**Updated** 05/15/2020

# STATE PROJECT

**Effective May 15, 2020**
**Supersedes April 22, 2020**

# 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:

NOTE: Not all projects accept Electronic Bids. Please review the Notice to Contractors and see if it specifically states that Electronic Bids will be accepted.

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, March 2020 Edition.*

April 28, 2017
Supersedes November 05, 2014

# NOTICE

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

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

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

**The downloading of bid packages from the MDOT website is not the same as providing an electronic bid to the Department. Electronic bids must be submitted via http://www.BIDX.com. For information on electronic bidding contact David Oakes at david.oakes@maine.gov, Dustin Henry at dustin.henry@maine.gov or Guy Berthiaume at guy.berthiaume@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:

# STATE OF MAINE DEPARTMENT OF TRANSPORTATION

Bid Guaranty-Bid Bond Form

**KNOW ALL MEN BY THESE PRESENTS THAT**_____

_____, of the City/Town of _____and State of_____

as Principal, and _____as Surety, a

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

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

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

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

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

_____

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

Signed and sealed this_____day of _____20_____

WITNESS:

_____

_____

_____

PRINCIPAL:

By_____

By:_____

By:_____

WITNESS

_____

_____

_____

SURETY:

By_____

By:_____

Name of Local Agency: _____

# NOTICE

Bidders:

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

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

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

State of Maine
Department of Transportation

**RFI No: _____**

# REQUEST FOR INFORMATION

**Date _____ Time _____**

---

**Information Requested for:**

**WIN(S): _____ Town(s): _____ Bid Date: _____**

**Question(s):**_____

_____

_____

_____

_____

_____

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_____

Request by:

**Company Name**:_____**Phone:(_____)**_____

**Email: _____ Fax: (_____)**_____

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**Complete this form and fax to 207-624-3431, Attn: Project Manager (name listed on the "Notice to Contractors"), or Email questions to RFI-Contracts.MDOT@maine.gov, Please include the word "RFI" along with the Project Name and Identification Number in the Subject line, or electronically by using the RFI Tab located on the Individual Projects Detail page.**

September 14, 2007

## Vendor Registration

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

# STATE OF MAINE DEPARTMENT OF TRANSPORTATION
# NOTICE TO CONTRACTORS

Sealed Bids addressed to the Maine Department of Transportation, Augusta, Maine 04333 and endorsed on the wrapper "Bids for **Plant Mixed Recycled Asphalt Pavement & Highway Rehabilitation** in the Towns of **Crystal & Island Falls**" will be received from contractors at the Reception Desk, MaineDOT Building, Capitol Street, Augusta, Maine, until 11:00 o'clock A.M. (prevailing time) on **April 16, 2025,** 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, Paving,** or project specific prequalification to be considered for the award of this contract. **We now accept electronic bids for 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: WINs 027670.00 & 027670.10

Location: In Aroostook County, project is located on Route159 beginning 0.54 of a mile east of Old Patten Road and extending west 1.24 miles.

Outline of Work: Highway Rehabilitation with Plant Mixed Recycled Asphalt Pavement, 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 **Roger Soucy** at (207) 624-3431, use electronic RFI form or email questions to RFI-Contracts.MDOT@maine.gov, project name and identification number should be in the subject line. Questions received after 12:00 noon of Monday (or if that Monday is a state holiday, Friday) prior to bid date will not be answered. Bidders shall not contact any other Departmental staff for clarification of Contract provisions, and the Department will not be responsible for any interpretations so obtained. TTY users call Maine Relay 711.

Bid Documents, specifications and bid forms can be viewed and obtained digitally at no cost at http://www.maine.gov/mdot/contractors/ . They may be purchased from the Department between the hours of 7:00 a.m. to 3:30 p.m. by cash, credit card (Visa/Mastercard) or check payable to Treasurer, State of Maine sent to Maine Department of Transportation, Attn.: Mailroom, 24 Child Street, Augusta, Maine 04333-0016. They also may be purchased by telephone at (207) 624-3536 between the hours of 7:00 a.m. to 3:30 p.m. Bid Book $10 ($13 by mail), Single Sheets $2, payment in advance, all non-refundable.

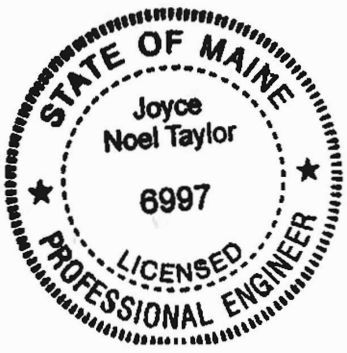
Each Bid must be made upon blank forms provided by the Department and must be accompanied by a bid bond at 5% of the bid amount or an official bank check, cashier's check, certified check, certificate of deposit, or United States postal money order in the amount of 5% of the bid amount, payable to Treasurer,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

This Contract is subject to all applicable State Laws.

All work shall be governed by *State of Maine, Department of Transportation, Standard Specifications, March 2020 Edition*, price $10 [$15 by mail], and *Standard Details, March 2020 Edition*, price $10 [$15 by mail]. They also may be purchased by telephone at (207) 624-3536 between the hours of 7:00 a.m. to 3:30 p.m. *Standard Detail* updates can be found at http://www.maine.gov/mdot/contractors/publications/ .

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

Augusta, Maine
**March 26, 2025**




JOYCE NOEL TAYLOR P. E.
CHIEF ENGINEER

March 14, 2007
Supersedes March 3, 1966

Non-federal Projects Only

# NOTICE TO CONTRACTORS - PREFERRED EMPLOYEES

Sec. 1303. Public Works; minimum wage

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

Crystal & Island Falls
027670.00 & 027670.10
April 14, 2011 Supersedes
August 3, 2004

**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 |
|---|---|
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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:** 027670.00 **Project(s):** 027670.00, 027670.10

**SECTION:** 1 HIGHWAY ITEMS

**Alt Set ID:** **Alt Mbr ID:**

**Contractor:** _____

| Proposal Line Number | Item ID<br>Description | Approximate Quantity and Units | Unit Price<br>Dollars Cents | Bid Amount<br>Dollars Cents |
|---|---|---|---|---|
| 0010 | 202.20201<br>REMOVING PAVEMENT SURFACE (HOURLY) | 10.000<br>HR | _____.____ | _____.____ |
| 0020 | 202.203<br>PAVEMENT BUTT JOINTS | 180.000<br>SY | _____.____ | _____.____ |
| 0030 | 203.20<br>COMMON EXCAVATION | 340.000<br>CY | _____.____ | _____.____ |
| 0040 | 204.21<br>ADD SHOULDER AGGREGATE - TRUCK MEASURE | 1,200.000<br>CY | _____.____ | _____.____ |
| 0050 | 304.10<br>AGGREGATE SUBBASE COURSE - GRAVEL | 500.000<br>CY | _____.____ | _____.____ |
| 0060 | 403.209<br>HOT MIX ASPHALT 9.5 MM (SIDEWALKS, DRIVES, INCIDENTALS) | 110.000<br>T | _____.____ | _____.____ |
| 0070 | 403.2104<br>HOT MIX ASPHALT 9.5 MM - THIN LIFT SURFACE TREATMENT | 1,280.000<br>T | _____.____ | _____.____ |
| 0080 | 403.211<br>HOT MIX ASPHALT (SHIMMING) | 990.000<br>T | _____.____ | _____.____ |
| 0090 | 403.213<br>HOT MIX ASPHALT 12.5 MM BASE | 90.000<br>T | _____.____ | _____.____ |
| 0100 | 409.15<br>BITUMINOUS TACK COAT - APPLIED | 3,750.000<br>G | _____.____ | _____.____ |
| 0110 | 411.10<br>UNTREATED AGGREGATE SURFACE COURSE (TRUCK MEASURE) | 160.000<br>CY | _____.____ | _____.____ |
| 0120 | 603.16<br>15 INCH CULVERT PIPE OPTION I | 276.000<br>LF | _____.____ | _____.____ |

**Maine Department of Transportation**

**Proposal Schedule of Items** 

**Proposal ID:** 027670.00 **Project(s):** 027670.00, 027670.10

**SECTION:** 1 HIGHWAY ITEMS

**Alt Set ID:** **Alt Mbr ID:**

**Contractor:** _____

| Proposal Line Number | Item ID / Description | Approximate Quantity and Units | Unit Price Dollars | Unit Price Cents | Bid Amount Dollars | Bid Amount Cents |
|---|---|---|---|---|---|---|
| 0130 | 603.17<br>18 INCH CULVERT PIPE OPTION I | 40.000<br>LF | | | | |
| 0140 | 603.179<br>18 INCH CULVERT PIPE OPTION III | 60.000<br>LF | | | | |
| 0150 | 603.219<br>36 INCH CULVERT PIPE OPTION III | 56.000<br>LF | | | | |
| 0160 | 605.09<br>6 INCH UNDERDRAIN TYPE B | 30.000<br>LF | | | | |
| 0170 | 605.10<br>6 INCH UNDERDRAIN OUTLET | 12.000<br>LF | | | | |
| 0180 | 610.08<br>PLAIN RIPRAP | 40.000<br>CY | | | | |
| 0190 | 615.07<br>LOAM | 620.000<br>CY | | | | |
| 0200 | 615.10<br>DIRTY BORROW | 380.000<br>CY | | | | |
| 0210 | 618.13<br>SEEDING METHOD NUMBER 1 | 51.000<br>UN | | | | |
| 0220 | 618.14<br>SEEDING METHOD NUMBER 2 | 61.000<br>UN | | | | |
| 0230 | 619.12<br>MULCH | 112.000<br>UN | | | | |
| 0240 | 620.58<br>EROSION CONTROL GEOTEXTILE | 100.000<br>SY | | | | |
| 0250 | 627.733<br>4" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE | 20,350.000<br>LF | | | | |

**Maine Department of Transportation**

**Proposal Schedule of Items** 

**Proposal ID:** 027670.00 **Project(s):** 027670.00, 027670.10

**SECTION:** 1 HIGHWAY ITEMS

**Alt Set ID:** **Alt Mbr ID:**

**Contractor:** _____

| Proposal Line Number | Item ID / Description | Approximate Quantity and Units | Unit Price Dollars | Unit Price Cents | Bid Amount Dollars | Bid Amount Cents |
|---|---|---|---|---|---|---|
| 0260 | 627.78<br>TEMPORARY 4 INCH PAINTED PAVEMENT MARKING LINE, WHITE OR YELLOW | 41,200.000<br>LF | | | | |
| 0270 | 629.05<br>HAND LABOR, STRAIGHT TIME | 10.000<br>HR | | | | |
| 0280 | 631.10<br>AIR COMPRESSOR (INCLUDING OPERATOR) | 10.000<br>HR | | | | |
| 0290 | 631.11<br>AIR TOOL (INCLUDING OPERATOR) | 10.000<br>HR | | | | |
| 0300 | 631.12<br>ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR) | 50.000<br>HR | | | | |
| 0310 | 631.14<br>GRADER (INCLUDING OPERATOR) | 20.000<br>HR | | | | |
| 0320 | 631.161<br>PAVING CREW | 43.000<br>HR | | | | |
| 0330 | 631.162<br>PAVING CREW (OVERTIME) | 22.000<br>HR | | | | |
| 0340 | 631.172<br>TRUCK - LARGE (INCLUDING OPERATOR) | 100.000<br>HR | | | | |
| 0350 | 631.179<br>PUGMILL TRUCKING | 4,000.000<br>T | | | | |
| 0360 | 631.211<br>PAVEMENT SWEEPER (INCLUDING OPERATOR) | 40.000<br>HR | | | | |

**Maine Department of Transportation**

**Proposal Schedule of Items** 

**Proposal ID:** 027670.00 **Project(s):** 027670.00, 027670.10

**SECTION:** 1 HIGHWAY ITEMS

**Alt Set ID:** **Alt Mbr ID:**

**Contractor:** _____

| Proposal Line Number | Item ID / Description | Approximate Quantity and Units | Unit Price Dollars | Unit Price Cents | Bid Amount Dollars | Bid Amount Cents |
|---|---|---|---|---|---|---|
| 0370 | 631.32<br>CULVERT CLEANER (INCLUDING OPERATOR) | 20.000<br>HR | | | | |
| 0380 | 639.19<br>FIELD OFFICE TYPE B | 1.000<br>EA | | | | |
| 0390 | 652.33<br>DRUM | 25.000<br>EA | | | | |
| 0400 | 652.34<br>CONE | 75.000<br>EA | | | | |
| 0410 | 652.35<br>CONSTRUCTION SIGNS | 950.000<br>SF | | | | |
| 0420 | 652.36<br>MAINTENANCE OF TRAFFIC CONTROL DEVICES | 140.000<br>CD | | | | |
| 0430 | 652.38<br>FLAGGER | 3,400.000<br>HR | | | | |
| 0440 | 656.75<br>TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL | LUMP SUM | LUMP SUM | | | |
| 0450 | 659.10<br>MOBILIZATION | LUMP SUM | LUMP SUM | | | |

**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, **WINs 027670.00 & 027670.10 for Highway Rehabilitation in the towns of Crystal & Island Falls, County of Aroostook, 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; performing construction quality control including inspection, testing and documentation; providing all required documentation at the conclusion of the project; warrantying 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 shall be made as provided in the same.

**B. Time.**

The Contractor agrees to complete all Work, except warranty work, on or before **October 31, 2025**. Further, the Department may deduct from moneys otherwise due the Contractor, not as a penalty, but as Liquidated Damages in accordance with Sections 107.7 and 107.8 of the *State of Maine Department of Transportation Standard Specifications, March 2020 Edition* and related Special Provisions.

**C. Price.**

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

_____

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

**D. Contract.**

This Contract, which may be amended, modified, or supplemented in writing only, consists of the Contract documents as defined in the Plans, *Standard Specifications, March 2020 Edition, Standard Details March 2020 Edition* as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds. It is agreed and understood that this Contract will be governed by the documents listed above.

**E. Certifications.**

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

1. All of the statements, representations, covenants, and/or certifications required or set forth in the Bid and the Bid Documents, including those in the Contract are still complete and accurate as of the date of this Agreement.

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

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

**F. Offer.**

The undersigned, having carefully examined the site of work, the Plans, *Standard Specifications March 2020 Edition, Standard Details March 2020 Edition* as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of:
**WINs 027670.00 & 027670.10 - for Highway Rehabilitation - in the towns of Crystal & Island Falls, County of Aroostook, State of Maine**, on which bids will be received until the time specified in the "Notice to Contractors" do(es) hereby bid and offer to enter into this contract to supply all the materials, tools, equipment and labor to construct the whole of the Work in strict accordance with the terms and conditions of this Contract at the unit prices in the attached "Schedule of Items."

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

As Offeror also agrees:

First: To do any extra work, not covered by the attached "Schedule of Items," which may be ordered by the Resident, and to accept as full compensation the amount determined upon a "Force Account" basis as provided in the *Standard Specifications, March 2020 Edition,* and as addressed in the contract documents.

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

Third: To begin the Work as stated in Section 107.2 of the *Standard Specifications March 2020 Edition* and complete the Work within the time limits given in the Special Provisions of this Contract.

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

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

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

CONTRACTOR

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

**G. Award.**

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

MAINE DEPARTMENT OF TRANSPORTATION

| | |
|---|---|
| _____ | _____ |
| Date | By: Bruce A. Van Note, Commissioner |
| _____ | |
| Witness | |

# CONTRACT AGREEMENT, OFFER & AWARD

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

_____

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, **WINs 027670.00 & 027670.10 for Highway Rehabilitation in the towns of Crystal & Island Falls, County of Aroostook, 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; performing construction quality control including inspection, testing and documentation; providing all required documentation at the conclusion of the project; warrantying 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 shall be made as provided in the same.

**B. Time.**

The Contractor agrees to complete all Work, except warranty work, on or before **October 31, 2025**. Further, the Department may deduct from moneys otherwise due the Contractor, not as a penalty, but as Liquidated Damages in accordance with Sections 107.7 and 107.8 of the *State of Maine Department of Transportation Standard Specifications, March 2020 Edition* and related Special Provisions.

**C. Price.**

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

_____

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

**D. Contract.**

This Contract, which may be amended, modified, or supplemented in writing only, consists of the Contract documents as defined in the Plans, *Standard Specifications, March 2020 Edition, Standard Details March 2020 Edition* as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds. It is agreed and understood that this Contract will be governed by the documents listed above.

**E. Certifications.**

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

1. All of the statements, representations, covenants, and/or certifications required or set forth in the Bid and the Bid Documents, including those in the Contract are still complete and accurate as of the date of this Agreement.

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

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

**F. Offer.**

The undersigned, having carefully examined the site of work, the Plans, *Standard Specifications March 2020 Edition, Standard Details March 2020 Edition* as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of:
**WINs 027670.00 & 027670.10 - for Highway Rehabilitation - in the towns of Crystal & Island Falls, County of Aroostook, State of Maine**, on which bids will be received until the time specified in the "Notice to Contractors" do(es) hereby bid and offer to enter into this contract to supply all the materials, tools, equipment and labor to construct the whole of the Work in strict accordance with the terms and conditions of this Contract at the unit prices in the attached "Schedule of Items."

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

As Offeror also agrees:

First: To do any extra work, not covered by the attached "Schedule of Items," which may be ordered by the Resident, and to accept as full compensation the amount determined upon a "Force Account" basis as provided in the *Standard Specifications, March 2020 Edition,* and as addressed in the contract documents.

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

Third: To begin the Work as stated in Section 107.2 of the *Standard Specifications March 2020 Edition* and complete the Work within the time limits given in the Special Provisions of this Contract.

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

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

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

CONTRACTOR

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

**G. Award.**

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

MAINE DEPARTMENT OF TRANSPORTATION

| | |
|---|---|
| _____ | _____ |
| Date | By: Bruce A. Van Note, Commissioner |
| _____ | |
| Witness | |

# CONTRACT AGREEMENT, OFFER & AWARD

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

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



**A. The Work.**

The Contractor agrees to complete all Work as specified or indicated in the Contract including Extra Work in conformity with the Contract, PIN No.01**12345.00**, for the **Hot Mix Asphalt Overlay** in the town/city of **South Nowhere,** County of **Washington**, Maine. The Work includes construction, maintenance during construction, warranty as provided in the Contract, and other incidental work.

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

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

**B. Time.**

The Contractor agrees to complete all Work, except warranty work, on or before **November 15, 2006.** Further, the Department may deduct from moneys otherwise due the Contractor, not as a penalty, but as Liquidated Damages in accordance with Sections 107.7 and 107.8 of the *State of Maine Department of Transportation Standard Specifications, March 2020 Edition* and related Special Provisions.

**C. Price.**

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

**D. Contract.**

This Contract, which may be amended, modified, or supplemented in writing only, consists of the Contract documents as defined in the Plans, *Standard Specifications, March 2020 Edition, Standard Details March 2020 Edition*, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds. It is agreed and understood that this Contract will be governed by the documents listed above.

**E. Certifications.**

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

1. All of the statements, representations, covenants, and/or certifications required or set forth in the Bid and the Bid Documents, including those in Appendix A to Division 100 of the *Standard Specifications March 2020 Edition* (Federal Contract Provisions Supplement), and the Contract are still complete and accurate as of the date of this Agreement.

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

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

**F. Offer.**

The undersigned, having carefully examined the site of work, the Plans, *Standard Specifications, March 2020 Edition, Standard Details March 2020 Edition*, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of:

**PIN 012345.00 South Nowhere, Hot Mix Asphalt Overlay**,

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

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



As Offeror also agrees:

First: To do any extra work, not covered by the attached "Schedule of Items," which may be ordered by the Resident, and to accept as full compensation the amount determined upon a "Force Account" basis as provided in the *Standard Specifications, March 2020 Edition*, and as addressed in the contract documents.

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

Third: To begin the Work as stated in Section 107.2 of the *Standard Specifications March 2020 Edition* and complete the Work within the time limits given in the Special Provisions of this Contract.

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

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

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

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

CONTRACTOR

| | |
|---|---|
| _____ | **(Sign Here)** |
| Date | (Signature of Legally Authorized Representative of the Contractor) |
| **(Witness Sign Here)** | **(Print Name Here)** |
| Witness | (Name and Title Printed) |



**G. Award.**

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

MAINE DEPARTMENT OF TRANSPORTATION

| | |
|---|---|
| _____ | _____ |
| Date | By: Bruce A. Van Note, 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 ..... | …….....…..... |

# STATE OF MAINE
# DEPARTMENT OF TRANSPORTATION

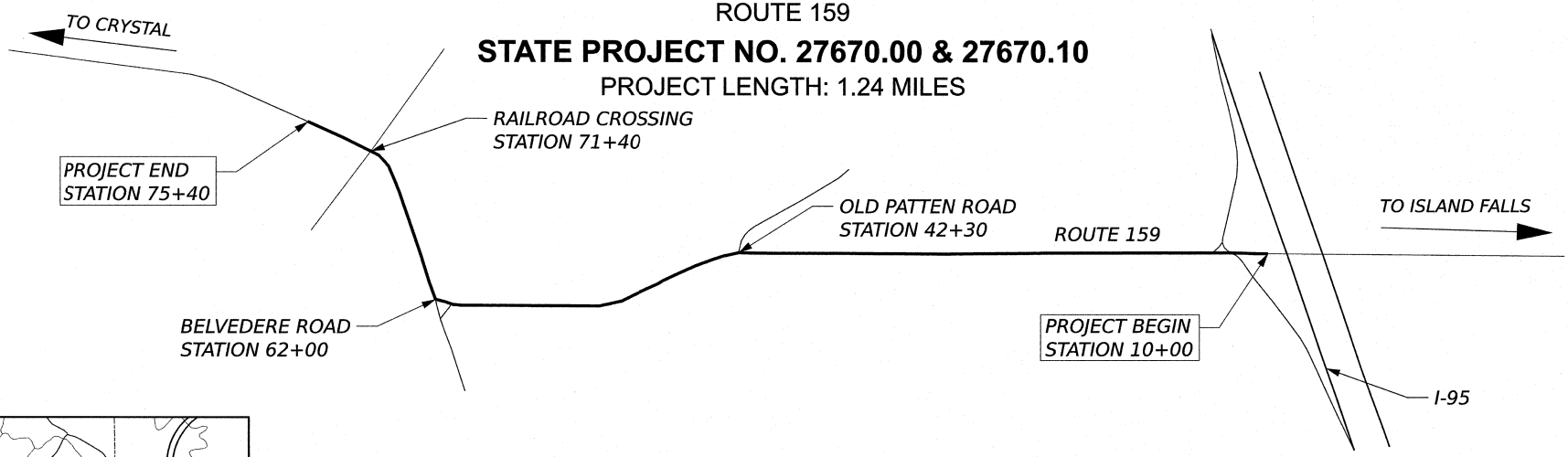
# CRYSTAL- ISLAND FALLS

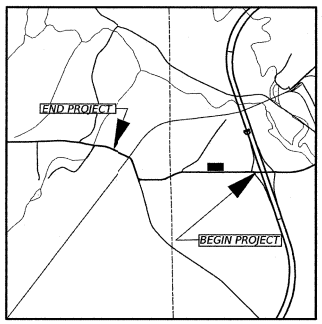
## AROOSTOOK COUNTY

ROUTE 159

## STATE PROJECT NO. 27670.00 & 27670.10

PROJECT LENGTH: 1.24 MILES




LOCATION MAP

| TRAFFIC DATA | |
|---|---|
| Current (2025) AADT | 1190 |
| Future (2037) AADT | 1260 |
| DHV - % of AADT | 11% |
| Design Hour Volume | 144 |
| % Heavy Trucks (AADT) | 18% |
| % Heavy Trucks (DHV) | 11% |
| Directional Distribution (DHV) | 58% |
| 18-kip Equivalent P 2.0 | 122 |
| 18-kip Equivalent P 2.5 | 116 |
| Design Speed (mph) | 45 |
| Corridor Priority | 4 |
| Function Class | Major Collector |

| | |
|---|---|
| *PROJECT LOCATION:* | *BEGINNING 0.54 OF A MILE EAST OF OLD PATTEN ROAD AND EXTENDING WEST 1.24 MILES.* |
| *PROGRAM AREA:* | *REGIONAL PROGRAM* |
| *SCOPE OF WORK:* | *HIGHWAY REHABILITATION* |

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

APPROVED — DATE

COMMISSIONER: — DATE 3-27-25

CHIEF ENGINEER: — DATE 5.20.25

STATE OF MAINE — Scott — 8231 — REGISTERED PROFESSIONAL ENGINEER

SIGNATURE — P.E. NUMBER — DATE 2/24/25

PROJECT INFORMATION

| | |
|---|---|
| PROGRAM | REGIONAL PROGRAM |
| PROJECT MANAGER | ROGER SOUCY |
| DESIGNER | DAN MOLAVER |
| CONSULTANT | |
| PROJECT RESIDENT | |
| CONTRACTOR | |
| PROJECT COMPLETION DATE | |

CRYSTAL- ISLAND FALLS
ROUTE 159

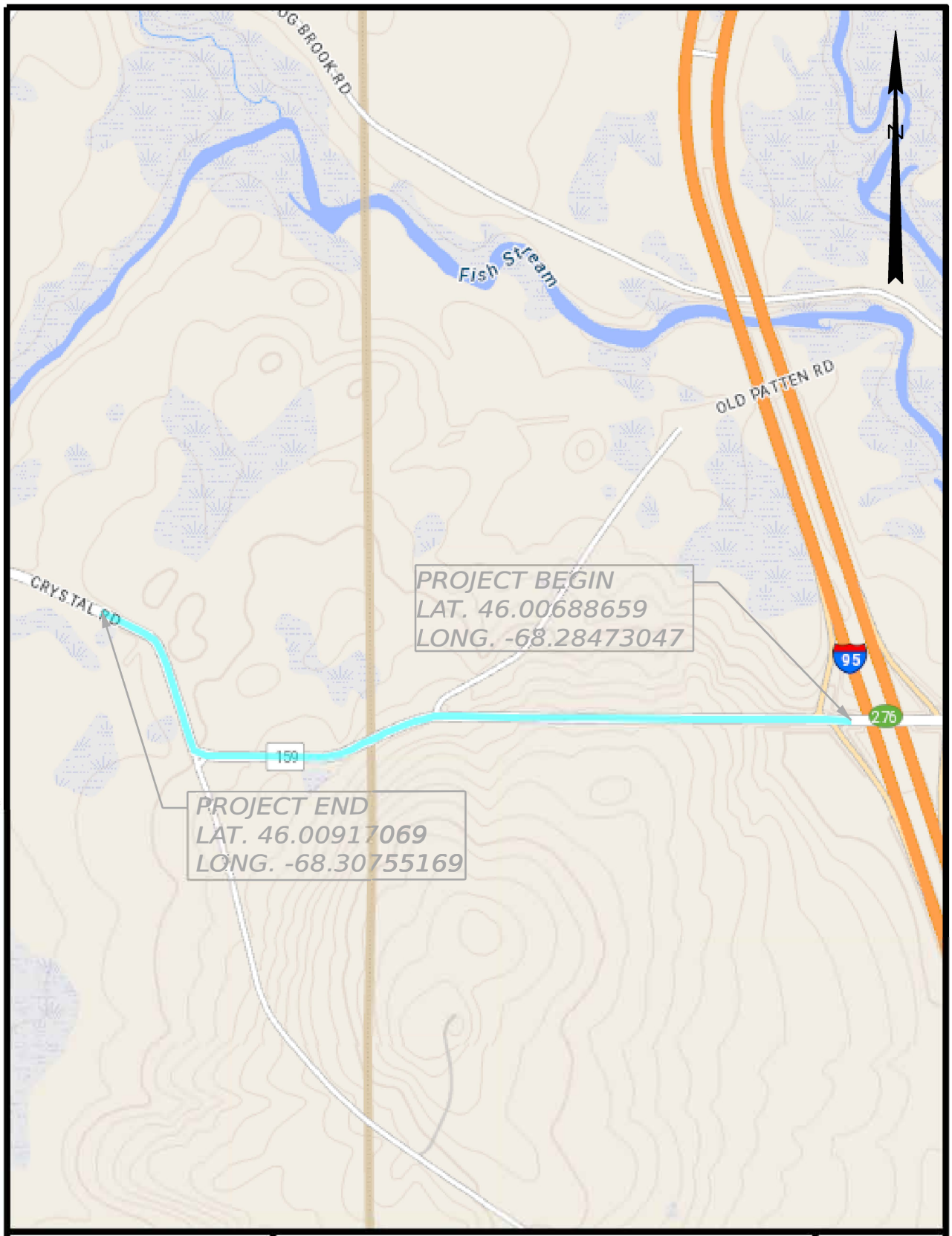
TITLE SHEET

WIN 27670.00 & 27670.10 STATE PROJECT NO. 27670.00 & 27670.10

SHEET NUMBER 1 OF 1

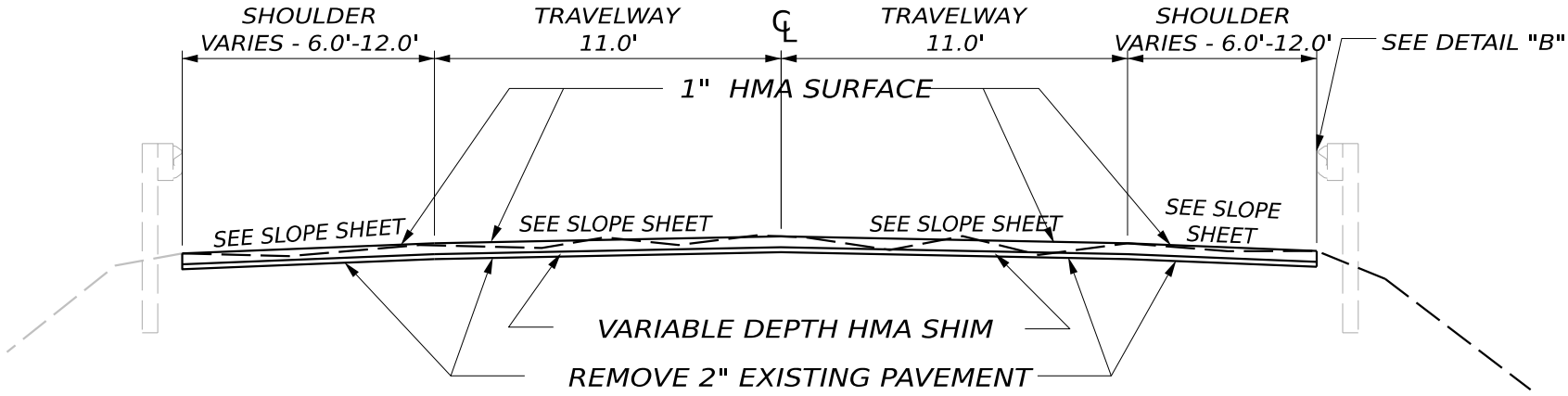
Username: Daniel.E.Molaver Date: 1/23/2025

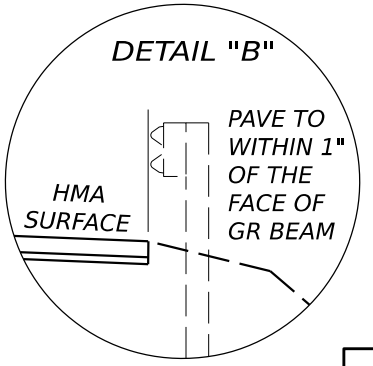
Filename:C:\Users\Bill.Hartt\State of Maine\MaineDOT Work - WIN\27670_00\HIGHWAY\027670_Title.dgn




| | | |
|---|---|---|
| STATE OF MAINE<br>DEPARTMENT OF TRANSPORTATION | ROUTE 159 CRYSTAL-ISLAND FALLS<br>AROOSTOOK COUNTY | SHEET NUMBER<br>1<br>OF1 |
| 027670.00 & 027670.10 | LOCATION MAP | |

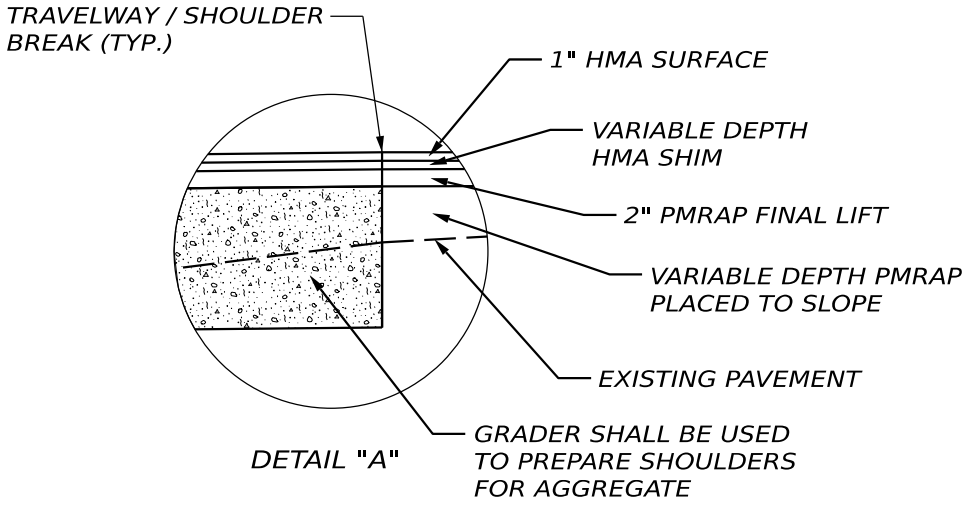
# 2" MILL WITH 1 " OVERLAY
# AND VARIABLE DEPTH SHIM
# GUARDRAIL AREAS




| | | | |
|---|---|---|---|
| CRYSTAL - ISLAND FALLS<br>ROUTE 159 | WINS<br>27670.00 & 27670.10 | STATE OF MAINE<br>DEPARTMENT OF TRANSPORTATION | SHEET NUMBER<br>1 OF 4 |
| TYPICAL SECTIONS | | 2767000 & 2767010 HIGHWAY PLANS | |

# VARIABLE DEPTH PMRAP WITH HOT MIX ASPHALT OVERLAY
## NORMAL SECTION

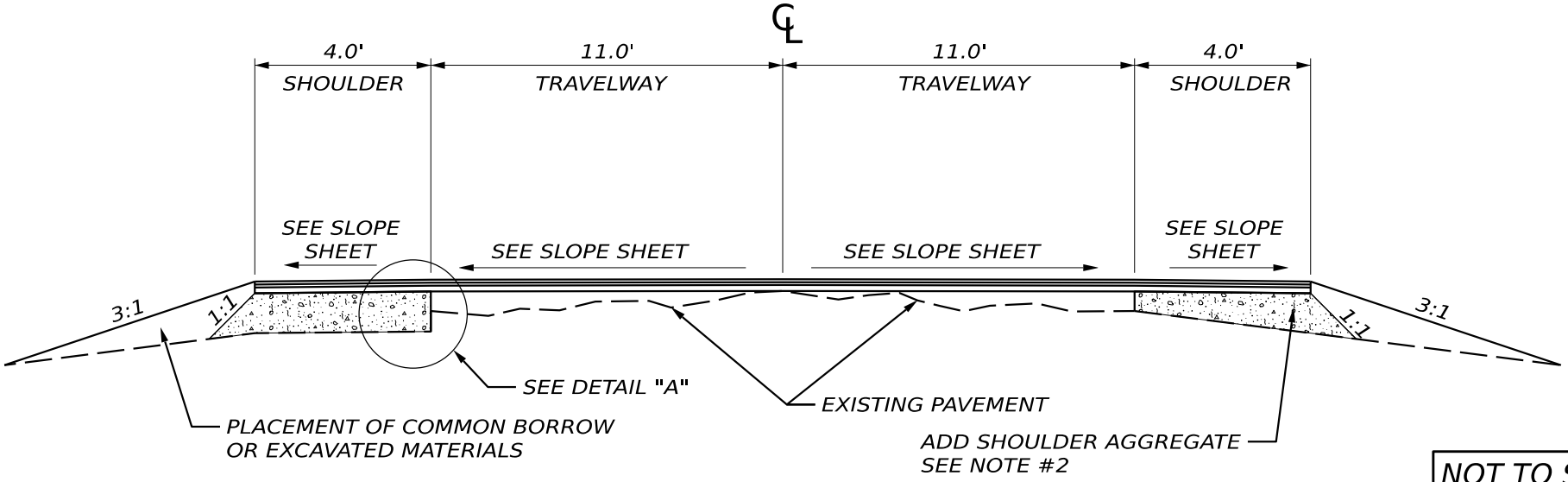



NOTES:

1. THE CROWN OF THE PAVER SCREED SHALL NOT EXCEED ¼" WHEN PLACING PMRAP.

2. PLACEMENT OF AGGREGATE FOR SHOULDERS SHALL BE DONE WITH A SHOULDER MACHINE OR OTHER METHOD THAT IS CAPABLE OF PLACING MATERIAL TO THE SPECIFIED SLOPES AND WIDTHS AS DIRECTED. PLACEMENT ON INSLOPES SHALL BE AT A 3:1 SLOPE.

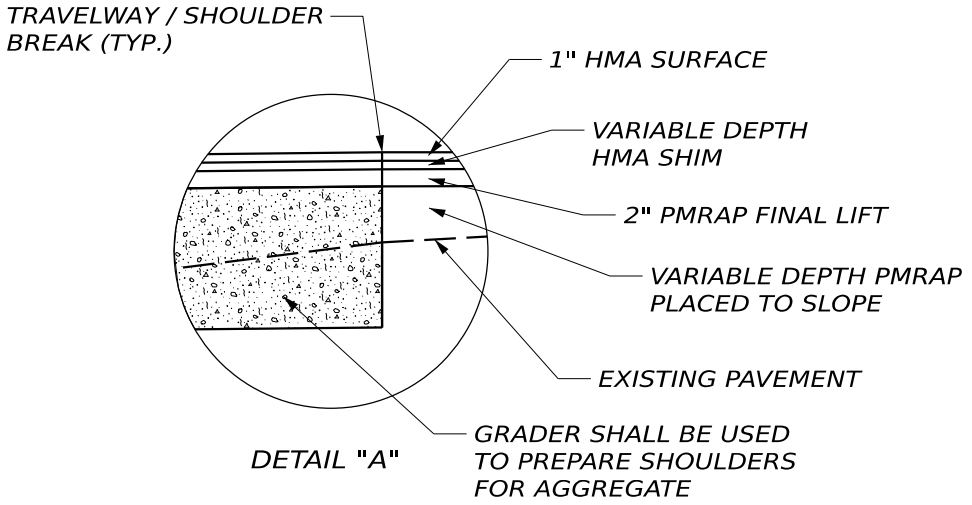
3. CONSTRUCTED SHOULDERS 3 FEET OR LESS IN WIDTH SHALL BE STRAIGHT GRADED TO TRAVELWAY.




NOT TO SCALE

| | | | |
|---|---|---|---|
| CRYSTAL - ISLAND FALLS<br>ROUTE 159<br>TYPICAL SECTIONS | WINS<br>27670.00 & 27670.10 | STATE OF MAINE<br>DEPARTMENT OF TRANSPORTATION<br>2767000 & 2767010 HIGHWAY PLANS | SHEET NUMBER<br>2 OF 4 |

# VARIABLE DEPTH PMRAP WITH HOT MIX ASPHALT OVERLAY
# SUPERELEVATED SECTION

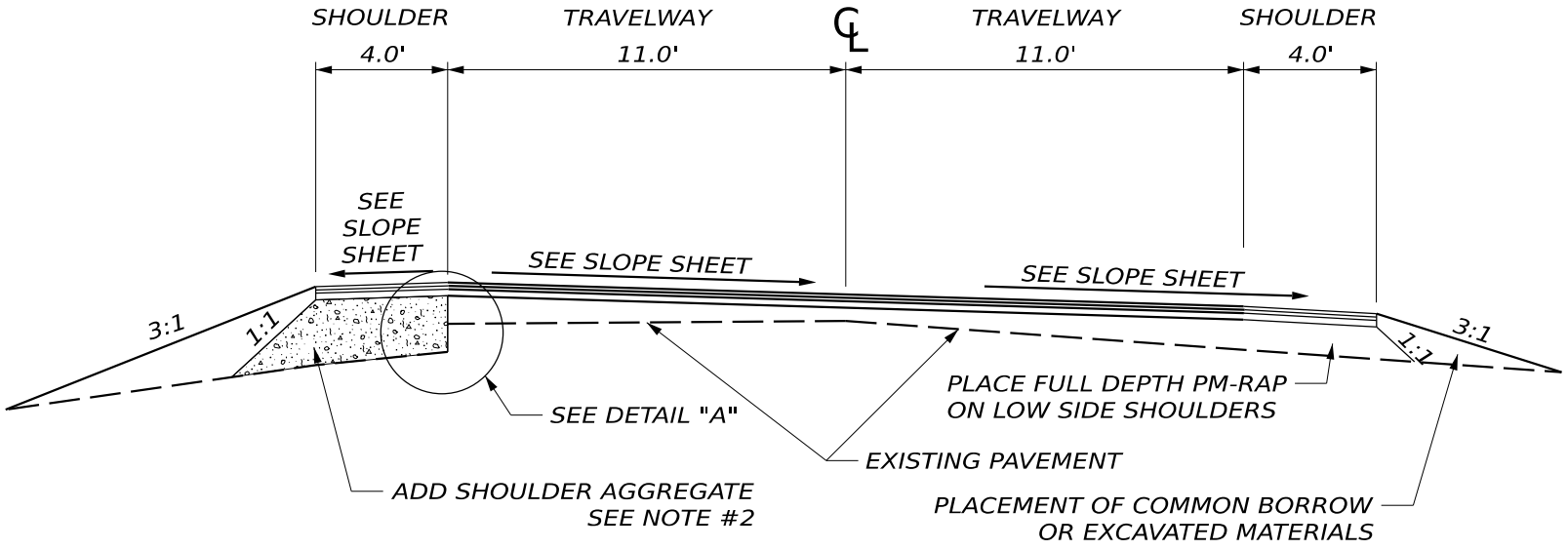



NOTES:

1. THE CROWN OF THE PAVER SCREED SHALL NOT EXCEED ¼" WHEN PLACING PMRAP.

2. PLACEMENT OF AGGREGATE FOR SHOULDERS SHALL BE DONE WITH A SHOULDER MACHINE OR OTHER METHOD THAT IS CAPABLE OF PLACING MATERIAL TO THE SPECIFIED SLOPES AND WIDTHS AS DIRECTED. PLACEMENT ON INSLOPES SHALL BE AT A 3:1 SLOPE.

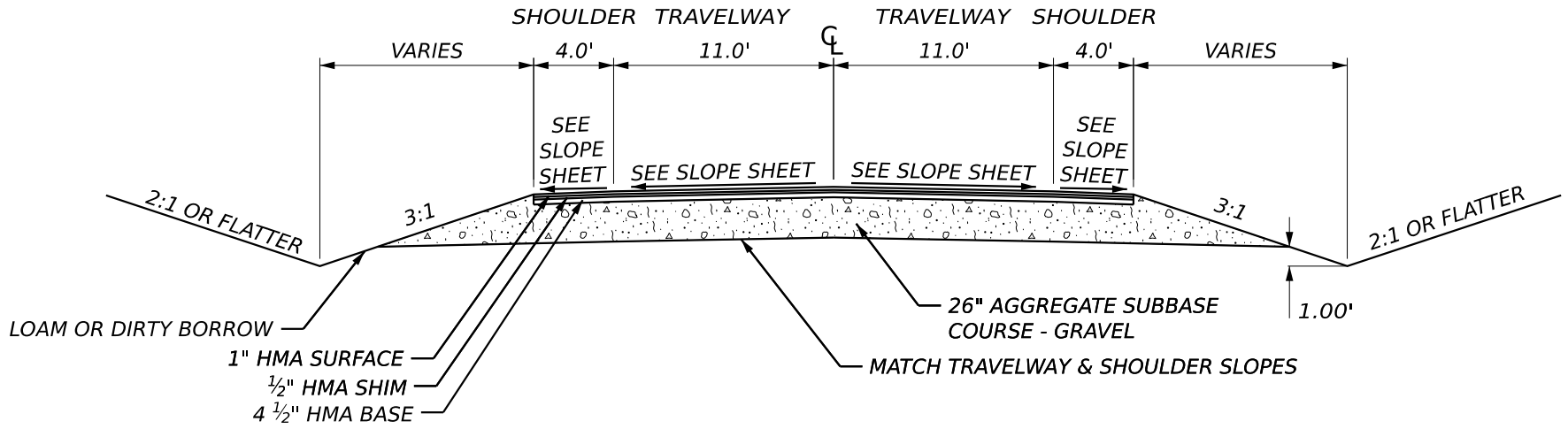
3. CONSTRUCTED SHOULDERS 3 FEET OR LESS IN WIDTH ON THE LOW SIDE OF THE SUPERELEVATION SHALL BE STRAIGHT GRADED TO TRAVELWAY.




NOT TO SCALE

| | | | |
|---|---|---|---|
| CRYSTAL - ISLAND FALLS<br>ROUTE 159 | WINS<br>27670.00 & 27670.10 | STATE OF MAINE<br>DEPARTMENT OF TRANSPORTATION | SHEET NUMBER<br>3 OF 4 |
| TYPICAL SECTIONS | | 2767000 & 2767010 HIGHWAY PLANS | |

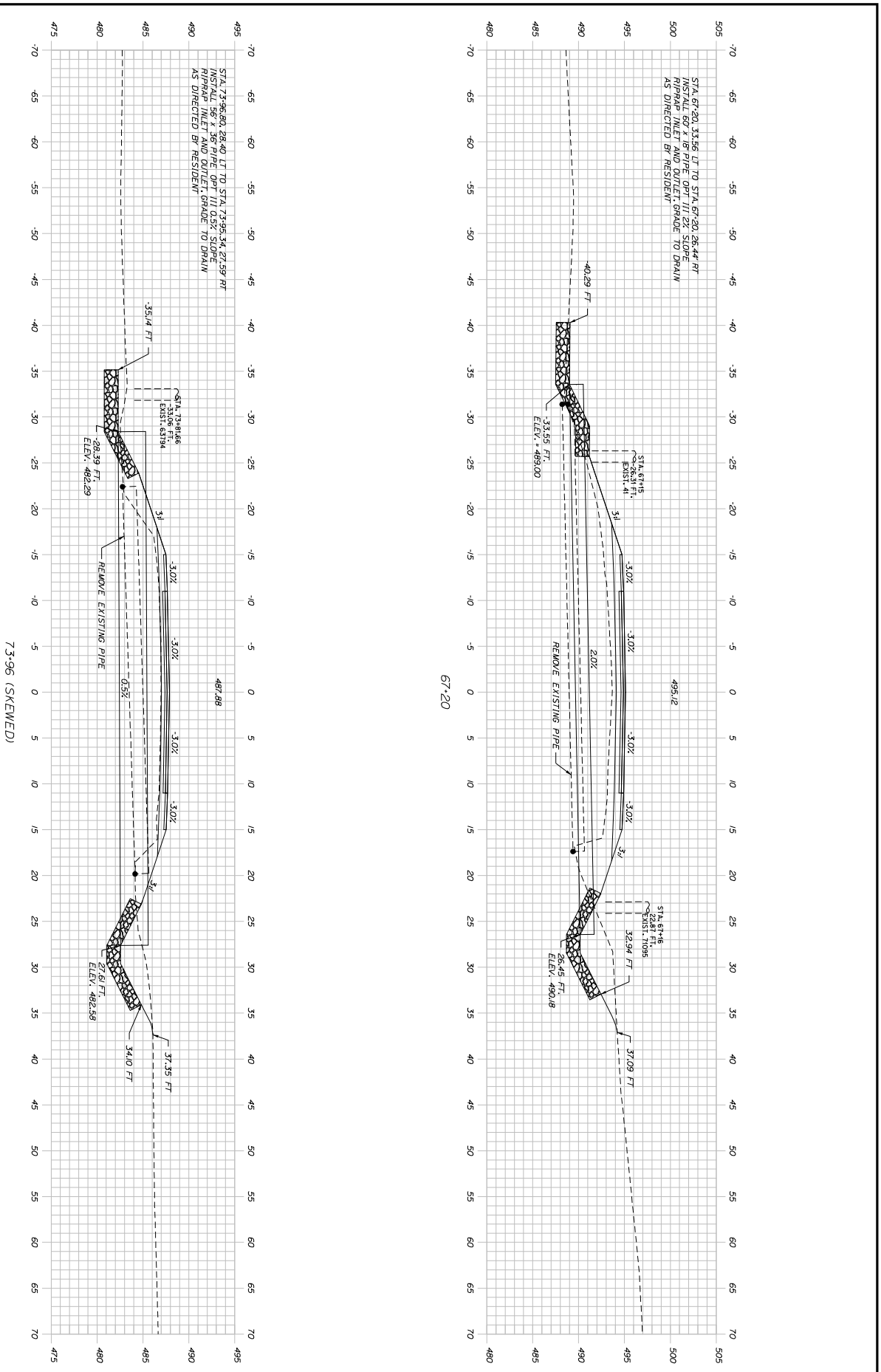
## FROST HEAVE REPAIR AREA




NOT TO SCALE

| | | | |
|---|---|---|---|
| CRYSTAL - ISLAND FALLS<br>ROUTE 159 | WINS<br>27670.00 & 27670.10 | STATE OF MAINE<br>DEPARTMENT OF TRANSPORTATION | SHEET NUMBER<br>4 OF 4 |
| TYPICAL SECTIONS | | 2767000 & 2767010 HIGHWAY PLANS | |

Filename: ...\00\HIGHWAY\MSTA\Xsect_2025.dgn Division: HIGHWAY Username: Daniel.E.Molaver Date:2/19/2025




| | | | | | |
|---|---|---|---|---|---|
| SHEET NUMBER 1 OF 1 | CRYSTAL - ISLAND FALLS ROUTE 159 | PROJ. MANAGER | ROGER SOUCY | BY | DATE |
| | | DESIGN-DETAILED | DAN MOLAVER | | |
| | | CHECKED-REVIEWED | | | |
| | | DESIGN2-DETAILED2 | | | |
| | | DESIGN3-DETAILED3 | | | |
| | | REVISIONS 1 | | | |
| | | REVISIONS 2 | | | |
| | | REVISIONS 3 | | | |
| | | REVISIONS 4 | | | |
| | | FIELD CHANGES | | | |
| | CROSS SECTIONS | SIGNATURE | | | |
| | | P.E. NUMBER | | | |
| | | DATE | | | |

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2767000 & 2767010

WINS
27670.00 & 27670.10 HIGHWAY PLANS

Sta. 67+20.00 to Sta. 73+96.00

**Crystal, Island Falls**
**027670.00, 027670.10**
**Route 159**
**January 16, 2025**

# Project Stationing

| Left | Station | Right |
|---|---|---|
| **Project End** | **75+40** | **Project End** |
| | 74+20 | Pole 49 |
| | 72+25 | Pole 48 |
| | 71+40 | **Railroad Crossing** |
| | 69+68 | pole 46 |
| | 66+98 | Pole 44 |
| | 64+12 | Pole 42 |
| | 61+16 | Pole 40 |
| | 57+96 | Pole 38 |
| | 54+60 | Pole 36 |
| | 51+56 | Pole 34 |
| | 48+72 | Pole 32 |
| | 47+93 | **Welcome to Crystal Sign** |
| | 45+40 | Pole 30 |
| | 42+30 | **Old Patten Road** |
| | 41+52 | Pole 52 |
| | 35+74 | Pole 26 |
| | 29+95 | Pole S137 |
| | 24+51 | Pole 22 |
| | 18+99 | Pole 71794 |
| Pole 73172 | 15+01 | |
| | 10+18 | Pole 73583 |
| **Project Begin** | **10+00** | **Project Begin** |

**Crystal – Island Falls**
**027670.00, 027670.10**
**Route 159**
**February 18, 2025**

## Description & Location of Treatments

1. **2" Mill with 1" Overlay and Variable Depth Shim – 11' Travelway and Variable Width Shoulders – Route 159**

   **Typical #1**
   Station 10+00 to 19+00

2. **Frost Heave Repair – 11' Travelway with 4' Paved Shoulders – Route 159**

   **Typical #4**
   Station 19+00 to 20+00

3. **PM-RAP – 11' Travelway with 4' Paved Shoulders – Route 159**

   **Typical #2 & #3**
   Station 20+00 to 75+50

# Construction Notes

**202.20201 Removing Pavement Surface (Hourly)**

| Station | to | Station | Width | Depth | Side | Description |
|---|---|---|---|---|---|---|
| 10+00 | - | 19+00 | 34’ to 46’ | 2” | RT/LT | Mill & Fill |
| 54+00 | - | 55+50 | 22’ | Variable | RT/LT | Profile Adjust |
| 70+50 | - | 71+51 | 26’ | 0” – 3.5” | RT/LT | Railroad Crossing |
| 71+55 | - | 72+56 | 26’ | 3.5” - 0” | RT/LT | Railroad Crossing |
| 74+49 | - | 75+50 | 30’ | 0” – 3.5” | RT/LT | End Taper |

- Station 54+75 - Actual depth shall be determined in the field by the resident for this location. The intent of this pavement removal area is to remove a knoll centered at approximately Station 54+75.

**202.203 Pavement Butt Joints**

- This item will be used for the Old Patten Road and Belvedere Road intersections as well as approximately 8 paved drives and entrances.
- Exact locations will be field determined by Resident.

**203.20 Common Excavation**

- Station 19+00 to 20+00 – Frost Heave Repair Area – Refer to Typical Section #4.

**204.21 Add Shoulder Aggregate – Truck Measure**

| Station | to | Station | Width | Side | Description |
|---|---|---|---|---|---|
| 19+00 | - | 75+00 | Varies | RT/LT | Shoulders |

**304.10 Aggregate Subbase Course - Gravel**

- Station 19+00 to 20+00 – Frost Heave Repair Area – Refer to Typical Section #4.
- 15:1 transitions shall be utilized on each end of the frost heave repair area, or as otherwise directed by the resident.

**403.2104 HMA 9.5mm - ¾” Surface**

- 9.5mm HMA surface will be placed on the travel way and shoulders over the entire length of the project as well as the following side roads below.

| Side Road | Station | Length (feet) | Width (feet) |
|---|---|---|---|
| Old Patten Road | 42+30 | 50.0 | 22.0 |
| Belvedere Road | 60+55 | 50.0 | 22.0 |
| Belvedere Road | 62+00 | 50.0 | 40.0 |

- These locations are approximate, actual butt locations will be determined in the field, as directed by the Resident.

**403.213 HMA 12.5mm Base**

| Station | to | Station | Width | Depth | Side | Description |
|---|---|---|---|---|---|---|

# Construction Notes

| | | | | | |
|---|---|---|---|---|---|
| 19+00 | - | 20+00 | 30’ | 4.5”-6” RT/LT | Frost Heave Repair |
| 67+10 | - | 67+30 | 22’ | 4.5”-6” RT/LT | Cross Culvert |
| 73+86 | - | 74+06 | 22’ | 4.5”-6” RT/LT | Cross Culvert |

- If the resident determines that the full depth of pavement needs to be removed at Station 54+00 to 55+50, existing base gravel shall be graded with hourly items and 4” of 12.5MM HMA Base shall be placed prior to placing PM-RAP.

**409.15 Bituminous Tack Coat, Applied**

- Tack application rate for all PM-RAP layers shall be 0.05 gallons per square yard.
- Tack application rate for all other pavement layers shall be as described in Special Provision 403.

**411.10 Untreated Aggregate Surface Course (Truck Measure)**

- Material shall be placed in all gravel drives and or entrances as directed by the Resident and will be field determined by Resident.

**603.16 15” Culvert Pipe – Option I**

| Station | Side | Length | Description |
|---|---|---|---|
| 49+18 | LT | 40’ | Drive Culvert |
| 50+15 | RT | 36’ | Drive Culvert |
| 58+88 | LT | 40’ | Drive Culvert |
| 60+20 | LT | 40’ | Drive Culvert |
| 64+90 | RT | 40’ | Drive Culvert |
| 66+25 | RT | 40’ | Drive Culvert |
| 73+00 | RT | 40’ | Drive Culvert |

**603.17 18” Culvert Pipe – Option I**

| Station | Side | Length | Description |
|---|---|---|---|
| 62+35 | LT | 40’ | Drive Culvert |

**603.179 18” Culvert Pipe - Option III**

| Station | Side | Length | Description |
|---|---|---|---|
| 67+20 | RT/LT | 60’ | Cross Culvert |

**603.219 36” Culvert Pipe - Option III**

| Station | Side | Length | Description |
|---|---|---|---|
| 73+96 | RT/LT | 56’ | Cross Culvert |

**605.09 6” Underdrain Type ‘B’**

| Location | Length | Side | Description |
|---|---|---|---|
| Frost heave repair section | 30’ | Across | Frost heave |

# Construction Notes

- Underdrain to be installed perpendicular to Roadway
- Actual location to be determined by Resident

**605.10 6" Underdrain Outlet**

| Location | Length | Side | Description |
|---|---|---|---|
| Frost heave repair section | 6' | RT/LT | Frost heave |

- Underdrain to be installed perpendicular to Roadway
- Actual location to be determined by Resident

**627.78 Temporary 4" Paint Pavement Marking Line White or Yellow**

- Temporary center lines shall be painted on all matched pavement within one week.
- Temporary edge lines shall be painted on all pavement layers within four weeks.
- All temporary lines shall be painted prior to final striping. TOMs must be used on all pavement layers until temporary paint is applied.
- TOMs will be removed before final striping.
- TOM removal will be addressed in the Traffic Control Plan.
- Only painted temporary line will be paid for under this item. TOMs will be considered incidental to the contract.

**629.05, 631 Items**

- **631.179** – Pugmill Trucking - The estimated quantity of PMRAP to be hauled is 4,000 tons. MaineDOT will produce the PMRAP at **Sherman DOT Maintenance Lot** – 22 Qualey Drive, Sherman. MaineDOT will be responsible for loading the Contractor's trucks.
- **631.161, 631.162 –** Paving Crew, Paving Crew (overtime) – Approximately 3340 Tons of PM-RAP are to be placed on Route 159. Approximately 660 Tons of PM-RAP are to be placed on Qualey Drive, and on the Access Road to the DOT Maintenance Lot. Work on Qualey Drive and on the DOT Maintenance lot shall occur after PM-RAP placement on Route 159 is complete, and this work shall consist of 1 – 3" Loose Measure lift placed & compacted in locations as directed by the resident.
- Equipment rental items including All Purpose Excavator and Hourly Trucking will be used to ditch, grade in-slopes and backslopes, and remove extra existing material from shoulder areas.
- Hourly road grader will be used to prepare the low side of superelevated corners for placement of full depth PM-RAP.
- All earthwork in drives/entrances shall be completed prior to placing Surface HMA on the adjacent roadway.
- Drives/entrances requiring vertical adjustment of more than +6" shall have 304.10 – Aggregate Subbase Course – Gravel Added prior to surface treatment. Payment for this work shall be incidental to the 304.10 item.
- Drives/entrances requiring vertical adjustment of less than 6" shall have PM-RAP added prior to surface treatment. Payment for this work shall be paid for with hourly items.

# Construction Notes

**652.35 Construction Signs**

Two **ROAD WORK NEXT 2 MILES** signs are to be used at each end of the project as part of the approach sign package.

**Crystal**
**27670.00 27670.10**
**Route 159**
**March 17, 2025**

# CROSS SLOPE SHEET

| STA | LEFT | | CL | RIGHT | |
|---|---|---|---|---|---|
| | Shldr Slope % | Travel Lane Slope % | PMRAP / Mill Depth inch | Travel Lane Slope % | Shldr Slope % |
| | | | | | |
| **55+00** | | **-3.0** | | | |
| 54+50 | | -2.0 | | | |
| 54+00 | **-3.0** | 0.0 | | | |
| 53+50 | **-2.0** | 2.0 | | **-3.0** | **-3.0** |
| **53+00** | | **4.0** | | **-4.0** | **-4.0** |
| | | | | | |
| **50+00** | | **4.0** | | **-4.0** | **-4.0** |
| 49+50 | **-2.0** | 2.0 | | **-3.0** | **-3.0** |
| 49+00 | **-3.0** | 0.0 | | | |
| 48+50 | | -2.0 | | | |
| 48+00 | | **-3.0** | | **-3.0** | |
| 47+50 | | | | -1.0 | **-3.0** |
| 47+00 | | | | 1.0 | **-2.0** |
| **46+50** | | | | **3.0** | |
| | | | | | |
| **41+00** | | | | **3.0** | |
| 40+50 | | | | 1.0 | **-2.0** |
| 40+00 | | | | -1.0 | **-3.0** |
| **39+50** | | | | **-3.0** | |
| | | | | | |
| **21+00** | | | **2.00** | | |
| 20+50 | | | 1.00 | | |
| 20+00 | | | 0.00 | | |
| 19+50 | **-3.0** | **-3.0** | -1.00 | | |
| 19+00 | -2.5 | -2.5 | **-2.00** | | |
| **18+50** | **-2.0** | **-2.0** | | | |
| | | | | | |
| **12+50** | | | | | -3.0 |
| 12+00 | | | | | -4.0 |
| 11+50 | | | | | -4.0 |
| 11+00 | | | | | -3.5 |
| 10+50 | **-2.0** | **-2.0** | | **-3.0** | -3.0 |
| **10+00** | **Match** | **Match** | **-2.00** | **Match** | **Match** |

| STA | LEFT | | CL | RIGHT | |
|---|---|---|---|---|---|
| | Shldr Slope % | Travel Lane Slope % | PMRAP / Mill Depth inch | Travel Lane Slope % | Shldr Slope % |
| | | | | | |
| **75+40** | **Match** | **Match** | **-1.50** | **Match** | **Match** |
| 75+00 | **-3.0** | **-3.0** | **2.00** | **-3.0** | **-3.0** |
| 74+50 | | | | | |
| 74+00 | | | | **-3.0** | |
| 73+50 | | | | -2.0 | |
| 73+00 | | | | -1.0 | **-3.0** |
| 72+50 | **-3.0** | **-3.0** | | 0.0 | -1.0 |
| 72+00 | -2.0 | -2.0 | **2.00** | 1.0 | 1.0 |
| 71+55 | **RR Crossing** | | **-1.50** | **RR Crossing** | |
| 71+50 | -1.0 | -1.0 | **2.00** | 1.0 | 1.0 |
| 71+00 | -2.0 | -2.0 | | 2.0 | -1.0 |
| **70+50** | **-3.0** | **-3.0** | | **3.0** | **-2.0** |
| | | | | | |
| **69+00** | | | | **3.0** | |
| 68+50 | | | | 1.0 | **-2.0** |
| 68+00 | | | | -1.0 | **-3.0** |
| **67+50** | | | | **-3.0** | |
| | | | | | |
| **65+50** | | **-3.0** | | | |
| 65+00 | | -2.0 | | | |
| 64+50 | **-3.0** | 0.0 | | -3.0 | |
| 64+00 | **-2.0** | 2.0 | | -2.0 | -3.0 |
| 63+50 | | 4.0 | | -4.0 | -4.0 |
| **63+00** | | 6.0 | | **-6.0** | **-6.0** |
| | | | | | |
| **60+00** | | 6.0 | | **-6.0** | **-6.0** |
| 59+50 | | 4.0 | | -4.0 | -4.0 |
| 59+00 | **-2.0** | 2.0 | | **-3.0** | **-3.0** |
| 58+50 | **-3.0** | 0.0 | | | |
| 58+00 | | -2.0 | | | |
| 57+50 | | -3.0 | | | |

**Notes:** 1. Positive ( ) CL PMRAP/Mill Depth Values denote the "loose" depth of the PMRAP Placed, negative (-) values indicate the exact mill depth.

2. Markups from station 19+00 to 21+00 inidcate a mill transtion to PMRAP. PMRAP placement will begin at approximately station 19+50 a mill taper length will vary to create a smooth transtion between segments.

# GENERAL NOTES

1. Pavement thickness shown on the typical sections are intended to be nominal.

2. All joints between existing and proposed hot bituminous pavement shall be butted. Payment shall be made under Standard Specifications Item 202.203, Pavement Butt Joints.

3. Construct butt joints at all paved drives and entrances. Butt joints shall have a minimum width of 18 inches or as directed by the Resident.

4. The Contractor shall place suitable existing or other material acceptable to the Resident on all pavement edges to allow a drop off no greater than the surface pavement thickness. The material shall be graded to match the existing inslope or as directed by the Resident before surface is placed. The Contractor will be paid under appropriate equipment rental items. Borrow is not authorized until all acceptable waste material has been utilized. Seed and Mulch will be paid for at the contract unit price.

5. All waste material not used on the project shall be disposed of off the project in acceptable waste areas reviewed by the Resident. Grading, seeding and mulching of waste areas shall be considered incidental.

6. Any necessary cleaning of existing pavement prior to paving (or milling) shall be incidental to the related paving (or milling) items. This includes killing and removal of all vegetative matter.

7. All existing paved shoulders and widenings shall be resurfaced as directed by the Resident.

8. When superelevation exceeds the slope of the low-side shoulder, the low-side shoulder will have same slope as the travelway.

9. Cross slopes for normal and superelevated sections will be straight unless otherwise directed by the Department.

10. The algebraic difference between travelway and shoulder cross slope shall not exceed 8 percent.

11. The following shall be incidental to the Standard Specifications Section 603, Pipe Culverts and Storm Drains (Preservation only):
    a. Any cutting of existing culverts and or connectors necessary to install new culvert replacements or extensions;
    b. All pipe excavation including any cutting and removal of pavement;
    c. All ditching at pipe ends;

## GENERAL NOTES

d. Furnishing, placing, grading, and compacting of any new gravel and for temporary detours to maintain traffic during pipe installation (excavation is also incidental);
e. All work necessary to connect to existing pipes and drainage structures;
f. Existing flow lines may be changed by up to 1.5 feet;
g. Any necessary clearing of brush and non-pay trees within 10 feet of culvert ends;
h. An 18-inch wide strip of non-woven geotextile meeting the requirements of Standard Specifications Item 620.58, Erosion Control Geotextile, shall be placed over all RCP joints.

12. Existing culverts and catch basins will be cleaned as directed by the Resident under the appropriate pay items.

13. Loam has been estimated for disturbed lawn areas. Actual placement of the loam shall be as noted on the Plans or designated by the Resident.

14. Dirty borrow has been estimated for all disturbed slope areas other than lawn areas. Actual placement of the dirty borrow shall be as noted on the Plans or designated by the Resident.

15. Unless otherwise noted Seeding Method No. 1 shall be utilized on all lawns and developed areas; Seeding Method No. 2 shall be utilized on all other areas.

16. Loam shall be placed to a nominal depth of 4 inches in lawn areas and 2 inches in all other areas unless otherwise noted or directed.

17. Dirty borrow shall be placed to a nominal depth of 2 inches unless otherwise noted or directed.

18. The Contractor will be responsible for maintaining all existing mailboxes to ensure that the mail will be deliverable. Payment for this work will be considered incidental to the contract

19. The Contractor will be responsible for maintaining all existing operational business directional signs (OBDS) to ensure that they are visible to the traveling public. Payment for this work will be considered incidental to the contract.

## GENERAL NOTES

20. The Contractor is responsible for the careful side staking of existing centerline as per Standard Specification Section 105.6.2, Contractor Provided Services. Side stakes shall be placed safely outside of the construction limits and the existing centerline grades shall be transferred to these stakes. These stakes and grades will be used to lay out centerline and determine new construction finish grades from differential elevation sheets furnished by MaineDOT. All layout, stakes, and grades will be checked and must be acceptable to the Resident.

21. Any damage to the slopes caused by the Contractor's equipment, personnel, or operation shall be repaired to the satisfaction of the Resident. All work, equipment, and materials required to make repairs shall be at the Contractor's expense.

22. Areas on the project requiring fill will come from suitable sites such as excavation, ditch and inslope or equipment rental areas.

23. No separate payment for superintendent or foreman will be made for the supervision of equipment and layout of work being paid for under the equipment rental items.

24. “Undetermined locations” shall be determined by the Resident.

25. Stations referenced are approximate.

26. The Contractor will place appropriately-marked stakes at the following locations on the project: striping pattern changes, cross-slope changes, and every 500 feet for stationing. The Contractor will paint every full station (100 feet) on the existing roadway and will transfer the painted stationing through all intermediate lifts (not surface). Appropriately-sized striping pattern changes will be painted on surface. Stationing control must be placed before work can commence. Cross-slope and striping change controls must be placed before paving can commence.

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

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

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

## 2025 Fair Minimum Wage Rates – Highway & Earth Aroostook County

| Occupational Title | Minimum Wage | Minimum Benefit | Total |
|---|---|---|---|
| Brickmasons And Blockmasons | $36.50 | $3.75 | $40.25 |
| Bulldozer Operator | $29.50 | $6.55 | $36.05 |
| Carpenter | $27.90 | $3.55 | $31.45 |
| Cement Masons And Concrete Finisher | $26.50 | $0.00 | $26.50 |
| Construction And Maintenance Painters | $43.81 | $30.39 | $74.20 |
| Construction Laborer | $21.90 | $1.62 | $23.52 |
| Crane And Tower Operators | $39.07 | $8.73 | $47.80 |
| Crushing Grinding And Polishing Machine Operators | $27.50 | $5.64 | $33.14 |
| Earth Drillers - Except Oil And Gas | $22.42 | $4.18 | $26.60 |
| Electrical Power - Line Installer And Repairers | $43.26 | $16.55 | $59.81 |
| Electricians | $41.50 | $21.34 | $62.84 |
| Elevator Installers And Repairers | $71.21 | $43.75 | $114.96 |
| Loading Machine And Dragline Operators | $28.60 | $7.52 | $36.12 |
| Excavator Operator | $33.88 | $8.97 | $42.85 |
| Fence Erectors | $26.00 | $3.70 | $29.70 |
| Flaggers | $20.50 | $0.39 | $20.89 |
| Floor Layers - Except Carpet/Wood/Hard Tiles | $26.50 | $3.83 | $30.33 |
| Glaziers | $46.26 | $22.61 | $68.87 |
| Grader/Scraper Operator | $31.00 | $6.86 | $37.86 |
| Hazardous Materials Removal Workers | $21.13 | $1.14 | $22.27 |
| Heating And Air Conditioning And Refrigeration Mechanics And Installers | $35.00 | $5.49 | $40.49 |
| Heavy And Tractor - Trailer Truck Drivers | $24.86 | $5.16 | $30.02 |
| Highway Maintenance Workers | $22.85 | $5.37 | $28.22 |
| Industrial Machinery Mechanics | $29.50 | $3.83 | $33.33 |
| Industrial Truck And Tractor Operators | $26.17 | $3.49 | $29.66 |
| Insulation Worker - Mechanical | $25.50 | $6.07 | $31.57 |
| Ironworker - Ornamental | $31.37 | $25.82 | $57.19 |
| Light Truck Or Delivery Services Drivers | $22.50 | $3.93 | $26.43 |
| Millwrights | $33.00 | $9.21 | $42.21 |
| Mobile Heavy Equipment Mechanics - Except Engines | $22.30 | $8.71 | $31.01 |
| Operating Engineers And Other Equipment Operators | $26.86 | $6.35 | $33.21 |
| Paving Surfacing And Tamping Equipment Operators | $28.60 | $13.85 | $42.45 |
| Pile-Driver Operators | $36.00 | $2.87 | $38.87 |
| Pipe/Steam/Sprinkler Fitter | $36.00 | $9.30 | $45.30 |
| Pipelayers | $26.00 | $5.06 | $31.06 |
| Plumbers | $33.00 | $5.98 | $38.98 |
| Pump Operators - Except Wellhead Pumpers | $56.03 | $34.76 | $90.79 |
| Radio Cellular And Tower Equipment Installers | $30.00 | $4.85 | $34.85 |
| Reinforcing Iron And Rebar Workers | $31.00 | $0.00 | $31.00 |
| Riggers | $30.50 | $8.25 | $38.75 |
| Roofers | $24.67 | $4.23 | $28.90 |
| Sheet Metal Workers | $27.00 | $6.21 | $33.21 |
| Structural Iron And Steel Workers | $32.02 | $11.13 | $43.15 |
| Tapers | $28.50 | $3.93 | $32.43 |
| Telecommunications Equipment Installers And Repairers - Except Line Installers | $31.00 | $5.43 | $36.43 |
| Telecommunications Line Installers And Repairers | $27.00 | $3.71 | $30.71 |

**Welders are classified as the trade to which welding is incidental (e.g. welding structural steel is Structural Iron and Steel Worker)**

**Apprentices – The minimum wage rates for registered apprentices are the rates recognized in the sponsorship agreement for registered apprentices working in the pertinent classification.**

**For any other specific trade on this project not listed above, contact the Bureau of Labor Standards for further clarification.**

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

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

**A true copy**

**Attest:** Scott R Cotnoir

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

**Expiration Date: 12-31-2025**

# 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 WORK ACCORDINGLY.**

## MEETING

A pre-utility meeting, as defined in Subsection 104.4.6 of the Standard Specifications, **is** required.

## GENERAL INFORMATION

This Special Provisions outline the arrangements that have been made by the Department for utility/railroad work to be undertaken in conjunction with this project. The following table identifies all known utilities/railroad having facilities presently located within the project limits.

Utilities have been notified, and shall be furnished a project booklet electronically.

| Utility Overview & Contact Information | | | | |
|---|---|---|---|---|
| **Utility** | **Aerial** | **Railroad** | **Contact Person** | **Contact Phone** |
| Consolidated Communications of Northern New England Company | X | | Dave Paradis | 956-1788 |
| Versant Power | X | | Phil Rochford | 551-9015 |
| Spectrum-Charter Communications | X | | Marty Madden | 478-7941 |
| MaineDOT Railroad | | X | Greg Gay | 592-1766 |

Temporary utility adjustments **are not** anticipated as part of this project. If any unexpected utility relocations become necessary, they shall be scheduled in compliance with Section 104 of the Standard Specifications and shall be performed by the appropriate utility company in conjunction with the work by the Contractor. Should the contractor choose to have any poles temporarily relocated, all work shall be done at the Contractor's request and expense, with no additional cost or schedule impacts to the Department.

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

Utility working days are Monday through Friday. Times are estimated based on a single crew for each utility. Any times and dates mentioned are **estimates only** and dependent upon favorable weather, working conditions, and freedom from emergencies.

The contractor shall notify all utility/railroad companies **ten (10) working days** prior to beginning any work on this project.

***** Specific information regarding the line voltage can be requested from Versant Power. *****

## AERIAL

Aerial utility adjustments **are** anticipated as part of this project. If any unexpected utility relocations become necessary, they shall be scheduled in compliance with Section 104 of the Standard Specifications and shall be done by the utilities in conjunction with the work by the Contractor.

Attention needs to be made to existing aerial service lines crossing the highway corridor at intermediate locations through-out the project limits. Each of the existing service lines provide a source of power and/or communication to the surrounding residents and commercial properties.

***Utility Specific Information:***

**Consolidated Communications of Northern New England Company:**

Consolidated Communications of Northern New England Company has aerial communication lines existing on both sides of the corridor within the project limits. Consolidated is required to transfer their existing aerial communication line, not already attached, to the main pole line holding Versant Power aerial lines. After Consolidated aerial line transfer has been performed, they have eleven (11) existing poles to remove.

A field review shall be accomplished at the conclusion of the paving binder course and the ditching work activities. This field review could conclude that additional aerial utility scopes involving new pole sets; relocate existing anchors/guy wires; transfer existing lines to existing/new pole sets; and removal of existing poles could need to be accomplished. The MaineDOT utility coordinator shall schedule this field review. The contractor is responsible for participating in this field review if MaineDOT deems necessary.

***Pole List:***

| | Existing/New Pole Description | Existing Pole Centerline Station | Left/ Right | | Existing Offset From Centerline (ft) | New Pole Centerline Station | Left/ Right | | New Offset From Centerline (ft) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | LT | RT | | | LT | RT | | |
| Pole List Starts | | | | | | | | | | |
| PROJECT START (46.00688659/-68.284760) | | | | | | | | | | |
| 1 | 73167 | 52+00+/- | X | | 27+/- | | | | | impacts TBD |
| 2 | 73172/18 | 54+50+/- | X | | 27+/- | | | | | impacts TBD |
| 3 | 73173/19 | 56+09 | X | | 26.8 | | | | | impacts TBD |
| 4 | 52626/20A | 58+22 | X | | 36.2 | | | | | impacts TBD |
| 5 | 71794 | 58+10 | | X | 40.6 | | | | | impacts TBD |
| 6 | 21 | 60+86 | | X | 39.3 | | | | | impacts TBD |
| Pole list continues the next page | | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 71795/22 | 63+60 | | X | 39.1 | | | | | impacts TBD |
| 8 | 52620 | 63+79 | X | | 56.0 | | | | | impacts TBD |
| 9 | 71795/23 | 66+30 | | X | 38.2 | | | | | impacts TBD |
| 10 | 71797/S173 | 69+07 | | X | 37.4 | | | | | impacts TBD |
| 11 | 71798/25 | 72+14 | | X | 35.9 | | | | | impacts TBD |
| 12 | 74551 | 72+14 | X | | 32.8 | | | | | impacts TBD |
| 13 | 71799/26 | 74+90 | | X | 43.8 | | | | | impacts TBD |
| 14 | 71773/27 | 77+75 | | X | 48.1 | | | | | impacts TBD |
| Old Patten Road intersection | | | | | | | | | | |
| 15 | 52609/2/57 | 80+59 | | X | 55.7 | | | | | impacts TBD |
| 16 | 58/2 | 81+64 | X | | 37.7 | | | | | transfer line/remove pole #1 |
| 17 | 71075 | 82+48 | | X | 25.7 | | | | | impacts TBD |
| 18 | 59/2 | 83+00 | X | | 55.1 | | | | | transfer line/remove pole #2 |
| 19 | 71094 | 84+48 | | X | 29.6 | | | | | impacts TBD |
| 20 | 60/2 | 84+61 | X | | 59.4 | | | | | transfer line/remove pole #3 |
| 21 | 72551 | 86+41 | | X | 23.9 | | | | | impacts TBD |
| 22 | 52631 | 86+43 | X | | 40.6 | | | | | impacts TBD |
| ISLAND FALLS/CRYSTAL TOWNLINE (46.006468/-68.299333) | | | | | | | | | | |
| 23 | 05037 | 87+80 | | X | 24.9 | | | | | impacts TBD |
| 24 | 60850 | 88+91 | | X | 22.6 | | | | | impacts TBD |
| 25 | 52634 | 88+98 | X | | 21.5 | | | | | impacts TBD |
| 26 | 61926 | 90+68 | | X | 39.0 | | | | | impacts TBD |
| 27 | 60106 | 90+70 | X | | 29.6 | | | | | impacts TBD |
| 28 | 67194 | 92+26 | | X | 25.3 | | | | | impacts TBD |
| 29 | 61924 | 92+26 | X | | 28.3 | | | | | impacts TBD |
| 30 | 60071 | 92+92 | X | | 27.9 | | | | | impacts TBD |
| 31 | 64 | 94+92 | X | | 28.6 | | | | | transfer line/remove pole #4 |
| 32 | 71093 | 95+38 | | X | 26.0 | | | | | impacts TBD |
| 33 | 60056 | 96+92 | X | | 29.6 | | | | | impacts TBD |
| 34 | 71065 | 97+09 | | X | 25.7 | | | | | impacts TBD |
| station 98+50 – start of new centerline at sharp-curve | | | | | | | | | | |
| 35 | 73552 | 98+79 | | X | 25.6 | | | | | impacts TBD |
| 36 | 60037/66 | 98+82 | X | | 30.3 | | | | | impacts TBD |
| new Belvedere Road intersection (station 100+25) | | | | | | | | | | |
| 37 | 60851 | 100+28 | X | | 105.1 | | | | | impacts TBD |
| 38 | 63154 | 100+21 | | X | 29.2 | | | | | impacts TBD |
| 39 | 05040 | 101+62 | X | | 23.8 | | | | | impacts TBD |
| 40 | 63175 | 101+66 | | X | 29.3 | | | | | impacts TBD |
| 41 | no description | 101+99 | X | | 25.1 | | | | | transfer line/remove pole #5 (green pole) |
| Station 102+50 – end of new centerline at sharp-curve | | | | | | | | | | |
| 42 | 73553 | 103+17 | | X | 31.5 | | | | | impacts TBD |
| 43 | 2/70 | 104+20+/- | X | | 22+/- | | | | | transfer line/remove pole #6 |
| 44 | 71068/52689 | 104+72 | X | | 22.2 | | | | | impacts TBD |
| 45 | 71 | 106+02 | | X | 22.9 | | | | | transfer line/remove pole #7 |
| 46 | 71095 | 106+02 | X | | 22.0 | | | | | impacts TBD |
| 47 | 73555 | 107+19 | | X | 22.1 | | | | | impacts TBD |
| Pole list continues the next page | | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 48 | 72 | 107+63 | X | | 27.4 | | | | | transfer line/remove pole #8 |
| 49 | 72S | 107+65 | | X | 28.9 | | | | | transfer line/remove pole #9 |
| 50 | 60036 | 108+72 | X | | 30.9 | | | | | impacts TBD |
| 51 | 73554/73.1 | 108+71 | | X | 29.0 | | | | | impacts TBD |
| 52 | 61919 | 109+94 | | X | 42.7 | | | | | impacts TBD |
| 53 | 74 | 109+94 | X | | 31.0 | | | | | transfer line/remove pole #10 |
| RAILROAD CROSSING (46.00690982/-68.28616526) | | | | | | | | | | |
| 54 | 61920 | 111+28 | | X | 18.7 | | | | | impacts TBD |
| 55 | 6/2/75 | 111+33 | X | | 27.6 | | | | | transfer line/remove pole #11 |
| 56 | 63794 | 112+70 | X | | 33.0 | | | | | impacts TBD |
| 57 | 59538 | 113+23 | | X | 20.7 | | | | | impacts TBD |
| 58 | 52698 | 113+67 | X | | 24.6 | | | | | impacts TBD |
| PROJECT END (46.00910544/-68.3073448874) | | | | | | | | | | |
| 59 | 52684 | 114+58 | X | | 41.4 | | | | | Ok |
| 60 | 69531 | 115+15 | | X | 23.3 | | | | | Ok |
| Pole List Ends | | | | | | | | | | |

## SUBSURFACE

Subsurface utility adjustments **are not** anticipated as part of this project. If any unexpected utility relocations become necessary, they shall be scheduled in compliance with Section 104 of the Standard Specifications and shall be done by the utilities in conjunction with the work by the Contractor.

## RAILROAD

**Maine Northern Railways (MNR):**

Maine Northern Railways is the operator at the rail crossings along Route #159 in Crystal. MNR needs to be notified **ten (10) working days** prior to working within 50' of the rail crossing location (*includes contractors and aerial utility companies*). This notification is to ensure that acceptable communication is occurring when working within the limits of the railroad right-of-way, and to allow for proper scheduling of track protection personnel and/or track safety items. This means that track protection personnel and/or track safety items are required always when working within the 50' of the rail crossing.

At this rail crossing #903824 (46.00872/-68.30621), the contractor shall perform pavement removal by milling to improve the ride as necessary; removing loose pieces and filling potholes with new hot mix; and finally placing a continuous overlay with new ¾"" thick rolled HMA. These work activities shall include the area between the existing rails. The intent is for the existing pavement mat to continuously be covered, excluding the rubber/rail configurations, with new HMA. The payment associated with the contractor milling butt-joints for transitions and between existing rubbers/rails/etc. shall be incidental to a paving bid item. All other work activities adjacent to this rail crossing shall be reviewed with the MaineDOT resident prior to being accomplished.

In addition to any other forms of insurance or bonds required under the terms of the Contract, the Contractor will be required to procure and maintain, at its sole cost and expense, the following insurance coverages naming the Maine Northern Railways as an additional insured:

a. Railroad Protective Liability Insurance with limits of not less than $2,000,000 per single occurrence and $6,000,000 per aggregate total occurrences.

b. Comprehensive General Liability Insurance protecting against liability from bodily injury or property damage arising out of the Construction Project with limits of not less than $2,000,000 per single occurrence and $6,000,000 per aggregate total occurrences.

This insurance coverages shall be activated prior to any work being performed on the project and shall remain in effect until all work required under the terms of the contract is satisfactorily completed as evidenced by the formal acceptance by MaineDOT. Further, signed certificates for the Railroad Protective Liability Insurance and the Comprehensive General Liability Insurance shall be furnished to the MaineDOT.

**MaineDOT Railroad:**
MaineDOT Railroad is the owner of the railroad that represents the above-mentioned rail crossing. The contractor is responsible for coordinating all notifications, work activities, track protection personnel and track safety items through the MaineDOT Railroad representative. See the above table for contact information.

## MAINTAINING UTILITY LOCATION MARKINGS

The Contractor shall 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.

**Crystal & Island Falls**
**027670.00 & 027670.10**
**March 3, 2025**

# SPECIAL PROVISION 105
# CONSTRUCTION AREA

**Construction Areas** located in the Towns of Crystal & Island Falls have been established by the Maine Department of Transportation (MDOT) in accordance with provisions of 29-A § 2382 Maine Revised Statutes Annotated (MRSA).

*The sections of highway under construction in Aroostook County:*

***Projects 027670.00 & 027670.10** are located in the towns of Crystal & Island Falls on Route159 beginning 0.54 of a mile east of Old Patten Road and extending west 1.24 miles.*

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 Towns of Crystal & Island Falls 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.

Crystal, Route 159
WIN 27670.00 and 27670.10
February 26, 2025

# SPECIAL PROVISION
# SECTION 105
# GENERAL SCOPE OF WORK
# (Environmental Requirements)

I. Wetlands are defined as areas inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas. The following special conditions shall apply to this project:

A. In-wetland work applies to the following location:

1. XC138568: 46.00902, -68.307084

B. To minimize the spread of invasive species, straw mulch shall be utilized in disturbed wetland areas for soil stabilization.

II. Approvals:

A. Soil Erosion and Water Pollution Control Plan (SEWPCP)

B. Permitted Protected Natural Resource Impacts, see Corps Maine GP 22 Permit Number NAE-2025-00314 for locations:

Wetland
1. Permanent: 42 s.f.
2. Temporary: 250 s.f.

III. To protect Northern Long Eared Bat (*Myotis septrionalis*) a federally Endangered species:

A. All work must comply with the following avoidance and minimization measures;

1. GENERAL AMM : Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable AMMs;

2. LIGHTING AMM: Direct temporary lighting away from suitable habitat during the active season of April15- October 31.

3. If the Contractor witnesses a bat (dead or alive), any activities that may injure any live bats must cease immediately and must contact the MaineDOT Environmental (ENV) Office for further coordination. Dead and/or injured bats will be collected by a MaineDOT biologist for further investigation or transfer to a veterinarian. Work in the vicinity of the live/dead bat sighting will not resume until the ENV office or project resident confirms it is acceptable to do so.

IV. To protect migratory birds pursuant to the Migratory Bird Act of 1918:

If the Contractor observes an active bird nest within the project limits, any activities that may disturb the nest or injure birds (i.e., nesting adults, chicks, eggs) must cease immediately, and the Contractor shall contact the ENV Office for further coordination.

V. If the authorized work is not complete before the monarch butterfly (*Danus Plexippus)* is listed under the Endangered Species Act (ESA), the permittee shall contact the MaineDOT Environmental Office for section 7 consultation with the USFWS.

VI. If the authorized work is not complete before the Suckley's cuckoo bumble bee (*Bonbus suckleyi)* is listed under the Endangered Species Act (ESA), the permittee shall contact the MaineDOT Environmental Office for section 7 consultation with the USFWS.

# SPECIAL PROVISION
# SECTION 105

GENERAL SCOPE OF WORK
(LIMITATIONS OF OPERATIONS)

1. Only one paving operation is allowed at one time, excluding hand placed paving, unless otherwise approved by Resident.

2. The Contractor's Traffic Control Plan shall address construction practices and schedules that will be implemented to minimize vehicle, pedestrian, and bicycle disruptions.

3. The Contractor will not be allowed to work Saturdays placing PMRAP. The contractor may work Saturdays placing HMA. Notification of Saturday work must be made 48 hours in advance to the Department.

4. A 24-hour notice is required for any changes in work schedule.

5. The Contractor must maintain a minimum of one lane of one-way alternating traffic at all times.

6. Daily operating hours for PMRAP placement will be determined by the Department. A typical full production day can range from 10 to 16 hours. See Special Provision 631 section 631.07 for explanation of overtime pay.

7. The Contractor shall request absences at least 72 hours in advance. The Department will review and approve based on existing roadway conditions, paving deadlines, adherence to schedule, traffic restrictions, detours, etc. The contractor shall assure that the roadway surface and signage are maintained for safe passage of the traveling public during any approved absences. The Department will not modify the Contract Completion Date for approved absences.

8. Hourly payment for item 631.161 (Paving Crew) shall begin 15 minutes prior to commencement of the placement (placement time will be determined the previous day). No payment will be made if the placement does not commence due to inclement weather unless the Department authorizes the Contractor to stand by.

9. PMRAP shall be continuous until completed unless otherwise agreed upon by the Department.

10. The Department and the Contractor shall hold a coordination meeting a minimum of 7 calendar days prior to the beginning of work. Tentative date for the pugmill to be on site and ready to go is June 12, 2025.

11. The Contractor shall plan operations so that the Resident will have sufficient advance notification to provide the necessary inspection and testing. Sufficient notification is considered 48 hours.

12. Night work will not be allowed.

13. Traffic can travel on milled surfaces on the mainline. After 21 calendar days, the Contractor shall repair any milled areas not covered, in need of extra repair or maintenance (see Special Provision 202) to the satisfaction of the Resident. All work, equipment and materials required to make repairs is at the Contractor's expense. Failure to adequately maintain milled areas will also result in a violation of Special Provision 652. The Contractor shall plan and conduct their work accordingly.

**SPECIAL PROVISION**
**SECTION 107**
Prosecution and Progress
(Contract Time)

1. 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.

2. The completion date for this contract is 10/31/2025.

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

4. Once operations commence, for every weekday not worked the Department will charge Supplemental Liquidated Damages in accordance with the per diem rates set forth in Section 107.7.2 of the Standard Specifications; excluding days lost to inclement weather, holidays, and approved absences.

October 25, 2011
Supersedes December 12, 2002

# SPECIAL PROVISION
# SECTION 107
# SCHEDULING OF WORK

Replace Section 107.4.2 with the following:

"107.4.2 Schedule of Work Required Within 21 Days of Contract Execution and before beginning any on-site activities, the Contractor shall provide the Department with its Schedule of Work. The Contractor shall plan the Work, including the activity of Subcontractors, vendors, and suppliers, such that all Work will be performed in Substantial Conformity with its Schedule of Work. The Schedule must include sufficient time for the Department to perform its functions as indicated in this Contract, including QA inspection and testing, approval of the Contractor's TCP, SEWPCP and QCP, and review of Working Drawings.

At a minimum, the Schedule of Work shall include a bar chart which shows the major Work activities, milestones, durations, **submittals and approvals**, and a timeline. Milestones to be included in the schedule include: (A) start of Work, (B) beginning and ending of planned Work suspensions, (C) Completion of Physical Work, and (D) Completion. If the Contractor Plans to Complete the Work before the specified Completion date, the Schedule shall so indicate.

Any restrictions that affect the Schedule of Work such as paving restrictions or In-Stream Work windows must be charted with the related activities to demonstrate that the Schedule of Work complies with the Contract.

The Department will review the Schedule of Work and provide comments to the Contractor within 20 days of receipt of the schedule. The Contractor will make the requested changes to the schedule and issue the finalized version to the Department."

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

The March 2020 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 using 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 30 foot minimum contact ski (floating beam), 24 foot non-contact ski (floating beam) with 3 or more sensors; or 3 non-contact sensors directly affixed at the fore, mid, and aft points of the milling machine. Systems designed to incorporate a contact sensor located at the mid-point of the milling machine in lieu of the non-contact sensor will be permitted. Grade control sensors shall all be located on the same side. A single sensor, contact or otherwise, shall not be permitted unless otherwise approved by the Department.

The rotary drum shall be a minimum of 7 feet in width and utilize carbide tip tools at a minimum triple wrap configuration. The difference in height from the top of any ridge to the bottom of the groove adjacent to that ridge shall not exceed ¼ inch. The forward speed of the milling machine shall be adjusted to produce a milled surface meeting the groove spacing, groove depth, and surface tolerance requirements of this specification. The tools on the revolving cutting drum must be continually maintained and shall be replaced as warranted to provide a uniform pavement texture. The Department may evaluate the texture of the milled surface for information purposes by performing the Sand Patch test according to ASTM E 965.

The Contractor shall locate and remove all objects in the pavement through the work area that would be detrimental to the milling 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 ½ 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 roadways with adjoining lanes carrying traffic, the Contractor shall remove the pavement surface in each lane per the conditions in Table 1, unless otherwise noted by the Department in Special Provision, Section 105 – Limitations of Operations.

TABLE 1: MILLING CONDITIONS FOR ADJOINING LANES

| **Depth (At Centerline)** | **Milling Conditions** |
|---|---|
| **Vertical Longitudinal Joint** | |
| 2" and less | The Contractor may remove the pavement on a single travel lane width for each production day and will be required to mill the adjacent section of travel lane before the end of the following calendar day. |
| Greater than 2" | The Contractor shall remove the pavement over the full width of the traveled way section being paved that day. |
| **12:1 Tapered Centerline Joint** | |
| 1 ½" to 2" | The Contractor may remove the pavement on a single travel lane width for each production day and will be required to mill the adjacent section of travel lane before weekend or holiday suspension. A maximum unmatched centerline joint length of 0.5 miles will be permitted over the weekend. |
| Greater than 2" | The Contractor shall remove the pavement on a single travel lane width for each production day and will be required to mill the adjacent section of travel lane before the end of the following calendar day. |

The Contractor will be required to remove the pavement over the full width of the mainline traveled way, regardless of highway type, cut depth, or longitudinal joint type prior to Memorial Day, July 4th, Labor Day, suspensions exceeding three days, or other dates as specified by Special Provision, Section 105 – Limitations of Operations.

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. 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. 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.

On roadways with immediately adjacent shoulders, the Contractor shall remove the pavement surface in each lane per the conditions in Table 2, unless otherwise noted by the Department in Special Provision, Section 105 – Limitations of Operations.

TABLE 2: MILLING CONDITIONS FOR THE EDGE OF TRAVELED WAY

| **Depth (At Edge of Traveled Way)** | **Conditions** |
|---|---|
| 2" and less | The Contractor may leave a vertical edge joint exposed for up to **21 days** after milling is performed. The Contractor shall treat vertical edge joints exposed beyond 21 days per the criteria below. |
| Greater than 2" | The Contractor shall treat vertical edge joints exposed per the criteria below. |

When required by Table 2, the Contractor shall treat vertical edge joints through one of the options below:

1. The vertical edge shall 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. 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. Unless otherwise authorized by the Department, no additional payment will be made for the additional milling.
3. A pavement layer shall be placed to reduce the vertical edge to 1 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 for all elevation differentials. 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.

Weepers shall be ground across the full width sections adjacent shoulders or remaining pavement surface matching the milled travel way or shoulder milled depth to minimize water ponding in any lanes carrying traffic. Weepers shall typically be 18 - 24" inches in width, installed along each lane, at a frequency of approximately one per half mile at locations as directed by the Resident or in areas that will provide drainage for the milled areas. Installation of weepers will not be paid for directly but will be considered incidental to the contracts pavement removal item. The replacement of mix in the weeper locations shall be performed concurrently within the pavement placement operation closure using the appropriate HMA item produced for the Contract or a MaineDOT approved 9.5mm HMA. There will be no separate payment for repaving the weeper locations as they are considered incidental to the square yard price of the contracts pavement removal item.

The milled surface shall be cleaned of all material resulting from the pavement removal operation. Loaders, skid steers, motorized side cast brooms, sweeper pick up brooms, vacuum pick up machines and hand labor may be used in any number or sequence as determined by the Contractor in order to clean the milled surfaces to the satisfaction of the Department before acceptance and opening the area up to traffic. The use of compressed air may be required to loosen any bonded materials from the surface to aid in cleaning.

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.

Basis of Payment

The square yard or hourly rental contract price will be full compensation for mobilizing to the site, de-mobilizing from the site, labor, supervision, cleaning of the milled surface, and all other incidentals required to complete the work. Hauling and stockpiling of the material will not be paid for directly, but will be considered incidental to the milling items.

Square Yard: Payment will be made at the contract unit price for the number of square yards removed.

Hourly: Payment will be made at the contract unit price for the number of hours of operation removing pavement surface as directed by the Resident. The equipment used for pavement removal shall be operated at the minimum speed of 50 fpm, unless the Resident directs otherwise for milled surface quality reasons, or traffic control limitations impact pavement removal operations, or site conditions make operations at the prescribed rate unreasonable. Trimming to create a vertical face along curb line, guardrail, or around structures will be considered incidental to the 202.202 items. Additional trimming beyond the incidental work described will be paid under the appropriate rental items as listed in the Contract.

| Pay Item | Pay Unit |
|---|---|
| 202.202 Removing Pavement Surface | S.Y. |
| 202.20201 Removing Pavement Surface (Hourly) | Hour |

# SPECIAL PROVISION
# SECTION 204
# SHOULDER REHABILITATION

The following additions are made to Section 204 Subsections 204.10 and 204.11 of the March 2020 revision of the Standard Specifications.

204.06 Method of Measurement:

The accepted quantity of Add Shoulder Aggregate to existing shoulder will be paid for at the contract unit price per cubic yard.

204.11 Basis of Payment:

| Pay Item | Pay Unit |
|---|---|
| 204.21 Add Shoulder Aggregate – Truck Measure | Cubic Yard |

# SPECIAL PROVISION
# SECTION 310
# PLANT MIXED RECYCLED ASPHALT PAVEMENT

310.01 Description This work shall consist of the Processing (screening, crushing, sizing, and stockpiling) of Department supplied recycled asphalt pavement (RAP), as well as the mixing of the processed materials with the required additives in an approved cold mix plant, and the successful placement of the processed materials in the locations identified in the contract per Section 310.020.

All plant mixed recycled asphalt pavement (PMRAP) shall be placed with a paver as described within this specification in subsection 310.032. All PMAP shall be placed in one or more courses on an approved base, and in accordance with these specifications. It shall be placed in reasonably close conformity with the lines, grades and thicknesses indicated on the plans and specifications, or as established by the Resident. Excess untreated recycled asphalt pavement materials not used in the pugmill process will remain as the property and responsibility of the Department. Excess treated PMRAP not placed in the actual roadway sections identified in the contract will remain the property and responsibility of the Department unless agreements are made otherwise.

## MATERIALS

310.20 Composition of Mixture The PMRAP mixture shall be composed as directed in the job mix formula (JMF). The actual JMF additive proportions will be established by executing a mix design using recycled material samples once the recycled asphalt stockpiles have been constructed.
A JMF shall be furnished by the Department establishing the percentage of emulsified asphalt cement, Portland cement, aggregate, and water to be used in the mixture. Emulsion, water, aggregate and Portland cement shall be added in percentage by weight and verified by tank checks done in accordance with the minimum testing and monitoring frequencies. Portland cement additive may be done in dry form or introduced as a cement slurry.

310.41 Recycled Asphalt Pavement Materials All recycled asphalt materials shall be sourced from Department supplied piles, unless otherwise specified in the contract. All materials shall be processed to pass a ¾ inch, [19.0mm] square sieve, and stockpiled as to minimize segregation. The stockpile shall be free of any materials not generally considered to be asphalt pavement, or bituminous treated material.

If additional material is required, the material will be supplied by the Department or acquired from the contracted sources through the Contract Modification process. Materials from offsite sources shall be processed so that all materials will be no larger than ¾ inch [19.0mm] and stockpiled so as to minimize segregation.

310.21 Emulsified Asphalt The emulsified asphalt materials shall be sourced from a supplier contracted by the Department. The emulsified asphalt shall be grade MS-4 as determined by the Department and meeting the requirements of Section 702.04 - Emulsified Asphalt. It shall be the Pugmill Manager's responsibility to coordinate the emulsion delivery with the emulsion supplier.

The Pugmill Manager shall provide the emulsion supplier 72 hours prior notice of their intent to start the PMRAP processing portion of contract. Once PMRAP processing has begun, a 12-hour notice must be provided for delivery. A delivery slip and lab certificate will be obtained from each load of emulsified asphalt. Each load shall be recorded in the Pugmill Operators' production log, and load documents delivered to the Pugmill Manager daily to be recorded in the Plant Report.

310.22 Portland Cement Portland Cement shall be Type I or II meeting the requirements of AASHTO M85. A delivery slip and lab certificate will be obtained from each load. Each load shall be recorded in the Pugmill Operators' production log and load documents delivered to the Pugmill Manager daily to be recorded in the Plant Report.

310.23 Water Water shall be clean and free from deleterious concentrations of acids, alkalis, salts or other organic or chemical substances. Each load used, as well as the percentage of water added to the mixture, shall be recorded in the Pugmill Operators production logbook daily. Should adjustments to the percent water used be made during the day, those adjustments should be recorded in the production log as well.

## EQUIPMENT

310.30 Mixing Plant The Department will provide the mixing plant.

The mixing plant shall be equipped with belt scales to accurately proportion the additives by mass, adjusted by moisture content of the processed recycled asphalt pavement stockpile. The belt scale will be checked for calibration at each new location prior to mix production. The belt scale calibration shall be verified daily prior to mixing. Each scale check and adjustment made to accurately measure material production shall be recorded in the Pugmill Operators' production log.

The cement hopper, silo feed, or other cement introduction systems shall be readily adjusted to meet the percentages required by the JMF. Mathematical yield calculations will be required daily to ensure the setup provides the target cement percentage. Adjustments the feed setup will be required if actual cement usage deviates from the desired percentage. The plant shall be operated at a production rate so as to provide a uniform, well-mixed product. Adjustments made to maintain additive percentages shall be recorded in the Pugmill Operators production log.

All yield calculations for emulsion, cement and water will be recorded in a in a daily production log to be maintained by the Pugmill Operator and presented to the Pugmill Manager upon end of day.

310.31 Hauling Equipment Hired trucks, if utilized, hauling the mixture shall meet the requirements of Division 400 - subsection 401.08.

310.32 Bituminous Pavers Pavers shall meet the requirements of Special Provision 631, and Division 400 - subsection 401.09.

310.33 Rollers Rollers shall meet the requirements of Special Provision 631, and Division 400 - subsection 401.10. As a minimum, a 10 ton dual drum vibratory or oscillatory roller, 16 ton pneumatic roller, and 10 ton final roller will be required. The sequence of rollers, and number of passes will be as determined during the control strip.

## CONSTRUCTION REQUIREMENTS

310.040 Weather Limitations PMRAP production and placement shall be performed under the following conditions:

a. PMRAP placement operations will be allowed between May 15th and September 15th inclusive in Zone 1 - Areas north of US Route 2 from Gilead to Bangor and north of Route 9 from Bangor to Calais. PM-RAP will be allowed between May 1st and September 30th inclusive in Zone 2 - Areas south of Zone 1 including the US Route 2 and Route 9 boundaries.
b. When the atmospheric temperature, as determined by an approved thermometer placed in the shade at the placement location, is $50^0$F and rising.
c. When there is no standing water on the surface to be paved.
d. During generally dry conditions, or when weather conditions are such that proper mixing, 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 $40^0$F.

310.42 Preparation of Existing Pavement Surface - The Department will prepare the existing roadway by the means of sweeping and grading as required. All existing pavement will receive an asphalt tack coat before placing PMRAP. Placement of the PMRAP material will not be allowed on wet pavement surfaces, unless otherwise authorized by the Department.

310.43 Material Mixing Mixing shall be allowed if weather conditions permit, and when the temperature is not less than 50°F. The emulsified asphalt shall meet the mixing temperature requirements listed in Section 702.05 - Application Temperatures. Recycled bituminous materials, emulsified asphalt, water, and Portland cement shall be properly proportioned according to the JMF, and the mixing time shall be set to produce a mixture in which uniform distribution of the emulsified asphalt and coating of the recycled pavement is obtained. The plant shall be operated at a production rate so as to provide a uniform, well-mixed product.

Moisture content of the stockpiled recycled materials shall be checked before the start of a new location and at least once during each day of production to determine adjustments to the belt scale totals, and to determine if increased or decreased water percentages are required. Moisture test results will be recorded in a daily production Plant Report.

Following mixing, the PMRAP material shall be stockpiled and incorporated into the work. The PMRAP must be stockpiled prior to use, but not for longer than 24 hours.

310.44 Spreading and Finishing The PMRAP mixture shall be spread and finished in accordance with Division 400 - Section 401.15. Areas requiring the placement of PMRAP in excess of 4 inches total depth shall be paved in multiple layers. Each layer placed will not exceed 4 inches. **Extended cure times may be required for such areas**.

310.45 Compaction Compaction of the mixture shall be in accordance with Section 401.16. The processed material shall be compacted to a minimum density of 96% of the target density as determined in the control section. See also Section 310.051.

310.46 Joints Joints shall be constructed in accordance with Division 400 - section 401.17.

310.47 Surface Tolerances The surface tolerances shall be as specified in Division 400 - section 401.101, except that the maximum allowable variation shall be ½ inch.

310.48 Repairs Delaminations, potholes, or low areas will be repaired using a hot mix asphalt shim course. High areas will require PMRAP removal. Any repair work required as a result of workmanship, equipment malfunction or failure will be at the Contractor's expense.

## TESTING REQUIREMENTS

310.050 Testing and Monitoring Plan The Pugmill Operator shall operate the plant in accordance with this document or as directed by the Pugmill Manager.

Prior to beginning the PMRAP mixing process, the Department shall hold a pre-recycle conference to discuss the recycling schedule, type and amount of equipment to be used, sequence of operations, traffic control, and the Contractor's responsibilities. All supervisors including the responsible trucking and traffic control supervisors shall attend this meeting.

The meeting agenda and discussion shall address any items that affect the quality of the recycling process including, but not limited to, the following:

a. Methods to adhere JMF(s).
b. Mixing details, pugmill type, production rates, material processing.
c. Make and type of paver(s).
d. Make and type of rollers including weight, weight per inch of steel wheels, and average contact pressure for pneumatic tired rollers.
e. Methods of monitoring moisture contents of stockpiles, emulsion and other additive control, and compaction efforts.
f. Transportation, including process for ensuring that truck bodies are clean and free of debris or contamination that could adversely affect the finished product, type of release agent used (if required)
g. Laydown operations, including procedures for mix design modification, avoiding recycling and curing in inclement weather, material yield monitoring, methods to ensure that segregation is minimized, longitudinal joint construction, procedures to

determine the maximum rolling and placing speeds based on field quality control, and achieving the best possible smoothness.

h. Methods for protecting the finished product from damage and procedures for any necessary corrective action.
j. Examples of TMP and logbook forms.
k. Method for calibration/verification of density gauge.
l. Stockpile procedures including method of moisture monitoring.

The Contractors paving superintendent shall be in attendance, the onsite paving crews roles, responsibilities and communication process determined.

The Project Resident shall coordinate the sampling and testing in accordance with the following procedures and minimum frequencies:

MINIMUM TMP FREQUENCIES

| Test or Action | Frequency | Test Method |
|---|---|---|
| Density | 1 per 1000 ft / lane | ASTM D 2950 |
| Air Temperature | 4 per day at even intervals | |
| Surface Temperature | At the beginning and end of each days operation | |
| Yield of all materials (Both the daily yield and yield since last test) | 4 per day at even intervals | |

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

a. The computed yield of each additive differs from the approved Job Mix Formula by 10% or more.
b. The finished product is visually segregated, unstable, or otherwise defective, as determined by the Pugmill Manager.

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

310.051 Control Strip / Field Proctor The Project Resident shall assemble all items of equipment for the recycling operation on the first day of the recycling work. The Contractor shall construct a control strip for the project at a location approved by the Resident. The control 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 sequence and manner of rolling necessary to obtain optimum compaction requirements; and;
c. Establish the number of roller passes per roller.

.

The strip shall be full lane-width and at least 300 feet in length. After the control strip has been placed, it will be compacted with the required number of rollers as directed until density readings show an increase in density of less than 2 pcf for the final four roller passes. The number of passes for each roller shall be recorded and become part of the compaction process.

Should three consecutive test results for density fail to meet a minimum of 96.0% of TMD, or exceed the maximum of 102.0% of field established TMD, a new control strip shall be constructed.

310.06 Curing No new hot mix asphalt pavement shall be placed on the PMRAP asphalt pavement until a curing period of **(5) five days** has elapsed. The curing period starts once the final PMRAP layer has been placed on the roadway section paved. When weather conditions are unfavorable, the curing period may be extended by the Resident.

October 25, 2011
Supersedes December 12, 2002

# SPECIAL PROVISION
# SECTION 107
# SCHEDULING OF WORK

Replace Section 107.4.2 with the following:

"107.4.2 Schedule of Work Required Within 21 Days of Contract Execution and before beginning any on-site activities, the Contractor shall provide the Department with its Schedule of Work. The Contractor shall plan the Work, including the activity of Subcontractors, vendors, and suppliers, such that all Work will be performed in Substantial Conformity with its Schedule of Work. The Schedule must include sufficient time for the Department to perform its functions as indicated in this Contract, including QA inspection and testing, approval of the Contractor's TCP, SEWPCP and QCP, and review of Working Drawings.

At a minimum, the Schedule of Work shall include a bar chart which shows the major Work activities, milestones, durations, **submittals and approvals**, and a timeline. Milestones to be included in the schedule include: (A) start of Work, (B) beginning and ending of planned Work suspensions, (C) Completion of Physical Work, and (D) Completion. If the Contractor Plans to Complete the Work before the specified Completion date, the Schedule shall so indicate.

Any restrictions that affect the Schedule of Work such as paving restrictions or In-Stream Work windows must be charted with the related activities to demonstrate that the Schedule of Work complies with the Contract.

The Department will review the Schedule of Work and provide comments to the Contractor within 20 days of receipt of the schedule. The Contractor will make the requested changes to the schedule and issue the finalized version to the Department."

# SECTION 401 - HOT MIX ASPHALT PAVEMENT

401.01 Description The Contractor shall furnish a uniformly blended, homogeneous mixture placed as one or more courses of Hot Mix Asphalt Pavement (HMA) on an approved base in accordance with the contract documents and in reasonably close conformity with the lines, grades, thickness, and typical cross sections shown on the plans or established by the Resident. The Department will accept this work under Quality Assurance provisions, in accordance with these specifications and the requirements of Section 106 – Quality, the provisions of AASHTO M 323 except where otherwise noted in sections 401 and 703 of these specifications, and the MaineDOT Policies and Procedures for HMA Sampling and Testing.

401.02 Materials Materials shall meet the requirements specified in Section 700 - Materials:

| | |
|---|---|
| Asphalt Cement | 702.01 |
| Aggregates for HMA Pavement | 703.07 |
| RAP for HMA Pavement | 703.08 |
| HMA Mixture Composition | 703.09 |

401.03 Composition of Mixtures The Contractor shall compose the Hot Mix Asphalt Pavement with aggregate, Performance Graded Asphalt Binder (PGAB), approved antistrip, warm mix additive, and/or mineral filler if required. HMA shall be designed and tested according to AASHTO R 35 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). Unless otherwise noted in Special Provision 403 - Hot Mix Asphalt Pavement, the design, verification, Quality Control, and Acceptance tests for this mix will be performed at 65 gyrations.

TABLE 1: VOLUMETRIC DESIGN CRITERIA

| **Design ESAL's (Millions)** | **Required Density (Percent of $G_{mm}$)** | | | **Voids in the Mineral Aggregate (VMA) (Minimum Percent)** | | | | | **Voids Filled with Binder (VFB) (Minimum %)** | **Fines/Eff. Binder Ratio** |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | **Nominal Maximum Aggregate Size (mm)** | | | | | | |
| | **$N_{initial}$** | **$N_{design}$** | **$N_{max}$** | **25.0** | **19.0** | **12.5** | **9.5** | **4.75** | | |
| < 3.0 | ≤90.5 | 96.0 | ≤98.0 | 13.0 | 14.0 | 15.0 | 16.0 | 16.0 | 65-80* | 0.6-1.2 |
| 3 to <10 | ≤89.0 | | | | | | | | | |
| ≥ 10 | | | | | | | | | | |

*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.

The Contractor shall submit a JMF to the Department for each mixture to be supplied. The JMF will be approved by the Department in accordance with the MaineDOT HMA Policies and Procedures for HMA Sampling and Testing Manual. 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 coarse aggregate stockpiles and 75 ton for fine aggregate stockpiles before the JMF may be submitted. The Contractor shall provide aggregate samples to the Department unless otherwise required. 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. 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 for a JMF as outlined in the MaineDOT HMA Policies and Procedures for HMA Sampling and Testing Manual: Mix Design Approval Section.

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.

401.031 Warm Mix Technology The Contractor may place Hot Mix Asphalt Pavement produced with an accepted WMA technology if approved by the Department. Methods or technologies shall generally be at the Contractors option, but will be limited to proven, Agency and Industry accepted practice. Mixture production, placement and volumetric testing details, including temperatures, shall be included in the project specific QCP, and submitted to the Department for approval prior to any work.

401.04 Temperature Requirements The temperature of the mixture shall conform to the tolerances in Table 2 as measured at the truck at the mixing plant and at the paver unless otherwise authorized by the Department.

TABLE 2: ALLOWABLE TEMPERATURE RANGES

| **PGAB Grade(s)** | **Temperature Range (°F)** |
|---|---|
| PG58-28 / PG64-28 | 275-325 |
| PG64E-28 / PG70E-28 | 285-335 |

401.05 Performance Graded Asphalt Binder The Contractor shall utilize either a PG58-28, PG64-28, PG64E-28, PG70E-28, or other grade as specified in the 403 Special Provision. The Contractor shall utilize a PG64-28 if no liquid grade is specified within the 403 Special Provision.

401.06 Weather and Seasonal Limitations The State is divided into two paving zones as follows:

a. Zone 1 Areas north of US Route 2 from Gilead to Bangor and north of Route 9 from Bangor to Calais.
b. Zone 2 Areas south of Zone 1 including the US Route 2 and Route 9 boundaries.

TABLE 3: SEASONAL AND TEMPERATURE LIMITATIONS

| Use | Minimum Ambient Air Temperature | Zone 1 Allowable Placement Dates | Zone 2 Allowable Placement Dates |
|---|---|---|---|
| Surface course (travelway & adjacent shoulders*) less than 1 in. thick placed during conditions defined as "night work" | 50°F | June 1 to Saturday following September 1 | |
| Surface course (travelway & adjacent shoulders*) less than 1 in. thick | 50°F | May 15 to Saturday following September 15 | |
| Travelway surface course greater than or equal to 1 in. thick | 50°F | May 1 to Saturday following October 1 | April 15 to Saturday following October 15 |
| HMA for surface course on bridge decks | 50°F | May 1 to Saturday following October 1 | April 15 to Saturday following October 15 |
| HMA for base or shim course on bridge decks | 50°F | April 15 to November 15 | |
| HMA for use other than travelway surface course | 40°F | April 15 to November 15 | |
| HMA for curb, driveways, sidewalks, islands, or other incidentals | 40°F | N/A | N/A |
| HMA produced with an approved WMA technology for base or shim course | 35°F | April 15 to November 15 | |
| *Adjacent shoulders shall be considered shoulders paved in the same operation as the travelway. | | | |

The ambient air temperature shall be determined by an approved thermometer placed in the shade at the paving location. Unless otherwise specified, the Contractor shall not place Hot Mix Asphalt Pavement on a wet or frozen surface regardless of the ambient air temperature. The Hot Mix Asphalt Pavement produced with an approved WMA technology shall meet the requirements of section 401.04 - Temperature Requirements, unless otherwise approved by the Department. For the purposes of this Section, the traveled way includes truck lanes, ramps, approach roads and auxiliary lanes.

401.07 Hot Mix Asphalt Plant

401.071 General Requirements HMA plants shall conform to AASHTO M 156, Standard Specification for Requirements for Mixing Plants for Hot-Mixed, Hot-Laid Bituminous Paving Mixtures with exception of Section 4.2.1, 4.2.2, 4.3.4, 4.3.5, and 4.12.2.

All HMA plants will be inspected annually by the Department prior to producing HMA for Department projects. The Contractor shall provide the Department at least 72 hours' notice that the plant is ready for inspection. The Contractor shall equip the plant with ladders and platforms that are accessible and safe to obtain samples of PGAB, aggregate and mix from the relevant tanks, collector belts and haul units. Silo storage time of mixtures shall not exceed 36 hours.

401.072 Stockpiles The Contractor shall provide sufficient space for stockpiles and maintain a minimum of supply for 2 days production of all aggregate products used in MaineDOT approved mix designs currently under production. A minimum stockpile supply of 100 ton (70 yards) shall be

maintained at all times. The Contractor shall construct stockpiles to prevent intermingling and to minimize segregation. All stockpiles used in MaineDOT mixes shall be identified with weatherproof signs at least 12" high and 24" wide, with reflective lettering at least 2" high.

401.073 Cold Feeds Cold Feed Bins will have bin dividers to keep aggregate products separated. Adequate means must be provided for obtaining samples of the combined flow of all Cold feed bins.

401.074 Dryer Dryer shall be capable of heating aggregate to required mixing temperature and shall be in good operation and condition. Dryer shall be subject to annual inspection prior to start-up. The Contractor shall dry and heat the aggregates for the HMA to the required temperature, adjusting flames to avoid damaging the aggregates. The Contractor shall provide the Department a minimum period of 72 hours to inspect the dryer and provide at least 24 hours' notice that the dryer is ready for inspection.

401.075 Asphalt Binder The plant shall include a heating system and insulation to maintain the asphalt binder at a uniform temperature for proper mixing and compaction. A thermometer shall be provided in the asphalt binder line. No direct flame may come in contact with tank. A sampling valve shall be provided in the circulation line downstream of any binder additive used unless otherwise approved by the Department. The Contractor shall drain down the asphalt as low as safely possible in any tank that will be switched to a new source or grade prior to adding the new PGAB.

401.076 Additives Additives (WMA, anti-strip, etc.) introduced into the binder at the HMA plant shall be introduced per the supplier's recommendations and shall be approved by the Department. The system for introducing additives shall be interlocked with the aggregate feed or weigh system to maintain correct proportions for all production rates and batch sizes. Additive introduction systems shall be controlled by a proportioning device to the amount required on the JMF plus or minus 0.1% of the target. Additive introduction systems shall
be interlocked with the plant and the recordation (batch tickets or drum recordation) shall display the additive and the weight and percentage added. A means for sampling the PG binder with additive introduced will be provided. The sampling point shall be after the additive is mixed with the PGAB before entering the drum or mixer unit.

401.077 Batch Plants

Hot Bins Hot bins shall provide uniform continuous operation and be in good working condition. The plant shall be able to provide samples of hot bins upon request. Overflow shall be provided for each hot bin. Hot bin gates shall close without leaking. Bin walls must prevent intermingling between bins. Each hot bin shall have low level indicators which will alert the operator when the bin is empty.

Mixer Unit Clearance between blades and liner shall be 1" maximum, unless the aggregate exceeds 1 ¼" then the clearance shall be 1 ½". The spray bar length shall be at least 75% of the mixer length. The mixer unit shall be a twin pug mill-type mixer capable of mixing continuously for at least 45 seconds after all materials have been introduced into the mixer. The blades in the mixer shall be capable of producing a homogenous mixture. If the mixer is not enclosed, it shall be equipped with an adjustable hood to prevent loss of dust by dispersion. The mixer unit shall be subject to annual inspection prior to removal of safety features and being readied for service. The Contractor shall provide the Department the opportunity to inspect the mixer unit prior to the

annual inspection. The Contractor shall provide the Department a minimum period of 72 hours to inspect the mixer unit and provide at least 24 hours' notice that the mixer unit is ready for inspection.

Mineral Filler Mineral filler and fiber shall utilize separate bins and feed systems to store and proportion the required quantity into the mixture. The feed systems shall be accurate to no more than 10% of the required weight with a convenient and accurate means of calibration. Mineral filler and fiber shall be introduced in the weigh hopper and uniformly distributed prior to the injection of the asphalt binder.

Automation The HMA batch plant shall automatically batch, mix and discharges mixes. The batch plant shall accurately proportion the various materials in the proper order by weight. The entire batching and mixing cycle shall be continuous and shall not require any manual operations. The batch plant shall use auxiliary interlock circuits to trigger an audible alarm whenever an error exceeding the acceptable tolerance occurs. Along with the alarm, the printer shall print an asterisk on the delivery slip in the same row containing the out-of-tolerance weight. The automatic proportioning system shall be capable of consistently delivering material within the full range of batch sizes. When RAP is being used, the plant must be capable of automatically compensating for the moisture content of the RAP.

The HMA batch plant shall be operated within the following tolerances:

| | |
|---|---|
| Each aggregate component | +/- 1.5% cumulative, per bin |
| Mineral Filler | +/- 0.5% |
| Bituminous Material | +/- 0.1% |
| Zero return (aggregate) | +/- 0.5% |
| Zero Return (AC) | +/- 0.1% |
| Additives | +/- 0.1% |

Recordation All plants shall be equipped with an approved digital recording device. The printer shall mark any weight on the ticket that exceeds tolerance. The delivery slip shall contain information required under Section 108.1.3 - Provisions Relating to Certain Measurements, Mass and paragraphs a, b, and c of Section 401.078.

401.078 Drum Plants

Cold Feeds and Delivery System A scalper screen shall be used to remove oversize material. The accuracy of the belt scale shall be within +/- 1.0% of the actual weight being measured. The plant shall be capable of correcting for aggregate moisture. Mineral filler and fiber shall utilize separate bin(s) and feeder systems to store and proportion the required quantity into the mixture. The feed systems shall be accurate to no more than +/- 10% of the required weight with a convenient and accurate means of calibration. The plant shall be equipped with a single control to change all feed rates. Mineral filler and fiber shall be introduced such that dry mixing is accomplished no less than 18 inches prior to the injection of the asphalt binder. The Contractor shall ensure that the mineral filler does not become entrained in the exhaust stream of the dryer.

Binder System The flow of asphalt binder shall adjust automatically with dry aggregate weights. The Department will conduct an asphalt flow meter check annually and after each change of plant location. The flow meter check must be performed prior to producing mix for Department projects. The plant must be configured to provide a convenient means to check accuracy of the flow meter. The flow meter will be considered accurate if the measured weight is within 1% of actual weight.

Drum Mixer The plant shall be equipped with a diversion system where mix can be diverted at startup/shutdown and any time. The drum mixer shall be subject to annual inspection prior to removal of safety features and being readied for service. The Contractor shall provide the Department a minimum period of 72 hours to inspect the drum mixer while providing at least 72 hours' notice that the drum mixer is ready for inspection.

Recordation An approved automatic ticket printer system shall be used to print delivery slips. The requirements for delivery slips for payment of materials measured by weight, as given in the following Sections, shall be waived: 108.1.3 a., 108.1.3 b., 108.1.3 c., and 108.1.3 d. The automatic printed ticket will be considered as the Weight Certificate. The dry aggregate weights and binder flow shall be recorded as well as mineral filler and all binder additives. The recordation of materials shall be printed a minimum of every ten minutes while in production.

The requirements of Section 108.1.3 f. - Delivery Slips, shall be met by the delivery slip printed by the automatic system, which accompanies each truckload, except for the following changes:

a. The quantity information required shall be individual weights of each batch or total net weigh of each truckload.
b. Signatures (legible initials acceptable) of Weighmaster (required only in the event of a malfunction as described in 401.074 c.).
c. The MaineDOT designation for the JMF.

401.079 Scales and Weight Checks Scales shall meeting the requirements of Section 108 - Payment. The scales shall be inspected and sealed by the State Sealer (or approved alternative) as often as the Department deems necessary to verify their accuracy. Plant scales shall be checked prior to the start of the paving season, and each time a plant is moved to a new location. Subsequent checks will be made as determined by the Resident. The Contractor will have at least ten 50 pound masses for scale testing at batch plants. At Contractor's option, the Contractor can use one single test weight that has been checked on sealed scales. This weight shall be 1,000 lbs. or greater. At least twice during each 5 days of production either of the following checks will be performed:

a. A loaded truck may be intercepted and weighed on a platform scale that has been sealed by the State Sealer of Weights and Measures within the past 12 months. The inspector will notify the producer to take corrective action on any discrepancy over 1.0%. The producer may continue to operate for 48 hours under the following conditions.
    1. If the discrepancy does not exceed 1.5%; payment will still be governed by the printed ticket.
    2. If the discrepancy exceeds 1.5%, the plant will be allowed to operate as long as payment is determined by truck platform scale net weight.

    If, after 48 hours the discrepancy has not been addressed and reduced below 1.0%, then plant operations will cease. Plant operation may resume after the discrepancy has been brought within 1.0%.
b. Where platform scales are not readily available, a check will be made to verify the accuracy and sensitivity of each scale within the normal weighing range and to assure that the interlocking devices and automatic printer system are functioning properly. If platform scales are not readily available, a weight with a known mass-verified and sealed annually by a licensed scale company, may be used by hanging weight from silo or surge hopper, at lower middle and upper third levels upon request to verify scale accuracy.
c. In the event of a malfunction of the automatic printer system, production may be continued without the use of platform truck scales for a period not to exceed the next two working

days, providing total weights of each batch are recorded on weight tickets and certified by a Licensed Public Weighmaster.

401.08 Hauling Equipment Units hauling HMA shall have tight, clean, and smooth metal bodies, which have been thinly coated with a small amount of approved release agent to prevent the mixture from adhering to the bodies. Release agents that dissolve or strip asphalts, including diesel fuel, will not be allowed.

All mix haul units shall have a cover of water repellent material capable of heat retention, which completely covers the mixture. The cover shall be securely fastened on the truck, unless unloading. Haul units shall have an opening on both sides near the midpoint of the body, at least 12 in above the bed, which will accommodate a thermometer stem.

401.09 Pavers The Contractor shall use pavers meeting the requirements of this section unless otherwise authorized by the Department. Pavers shall meet the requirements of Table 4: Paver Requirements.

TABLE 4: PAVER REQUIREMENTS

| Use | Paver Requirement |
|---|---|
| Traveled Way & Auxiliary Lanes | Equipped with a 10 ft minimum main screed with activated extensions. The minimum tractor weight shall be 30,000 pounds. |
| | Equipped with automatic grade and slope controls that automatically adjust the screed and increase or decrease the layer thickness to compensate for irregularities in the preceding course. The controls shall maintain the proper transverse slope and be readily adjustable so that transitions and superelevated curves can be properly paved. The controls shall operate from a fixed or moving reference such as a grade wire or ski type device (floating beam) with a minimum length of 30 ft, a non-contact grade control with a minimum span of 24 ft, except that a 40 ft reference shall be used on interstate and divided highway projects. |
| All HMA Placement | Self-contained, self-propelled units of sufficient class and size to place Hot Mix Asphalt Pavement in full lane widths specified in the contract on the main line, shoulder, or similar construction. |
| | Equipped with a free-floating activated heated main screed with activated extensions. Pavers with extendible screeds shall have auger extensions and tunnel extenders as per the manufacturer's recommendations, a copy of which shall be available if requested. |
| | Equipped with a receiving hopper with sufficient capacity for a uniform spreading operation and a distribution system to place the mixture uniformly, without segregation in front of the screed. |
| | Operated in such a manner as to produce a visually uniform surface texture and a thickness within the requirements of Section 401.11 - Surface Tolerances. The screed assembly shall produce a finished surface of the required evenness and texture without tearing, shoving, or gouging the mixture. |

The Contractor shall have the paver at the project site sufficiently before the start of paving operations to be inspected and approved by the Department. The Contractor shall repair or replace any paver found worn or defective, either before or during placement, to the satisfaction of the Department. Pavers that produce an unevenly textured or non-uniform mat will be repaired or replaced before continuing to place HMA on MaineDOT projects. On a daily basis, the Contractor shall perform density testing across that mat as detailed in Section 401.191 Quality Control - Method A, B & C.

401.10 Rollers Rollers shall be static steel, pneumatic tire, oscillatory, or approved vibrator type. Rollers shall be in good mechanical condition, capable of starting and stopping smoothly, and be free from backlash when reversing direction. Rollers shall be equipped and operated in such a way as to prevent the picking up of hot mixed material by the roller drums or tires. Crushing of the aggregate or displacement of the HMA during rolling will not be permitted. Any HMA Pavement that becomes loose, broken, contaminated, shows an excess or deficiency of PGAB, or is in any other way defective shall be removed and replaced at no additional cost with fresh material which shall be immediately compacted to conform to the adjacent area.

The Contractor shall repair or replace any roller found to be worn or defective, either before or during placement, to the satisfaction of the Department. Rollers that produce grooved, unevenly textured or non-uniform mat will be repaired or replaced before continuing to place HMA. The type of rollers to be used and their relative position in the compaction sequence shall generally be the Contractor's option unless otherwise specified in the contract, provided specified density is attained and with the following requirements:

a. On variable-depth courses, the first lift of pavement over gravel, reclaimed pavement, on irregular or milled surfaces, or on bridges, at least one roller shall be 16 ton pneumatic-tired. Pneumatic-tired rollers shall be equipped with skirting to minimize the pickup of HMA materials from the paved surface. When required by the Resident, the roller shall be ballasted to 20 ton.
b. Compaction with a vibratory or steel wheel roller shall precede pneumatic-tired rolling, unless otherwise authorized by the Department.
c. Vibratory rollers shall not be operated in the vibratory mode on bridge decks.
d. Any method, which results in cracking or checking of the mat, will be discontinued and corrective action taken.
e. The use of an oscillating steel roller shall be required to compact all mixtures placed on bridge decks.

The maximum operating speed for a steel wheel or pneumatic roller shall not exceed the manufacturer's recommendations, a copy of which shall be available if requested.

401.11 Surface Tolerances The Department will check the following surface tolerances:

a. Longitudinally: The pavement surface profile shall be free of deviations in excess of +/- ¼ inches from the required pavement surface profile grade. To verify the surface tolerance a straight plane shall be established using 16 foot straight edge or a taught string line placed parallel to the direction of travel and checked continuously across the width of the lane.
b. Transversely: The pavement surface profile shall be free of deviations in excess of 0 inches below and ¼ inches above the required cross-sectional profile grade. To verify the surface tolerance a straight plane shall be established using a 10 foot straight edge or taught string line placed perpendicular to the direction of travel and checked continuously along the length of the lane.

The Contractor shall correct defective areas by removing defective work and replacing it with new material as directed by the Department. The Contractor shall furnish a 10 foot straightedge for the Department's use.

401.12 Preparation of Existing Surface The Contractor shall thoroughly clean the surface upon which Hot Mix Asphalt Pavement is to be placed of all objectionable material. When the surface of the existing base or pavement is irregular, the Contractor shall bring it to uniform grade and cross section. All surfaces shall have a tack coat applied prior to placing any new HMA course. Tack coat shall conform to the requirements of Section 409 – Bituminous Tack Coat, Section 702 – Bituminous Material, and all applicable sections of the contract.

401.13 Spreading and Finishing On areas where irregularities or unavoidable obstacles make the use of mechanical spreading and finishing equipment impracticable, the Contractor shall spread, rake, and lute the HMA with hand tools to provide the required compacted thickness. Release agents that dissolve or strip asphalts, including diesel fuel, will not be allowed. On roadways with adjoining lanes carrying traffic, the Contractor shall place each course per the conditions in Table 5, unless otherwise noted by the Department in Section 403 - Hot Mix Asphalt Pavement.

TABLE 5: PLACEMENT CONDITIONS FOR ADJOINING LANES

| **Depth (at centerline)** | **Placement Conditions** |
|---|---|
| **Vertical Longitudinal Joint** | |
| ¾" and less (incl. shim) | The Contractor may place the HMA course over the full single travel lane width for each production day. |
| 1" to 1 ¼" | The Contractor may place the HMA course over the full single travel lane width for each production day and will be required to place a matching course of HMA over the adjacent section of travel lane before weekend or holiday suspension. |
| 1 ½" to 2" | The Contractor may place the HMA course over the full single travel lane width for each production day and 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. |
| Greater than 2" | The Contractor shall place each course over the full width of the traveled way section being paved that day. |
| **Notched-Wedge Longitudinal Joint** | |
| 1 ½" to 2" | The Contractor may place the HMA course over the full single travel lane width for each production day and will be required to place a matching course of HMA over the adjacent section of travel lane before weekend or holiday suspension. A maximum unmatched centerline joint length of 0.5 miles will be permitted over the weekend. |
| Greater than 2" | The Contractor may place the HMA course over the full single travel lane width for each production day and 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 shall place the specified course over the full width of the mainline traveled way being paved, regardless of use, depth, or longitudinal joint type prior to Memorial Day, July 4$^{th}$, Labor Day, paving suspensions exceeding three days, or other dates as specified by special provision.

The Contractor shall install 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 application of raised pavement markers at 100 foot intervals, or temporary painted line. For any exposed vertical edge between the shoulder and traveled way, at a minimum, the use of temporary painted line, or RPMs placed along the edge of traveled way at 200 foot intervals is required. 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. 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.

401.14 Hot Mix Asphalt Placement on Bridge Decks Hot mix asphalt pavement placed on bridges shall also conform to Section 508.04 and the following requirements.

a. The minimum production and placement temperature for the Hot Mix Asphalt placed over membrane shall conform to the manufacturer's recommendations.
b. The bottom course shall be placed with an approved rubber mounted paver of such type and operated in such a manner that the membrane waterproofing will not be damaged in any way.
c. The top course shall not be placed until the bottom course has cooled sufficiently to provide stability.
d. The Contractor will not be required to cut sample cores from the compacted pavement on the bridge deck, unless otherwise directed by Special Provision.
e. After the top course has been placed, the shoulder areas shall be sealed 3 ft wide with two applications of an emulsified bituminous sealer meeting the requirements of Section 612.03 - Sealing and Section 702.12 - Emulsified Bituminous Sealing Compound. The first application shall be pre-mixed with fine, sharp sand, similar to mortar sand, as needed to fill all voids in the mix in the area being sealed. The second application may be applied without sand. The sealer shall be carried to the curb at the gutter line in sufficient quantity to leave a bead or fillet of material at the face of the curb. The area to be sealed shall be clean, dry and the surface shall be at ambient temperature. The furnishing and applying of the required quantity of sealer for the bridge shoulder areas shall be incidental to placing the hot mix asphalt pavement.
f. The area between the edge of the membrane and the vertical surface shall be completely sealed with hot-applied rubberized asphalt material, meeting the requirements of Type 4 crack seal; shall be applied to form a complete seal between the membrane and the vertical surface and shall extend up the vertical surface to within ½ inch of the top of the HMA wearing surface. This work shall be considered incidental to the contract pavement items unless 508 membrane items are included in the contract.

401.15 Compaction Immediately after the Hot Mix Asphalt Pavement has been spread, struck off, and any surface irregularities adjusted, the Contractor shall thoroughly and uniformly compact the HMA by rolling.

The Contractor shall roll the surface when the mixture is in the proper condition and when the rolling does not cause undue displacement, cracking, or shoving. The Contractor shall prevent adhesion of the HMA to the rollers or vibrating compactors without the use of fuel oil or other petroleum-based release agents. Solvents designed to strip asphalt binders from aggregates will not be permitted as release agents on equipment, tools, or pavement surfaces.

The Contractor shall immediately correct any displacement occurring as a result of the reversing of the direction of a roller or from other causes to the satisfaction of the Department. Any operation other than placement of variable depth shim course that results in breakdown of the aggregate shall be discontinued. Any new pavement that shows obvious cracking, checking, or displacement shall be removed and replaced for the full lane width as directed by the Resident at no cost to the Department.

Along forms, curbs, headers, walls, and other places not accessible to the rollers, the Contractor shall thoroughly compact the HMA with mechanical vibrating compactors. The Contractor shall only use hand tamping in areas inaccessible to all other compaction equipment. On depressed areas, the Contractor may use a trench roller or cleated compression strips under a roller to transmit compression to the depressed area.

Any HMA that becomes unacceptable due to cooling, cracking, checking, segregation or deformation as a result of an interruption in mix delivery shall be removed and replaced with material that meets contract specifications at no cost to the Department.

For all items requiring pavement density testing, the Contractor shall cut 6-inch diameter cores at no additional cost to the Department by the end of the working day following paving. Cores shall be cut such that the nearest edge at least 9 inches from any joint. Pre-testing of the cores will not be allowed. If the Contractor and the Department mutually determine that a core is damaged, the Contractor shall cut new core(s) at the same offset and within 3 ft of the initial sample. The Contractor and the Department will mutually determine if underlying material is adhered to the core and if so will mark the core at the point where sawing is needed. The Department will place the cores in a secure container and the Contractor shall transport the cores to the designated MaineDOT lab. The cores will be saw cut by the Department to remove underlying layers. No recuts are allowed at a test location after the core has been tested.

On all sections of overlay with wearing courses designed to be 1 in or less in thickness, there shall be no pay adjustment for density otherwise noted in Section 403 - Hot Mix Asphalt Pavement. For overlays designed to be 1 in or less in thickness, density shall be obtained by the same rolling train and methods as used on mainline travelway surface courses with a pay adjustment for density, unless otherwise directed by the Department.

There shall be no pay adjustment for density on shoulders unless otherwise noted in Section 403 - Hot Mix Asphalt Pavement. Density for shoulders shall be obtained by the same rolling train and methods as used on mainline travelway, unless otherwise directed by the Department. Efforts to obtain optimum compaction will not be waived by the Department unless it is apparent during construction that local conditions make densification to this point detrimental to the finished pavement surface course.

401.16 Joints The Contractor shall construct wearing course transverse and longitudinal joints in such a manner that minimum tolerances shown in Section 401.11 - Surface Tolerances are met when measured with a straightedge. The paver screed shall maintain a uniform head of HMA during transverse and longitudinal joint construction. The HMA shall be free of segregation and meet temperature requirements outlined in Section 401.04. Transverse joints of the wearing course shall be straight and neatly trimmed. The Contractor may form a vertical face exposing the full depth of the course by inserting a header, by breaking the bond with the underlying course, or by cutting back with hand tools. The Contractor shall apply a coating of emulsified asphalt immediately before paving all joints to the vertical face and 3 in of the adjacent portion of any pavement being overlaid except those formed by pavers operating in echelon. The Contractor shall use an approved spray apparatus designed for covering a narrow surface. The Department may approve application by a brush for small surfaces, or in the event of a malfunction of the spray apparatus, but for a period of not more than one working day.

Where pavement under this contract joins an existing pavement, or when the Department directs, the Contractor shall cut the existing pavement along a smooth line, producing a neat, even, vertical joint. The Department will not permit broken or raveled edges. The cost of all work necessary for the preparation of joints is incidental to related contract pay items. Longitudinal joints shall be generally straight to the line of travel and constructed in a manner that best ensure joint integrity. Methods or activities that prove detrimental to the construction of straight, sound longitudinal joints will be discontinued.

The Contractor may utilize an approved notched wedge joint device on all HMA layers 1 ½ inches in depth or greater. A notched wedge joint shall be constructed as shown in Figure 1 using a device that is attached to the paver screed and is capable of independently adjusting the top and bottom vertical notches.

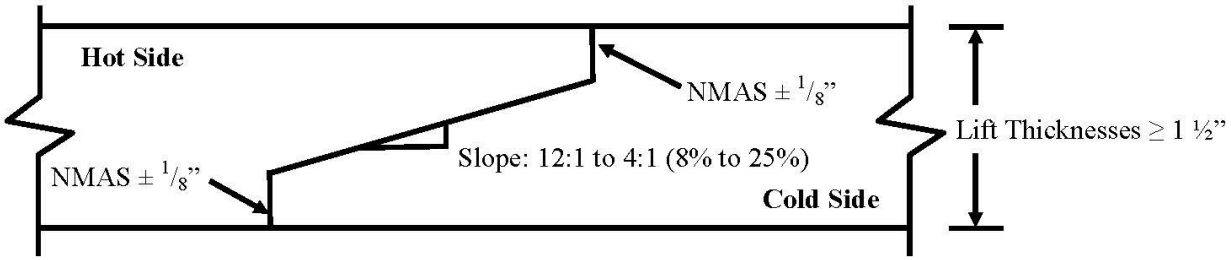



**FIGURE 1: Notched Wedge Joint**

Notes
1. An emulsified tack coat shall be applied to the vertical edges and the wedge surface so that the total rate is 0.05 G/SY plus the normal specified rate prior to placing the adjacent layer. The Contractor may elect to apply the emulsified tack coat in one or multiple passes.
2. Dimensions shown are compacted depths (after rolling is complete).

The Department reserves the right to have centerline cores cut by the Contractor's QC personnel for informational purposes to monitor the density along the joint. Informational cores at the centerline joint will be taken centered over the tapered part of the wedge joint.

Any notched wedge joint constructed areas that become cracked or broken shall be trimmed back to the limits affected prior to placing the adjoining lane. Any materials that become unbound or separated from the wedge or tapered joint section, or contaminated by materials determined by the Department as being detrimental to the construction of a sound construction joint, shall be removed by sweeping, compressed air and lance, or by hand tools as required. This work, if necessary, will not be paid for directly, but shall be considered incidental to the related contract items.

The Contractor shall apply a coating of emulsified asphalt on the vertical and tapered surface of the longitudinal centerline joint immediately before paving if the notched wedge joint device is used.

The total rate of application shall be 0.050 G/SY plus the normal specified tack coat rate. The Contractor shall use an approved spray apparatus designed for covering a narrow surface. The Department may approve application by a brush for small surfaces.

401.17 Hot Mix Asphalt Documentation The Contractor and the Department shall agree on the amount of Hot Mix Asphalt Pavement that has been placed each day. All delivery slips shall conform to the requirements of 401.078.

401.18 Prepave Meeting Prior to placing any mix, the Department and the Contractor shall hold a Pre-paving conference to discuss the paving schedule, source of mix, type and amount of equipment to be used, sequence of paving pattern, rate of mix supply, random sampling, project lots and sublots and traffic control. A copy of the density QC random numbers to be used on the project shall be provided to the Resident. The Departments' random numbers for Acceptance testing shall be generated and on file with the Resident and the Project Manager. All personnel of the Department and the Contractor who have significant information relevant to the paving items shall attend, including the responsible onsite paving supervisor for the Contractor. The Resident will prepare minutes of the conference and distribute them to all attendees. Any requests to revise the minutes must be made to the Resident within 7 Days of Receipt. These minutes will constitute the final record of the Pre-paving conference. On the first day of paving and whenever there is a change in the onsite paving foreman or paving inspector, the Department and the Contractor shall hold an informal onsite meeting to review the minutes of the Pre-paving conference, Project Specific QCP, Plans, Typicals, Special Provisions and communication process. This meeting shall be held prior to placing any mix and, at minimum, shall occur yearly for multi-year contracts. The onsite paving supervisor, QCT, Superintendent, Resident and/or paving inspector shall attend.

401.19 Contractor Quality Control – Method A, B, C & D
The Contractor shall operate in accordance with the approved Quality Control Plan (QCP) to assure a product meeting the contract requirements. The Contractor shall not begin paving operations until the Department approves the QCP in writing.

401.191 Quality Control The QCP shall meet the requirements of Section 106.6 – Acceptance and this Section. The QCP shall address any items that affect the quality of the Hot Mix Asphalt Pavement, and shall include the following personnel meeting these minimum requirements:

a. QCP Administrator – The QCP Administrator must be a full-time employee of or a consultant engaged by the Contractor or paving subcontractor. The QCP Administrator shall have full authority to institute any and all actions necessary for the successful operation of the QCP. The QCP Administrator (or their designee in the QCP Administrator's absence) shall be available to communicate with the Department at all times.
    - For items accepted under Methods A and B, the QCP Administrator shall be certified as a Quality Assurance Technologist (QAT) by NETTCP.
    - For items accepted under Methods C and D, the QCP Administrator shall be certified by NETTCP as a Quality Assurance Technologist (QAT), Plant Technician, or Paving Inspector.
b. Process Control Technician(s) (PCT) shall utilize test results and other quality control practices to assure the quality of aggregates and other mix components and control proportioning to meet the JMF(s). The PCT shall inspect all equipment used in mixing to assure it is operating properly and that mixing conforms to the mix design(s) and other Contract requirements, and that delivery slips and plant recordation accurately reflects the mix being produced with all the required information. The QCP shall detail how these duties and responsibilities are to be accomplished and documented, and whether more than one PCT is required. The Plan shall include the criteria to be utilized by the PCT to correct or reject unsatisfactory materials. The PCT shall be certified as a Plant Technician by the NETTCP.
c. Quality Control Technician(s) (QCT) shall perform and utilize quality control tests at the job site to assure that delivered materials meet the requirements of the JMF(s). The QCT

shall inspect all equipment utilized in transporting, laydown, and compacting to assure it is operating properly and that all laydown and compaction conform to the Contract requirements. The QCP shall detail how these duties and responsibilities are to be accomplished and documented, and whether more than one QCT is required. The QCP shall include the criteria utilized by the QCT to correct or reject unsatisfactory materials. The QCT shall be certified as a Paving Inspector by the NETTCP.

The QCP shall detail the coordination of the activities of the Plan Administrator, the PCT and the QCT. The Project Superintendent shall be named in the QCP, and the responsibilities for successful implementation of the QCP shall be outlined.

The QCP shall address any items that affect the quality of the Hot Mix Asphalt Pavement including, but not limited to, the following:

a. General Requirements:
    - Job Mix Formulas (JMFs)
    - Name of QCP Administrator, and certification number
    - Description of corrective action process
    - Disposition of defective material
    - A procedure to take immediate possession of acceptance samples once released by MaineDOT and deliver said samples to the designated acceptance laboratory.
b. Process Control Requirements: Each Hot Mix Asphalt plant shall have a Plant Specific Process Control Plan. At minimum the plan shall include:
    - Name of Plant Specific Process Control Technician(s) and certification number(s)
    - Hot mix asphalt plant details
    - Stockpile Management
    - Mixing & transportation
    - Silo management and details
    - A detailed description of RAP processing, stockpiling and introduction into the plant
    - PG Binder management:
        - Tanks and storage (including polymer modified binders if applicable)
        - Binder temperature
        - Sample points
        - Method to ensure mixture contains the specified binder grade
        - Additive introduction details if introduced at the plant
    - Testing and inspection plan for control of aggregates and RAP
    - Mix Testing and inspection plan
c. Quality Control Requirements – Method A & B:
    - Name of Quality Control Technicians(s) and certification number(s)
    - Laydown operations
    - Longitudinal joint construction including the tacking of all joints.
    - Procedures for avoiding paving in inclement weather
    - Compaction of shoulders
    - Methods to ensure that segregation is minimized
    - Procedures to determine the maximum rolling and paving speeds based on best engineering practices and past experience in achieving acceptable pavement smoothness.

- Sequence for paving around drainage structures, under guard rail, around curb, at bridges, intersections, drives and minor approaches to ensure proper compaction, finish, and drainage.
- Type of release agent to be used on haul units, tools and rollers.

d. Quality Control Requirements – Method C and D:
   - Name of QCP Administrator and certification number(s) as specified in Section 401.19.
   - Name of Process Control Technicians(s) and certification number(s).
   - Name of Quality Control Technicians(s) and certification number(s).
   - Anticipated Compaction Temperature Zones for each roller pass during placement.
   - Mix TMD to be used for density gauge setting for method spec density work
   - Procedures for avoiding paving in inclement weather.
   - Type of release agent to be used on haul units, tools and rollers.
   - A note stating that the use of petroleum-based fuel oils, such as diesel or kerosene, or asphalt stripping solvents will not be permitted.

The Contractor shall also supply a Laydown Operation Plan that addresses sequence of work, layout of work, longitudinal joint construction, compaction of shoulders, methods to minimize segregation, and procedures to achieve acceptable pavement smoothness.

For each production day, a summary of each day's results, including a daily paving report, summarizing the mixture type, mixture temperature, equipment used, environmental conditions, and the number of roller passes, shall be recorded and signed by the QCT and presented to the Department's representative by 1 PM the following working day.

Unless otherwise noted in Section 403 – Hot Mix Asphalt Pavement, the Contractor shall submit a modified QC Plan every year detailing, how the mix is to be placed, what equipment is to be used, and what HMA plant is to be used for Items covered under the Plan. All mix designs (JMF) shall be approved and verified by MaineDOT prior to use.

A QCP, certified QC personnel, and a Prepave Meeting shall not be required for Item 403.209 - Hot Mix Asphalt, 9.5 mm Nominal Maximum Size (sidewalks, drives, islands & incidentals) accepted under visual or Method D. An approved JMF shall be provided to the Resident prior to placement.

The Contractor shall certify the mix and the test results for each item by a Certificate of Compliance.

The Contractor shall have a testing lab at the plant site, equipped with all testing equipment necessary to complete the tests in Table 6. The Contractor shall generate QC sampling random numbers for each approved mix design every year. A copy of the random numbers shall be emailed to the QC.mainedot@maine.gov email address and remain on-file (in print) and be available for inspection at the QC laboratory. The Contractor shall sample, test, and evaluate Hot Mix Asphalt Pavement in accordance with the minimum frequencies per each approved mix design.

TABLE 6: MINIMUM QUALITY CONTROL FREQUENCIES

| Test or Action | Frequency | Test Method |
|---|---|---|
| Temperature of mix | 6 per day at street and plant | - |
| Temperature of mat | 4 per day | - |
| %TMD (In-Place Density - Surface) | 1 per 125 ton | AASHTO T 355 or AASHTO T 343 |
| %TMD (In-Place Density - Base) | 1 per 250 ton | AASHTO T 355 or AASHTO T 343 |
| Fines / Effective Binder | 1 per 500 ton | AASHTO T 312* |
| Gradation | 1 per 500 ton | AASHTO T 30 |
| PGAB Content | 1 per 500 ton | AASHTO T 164 or AASHTO T 308 |
| Voids at $N_{design}$ | 1 per 500 ton | AASHTO T 312* |
| VMA at $N_{design}$ | 1 per 500 ton | AASHTO T 312* |
| Rice Specific Gravity | 1 per 500 ton | AASHTO T 209 |
| Percent Fractured Particles | 1 per 5,000 ton | AASHTO T 335 |
| Flat and Elongated Particles | 1 Per 5,000 ton | ASTM D4791 |
| Fine Aggregate Angularity | 1 Per 5,000 ton | AASHTO T 304 |

*Method A and B only

The Contractor shall monitor plant production on each approved mix design using running average of three control charts as specified in Section 106 - Quality. Control limits shall be as noted in Table 7 below. The UCL and LCL, shall not exceed the allowable gradation control points for the particular type of mixture as outlined in Table 1 of Section 703.09.

TABLE 7: CONTROL LIMITS

| Property | UCL and LCL |
|---|---|
| Percent Passing 4.75 mm and larger sieves | Target +/- 4.0 |
| Percent Passing 2.36 mm sieve | Target +/- 2.5 |
| Percent Passing 0.075 mm sieve | Target +/- 1.0 |
| PGAB Content | Target +/- 0.25 |
| VMA at $N_{design}$ | LCL = LSL + 0.2 |
| Voids at $N_{design}$ | JMF Target +/- 1.2 |
| Theoretical Maximum Specific Gravity | JMF Target +/- 0.020 |

The Contractor shall submit all QC test and inspection reports and updated control charts to the Resident and QC.mainedot@maine.gov by email. The reports and updated control charts shall be signed by the appropriate technician and be submitted to the Department by 1:00 P.M. on the next working day, except when otherwise noted in the QCP and approved by the Department.

The Contractor shall also retain splits of the previous 5 QC tests, with QC results enclosed for random selection and testing by the Department. Test results of splits that do not meet the Dispute Resolution

Variance Limits in Table 18 shall trigger an investigation by the MaineDOT Independent Assurance Unit and may result in that lab losing NETTCP certification and the ability to request a dispute [Section 401.50 - Process for Dispute Resolution].

The Contractor shall make density test results, including randomly sampled densities, available to the Department onsite. Summaries of each day's results, including a daily paving report summarizing the mixture type, mixture temperature, equipment used, environmental conditions, and the number of

roller passes, shall be recorded and signed by the QCT and provided to the QC.mainedot@maine.gov email address and Resident in writing by 1:00 p.m. the next working day. The Contractor shall fill all holes in the pavement resulting from cutting cores by the Contractor or the Department with a properly compacted, acceptable mixture no later than the following working day. Before filling, the Contractor shall carefully clean the holes and apply a coating of emulsified asphalt. The Contractor may only cut additional cores for verification of the densometer, at a rate not to exceed 3 per day or 2 per 1000 ton placed.

If the Contractor's control chart shows the process for a given mix design to be out of control (defined as a single point outside of the control limits on the running average of three chart) on any property listed in Table 7: Control Limits, the Contractor shall notify the Resident of all affected projects in writing of the corrective action by 1:00 PM the next working day. The written description shall detail what action is being taken by the Contractor to bring the property in question back within control limits. Subsequent quality control results are expected to demonstrate an improvement and regression towards the aim. The Department reserves the right to take action, to include cessation of production, in the case of repeated results outside the Table 7 control chart control limits.

On a daily basis, or whenever equipment type or sequence is modified, the Contractor shall perform density testing across the mat being placed, prior to being compacted by equipment at 12 in intervals. If the density values vary by more than 2.0% from the mean, the Contractor shall make adjustments to the screed until the inconsistencies are remedied. Failure to replace or repair defective placement equipment may result in a letter of suspension of work and notification of a quality control violation resulting in possible monetary penalties as governed by Section 106 – Quality.

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

a. The quality level for density using all quality control tests for the current Lot is less than 60 PWL.
b. The Coarse Aggregate Angularity or Fine Aggregate Angularity value falls below the requirements of Section 703.07, Table 3: Aggregate Consensus Properties Criteria for the design traffic level.
c. The Flat and Elongated Particles value exceeds 10% by ASTM D4791.
d. There is any visible damage to the aggregate due to over-densification other than on variable depth shim courses.
e. The Contractor fails to follow the approved QCP.

The Contractor shall notify the Resident in writing as to the reason for shutdown, as well as the corrective action, by the end of the workday. Failure to do so will be treated as a second incident under 106.4.6 QCP Non-compliance. The Department will only allow the continuation of paving operations when it is satisfied the corrective action will result in an improvement in results. The Department may require the submittal of a passing verification sample to allow further production. The Department

retains the exclusive right, with the exception of the first day's production of a new JMF, to determine whether the resumption of production involves a significant change to the production process. If the Department so determines, then the current lot will be terminated, a pay factor established, and a new lot will begin.

The Contractor may utilize innovative equipment or techniques not addressed by the Contract documents to produce or monitor the production of the mix, subject to approval by the Department.

401.192 Quality Control for Method D, (sidewalks, drives, islands & incidentals) and visual acceptance items A QCP, certified QC personnel, or Prepave Meeting shall not be required for Item 403.209 - Hot Mix Asphalt, 9.5 mm Nominal Maximum Size (sidewalks, drives, islands & incidentals) accepted under visual or Method D. An approved JMF shall be provided to the Resident prior to placement.

401.20 Acceptance Method A & C These methods utilize Quality Level Analysis and pay factor specifications. For Hot Mix Asphalt Pavement designated for acceptance under Quality Assurance provisions, the Department will sample once per sublot on a statistically random basis, test, and evaluate in accordance with the Acceptance Properties as outlined in Table 8:

TABLE 8: ACCEPTANCE PROPERTIES – METHOD A & C

| **Properties** | **Point of Sampling** | **Test Method** |
|---|---|---|
| Gradation | Paver Hopper | AASHTO T 30 |
| PGAB Content | Paver Hopper | AASHTO T 308 |
| % TMD (In-Place Density) | Mat behind all Rollers | AASHTO T 269 |
| Voids at $N_{design}$ | Paver Hopper | AASHTO T 312 |
| VMA at $N_{design}$ | Paver Hopper | AASHTO T 312 |
| Fines to Effective Binder | Paver Hopper | AASHTO T 312 |
| VFB | Paver Hopper | AASHTO T 312 |

The Department will obtain samples of Hot Mix Asphalt Pavement in conformance with AASHTO R 97, Sampling Asphalt Mixtures, and the MaineDOT Policies and Procedures for HMA Sampling and Testing. The Contractor shall transport the samples in containers provided by the Department to the designated MaineDOT Laboratory within 48 hours except when otherwise noted in the project specific QCP or as directed by the Resident. Failure to deliver an acceptance sample to the designated acceptance laboratory will be considered the second incident under 106.4.6–QCP Non-Compliance.

Target values shall be as specified in the JMF. The Department will withhold reporting of the test results for the Acceptance sample until 7:00 AM, on the second working day of receipt of the sample, or after receipt of the Contractors results of the Acceptance sample split. Upon conclusion of each lot being evaluated under quality level analysis, where there is a minimum of four sublots, results shall be examined for statistical outliers, as stated in Section 106.7.2 - Statistical Outliers.

Lot sizes and sublot sizes shall be determined as outlined in Table 9.

TABLE 9: LOT AND SUBLOT SIZES – METHOD A & C

| | |
|---|---|
| Lot Size* | Entire production per item per contract per year up to 6000 ton |
| Maximum Sublot Size – Mix | 750 ton |
| Maximum Sublot Size – Density | Surface Layers – 250 ton<br>Base / Intermediate Layers – 500 ton |
| Minimum Number of Samples – Mix | Four |
| Minimum Number of Samples – Density | Five |

*General – Lot and Sublot size may be adjusted to accommodate the work scope and schedule, or as otherwise agreed upon at the Prepave Meeting

If there is less than one-half of a sublot remaining at the end of production for the year, then it shall be combined with the previous sublot. If there is more than one-half sublot remaining at the end of production for the year, then it shall constitute the last sublot and shall be represented by test results. If it becomes apparent partway through a Lot that, due to an underrun, there will be insufficient mix quantity to obtain the minimum number of sublots needed, the Resident may adjust the size of the remaining sublots and select new sample locations based on the estimated quantity of material remaining in the Lot. Unanticipated over-runs of up to 1500 ton shall be rolled into the last lot. Cases where the lot is terminated prior to reaching completion shall be handled in accordance with Section 106.7.3 Early Termination of Lots. In cases where density incentive/disincentive provision apply, additional cores shall be taken to attain a minimum of three for the Lot.

Isolated Areas During the course of inspection, should it appear that there is an isolated area that is not representative of the lot based on a lack of observed compactive effort, excessive segregation, a change in process or any other questionable practice, that area may be isolated and tested separately. An area so isolated that has a calculated pay factor below 0.80 for Method A, based on three random tests shall be removed and replaced at the expense of the Contractor for the full lane width and a length not to be less than 150 ft.

TABLE 10: ACCEPTANCE LIMITS – METHOD A & C

| **Property** | **USL and LSL** | |
|---|---|---|
| | **Method A** | **Method C** |
| Percent Passing 4.75 mm and larger sieves | Target +/- 7% | Target +/- 7% |
| Percent Passing 2.36 mm to 1.18 mm sieves | Target +/- 4% | Target +/- 5% |
| Percent Passing 0.60 mm sieve | Target +/- 3% | Target +/- 4% |
| Percent Passing 0.30 mm to 0.075 mm sieve | Target +/- 2% | Target +/- 2% |
| PGAB Content | Target +/- 0.4% | Target +/- 0.4% |
| Voids at $N_{design}$ | 4.0% +/- 1.5% | N/A |
| Fines to Effective Binder | 0.9 +/- 0.3 | N/A |
| VMA at $N_{design}$ | LSL from Table 1 | N/A |
| VFB | Table 1 plus a 4% production tolerance for USL | N/A |
| % TMD (In-place Density) | 94.5% +/- 2.5% | 94.5% +/- 2.5% |

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

TABLE 11: CEASE PRODUCTION – METHOD A & C

| Property | Percent Within Limits (PWL) | |
|---|---|---|
| | **Method A** | **Method C** |
| Percent Passing NMAS sieve* | <60 PWL | <60 PWL |
| Percent Passing 2.36 mm sieve* | | |
| Percent Passing 0.30 mm sieve* | | |
| Percent Passing 0.075 mm sieve* | | |
| PGAB Content | | |
| Voids at $N_{design}$ | | N/A |
| Fines to Effective Binder* | | |
| VMA at $N_{design}$ | | |
| VFB | | |
| % TMD (In-place Density) | | <60 PWL |

*Paving operations shall not be required to cease if the mean test value is equal to the LSL or USL and s = 0.

In cases where the Contractor is to cease paving operations based upon an Acceptance result or payfactor, the Contractor will submit a corrective action plan to the Department. The Department will only allow the continuation of paving operations when it is satisfied the corrective action will result in an improvement in results. The Department may require the submittal of a passing verification sample to allow further production.

401.201 Pay Adjustment - Method A & C The Department will use the following criteria for pay adjustment at the completion of the Lot using the pay adjustment factors under Section 106.7 - Quality Level Analysis.

Density Upon conclusion of each lot, density results shall be examined for statistical outliers as stated in Section 106.7.2. If the pay factor for Density falls below 0.80, all of the cores will be randomly re-cut by Sublot. A new pay factor will be calculated that combines all initial and retest results. If the resulting pay factor is below 0.80 , the entire Lot shall be removed and replaced with material meeting the specifications at no additional cost to the Department, except that the Department may, when it appears that there is a distinct pattern of defective material, isolate any defective material by investigating each mix sample sublot and require removal of defective mix sample sublots only, leaving any acceptable material in place if it is found to be free of defective material. Pay factors equal to or greater than the reject level will be paid accordingly.

Mix Properties The Department will determine a pay factor (PF) using the applicable Acceptance Limits. If all three pay factors for PGAB Content, VMA at $N_{design}$, and Voids at $N_{design}$ fall below 0.80 for Method A, then the composite pay factor for PGAB Content, VMA at $N_{design}$, and Voids at $N_{design}$ shall be 0.50.

The following variables will be used for pay adjustment:

PA = Pay Adjustment
Q = Quantity represented by PF in ton
P = Contract price per ton
PF = Pay Factor

The Department will determine a pay adjustment using Table 12: Pay Adjustment Calculations as follows:

TABLE 12: PAY ADJUSTMENT CALCULATIONS – METHOD A & C

| Acceptance Method | Mix Properties / Gradation | Density |
|---|---|---|
| Method A | PA = (Voids @ $N_d$ PF - 1.0)(Q)(P)x0.20 + (VMA @ $N_d$ -1.0)(Q)(P)x0.20 + (PGAB Content PF- 1.0)(Q)(P)x0.10 | PA = (density PF-1.0)(Q)(P)x0.50 |
| Method C | PA = (% Passing Nom. Max PF-1.0)(Q)(P)x0.05+(% passing 2.36 mm PF-1.0)(Q)(P)x0.05+(%passing 0.30 mm PF-1.0)(Q)(P)x0.05+(%passing 0.075 mm PF-1.0)(Q)(P)x0.10+(PGAB Content PF-1.0)(Q)(P)x0.25 | PA = (density PF-1.0)(Q)(P)x0.50 |

In addition, for 9.5 mm NMAS mixtures the following pay adjustment shall also apply:

The average percent passing for the 0.075 mm sieve shall be evaluated for each Lot. If the average is greater than 6.5%, a pay adjustment according to Table 13 below shall apply in addition to the other pay adjustments for the given method of testing.

TABLE 13: 0.075 MM SIEVE PAY ADJUSTMENT

| Average Percent Passing 0.075 mm Sieve | Pay Adjustment |
|---|---|
| 6.6% - 7.0% | -5% |
| > 7.0% | -10% |

The Department shall notify the Contractor whenever the average of at least three samples in a given Lot is greater than 6.5%.

401.21 Acceptance Method B & D Unless otherwise stated in the 403 special provision, the Lot shall be the entire mix quantity per item per contract per year. The Department will sample once per sublot per pay item on a statistically random basis, test, and evaluate in accordance with the Acceptance Properties in Table 14. The Department will obtain samples of Hot Mix Asphalt Pavement in conformance with AASHTO R 97, Sampling Asphalt Mixtures, and the MaineDOT Policies and Procedures for HMA Sampling and Testing. The Contractor shall transport the samples in containers provided by the Department to the designated MaineDOT Laboratory within 48 hours except when otherwise noted in the project specific QCP or as directed by the Resident. Failure to deliver an acceptance sample to the designated acceptance laboratory will be considered the second incident under 106.4.6–QCP Non-Compliance. Target values shall be as specified in the JMF. The Department will withhold reporting of the test results for the Acceptance sample until 7:00 AM, on the second working day of receipt of the sample, or after receipt of the Contractors results of the Acceptance sample split.

TABLE 14: ACCEPTANCE PROPERTIES – METHOD B & D

| Properties | Point of Sampling | | Test Method |
|---|---|---|---|
| | Method B | Method D | |
| Gradation | Paver Hopper | Paver Hopper or Truck | AASHTO T 30 |
| PGAB Content | Paver Hopper | Paver Hopper or Truck | AASHTO T 308 |
| % TMD (In-Place Density) | Mat behind all Rollers | Mat behind all Rollers | AASHTO T 269 |
| Voids at $N_{design}$ | Paver Hopper | N/A | AASHTO T 312 |
| VMA at $N_{design}$ | Paver Hopper | N/A | AASHTO T 312 |
| Fines to Effective Binder | Paver Hopper | N/A | AASHTO T 312 |
| VFB | Paver Hopper | N/A | AASHTO T 312 |

TABLE 15: LOT AND SUBLOT SIZES – METHOD B & D

| Lot Size* | Entire mix quantity per item per contract per year | |
|---|---|---|
| Maximum Sublot Size – Mix | (Lot size ≤ 1000 tons) | (Lot size > 1000 tons) |
| | 250 ton | 750 ton |
| Sublot Size – Density | 125 ton (Max 5 Sublots) | 250 ton |

*General – Lot and Sublot size may be adjusted to accommodate the work scope and schedule, or as otherwise agreed upon at the Prepave Meeting

If there is less than one-half of a sublot remaining at the end of production for the year, then it shall be combined with the previous sublot. If there is more than one-half sublot remaining at the end of production for the year, then it shall constitute the last sublot.

TABLE 16: ACCEPTANCE LIMITS – METHOD B & D

| Property | USL and LSL | |
|---|---|---|
| | Method B | Method D |
| Percent Passing 4.75 mm and larger | Target +/- 7% | Target +/- 7% |
| Percent Passing 2.36 mm sieve | Target +/- 5% | Target +/- 7% |
| Percent Passing 1.18 mm sieve | Target +/- 5% | Target +/- 5% |
| Percent Passing 0.60 mm sieve | Target +/- 4% | Target +/- 4% |
| Percent Passing 0.30 mm sieve | Target +/- 3% | Target +/- 3% |
| Percent Passing 0.075 mm sieve | Target +/- 3% | Target +/- 3% |
| PGAB Content | Target +/- 0.5% | Target +/- 0.5% |
| Voids at $N_{design}$ | 4.0% +/- 2.0% | N/A |
| Fines to Effective Binder | 0.9 +/- 0.3 | N/A |
| VMA at $N_{design}$ | LSL from Table 1 | N/A |
| VFB | Table 1 plus a 4% production tolerance for USL | N/A |
| % TMD (In-place Density) | 94.5% +/- 2.5% | LSL of 92.0% |

The Contractor shall cease paving operations whenever two consecutive Method B or D tests fall outside specification limits on the same property. The Contractor will submit a corrective action plan to the Department. The Department will only allow the continuation of paving operations when it is satisfied the corrective action will result in an improvement in results. The Department may require the submittal of a passing verification sample to allow further production.

401.211 Pay Adjustment - Method B & D For items accepted under Method B or D, if the mix is within the tolerances listed in Table 16, the Department will pay the contract unit price, otherwise pay adjustments as shown in Table 17 shall be applied to the quantity of mix represented by the test. The Contractor shall cut one 6 in core per sublot unless otherwise noted in Section 403 - Hot Mix Asphalt Pavement. If the density result is not within the specified limits the disincentive shall apply. If the sublot density is less than 88.5 percent or greater than 99.0 percent of the sublot TMD, two additional cores shall be cut at random locations determined by the Department. If either of the additional cores has a density less than 88.5 percent or greater than 99.0 percent of the sublot TMD, the sublot shall be removed and replaced at no cost to the Department; otherwise, the average of the three cores will be used to determine the sublot pay adjustment.

TABLE 17: PAY ADJUSTMENTS – METHOD B & D

| **Property** | **Method B** | | **Method D** | |
|---|---|---|---|---|
| Percent Passing 2.36 mm sieve | N/A | | -2.0% | |
| Percent Passing 0.30 mm sieve | N/A | | -1.0% | |
| Percent Passing 0.075 mm sieve | -2.0% | | -2.0% | |
| PGAB Content | -5.0% | | -5.0% | |
| Voids at $N_{design}$ | -3.0% | | N/A | |
| % TMD (In-place Density) | 91.5% - 91.9% or 97.1% - 97.5% | -5.0% | 91.5% - 91.9% | -5.0% |
| | 90.5% - 91.4% or 97.6% - 98.5% | -10.0% | 90.5% - 91.4% | -10.0% |
| | 89.5% - 90.4% or 98.6% - 99.0% | -20.0% | 89.5% - 90.4% | -20.0% |
| | 88.5% - 89.4% | -30.0% | 88.5% - 89.4% | -30.0% |
| | <88.5% or >99.0% | Reject | <88.5% or >99.0% | Reject |

401.30 Method of Measurement The Department will measure Hot Mix Asphalt Pavement by the ton in accordance with Section 108.1 - Measurement of Quantities for Payment.

401.40 Basis of Payment The Department will pay for the work, in place and accepted, in accordance with the applicable sections of this Section, for each type of HMA specified.

The Department will pay for the work specified in Section 401.12, for the HMA used, except that cleaning objectionable material from the pavement and furnishing and applying bituminous material to joints and contact surfaces is incidental.-Payment for this work under the appropriate pay items shall be full compensation for all labor, equipment, materials, and incidentals necessary to meet all related contract requirements, including design of the JMF, implementation of the QCP, obtaining core samples, transporting cores and samples, filling core holes, applying emulsified asphalt to joints, and providing testing facilities and equipment. The Department will make a pay adjustment for quality as specified in Section 401.20 Acceptance Method A & B or 401.21 Acceptance Method C & D.

401.50 Process for Dispute Resolution At the time of Hot-Mix Asphalt sampling, the Department will obtain a split sample of each Acceptance test random sample for possible dispute resolution testing. The Contractor shall also obtain a split sample of the HMA at this same time. If the

Contractor wishes to retain the option of requesting dispute testing of the initial Acceptance sample, the Contractor will test their split of the Acceptance sample in accordance with applicable AASHTO procedure and accepted supplemental practice as described in the Department's HMA Sampling and Testing Policies and Procedures manual. The Contractor shall report their results to the Resident, with a copy to Contractor.mainedot@maine.gov by 7:00 AM, on the second working day from time of QA sampling, otherwise dispute resolution will not be initiated. The Department's dispute resolution split sample will be properly labeled and stored for a period of at least two weeks after it has been reported, or until the sample is tested. The properties eligible for dispute and the respective variances are shown in Table 18.

The Contractor may dispute the Department's Acceptance results and request that the dispute resolution split sample be tested by notifying the Department's Resident and QA Engineer in writing within two working days after the results of the Acceptance test are reported. The following shall be provided in the request:

- Acceptance sample reference number
- The specific test result(s) or property(ies) being disputed, and
- The complete, signed report of the Contractor's testing (In a lab certified by the NETTCP and MaineDOT) of their split of the Acceptance sample indicating that the variances in Table 18 for the specific test result(s) or property(ies) were exceeded.

TABLE 18: DISPUTE RESOLUTION VARIANCE LIMITS

| Property | Method A & B | Method C & D* | Variance Limits |
|---|---|---|---|
| PGAB Content | Yes | Yes | +/- 0.4% |
| $G_{mb}$ | Yes | No | +/- 0.030 |
| $G_{mm}$ | Yes | Only if referenced to a Core | +/- 0.020 |
| Voids at $N_{design}$ | Only if $G_{mb}$ or $G_{mm}$ is not disputable | No | +/- 0.8% |
| VMA at $N_{design}$ | Only if $G_{mb}$ or $G_{mm}$ is not disputable | No | +/- 0.8% |
| Percent Passing 4.75 mm and larger sieves | No | Yes^ | +/- 4.0% |
| Percent Passing 2.36 mm to 0.60 mm sieves | No | Yes^ | +/- 3.0% |
| Percent Passing 0.30 mm to 0.15 mm sieves | No | Yes^ | +/- 2.0 % |
| 0.075 mm sieve | Only for 9.5 mm NMAS mixes | Yes | +/- 0.8% |

*Disputes will not be allowed on Item 403.209

^Disputes will only be allowed on Sieve Sizes used for pay adjustment calculations

The value of any disputed result or property reported for the initial Acceptance sample shall stand if the value reported for the dispute resolution sample is not closer to the value the Contractor reported for their split sample than to the value reported for the initial Acceptance sample. If the value reported for the dispute resolution falls precisely half-way between the other two values the value reported for the dispute resolution will replace the original acceptance value. Otherwise, the

value reported for the dispute resolution sample will replace the value reported for the initial Acceptance sample and will be used to re-calculate any other affected results or properties.

## SECTION 402 - PAVEMENT SMOOTHNESS

402.00 Smoothness Projects Projects to have their pavement smoothness analyzed in accordance with this Specification will be so noted in Special Provision 403 - Hot Mix Asphalt Pavement.

402.01 Pavement Smoothness The final pavement surface shall be evaluated for smoothness using a Class I or Class II profiler as defined by ASTM E950 (94). Smoothness measurements will be expressed in terms of the International Roughness Index (IRI) as defined by the World Bank, in units of inches/mile.

402.02 Lot Size Lot size for smoothness will be 3000 lane-feet. A sublot will consist of 50 lane-feet. Partial lots will be included in the previous lot if less than one-half the size of a normal lot. If equal to or greater than one-half the normal lot size, it will be tested as a separate lot.

402.03 Acceptance Testing The Department will conduct Acceptance testing following completion of the surface course. Sections to be excluded from testing include the following:

- Bridge decks and joints (no smoothness measurements will be taken within 100 ft of bridge joints)
- Acceleration and deceleration lanes
- Shoulders and ramps
- Side streets and roads
- Within 100 ft of transverse joints at the beginning and end of the project
- Within 100 ft of railroad crossings
- Urban areas with speed limits of 30 mph or lower

Each lot shall have 2 measurements made in each wheel path. The average of the 4 measurements will determine the smoothness for that lot. The smoothness measurements will be statistically evaluated for pay factors as described in Subsection 106.7 - Quality Level Analysis, using the specification limits shown below.

TABLE 1: ACCEPTANCE LIMITS

| **Level** | **USL** |
|---|---|
| I | 55 in/mile |
| II | 65 in/mile |
| III | 75 in/mile |

Computation of Smoothness Pay Adjustment:

PA = (PF-1.0)(Q)(P) where:
Q = Quantity of surface course in the Lot (excluding shoulders, side streets, bridge decks, ramps, acceleration and deceleration lanes)
PF = smoothness pay factor for the Lot
P = Contract unit price for surface pavement
PA = pay adjustment

402.04 Unacceptable Work In the event that any Lot is found to have a pay factor less than 0.80, the Contractor shall take whatever remedial action is required to correct the pavement surface in that Lot at no additional expense to the Department. Such remedial action may include but is not limited to removal and replacement of the unacceptable pavement. In the event remedial action is necessary, the Contractor shall submit a written plan to the Resident outlining the scope of the remedial work. The Resident must approve this plan before the remedial work can begin. Following remedial work, the Lot shall be retested, and will be subject to the specification limits listed above. The resulting pay factor, if within the acceptable range, will be used in the final pay adjustment. The Contractor shall pay the cost of retesting the pavement following corrective action.

Localized surface tolerance defects will be subject to the provisions outlined in Section 401.11 Surface Tolerances.

Payment will be made under:

| Pay Item | Pay Unit |
|---|---|
| 402.10 Incentive/Disincentive - Pavement Smoothness | Lump Sum |

## SECTION 403 - HOT MIX ASPHALT PAVEMENT

403.01 Description This work shall consist of constructing one or more courses of Hot Mix Asphalt pavement on an approved base in accordance with these specifications, and in reasonably close conformity with the lines, grades, thickness and typical cross sections shown on the plans or established. The HMA pavement shall be composed of a mixture of aggregate, filler if required, and asphalt material.

403.02 General The materials and their use shall conform to the requirements of Section 401 - Hot Mix Asphalt Pavement.

403.03 Construction The construction requirements shall be as specified in Section 401 - Hot Mix Asphalt Pavement.

403.04 Method of Measurement Hot mix asphalt pavement will be measured as specified in Section 401.21- Method of Measurement.

403.05 Basis of Payment The accepted quantities of hot mix asphalt pavement will be paid for at the contract unit price per ton for the mixtures, including hot mix asphalt material complete in place. Method A, Method B, Method C and Method D shall be used for acceptance as specified in Section 401 - Hot Mix Asphalt Pavements. (See Complementary Notes, Section 403 - Hot Mix Asphalt Pavement, for Method location).

Payment will be made under:

| Pay Item | | Pay Unit |
|---|---|---|
| 403.102 | Hot Mix Asphalt Pavement for Special Areas | Ton |
| 403.206 | Hot Mix Asphalt, 25 mm Nominal Maximum Size | Ton |
| 403.207 | Hot Mix Asphalt, 19.0 mm Nominal Maximum Size | Ton |
| 403.2071 | Hot Mix Asphalt, 19.0 mm Nominal Maximum Size (Polymer Modified) | Ton |
| 403.2072 | Asphalt Rich Hot Mix Asphalt, 19.0 mm Nominal Maximum Size (Asphalt Rich Base and Intermediate course) | Ton |
| 403.208 | Hot Mix Asphalt, 12.5 mm Nominal Maximum Size | Ton |
| 403.2081 | Hot Mix Asphalt - 12.5 mm Nominal Maximum Size (Polymer Modified) | Ton |
| 403.209 | Hot Mix Asphalt, 9.5 mm Nominal Maximum Size (Sidewalks, Drives, Islands & Incidentals) | Ton |
| 403.210 | Hot Mix Asphalt, 9.5 mm Nominal Maximum Size | Ton |
| 403.2101 | Hot Mix Asphalt, 9.5 mm Nominal Maximum Size (Polymer Modified) | Ton |
| 403.2104 | Hot Mix Asphalt, 9.5 mm Nominal Maximum Size (Thin Lift Surface Treatment) | Ton |
| 403.211 | Hot Mix Asphalt, 9.5 mm Nominal Maximum Size (Shimming) | Ton |
| 403.2111 | Hot Mix Asphalt, 9.5 mm Nominal Maximum Size (Shimming, Polymer Modified)) | Ton |
| 403.212 | Hot Mix Asphalt, 4.75 mm Nominal Maximum Size | Ton |
| 403.213 | Hot Mix Asphalt, 12.5 mm Nominal Maximum Size (Base and Intermediate Base course) | Ton |
| 403.2131 | Hot Mix Asphalt, 12.5 mm Nominal Maximum Size (Base and Intermediate Base course, Polymer Modified) | Ton |
| 403.2132 | Asphalt Rich Hot Mix Asphalt, 12.5 mm Nominal Maximum Size (Base and Intermediate Base course) | Ton |
| 403.214 | Hot Mix Asphalt, 4.75 Nominal Maximum Size (5/8” Surface Treatment) | Ton |

# SECTION 400
# HOT MIX ASPHALT PAVEMENT
(Weather and Seasonal Limitations)

The following section of Special Provision Section 400 – Weather and Seasonal Limitations Table3: SEASONAL AND TEMPERATURE LIMITATIONS has been replaced by the following Table 3: SEASONAL AND TEMPERATURE LIMITATIONS. All other requirements not amended or replaced by Table3 by this special provision shall be considered unchanged.

401.06 Weather and Seasonal Limitations The State is divided into two paving zones as follows:

a. Zone 1 Areas north of US Route 2 from Gilead to Bangor and north of Route 9 from Bangor to Calais.
b. Zone 2 Areas south of Zone 1 including the US Route 2 and Route 9 boundaries.

TABLE 3: SEASONAL AND TEMPERATURE LIMITATIONS

| **Description** | **Zone 1 Allowable Placement Dates** | **Zone 2 Allowable Placement Dates** | **Minimum Ambient Air Temperature** |
|---|---|---|---|
| HMA Surface Course greater than or equal to 1" (Travelway) | May 1 to Saturday following October 1 | April 15 to Saturday following October 15 | 50°F |
| HMA Surface Course less than 1" (Travelway) | May 15 to Saturday following September 15 | May 15 to Saturday following October 1 | |
| HMA Surface Course less than 1" considered to be "**Night Work**" (Travelway) | June 1 to the Saturday following September 1 | | |
| HMA Surface Course less than 1" (Shoulders) | May 15 to the Saturday following October 15 | | |
| HMA for Surface Course on **Bridge Decks** | May 1 to Saturday following October 1 | April 15 to Saturday following October 15 | |
| HMA for Base or Shim Course on **Bridge Decks** | April 15 to November 15 | | |
| HMA for use other than Travelway Surface Course (Shoulders greater than or equal to 1", Intermediate, Base, Shim) | April 15 to November 15 | | 40°F |
| HMA for curb, driveways, sidewalks, islands, or other incidentals | N/A | | |

<table>
<tr><th colspan="4">With Use of Approved Warm Mix Technology as Compaction Aid<br>(Surface Course Ambient Air Temperature Allowances)</th></tr>
<tr><td>HMA Surface Course greater than or equal to 1”<br>(Travelway)</td><td>May 1 to Saturday following October 1</td><td>April 15 to Saturday following October 15</td><td rowspan="4">Begin at 50°F and pave down to 45°F</td></tr>
<tr><td>HMA Surface Course less than 1”<br>(Travelway)</td><td>May 15 to Saturday following October 1</td><td>May 15 to Saturday following October 15</td></tr>
<tr><td>HMA Surface Course less than 1” considered to be “Night Work”<br>(Travelway)</td><td colspan="2">June 1 to the Saturday following September 15</td></tr>
<tr><td>HMA Surface Course less than 1”<br>(Shoulders)</td><td colspan="2">May 15 to the Saturday following October 15</td></tr>
<tr><th colspan="4">With Use of Approved Warm Mix Technology as Compaction Aid<br>(Seasonal Limitation Extensions)</th></tr>
<tr><td>HMA Surface Course greater than or equal to 1”<br>(Travelway)</td><td>Saturday following October 1 to Saturday following October 15</td><td>Saturday following October 15 to Saturday following October 29</td><td>50°F</td></tr>
<tr><td>HMA Surface Course less than 1”<br>(Shoulders)</td><td colspan="2">Saturday following October 15 to Saturday following October 29</td><td>50°F</td></tr>
<tr><td>HMA for use other than Travelway Surface Course<br>(Shoulders greater than or equal to 1”, Intermediate, Base, Shim)</td><td colspan="2">April 15 to Saturday following November 15</td><td>35°F</td></tr>
</table>

1. Shoulders paved with the travelway pass shall meet travelway ambient air temperatures
2. Refer to the 461 SP for UTBWC for seasonal and temperature requirements.

The ambient air temperature shall be determined by an approved thermometer placed in the shade at the paving location. Unless otherwise specified, the Contractor shall not place Hot Mix Asphalt Pavement on a wet or frozen surface regardless of the ambient air temperature. The Hot Mix Asphalt Pavement produced with an approved WMA technology shall meet the requirements of section 401.04 - Temperature Requirements, unless otherwise approved by the Department. For the purposes of this Section, the traveled way includes truck lanes, ramps, approach roads and auxiliary lanes.

March 8, 2024

# SPECIAL PROVISION SECTION 401
# HOT MIX ASPHALT
(Thin Lift Surface Treatment – ¾ inch and 1 inch)

Description The Contractor shall furnish a uniformly blended, homogeneous mixture placed as one or more courses of Hot Mix Asphalt Pavement (HMA) on an approved base in accordance with the contract documents and in reasonably close conformity with the lines, grades, thickness, and typical cross sections shown on the plans or established by the Resident. The Department shall accept this work under Quality Assurance provisions as specified in Special Provision Section 400; Subsection 401 - Hot Mix Asphalt Pavement, and Standard Specifications Section 106 - Quality.

The Thin Lift Surface Treatment shall meet all of the Materials, Seasonal Limitations, Equipment, and Construction requirements of Section 401, with the following additions and changes.

Weather and Seasonal Limitations All work shall be in accordance with Division 400 – Pavements; Section 401 – Hot Mix Asphalt Pavement, subsection 401.06- Weather and Seasonal Limitations, with the exception of the following revisions;

1. For travelway paving the seasonal limits are extended to the Saturday following September 15th for surface courses placed less than 1 inch during conditions defined as night work, and October 1st for surface courses less than 1 inch during conditions defined as day work.
2. Shoulder surface courses that are less than 1 inch and are paved separately from the travelway shall be completed by the Saturday following October 15th.

The minimum pavement surface temperature for application of the tack coat and placement of the wearing course is 50º F.

Materials 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.

Compaction As a minimum, compaction of the Thin Lift Surface Treatment will be obtained using a minimal roller train consisting of a 10 ton vibratory roller, 16 ton pneumatic roller, and a 10 ton finish roller. Once the methods are established, rolling patterns, equipment, and methods will become part of the QCP. Failure to conform to these requirements will be treated as a second incident under 106.4.6 QCP Non-compliance.

The Contractor will be required to provide a QCT onsite for the placement of the Thin Lift Surface Treatment to monitor placement activities and maximize the density of the material for each day of placement. The QCT will be required to perform density testing of the mixture using a density meter (according to ASTM D 2950). A control section will be established at the beginning of the first day of production to establish roller patterns. The control section mixture will be rolled until the density readings show less than 1 pcf change for the final roller passes. This density will be used as the target TMD for the mixture. The remainder of the areas to be paved shall be compacted to a minimum density of 98% of the target density as determined in the control section.

The Contractor shall record and provide reports of each day's results, including a daily paving report listing the mixture type, mixture temperatures, equipment used, environmental conditions, and number of roller passes used to obtain the target TMD. Reports shall be signed by the QCT and presented to the Department's representative by the end of the working day. If this option is selected, the QCT will be required to monitor the densities for the entire production run. The QCT shall be required to be onsite during all mainline paving operations.

The Department may halt the production and placement of the Thin Lift Surface Treatment and require the construction of a new test strip if the Department finds that material being produced, hauled, or placed does not meet the requirements of Sections 401.08 through 401.18.

Method of Measurement The Department will measure Hot Mix Asphalt pavement by the ton in accordance with Section 109 - Measurement and Payment.

Basis of Payment The Department will pay for the Work, in place and accepted, in accordance with the applicable sections of this Special Provision; at the contract unit price per ton for the Pay Item listed in Special Provision Section 403 – Hot Mix Asphalt.

Payment will be made under:

| Pay Item | | Pay Unit |
|---|---|---|
| 403.2104 | 9.5mm HMA - Thin Lift Surface Treatment | Ton |
| 403.21041 | 9.5mm HMA – Polymer Modified Thin Lift Surface Treatment | Ton |

**Crystal - Island Falls**
**27670.00, 27670.10**
**Route 159**
**1" Overlay, PMRAP**
**CHIP**
**March 19, 2025**

# SPECIAL PROVISION
# SECTION 403
# HOT MIX ASPHALT

| Desc. Of Course | Grad Design. | Item Number | Total Thick | No. Of Layers | Comp. Notes |
|---|---|---|---|---|---|
| **1" HMA Overlay w/ Variable Depth Shim (PMRAP)** | | | | | |
| **2" Mill & 1" HMA Overlay w/ Variable Depth Shim** | | | | | |
| **Travelway, Shoulders & Side Roads (As Indicated)** | | | | | |
| Wearing | 9.5 mm | 403.2104 | 1" | 1 | 1,4,10,20,24,30,43 |
| Shim | 9.5 mm | 403.211 | variable | 1/more | 4,10,20,30,43 |
| **Drainage Cross Trenches & Frost Heave Repair Areas** | | | | | |
| **Base Paving (As Indicated or As Directed)** | | | | | |
| Base | 12.5 mm | 403.213 | 4 ½" or Match | 2/more | 4,10,30,32,34,35 |
| **Spot Shims (As Directed)** | | | | | |
| Shim | 9.5 mm | 403.211 | variable | 1/more | 4,10,20,30 |
| **Drives, Misc. (As Directed)** | | | | | |
| Wearing | 9.5 mm | 403.209 | 1-2" | 1/more | 3,20,30 |

## COMPLEMENTARY NOTES

1. The required PGAB for this mixture will meet a **PG 64-28** grading. All asphalt grades utilized on the travelway and shoulders shall be treated with an approved liquid anti-strip. PG binders shall be treated with a minimum 0.50 percent anti-strip by weight of asphalt binder used unless otherwise recommended by the anti-strip manufacturer. The PGAB and anti-strip blend shall meet the **PG 64-28** requirements. The Contractor shall provide supporting test data showing the PGAB and anti-strip blend meet the required criteria.
3. The design traffic level for mix placed shall be <3 million ESALS. The design, verification, Quality Control, and Acceptance tests for this mix will be performed at **65 gyrations**.
4. 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 **65 gyrations**.
10. Section 106.6 Acceptance, (2) **Method D** as specified Section 401.21 - Quality Assurance Methods B and D. The Contractor may request a contract modification to change to testing method "C" prior to work starting on this item.
20. 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.
24. See Special Provision 401 - Thin Lift Surface Treatment for project specifics.
30. 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.
32. For the frost heave repair area, compaction of the new Hot Mix Asphalt Pavement will be obtained using a minimal roller train consisting of a **10 ton** vibratory and a **3-5 ton** finish roller for roadway work. A daily paving report, summarizing the mixture type, mixture temperature, equipment used, environmental conditions, and number of roller passes, shall be recorded and signed by a **NETTCP Certified Paving Inspector acting as the Contractor's representative** and presented to the Department's representative by the **end of the working day.**

34. For the cross trenches, the contractor shall saw cut at a consistent width to allow transverse rolling of the trench. When applicable, a **10 ton** roller will be required. In areas inaccessible to a **10 ton** roller, compaction of the new Hot Mix Asphalt Pavement will be obtained using a minimal roller train consisting of a **3-5 ton** vibratory roller. The **minimum width of the trench shall be 5 feet** to accommodate a **3-5 ton** vibratory roller.
35. An approved release agent is required to ensure the mixture does not adhere to hand tools, rollers, pavers, and truck bodies. The use of petroleum based fuel oils, or asphalt stripping solvents will not be permitted. Payment for additional milling or saw cutting required shall not be considered directly, but instead shall be considered incidental to the paving items.
43. The Department shall profile railroad and bridge approaches every 10 feet along the roadway center line and edge of travelways, out to a match point at a minimum of 75 feet from the structure, to determine the approach pavement taper, elevations, and pavement removal or shim requirements. This work shall be accomplished in cooperation with the Contractor by means of conventional surveying equipment or blocking and string lines as cooperatively determined by the Contractor and Department. At minimum, the survey work will be completed 10 days prior to milling and/or paving operations.

Tack Coat

A tack coat of emulsified asphalt, RS-1, RS-1h, CRS-1 or CRS-1h, Item 409.15 shall be applied to any existing pavement at a rate of approximately 0.030 gal/yd², and on milled pavement approximately 0.05 gal/yd² 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/yd². Tack used will be **paid for at the contract unit price** for Item 409.15 Bituminous Tack Coat.

March 28, 2022
Supersedes February 5, 2020
State Pugmill Projects

# SPECIAL PROVISION
# SECTION 631 EQUIPMENT RENTAL
# (PAVING CREW)

631.01 Description This work shall consist of placing processed recycled asphalt pavement (PMRAP) produced by the MaineDOT pugmill in one or more courses in areas designated in the contract. The Department will notify the Contractor two weeks prior to the planned placement of PMRAP. All PMRAP shall be placed on an approved base in accordance with these specifications and in reasonably close conformity with the lines, grades, and thicknesses established in the contract, or as directed by the Department.

631.031 Loading and Hauling Equipment Trucks will be loaded using Department supplied equipment.

631.032 Bituminous Pavers Pavers shall be equipped with a 10 foot heated and activated main screed, and shall be equipped with power extendible, activated extensions and automatic grade and slope controls. Pavers shall conform to the 401 Specification; subsection 401.09 - Pavers.

631.033 Rollers One 10 ton minimum weight dual drum steel roller equipped with vibratory or oscillatory compaction will be required. Two pneumatic-tired rollers shall be required, one ballasted to 16 ton minimum, and the second pneumatic-tired roller ballasted to 8-10 ton. The roller sequence and pattern will be as determined by a density control strip at the beginning of the first day of full lane width PMRAP placement. All rollers shall conform to the 401 Specification; subsection 401.10 – Rollers, unless otherwise authorized by the Department.

631.034 Crew At a minimum, the crew shall consist of a paver operator, three roller operators, two screed/wheel people, a laborer, and a foreperson.

631.042 Spreading and Finishing The mixture shall be spread and finished in accordance with Section 401.15, or as otherwise established by the contract documents. Thicknesses may vary. Localized spot shims or partial width shim layers may be required. With the exception of localized spot or partial width shim layers, the minimum **un-compacted layer thickness will be 2 inches**. Areas requiring the placement of PMRAP in excess of **6 inches un-compacted depth** shall be paved in multiple layers. Each layer will not exceed 6 un-compacted inches. Extended cure times may be needed for multiple lift areas. HMA will not be placed until a minimum curing period of 5 days have elapsed. When weather conditions are unfavorable, the curing period may be extended by the Department.

631.043 Compaction Compaction of the mixture shall be in accordance with Section 401.16 and the PMRAP Special Provision. Rolling effort, timing, or sequence of rollers may be changed as directed by the Department to avoid excessive pushing, shoving, cracking, or other damage to the layer.

631.044 Joints Joints shall be constructed in accordance with Section 401.17.

631.07 Method of Measurement Placement of PMRAP shall be paid by the hour to the nearest ¼ hour. Up to 8 hours per day will be paid under 631.161. Hours past the 8 hour period will be paid under 631.162.

631.08 Basis of Payment The accepted quantity of placement of PMRAP will be paid for at the contract unit price per hour complete in-place. The unit price will be full compensation for furnishing all equipment and labor for placing, compacting, and for all other incidentals necessary to complete the work.

| Pay Item | Pay Unit |
|---|---|
| 631.161 Paving Crew | Hour |
| 631.162 Paving Crew (Overtime) | Hour |

# SPECIAL PROVISION
# SECTION 631
# EQUIPMENT RENTAL
## Trucking

The following are added to Subsection 631.01, 631.02, 631.07 and 631.08.

631.01 Description

The Contractor is to provide any combination of trucks listed in Section 631.02 below. The capacity will vary between a minimum of 145 tons per round and 290 tons per round on the road either to or from the Departments pugmill and the Contractors paving crew.

631.02 General

| Equipment | Requirements |
|---|---|
| Truck – Wheeler | Capable of legally* hauling 14 or more tons |
| Truck – Tri-axle | Capable of legally* hauling 20 or more tons |
| Truck – Live Bottom | Capable of legally* hauling 26 or more tons |

*Legal load for non-Interstate

Trucks for hauling Department produced pugmill material shall have tight, clean, and smooth metal dump bodies, which have been thinly coated with a small amount of approved release agent to prevent the mixture from adhering to the bodies. All truck dump bodies shall have a cover of canvas or other material which completely covers the mixture.

The cover shall be securely fastened on the truck, unless unloading. All truck bodies shall have an opening on both sides, which will accommodate a thermometer stem. The opening shall be located near the midpoint of the body, at least 12 inches above the bed.

The Department and the Contractor will identify a trucking contact at the pre-construction meeting. By 5:00 PM, these contacts will discuss the truck start time and amount of trucking tonnage required for the following day.

631.07 Method of Measurement

Payment will be based on the calculated tonnage loaded at the pugmill and delivered and placed on the street. The pugmill supervisor will provide a cover slip by noon the following working day.

631.08 Basis of Payment

Payment will be made under:

| Pay Item | | Pay Unit |
|---|---|---|
| 631.179 | Pugmill Trucking | Ton |

# SPECIAL PROVISION
# SECTION 631
# EQUIPMENT RENTAL

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

| Pay Item | | Pay Unit |
|---|---|---|
| 631.211 | Pavement Sweeper (Including Operator) | HR |

**November 13, 2023**
**Supersedes January 15, 2020**

# SPECIAL PROVISION
# SECTION 652
# MAINTENANCE OF TRAFFIC

Approaches. Approach signing shall include the following signs at 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 (Ahead)
End Road Work

Work Areas. At each work site, signs and channelizing devices shall be used as directed by the Resident.

Signs include:

Road Work XXXX[1].
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.

Unless otherwise defined in Special Provision 105/107 or submitted and approved in the Traffic Control Plan, the following shall apply:

- The Contractor shall conduct their operations in such a manner that the roadway will not be restricted to one lane for more than 2,500 feet at each work area and no more than 4,000 feet for paving, milling, and crack seal/repair work areas.
- Where more than one work area restricts traffic to one lane operation, these work areas shall be separated by at least 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.

[1] "Road Work Ahead" to be used in short duration operations and "Road Work xx feet" to be used in stationary operations as directed by the Resident.

December 17, 2024
Supersedes November 07, 2024

# 2020 STANDARD DETAIL UPDATES

Standard Details and Standard Detail updates are available at:
http://maine.gov/mdot/contractors/publications/standarddetail/

| Detail # | Description | Posted Date |
|---|---|---|
| 502(19) | Bridge Drains | 3/17/2023 |
| 502(15) | Bridge Drains | 3/17/2023 |
| 502(20) | Bridge Drains | 3/17/2023 |
| 502(23) | Bridge Drains | 3/17/2023 |
| 502(24) | Bridge Drains | 3/17/2023 |
| 502(25) | Bridge Drains | 3/17/2023 |
| 502(26) | Bridge Drains | 3/17/2023 |
| 504(07) | Diaphragm & Crossframe Notes | 3/17/2023 |
| 507(20) | Steel Approach Railing 3-Bar | 2/11/2021 |
| 507(21) | Steel Approach Railing 3-Bar | 2/11/2021 |
| 507(22) | Steel Approach Railing 3-Bar | 2/11/2021 |
| 507(23) | Steel Approach Railing 3-Bar | 2/11/2021 |
| 507(27) | Steel Approach Railing | 2/11/2021 |
| 526(01) | Portable Concrete Barrier | 1/14/2021 |
| 526(01A) | Portable Concrete Barrier | 1/14/2021 |
| 526(01B) | Portable Concrete Barrier | 1/14/2021 |
| 526(02) | Portable Concrete Barrier | 1/14/2021 |
| 526(02A) | Portable Concrete Barrier | 1/14/2021 |
| 526(03) | Portable Concrete Barrier | 1/14/2021 |
| 526(04) | Portable Concrete Barrier | 1/14/2021 |
| 526(04A) | Portable Concrete Barrier | 1/14/2021 |
| 526(04B) | Portable Concrete Barrier | 1/14/2021 |
| 526(05) | Permanent Concrete Barrier | 3/17/2023 |
| 526(21) | Permanent Concrete Barrier | 3/17/2023 |
| 526(22) | Concrete Transition Barrier | 3/17/2023 |
| 526(38) | Concrete Transition Barrier | 3/17/2023 |
| 526(39) | Texas Classic Rail | 3/17/2023 |
| 526(55) | Texas Classic Rail | 3/17/2023 |

| | | |
|---|---|---|
| 603(10) | Concrete Pipe Ties | 6/10/2021 |
| 605(01) | Underdrain | 7/8/2022 |
| 605(01) | Underdrain Notes | 7/8/2022 |
| 606(17) | Midway Splice Guardrail Transition | 6/10/2022 |
| 606(23) | Standard Bridge Transition – Type “1” | 2/11/2021 |
| 606(24) | Standard Bridge Transition – Type “1A” | 2/11/2021 |
| 608(02) | Detectable Warnings | 6/10/2021 |
| 609(09) | Precast Concrete Vertical Curb | 2/11/2021 |
| 627(07) | Crosswalk | 2/22/2022 |
| 627(08) | Crosswalk | 2/22/2022 |
| 643(11) | ATCC Cabinet | 12/14/2020 |
| 645(06) | H Beam Posts Highway Signing | 12/17/2024 |
| 801(11) | Pedestrian Ramp Notes | 11/20/2023 |
| 801(12) | Pedestrian Ramp Requirements | 11/20/2023 |
| 801(13) | Ramp Length Table | 11/20/2023 |
| 801(14) | Parallel Pedestrian Ramp | 11/20/2023 |
| 801(15) | Perpendicular Pedestrian Ramp – Option 1 | 11/20/2023 |
| 801(16) | Parallel Pedestrian Ramp – Option 2A | 11/20/2023 |
| 801(17) | Perpendicular Pedestrian Ramp – Option 2A | 11/20/2023 |
| 801(18) | Parallel Pedestrian Ramp – Option 2B | 11/20/2023 |
| 801(19) | Perpendicular Pedestrian Ramp – Option 2B | 11/20/2023 |
| 801(20) | Parallel Pedestrian Ramp – Option 3 | 11/20/2023 |
| 801(21) | Perpendicular Pedestrian Ramp – Option 3 | 11/20/2023 |
| 801(22) | Side Street Pedestrian Ramp | 11/20/2023 |
| 801(23) | Parallel Pedestrian Ramp – Esplanade | 11/20/2023 |
| 801(24) | Perpendicular Pedestrian Ramp – Esplanade | 11/20/2023 |
| 801(25) | Island Crossings | 11/20/2023 |
| 801(26) | Blended Transition | 11/20/2023 |
| 801(26) | Blended Transition | 1/19/2024 |
| 801(27) | Pedestrian Ramp Adjacent to Driveway or Entrance | 11/20/2023 |
| 802(05) | Roadway Culvert End Slope Treatment | 1/03/2017 |
| 802(05) | Roadway Culvert End Slope Treatment | 11/01/2024 |

# SUPPLEMENTAL SPECIFICATIONS
**(Corrections, Additions, & Revisions to Standard Specifications – March 2020)**

## SECTION 101
## CONTRACT INTERPRETATION

101.2 Definitions

Construction Easement revise this definition by removing it in its entirety and replace with; **"A right acquired by the Department for a specific use of private property outside of the established Right-of-Way. Examples include but are not limited to Drainage Easements, Construction and Maintenance Easements, and Slope Easements. Construction Easement areas, including Temporary Construction Limits and Temporary Road Limits, outside of the Right-of-Way remain private property. No use other than to access and perform the specified work activity is permitted without written permission of the owner."**

Construction Limit Line Remove this definition in its entirety.

Holidays Amend this paragraph by adding "**Juneteenth**" between 'Memorial Day' and 'Independence Day'.

Plans Revise this paragraph by removing "**Standard Details, Supplemental Standard Details**" from the first sentence.

Project Limits Revise this definition by removing it in its entirety and replacing it with: **"Areas within the Right-of-Way, Construction Easements, or Temporary Construction Limits shown on the Plans or otherwise indicated in the Contract. If no Project Limits are indicated in the Contract, the Project Limits shall be determined by the Department. For a related Maine statute, see 23 MRSA § 653. "**

Right-Of-Way Revise this definition by removing it in its entirety and replacing it with: **"The area of land, property, or interest therein, acquired for or devoted to the Project or other purposes. Portions of the Right-of-Way may be used for storage of materials and equipment and the location of engineering facilities, subject to written approval by the Department."**

Amend this Section by adding the following two definitions (that replace Construction Limit Line);

**Temporary Construction Limits The area within which the Contractor may access and perform the Physical Work and outside of which Work may not be performed without written authorization by the property owner.**

**Temporary Road Limits The area within which the Contractor may construct and maintain a temporary detour for maintenance of traffic**.

## SECTION 102
## BIDDING

102.11 Bid Responsiveness Revise the paragraph that states "The Bid is not signed by a duly authorized representative of the Bidder." So that it reads:

"**The Bid is not signed by a duly authorized representative of the Bidder.**

- **Properly submitted electronic bids meet this requirement.**
- **Paper bids must include at least one signed copy of the Contract Agreement Offer & Award form**."

## SECTION 103
## AWARD AND CONTRACTING

103.3.1 Qualification Requirement for Award Revise this subsection so that it reads:

"**103.3.1 Qualification Requirement for Award If the Notice to Contractors lists a Prequalification requirement, the Apparent Successful Bidder must successfully complete the Prequalification process as a condition of Award. The Apparent Successful Bidder who does not already hold an Annual Prequalification shall have 21 days to provide the Department with their Prequal documents or the Department may move on to the next low bidder."**

## SECTION 104
## GENERAL RIGHTS AND RESPONSIBILITIES

104.2.1 Furnishing of Right-of-Way Revise this subsection by removing it in its entirety and replace with the new subsection:

**"104.2.1 Furnishing of Property Rights The Department will secure all necessary rights to real property within the Project Limits shown on the Right-of-Way Plans that are provided with the Bid Documents. For related provisions, see Sections 104.3.2 – Furnishing of Other Property Rights, Licenses and Permits and 105.4.5 - Maintenance of Existing Structures. For related definitions, see Construction Easements and Right-of-Way."**

104.3.2 Furnishing of Other Property Rights, Licenses and Permits Revise this subsection by replacing "104.2.1 Furnishing of Right-of-Way" with "**104.2.1 Furnishing of Property Rights".**

# SECTION 105
# GENERAL SCOPE OF WORK

105.10.1.4 Race-conscious Project Goals Revise the second paragraph of this section so it reads as follows:

*"***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. This form must be filled out in its entirety. The dollar total of each commitment shall be totaled and a percentage determined.***"*

105.10.2 Requirements Applicable to All Contracts Under section A, number 2, in the first sentence of the first paragraph, revise this Section by replacing the word "handicap" in two places with the word "disability" so it now reads:

**"2) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, State that all qualified applicants will receive consideration for employment without regard to race, color, sexual orientation, religious creed, sex, national origin, ancestry, age, physical disability, or mental disability."**

# SECTION 106
# QUALITY

106.6 Acceptance Revise this Subsection by replacing the paragraph beginning with "Acceptance of Hot Mix Asphalt Pavement will be based" with:

**"Acceptance of Hot Mix Asphalt Pavement will be based on Method A or C Statistical Acceptance, or Method B or D Acceptance as specified. The method of acceptance for each item is defined in Special Provision, Section 403, Hot Mix Asphalt Pavement. When items of Hot Mix Asphalt Pavement are not so designated, Method A will be utilized whenever there are more than 1000 tons per Hot Mix Asphalt Pavement item, and Method B will be utilized when there are less than or equal to 1000 tons per Hot Mix Asphalt Pavement item."**

Revise Subsection "B" by removing it and replacing it with:

**"B. Items not designated for Statistical Acceptance will utilize Method B or D Acceptance testing to validate the quality of the material incorporated into the Project. For material paid under Item 403.209 – Method D, or designated to be visually accepted, the Contractor shall provide the Department with a Certification Letter that indicates that the material supplied complies with the Specifications. Test results representative of the certified material shall be attached to the letter.**

**The Department will randomly sample and test the certified Material for properties noted in Table 1 of Section 502 - Structural Concrete or Table 14 of Section –401.21**

**Acceptance Method B & D. Material will be subject to rejection as noted in Structural Concrete Section 502.195 - Quality Assurance Method C Concrete or Hot Mix Asphalt, Section 401.2022 Pay Adjustment – Method B & D."**

106.7.1 Standard Deviation Method Revise 106.7.1, subsection H by removing the following from the first paragraph:

"Method B: PF = [70 + (Quality Level * 0.33)] * 0.01"

106.9.1 Warranty by Contractor Revise the third paragraph of this section so that it reads:

"**For a related provision regarding obligations regarding plantings, see section 621.36 – Maintenance Period.** "

## SECTION 107
## TIME

107.3.1 General Amend this paragraph by adding "**Juneteenth**" between 'Patriot's Day' and 'the Friday after Thanksgiving'.

## SECTION 108
## PAYMENT

108.2.3 Mobilization Payments Replace Standard Specification 108.2.3 – Mobilization Payments with the following:

"**108.2.3 Mobilization Payments "Mobilization" includes the mobilization and demobilization of all resources as many times as necessary during the Work.**

**Percent Mobilization Bid will be determined by taking the amount Bid for Mobilization and dividing by the Total Contract Amount less Mobilization. Mob/(Total Contract – Mob).**

**Payment will be made at the following intervals:**

| % Mobilization Bid | % Mobilization Paid at Contract Award | % Mobilization Paid after the Department determines 50% of the work is Complete | % Mobilization Paid at Final Acceptance |
|---|---|---|---|
| **10% or less** | **50%** | **50%** | |
| **More than 10% to 15%** | **33%** | **33%** | **34%** |
| **More than15% to 20%** | **25%** | **25%** | **50%** |
| **More than 20% to 30%** | **15%** | **15%** | **70%** |
| **Greater than 30%** | **10%** | **10%** | **80%** |

108.3 Retainage Revise the third paragraph of this section so that it reads:

**"Upon Final Acceptance, and determination by the department that there are no claims either by or on the Contractor or Subcontractors; no over payments by the department; no LDs due; and no disincentives due, the Department will reduce Retent to 1% of the original Contract Award amount, or $100,000, whichever is less, as it deems desirable and prudent."**

108.4.1 Price Adjustment for Hot Mix Asphalt Revise this section by removing it in its entirety and replacing it with the following:

**"108.4.1 Price Adjustment for Hot Mix Asphalt: For each Contract, a price adjustment for performance graded binder will be made for the following pay items, when the total quantity of Hot Mix Asphalt included in these items is in excess of 500 tons, based on the estimated quantities of these items at the time of bid.**

| | |
|---|---|
| **Item 403.102** | **Hot Mix Asphalt – Special Areas** |
| **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 403.2084** | **Hot Mix Asphalt - 12.5 mm (Highly Modified HiMAP)** |
| **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 403.2104** | **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 403.301** | **Hot Mix Asphalt (Asphalt Rubber Gap-Graded)** |
| **Item 461.13** | **Light Capital Pavement** |
| **Item 461.210** | **9.5 mm HMA - Paver Placed Surface** |
| **Item 461.2101** | **Hot Mix Asphalt - 9.5 mm (Polymer Modified)** |
| **Item 461.216** | **Hot Mix Asphalt (Shim)** |
| **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 403.207–5.2%**
**Item 403.2071–5.2%**
**Item 403.2072–5.8%**
**Item 403.208–5.6%**
**Item 403.2081–5.6%**
**Item 403.2084 – 6.2%**
**Item 403.209–6.2%**
**Item 403.210–6.2%**
**Item 403.2101–6.2%**
**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 403.301–6.2%**
**Item 461.13–6.7%**
**Item 461.210 – 6.4%**
**Item 461.2101 – 6.4%**
**Item 461.216 – 6.7%**
**Item 462.30–0.0021 tons/SY**
**Item 462.301–0.0021 tons/SY”**

## SECTION 110
## INDEMNIFICATION, BONDING, AND INSURANCE

110.3.9 Administrative & General Provisions Amend this subsection by adding "**Automobile Liability**" under letter A) Additional Insured to the list of exceptions.

10. Assurance Required by 49 CFR: 26.13(a)(b) Revise this section by removing it in its entirety and replacing it with the following:

***"*a. MaineDOT shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of any DOT-assisted contract or in the administration of its DBE Program or the requirements of 49 CFR part 26. MaineDOT shall take all necessary and reasonable steps under 49 CFR part 26 to ensure nondiscrimination in the award and administration of DOT-assisted contracts. MaineDOT's DBE Program, as required by 49 CFR part 26 and as approved by DOT, is incorporated by reference in this agreement. The implementation of this program is a legal obligation and failure to carry out its terms shall be treated as a violation of this agreement. Upon notification to the MaineDOT of its failure to carry out its terms shall be treated as a violation of this agreement. Upon notification to the MaineDOT of its failure to carry out its approved program, the Department may impose sanctions as provided for under 49 CFR Part 26, and may, in appropriate cases, refer the matter for enforcement under 18 U.S.C. 1001 and/or the Program Fraud Remedies Act of 1986 (31 U.S.C. 3801 et seq.). This language will appear in financial assistance agreements with sub-recipients.**

**b. The contractor, sub-recipient, 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 recipient deems appropriate, including, but not limited to:**

1. **Withholding monthly progress payments;**
2. **Assessing sanctions;**
3. **Liquidated damages; and/or**
4. **Disqualifying the contractor from future bidding as non-responsible."**

## SECTION 206
## STRUCTURAL EXCAVATION

206.01 Description – *Structural Earth Excavation, Below Grade* delete the entire sentence and replace with "**shall consist of the removal of excavation required for unknown or unanticipated subsurface condition. See 206.04 – Method of Measurement for pay limits**."

206.04 Method of Measurement – Drainage and Minor Structures Paragraph 1, sentence 2, delete the remainder of the sentence beginning with "….provided the maximum allowable…"And replace with: **"….in accordance with the following limits:"**

- **Vertical pay limits:**
  - **Below a plane parallel with and 12 inches below the bottom of the drainage or minor structure or**
  - **Below the excavation limits shown in the Bid Documents; whichever is greater.**

- **Horizontal pay limits – The maximum allowable horizontal dimensions shall not exceed those bounded by vertical surfaces 18 inches outside the base, or extreme limits of, the structure, and to the vertical neat lines of underdrain trenches, as shown in the Contract Documents.**

## SECTION 401
## HOT MIX ASPHALT PAVEMENT

401.19 Contractor Quality Control Amend this Section by adding the following to the end: **"Failure to comply with the approved QCP will result in work suspension and pay reductions as outlined in Section 106.4.6. The Quality Control Plan Value shall be the total bid value for all items covered by the QCP as identified in Special Provision 403."**

## SECTION 501
## FOUNDATION PILES

501.044 Special Requirements for Steel Pipe Piles and Steel Casings Amend this section by deleting it in its entirety and replacing with:

**Pipe piles shall be driven closed ended, unless otherwise specified. When open-ended pipe piles are specified or when the ends are not completely closed ended when driven, the inside of the pile shall be thoroughly cleaned out, and the inside walls cleaned by jetting or other means approved by the Resident. The sediment control required for the cleaning operations shall be covered in the Contractor's SEWPCP.**

**Pipe piles shall be inspected and approved by the Resident immediately before concrete is placed in them. They shall be free from rupture and undue deformation and shall be free from water unless the Resident determines that the concrete can be placed without damage to the pile and such that the discharged water will be contained. The Contractor shall provide lights and other equipment necessary to enable the Resident to inspect each pipe pile.**

**Portland cement concrete for filling the pipe piles shall be placed in one continuous operation to fill the pile completely without causing water contamination. An internal type vibrator shall be used in the top 25 feet. Pile heads shall be protected and cured in accordance with Section 502, Structural Concrete.**

**The placing of concrete and the driving of piles shall be scheduled so that fresh and setting concrete will not be injured by the pile driving.**

**Concrete shall not be placed in pipe piles until pile driving has progressed beyond a radius of 15 feet from the pile to be concreted. If pile heave is detected for pipe piles that have been filled with concrete, the piles shall be redriven to the original position after the concrete has attained sufficient strength and a proper hammer-pile cushion system, is in place and is satisfactory to the Resident.**

**When a reinforcing steel cage is specified, it shall be placed inside the piles to allow for a minimum of 2 inches of concrete cover and the piles shall be filled with concrete to the elevation shown on the Plans.**

**Full-length pipe piles and steel casings shall be used wherever practicable; however, splicing may be permitted when approved by the Resident. The method of splicing shall be as follows:**

**a. Steel pipe piles and steel casings shall be spliced by full penetration butt joint welds.**

**b. When the pipe piles and steel casings are to be spliced while in a vertical position, splicing shall be accomplished utilizing single-bevel groove welds with the use of back-up rings. When the pipe piles and steel casings are to be spliced while in a horizontal position, splicing shall be accomplished utilizing single-vee groove welds with the use of back-up rings.**

**c. Welded joints shall conform to the Standard Details.**

501.047 Splicing Piles Amend this section by deleting it in its entirety and replacing it with:

**Full-length piles shall always be used wherever practicable. When full-length piles cannot be used, the number of splices, locations, and details shall be noted in the QCP. Piles fabricated from multiple pieces will be acceptable only if they comply with the following:**

| H-Beam Piles [a] | | Pipe Piles and Steel Casings [a,b] | |
|---|---|---|---|
| **Lengths** | **Maximum No. Field Splices** | **Lengths** | **Maximum No. Field Splices** |
| **Less than 20 ft.** | **0** | **Less than 20 ft.** | **0** |
| **Over 20 – 35 ft.** | **1** | **Over 20 – 40 ft.** | **1** |
| **Over 35 – 79 ft.** | **2** | **Over 40 – 60 ft.** | **2** |
| **Over 79 ft.** | **1 per 40 ft.** | **Over 60 – 80 ft.** | **3** |
| | | **Over 80 ft.** | **1 per 20 ft.** |
| **[a] Pile lengths less than 10 feet will not be spliced, except as the final (top) section of the pile.** **[b] Where pipe piles are used for pile bent piers, no splices will be allowed in the length of pile from the cutoff elevation to 2 feet below the channel bottom.** | | | |

**When pre-planned splicing is approved, the pile piece of lesser length shall be placed at the tip of the pile (the first part of the pile that enters the ground).**

**When splicing is allowed, the work shall be done in accordance with the following:**

**A. Welding shall be done in accordance with the requirements of the AWS D1.1 welding code.**
**B. Qualify welders in accordance with the most recent edition of the AWS D1.5 code.**
**C. Submit a written Weld Procedure Specification (WPS) for each joint to be included as part of the QCP. The WPSs shall be provided to the Fabrication Engineer for review and approval prior to beginning welding. Provide copies of the approved WPSs to the welder, QC Inspector and Resident prior to beginning welding. Welding performed without an approved WPS and approved QCP will be considered Unacceptable Work.**
**D. Provide a list of qualified welders with copies of their AWS certifications to the Fabrication Engineer for review prior to beginning welding. Welders shall have in their possession, at the time of welding, a valid certification for the process and position to be used in production from the AWS. The welder shall show the Resident their credentials upon request.**
**E. The Contractor shall only use electrodes that are on the Department's Qualified Products List for Welding Electrodes or shall submit alternative electrodes for review and approval by the Fabrication Engineer. Electrodes used shall match those approved for use in the WPS.**
**F. Welding shall not be done: When the temperature in the immediate vicinity of the weld is below 0°F; when the surfaces are damp or exposed to rain, snow, or high wind; or when the welders or welding operators are exposed to inclement conditions.**
**G. The pile shall be preheated to and maintained at 150°F minimum, within 6 inches from the joint during welding.**
**H. Power sources for welders shall have meters indicating amperage/voltage that have been calibrated within 1 year at the time of welding.**
**I. The Contractor shall provide the Department with notice, a minimum of, 7 Days prior to the start of any welding.**
**J. The Contractor shall provide a QC Inspector to perform QC for the welds in accordance with the AWS D1.1 welding code. The QC Inspector shall be an AWS Certified Welding Inspector (CWI) in conformance with the requirements of AWS QC1, Standard for AWS Certifications of Welding Inspectors. The Contractor may submit, in lieu of a CWI, an alternative QC Inspector with documented training and experience in metals fabrication, inspection, and testing for approval by the Fabrication Engineer. The QC Inspector shall be someone other than the welder performing the welds to be inspected.**
**K. The QC Inspector shall inspect all production stages of the welded splice to ensure that workmanship and materials meet the requirements of the AWS D1.1 welding code and the Contract. The QC Inspector shall submit a signed record of all weld inspection documentation to the Resident after welding is completed.**

**Record of weld inspection shall include, but not be limited to, the following:**

**1. Name of QC Inspector**
**2. Project WIN and Location**
**3. Date**
**4. Weather conditions**
**5. Type, size, length, and location of welds.**

6. **Confirmation of appropriate equipment and materials used, including proper handling of welding electrodes.**
7. **Confirmation that welder has approved WPS onsite, and welding is performed in accordance with approved WPS.**
8. **Confirmation that welder is qualified to perform work per approved WPS. Include name and certifications of qualified welder who performed the work.**
9. **Confirm that 100% visual testing, in accordance with AWS D1.1 Table 8.1, has been conducted and any subsequent repairs are made prior to non-destructive testing (NDT).**
10. **Document NDT testing including name of NDT technician, NDT personnel qualifications, type and extent of NDT testing performed, and include NDT testing reports provided by the NDT testing technician.**

**L. Piles shall not be driven until all pile welding has been inspected and accepted by the Department.**

**501.0471 Specific Requirements for Splicing H-Beam Piles**

**A. Damaged material shall be removed from the end of the driven pile. Lifting holes shall be repaired or trimmed off. The ends of both pieces to be spliced shall be cut off square with the longitudinal axis of the pile and beveled per the approved WPS. All cutting shall be done with the use of a mechanical guide, except that minor trimming may be allowed, as approved by the Resident.**

**B. The Contractor shall use an approved mechanical splicer or a full penetration butt weld for the entire cross section of the pile. Mechanical splicers shall be installed per the manufacturer's recommendations, except that the flanges shall be welded using a complete joint penetration weld, per the AWS D1.1 welding code.**

**C. In addition to the 100% visual testing (VT) performed by the QC Inspector, the Contractor shall perform NDT on the first two welded splices of the same type/size. The welds shall be radiographically (RT) or ultrasonically (UT) tested for their full length for acceptance per Table 8.2 of AWS D1.1. If both RT/UT-tested splices are determined to be acceptable, no further NDT will be required. If either of the first two RT/UT-tested splices contain defects warranting rejection, RT/UT testing of splices shall continue until two consecutive splices are found to be acceptable.**

**D. Should the Department determine that the Quality Control of the Contractor is not producing welds with acceptable quality, then the Department may request the Contractor to perform additional NDT, such as RT or UT of any or all welds. Should the NDT testing identify defects warranting rejection, the welds shall be repaired and retested. The Contractor shall perform the NDT and weld repair work at no additional cost to the Department. If the NDT does not identify defects warranting rejection, then the Department will pay for the cost of the NDT testing. RT and UT defect indications will be evaluated according to the statically loaded criteria of AWS D1.1.**

**501.0472 Specific Requirements for Splicing Steel Pipe Piles and Steel Casings**

**A. Damaged material shall be removed from the end of the driven pile. Lifting holes shall be trimmed off. The ends of both pieces to be spliced shall be cut off square with the longitudinal axis of the pile and beveled per the approved WPS. All cutting shall be**

**done with the use of a mechanical guide, except that minor trimming may be allowed, as approved by the Resident.**
**B. Splices shall be welded using an AWS D1.1 Complete Joint Penetration butt weld**
**with a backer ring.**
**C. In addition to the 100% VT performed by the QC Inspector, the Contractor shall perform NDT on the first two welded splices of the same type/size. The welds shall be RT or UT tested for their full length for acceptance per Table 8.2 of AWS D1.1. If both RT/UT-tested splices are determined to be acceptable, no further NDT will be required. If either of the first two RT/UT-tested splices contain defects warranting rejection, RT/UT testing of splices shall continue until two consecutive splices are found to be acceptable.**
**D. Should the Department determine that the Quality Control of the Contractor is not producing welds with acceptable quality, then the Department may request the Contractor to perform additional NDT, such as RT or UT of any or all welds. Should the NDT testing identify defects warranting rejection, the welds shall be repaired and retested. The Contractor shall perform the NDT and weld repair work at no additional cost to the Department. If the NDT does not identify defects warranting rejection, then the Department will pay for the cost of the NDT testing. RT and UT defect indications will be evaluated according to the statically loaded criteria of AWS D1.1.**

501.048 Prefabricated Pile Tips Amend this section by deleting it in its entirety and replacing it with:

**Welding of pile tips shall be done in accordance with the following:**

**A. Welding shall be done in accordance with the requirements of the AWS D1.1 welding code.**
**B. Qualify welders in accordance with the most recent edition of the AWS D1.5 code.**
**C. Submit a written WPS for each tip to be included as part of the QCP. The WPSs shall be provided to the Fabrication Engineer for review and approval prior to beginning welding. Provide copies of the approved the WPS to the welder and Resident prior to beginning welding. Welding performed without an approved WPS and approved QCP will be considered Unacceptable Work.**
**D. Provide a list of qualified welders with copies of their AWS certifications to the Fabrication Engineer for review prior to beginning welding. Welders shall have in their possession, at the time of welding, a valid certification for the process and position to be used in production from the AWS or other organization acceptable to the Resident. The welder shall show the Resident their credentials upon request.**
**E. The Contractor shall only use electrodes that are on the Department's Qualified Products List for Welding Electrodes or shall submit alternative electrodes for review and approval by the Fabrication Engineer. Electrodes used shall match those approved for use in the WPS.**
**F. Pile tips shall be approved by the Resident.**

**G. Welding shall not be done: When the temperature in the immediate vicinity of the weld is below 0°F; when the surfaces are damp or exposed to rain, snow, or high wind; or when the welders or welding operators are exposed to inclement conditions.**

**H. The pile shall be preheated to and maintained at 150°F minimum within 6 inches from the joint during welding.**

**I. Power sources for welders shall have meters indicating amperage/voltage that have been calibrated within 1 year at the time of welding.**

**J. Pile tips may be welded to the piles by the pile supplier upon approval by the Department. Approval is contingent upon submission of the following: A welding QC Plan; proof that the proposed welder(s) is certified per AWS D1.5; and an AWS D1.1 WPS, with base metal preheated to a minimum of 150°F. The Contractor shall provide notice a minimum of 14 Days prior to the start of any welding by the pile supplier. At a minimum, welds shall be 100% visually inspected by the pile supplier's QC representative.**

**K. The Contractor shall provide a QC Inspector to perform QC for the welds in accordance with the AWS D1.1 welding code. The QC Inspector shall be an CWI in conformance with the requirements of AWS QC1, Standard for AWS Certifications of Welding Inspectors. The Contractor may submit, in lieu of a CWI, an alternative QC Inspector with documented training and experience in metals fabrication, inspection, and testing for approval by the Fabrication Engineer. The QC Inspector shall be someone other than the welder performing the welds to be inspected.**

**L. The QC Inspector shall inspect all production stages of the welded splice to ensure that workmanship and materials meet the requirements of the AWS D1.1 welding code and the Contract. The QC Inspector shall submit a signed record of all weld inspection documentation to the Resident after welding is completed.**

**M.**

**Record of weld inspection shall include, but not be limited to, the following:**

1. **Name of QC Inspector**
2. **Project WIN and Location**
3. **Date**
4. **Weather conditions**
5. **Type, size, length, and location of welds.**
6. **Confirmation of appropriate equipment and materials used, including proper handling of welding electrodes.**
7. **Confirmation that welder has approved WPS onsite, and welding is performed in accordance with approved WPS.**
8. **Confirmation that welder is qualified to perform work per approved WPS. Include name and certifications of qualified welder who performed the work.**
9. **Confirm that 100% VT, in accordance with AWS D1.1 Table 8.1, has been conducted and any subsequent repairs are made prior to NDT.**
10. **Document NDT testing including name of NDT technician, NDT personnel qualifications, type and extent of NDT testing performed, and include NDT testing reports provided by the NDT testing technician.**

**N. The Contractor shall provide notice a minimum of 7 Days prior to the start of any field welding.**
**O. Piles shall not be driven until all pile welding has been inspected and accepted by the Department.**

## 501.0481 Specific Requirements for Installing H-Beam Pile Tips

**A. Damaged material shall be removed from the end of the driven pile, as applicable. Lifting holes shall be trimmed off. The end of the pile to which the tip is to be attached shall be cut off square with the longitudinal axis of the pile and prepared per the approved WPS. All cutting shall be done with the use of a mechanical guide, except that minor trimming may be allowed, as approved by the Resident.**
**B. Regarding weld size, prefabricated pile tips shall be attached to H-beam piles with 5/16-inch groove welds along each flange, or as recommended by the manufacturer of the pile tips, whichever weld size is larger.**
**C. The QC Inspector shall, at a minimum, perform 100% VT on each pile tip weld.**
**D. Should the Department determine that the Quality Control of the Contractor is not producing welds with acceptable quality, then the Department may request the Contractor to perform additional NDT, such as RT or UT of any or all welds. Should the NDT testing identify defects warranting rejection, the welds shall be repaired and retested. The Contractor shall perform the NDT and weld repair work at no additional cost to the Department. If the NDT does not identify defects warranting rejection, then the Department will pay for the cost of the NDT testing. RT and UT defect indications will be evaluated according to the statically loaded criteria of AWS D1.1.**

### 501.0482 Specific Requirements for Installing Steel Pipe Pile Tips

**A. Damaged material shall be removed from the end of the driven pile, as applicable. Lifting holes shall be trimmed off. The end of the pile to which the tip is to be attached shall be cut off square with the longitudinal axis of the pile and prepared per the approved WPS. All cutting shall be done with the use of a mechanical guide, except that minor trimming may be allowed, as approved by the Resident.**
**B. Unless otherwise shown on the Plans, steel pipe piles shall have pointed cast steel pile tips.**
**C. Regarding weld size, prefabricated pile tips shall be attached to steel pipe piles with a continuous 5/16-inch groove weld along the full perimeter of the pile, or as recommended by the manufacturer of the pile tips, whichever weld size is larger.**
**D. The QC Inspector shall, at a minimum, perform 100% VT on each pile tip weld.**
**E. Should the Department determine that the Quality Control of the Contractor is not producing welds with acceptable quality, then the Department may request the Contractor to perform additional NDT, such as RT or UT of any or all welds. Should the NDT testing identify defects warranting rejection, the welds shall be repaired and retested. The Contractor shall perform the NDT and weld repair work at no additional cost to the Department. If the NDT does not identify defects warranting rejection, then the Department will pay for the cost of the NDT testing. RT and UT defect indications will be evaluated according to the statically loaded criteria of AWS D1.1.**

501.05 Method of Measurement
c. Piles in Place  Revise the third paragraph by replacing the "10" with "20" so that it reads:

Unused pile cutoffs **20** feet or more in length, except those required to accommodate the Contractor's construction method, as discussed herein, will remain the property of the Department and will be stored at a bridge maintenance yard nearest the project. Hauling and unloading of piles will be done by the Contractor or by the Department, depending upon availability of services.

## SECTION 502
## STRUCTURAL CONCRETE

502.09 Forms and Falsework  Amend this subsection by adding the subsection title "**502.10 Placing Concrete**" after section "D" Removal of Forms and False work" and after the paragraph beginning with "2. Forms and False work, including blocking…". So that a new subsection starts and reads:

"**502.10 Placing Concrete**

A. **General Concrete shall not be placed until forms** …."

502.1701 Quality Control, Method A and B  Revise this Section so that the first paragraph and the first sentence of the second paragraph read:

"**502.17 Quality Control The Contractor shall control the quality of the concrete through testing, inspection, and practices which shall be described in the QCP, sufficient to assure a product meeting the Contract requirements. The QCP shall meet the requirements of Section 106, Quality, and this specification. No work under this item shall proceed until the QCP is submitted to and approved by the Department. Failure to comply with the approved QCP will result in work suspension and pay reductions as outlined in Section 106.4.6. The Quality Control Plan Value shall be the total bid value for all cast-in-place items covered by the QCP, using the P value listed in Special Provision 502. If no P value is listed, a value of $350, or bid value per cubic yard, whichever is less, shall be used.**

**502.1701 Quality Control, Method A and B The QCP shall address all elements that affect the quality of the structural concrete including, but not limited to, the following:** "

Section 502.1701, Quality Control, Revise Table 4 of this Subsection by removing it in its entirety and replacing it with:

TABLE 4
METHOD A & B MINIMUM QUALITY CONTROL TESTING REQUIREMENTS *

| TEST | TEST METHOD | SAMPLING LOCATION | FREQUENCY |
|---|---|---|---|
| Gradation | AASHTO T-27 & T-11 | Stockpile | One set per proposed grading before production. One set every 100 $yd^3$ (Min. 1 set per month) |
| Organic Impurities | AASHTO T-21 | Stockpile | **Once per fine aggregate per year **** |
| % Absorption | AASHTO T-84 & T-85 | Stockpile | Once per aggregate per year |
| Specific Gravity | AASHTO T-84 & T-85 | Stockpile | Once per aggregate per year |
| Total Moisture in Aggregate | AASHTO T-255 | Stockpile | One set per day's production |
| Free Water and Aggregate Wt. | N/A | | One per day's production |
| % Entrained Air | AASHTO T-152 | On Project | On first two loads and every third load thereafter provided consistent results are achieved |
| Compressive Strength | AASHTO T-22 | On Project | One set per sublot |
| Compressive Strength | AASHTO T-22 @ 7days | On Project | One set per sublot |

* Additional QC testing will be required any time a process change occurs during a placement, including changes in type or dosage of admixture. Additional testing shall include, but is not limited to, entrained air testing.

**** If the color produced is a laboratory designation Plate III, then the fine aggregate shall be tested once per month.**

502.18, Method of Measurement, Revise Subsection 'F' by removing the word 'transverse' so that it reads: "**Saw cut grooving of concrete wearing surfaces, complete and accepted, will be measured for payment as one lump sum**."

502.19, Basis of Payment, Revise the third paragraph by removing the word 'transverse' so that it reads: "**Saw cut grooving of concrete wearing surfaces will be paid for at the Contract Lump Sum Price, which shall be payment for furnishing all materials, labor, and equipment, including depth gauges and all incidentals, to satisfactorily complete the work."**
(Also see 535.24 and 535.25 for related changes)

# SECTION 503
# REINFORCING STEEL

Section 503.07 Splicing Revise this section by removing the table and following footnote and replacing them with:

| Minimum Lap Splice Length (inches) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Bar Size | | | | | | | | |
| Bar Type | #3 | #4 | #5 | #6 | #7 | #8 | #9 | #10 | #11 |
| Plain or Galvanized | 16 | 20 | 24 | 29 | 38 | 47 | 59 | 72 | 85 |
| Epoxy or Dual Coated | 17 | 24 | 36 | 43 | 56 | 71 | 88 | 107 | 128 |
| Stainless | 19 | 24 | 30 | 36 | 47 | 59 | 73 | 89 | 107 |
| Low-carbon Chromium | 24 | 32 | 39 | 47 | 63 | 78 | 97 | 119 | 142 |

"**The minimum lap splice lengths in the table above are based on the parameters below. When any of these parameters are altered, appropriate minimum lap splice lengths will be as shown on the Plans.**

- **Normal weight concrete**
- **Minimum 28-day concrete compressive strength from 4,000 psi to 10,000 psi**
- **Class B tension lap splice**
- **Minimum center-to-center spacing between bars of 6 inches**
- **Minimum clear cover of 2 inches**
- **Nominal reinforcing steel yield strengths**
  - **Low-carbon Chromium = 100 ksi**
  - **Stainless = 75 ksi**
  - **All others = 60 ksi**
- **Reinforcement with yield strengths greater than 75 ksi shall have beam transverse reinforcement and column ties provided over the required lap splice length in accordancewith the current edition of the AASHTO LRFD Bridge Design Specifications**

**When lap splices are placed horizontally in an element where the concrete depth below the splice will be 12 inches, or more, the indicated lap splice lengths shall be multiplied by a factor of 1.3."**

# SECTION 506
# SHOP APPLIED PROTECTIVE COATING – STEEL

506.13 Surface Preparation Amend this section by adding this paragraph to the end:

"**Steel shall meet the requirements of SSPC SP8 Pickling prior to being immersed in the zinc tanks. Verification of the surface preparation shall be included in the QC documentation**."

## SECTION 523
## BEARINGS

523.051 Protective Coating Revise this subsection by removing the paragraph beginning with "Anchor rods shall be galvanized…" and replacing with:

"**Anchor rods shall be galvanized. When anchor rods are designated to secure bare unpainted steel or painted steel, a dielectric coating (epoxy or bituminous type coatings are acceptable) shall be applied to the anchor rod and/or adjacent steel to prevent contact between galvanized surfaces and painted or unpainted steel."**

523.22 Fabrication Amend this subsection by adding the following: "**Elastomeric Bearings shall be fabricated in accordance with AASHTO M251."**

## SECTION 526
## CONCRETE BARRIER

Amend this section by deleting it in its entirety and replacing it with:

"**526.01 Description This work shall consist of the furnishing, constructing, erecting, setting, resetting, and removal of concrete barrier and associated elements in accordance with these specifications, the Standard Details, and the lines and grades shown on the Plans or established by the Resident.**

**The types of concrete barrier are designated as follows:**

**Portable Concrete Barrier Type I Double faced removable barrier in accordance with the Standard Details.**

**Permanent Concrete Barrier Type II Double faced barrier as shown on the Plans.**

**Permanent Concrete Barrier Type IIIa Single faced barrier 32 inches high in accordance with the Standard Details or as shown on the Plans.**
**Permanent Concrete Barrier Type IIIb Single faced barrier 42 inches high in accordance with the Standard Details or as shown on the Plans.**

**Permanent Concrete Transition Barrier Barrier of various heights joining steel bridge rail to steel guardrail in accordance with the Standard Details or as shown on the Plans.**

**Permanent Texas Classic Rail Barrier Traffic rail or sidewalk rail, in accordance with the Standard Details or as shown on the Plans.**

**526.02 Materials**

**a. Concrete Concrete for barriers, both permanent and portable, shall have a design strength of 5,000 psi.**

**For cast-in-place barrier: The concrete shall be Class LP, in accordance with Standard Specification Section 502, Structural Concrete.**

**For precast barrier: The concrete shall meet the requirements of Standard Specification 712.061, Structural Precast Concrete Units, except that the stripping strength for precast barriers is 4,000 psi.**

**b. Reinforcing Steel Reinforcing steel shall meet the requirements of Section 503, Reinforcing Steel.**

**c. Structural Steel Plates and barrier connections shall meet the requirements specified in Standard Specification 504 - Structural Steel and shall be hot dip galvanized after fabrication in accordance with Standard Specification 506, Shop Applied Protective Coating – Steel**

**d. Bolts Bolts shall meet the requirements specified in Section 713.02, High Strength Bolts.**

**e. Connecting Pins for Portable Concrete Barrier Portable concrete barriers must be connected using a 1- inch diameter pin. The connecting pin must be smooth, not deformed, i.e., reinforcing bar may not be used, and shall meet the strength requirements of ASTM A449 steel. Materials with greater strength may be used with the approval of the Department.**

**f. Anchor Pins for Portable Concrete Barrier Anchoring to concrete or asphalt will be required when specified on the Plans. When required, portable concrete barriers must be anchored using a 1 ½ - inch diameter anchor pin. The anchor pin must be smooth, not deformed, i.e., reinforcing bar may not be used, and shall meet the strength requirements of ASTM A36 steel. Materials with greater strength may be used with the approval of the Department.**

**g. Device Crashworthiness MaineDOT is transitioning to MASH2016 criteria for Portable Concrete Barrier on the following schedule:**

**New Portable Concrete Barrier shall be crash tested and/or evaluated to MASH2016 criteria.**

**Current Portable Concrete Barrier in useful serviceable condition that is successfully tested to NCHRP Report 350 or MASH2009 criteria may be utilized through December 31, 2029.**

**Other current Portable Concrete Barrier that is deemed acceptable by the Department may be utilized on projects off the National Highway System through December 31, 2024.**

**526.03 Construction Requirements**

**Cast-in-place barriers shall be fabricated in accordance with Standard Specification Section 502, Structural Concrete. Precast barriers shall be fabricated in accordance with Standard Specification 534, Precast Structural Concrete.**

**Concrete finish for permanent barrier shall be rubbed as defined in Standard Specification Section 502, Structural Concrete, 502.13 D2 or an approved equal.**

**Portable concrete barrier shall be generally free from fins and porous areas and shall present a neat and uniform appearance.**

**Permanent barrier shall have a protective coating applied in accordance with Standard Specification Section 515, Protective Coating for Concrete Surfaces.**

**Reflective delineators for concrete median barrier shall meet the requirements of Special Provision 645, Highway Signing.**

**Preformed Joint Filler shall meet the requirements specified in Subsection 705.01, Preformed Expansion Joint Filler.**

**Permissible dimensional tolerances for all concrete barriers shall be as follows:**

**a. Cross-sectional dimensions shall not vary from design dimensions by more than ¼ inch. The vertical centerline shall not be out of plumb by more than ¼ inch.**

**b. Longitudinal dimensions shall not vary from the design dimensions by more than ¼ inch per 10 feet of barrier section and shall not exceed ¾ inches per section.**

**c. Location of anchoring holes shall not vary by more than ½ inch from the dimensions shown in the concrete barrier details on the Plans.**

**d. Surface straightness shall not vary more than ¼ inch under a 10-foot straightedge.**

**e. The barrier shall have no significant cracking. Significant cracking is defined as fractures or cracks passing through the section, or any continuous crack extending for a length of 12 inches or more, regardless of position in the section.**

**<u>526.04 Method of Measurement</u> Permanent Concrete Barrier Type II, IIIa, IIIb, Texas Classic Rail, and Precast Median Barrier will be measured for payment by lump sum, complete in place.**

**Portable concrete barrier, both anchored and unanchored will be measured for payment by lump sum. Lump sum measurement will include verification of the installation and removal of all portable concrete at the completion of the Contractor's operations.**

**The Contractor shall replace sections of portable concrete barrier, including anchored barrier damaged by the traveling public when directed by the Resident. Replacement**

**sections will be measured for payment in accordance with Standard Specification 109.7, Equitable Adjustments to Compensation and Time.**

**Transition barrier will be measured by each, complete in place.**

**526.05 Basis of Payment The accepted quantities of Concrete Barrier Type II, IIIa, IIIb, Texas Classic Rail, and Precast Median Barrier will be paid for at the Contract lump sum price for the type specified, complete in place.**

**The accepted quantities of Portable Concrete Barrier Type I, both anchored and unanchored will be paid for at the Contract lump sum price. Such payment shall be full compensation for furnishing all materials, assembling, moving, resetting, transporting, temporarily storing, removing barrier, furnishing new parts as necessary, and all incidentals necessary to complete the work.**

**Portable barrier shall become the property of the Contractor upon completion of the use of the barrier on the project and shall be removed from the project site by the Contractor.**

**Transition barrier will be paid for at the Contract price each, complete in place.**

**The accepted quantity of all types of concrete barrier, whether portable or permanent, will be paid for at the lump sum or per each price, as applicable, which payment shall be full compensation for all materials, including reinforcing steel, protective coating, reflective delineators, steel plates and hardware, equipment, labor and incidentals required, as necessary, to complete the work.**

**Payment will be made under:**

| | Pay Item | Pay Unit |
|---|---|---|
| 526.301 | Portable Concrete Barrier, Type I | Lump Sum |
| 526.304 | Portable Concrete Barrier, Anchored Type I | Lump Sum |
| 526.312 | Permanent Concrete Barrier Type II | Lump Sum |
| 526.321 | Permanent Concrete Barrier Type IIIa | Lump Sum |
| 526.323 | Texas Classic Rail | Lump Sum |
| 526.331 | Permanent Concrete Barrier Type IIIb | Lump Sum |
| 526.34 | Permanent Concrete Transition Barrier | Each |
| 526.502 | Precast Concrete Median Barrier | Lump Sum” |

## SECTION 527
## ENERGY ABSORBING UNIT

527.02 Materials Amend this section by deleting it in its entirety and replacing it with:

"**MaineDOT is transitioning to MASH2016 criteria for Work Zone Traffic Control Devices on the following schedule:**

**Portable Crash Cushions will be crash tested and/or evaluated to MASH2016 criteria by January 1, 2030. Current Category 3 devices in useful serviceable condition that are successfully tested to NCHRP Report 350 or MASH2009 criteria may be utilized through December 31, 2029.**

**Work Zone Crash Cushions shall be selected from the Department's Qualified Products List of Crash Cushions/Impact Attenuators or approved equal**."

## SECTION 535
## PRECAST, PRESTRESSED CONCRETE SUPERSTRUCTURE

535.22 Tolerances Amend this section by deleting it in its entirety and replacing it with:
"**Product dimensional tolerances shall be in conformance with the latest edition of PCI MNL-135, Tolerance Manual for Precast and Prestressed Concrete Construction, as applicable to the particular product (e.g., slab, I-girder, box beam), the Plans, and this Specification. Use Box Beam fabrication tolerances for voided or solid slab beams and use Double Tee tolerances for NEXT beams. In case of dispute, the Fabrication Engineer shall determine the allowable tolerance.**"

535.24 Installation of Slabs, Beams, and Girders Revise the 5th paragraph by replacing "6.0 and 9.0" to "5.0 and 8.0" so it reads: **"Ready mixed grout shall achieve a design compressive strength of 6,000 psi at 28 days, have an entrained air content of between 5.0 and 8.0 percent, be non-shrink, flowable, and contain a non-shrink additive listed on the Department QPL for expansive cements."**

535.25, Installation of Precast/Prestressed Deck Panels Revise the 2nd paragraph by replacing "6.0 and 9.0" to "5.0 and 8.0" so it reads: **"Ready mixed grout shall achieve a design compressive strength of 6,000 psi at 28 days, have an entrained air content of between 5.0 and 8.0 percent, be non-shrink, flowable, and contain a non-shrink additive listed on the Department QPL for expansive cements."**

# SECTION 606
# GUARDRAIL

Amend this section by replacing it with the following:

606.01 Description This work shall consist of furnishing and installing guardrail components in accordance with these specifications and in reasonably close conformity with the lines and grades shown on the plans or as established. Guardrail is designated as:

31" W-Beam Guardrail - Mid-Way Splice
Galvanized steel w-beam, 8" wood or composite offset blocks, galvanized steel posts
Thrie Beam
Galvanized steel thrie beam, 8" wood or composite offset blocks, galvanized steel posts

Median guardrail shall consist of two beams of the above types, mounted on single posts.

Bridge mounted guardrail shall consist of furnishing all labor, materials, and equipment necessary to install guardrail as shown on the plans. This work shall also include drilling for and installation of offset blocks if specified, and incidental hardware necessary for satisfactory completion of the work.

Remove and Reset and Remove, Modify, and Reset guardrail shall consist of removing the existing designated guardrail and resetting in a new location as shown on the plans or directed by the Resident. Remove, Modify, and Reset guardrail and Modify guardrail include the following guardrail modifications: Removing plate washers at all posts, except at anchorage assemblies as noted on the Standard Details, adding offset blocks, and other modifications as listed in the Construction Notes or General Notes. Modifications shall conform to the guardrail Standard Details.

Bridge Connection shall consist of the installation and attachment of beam guardrail to the existing bridge. This work shall consist of constructing a concrete end post or modifying an existing end post as required, furnishing, and installing a terminal connector, necessary hardware, and incidentals required to complete the work as shown on the plans. Bridge Transition shall consist of a bridge connection and furnishing and installing guardrail components as shown in the Standard Details.

606.02 Materials Materials shall meet the requirements specified in the following Sections of Division 700 - Materials:

| | |
|---|---|
| Timber Preservative | 708.05 |
| Metal Beam Rail | 710.04 |
| Guardrail Posts | 710.07 |
| Guardrail Hardware | 710.08 |

Guardrail components shall meet the applicable standards of "A Guide to Standardized Highway Barrier Hardware" prepared and approved by the AASHTO-AGC-ARTBA Joint Cooperative Committee, Task Force 13 Report.

Posts for underdrain delineators shall be "U" channel steel, 8 ft long, 2 ½ lb/ft minimum and have 3/8-inch round holes, 1-inch center to center for a minimum distance of 2 ft from the top of the post.

Reflectorized Flexible Guardrail Markers shall be mounted on all guardrails. A marker shall be mounted onto guardrail posts at the flared guardrail terminal end point and tangent point, both at the leading and trailing ends of each run of guardrail. The marker's flexible posts shall be gray with either silver-white or yellow reflectors (to match the edge line striping) at the tangents, red at leading ends, and green at trailing ends. Whenever the guardrail terminal is not flared, markers will only be required at the terminal end point. These shall be red or green as appropriate. Markers shall be installed on the protected side of guardrail posts unless otherwise approved by the Resident. Reflectorized flexible guardrail markers shall be from the Department's Qualified Products List of Delineators. The marker shall be gray, flexible, durable, and of a non-discoloring material to which 3-inch by 9-inch reflectors shall be applied, and capable of recovering from repeated impacts and meeting MASH 16 requirements. Reflective material shall meet the requirements of Section 719.01 for ASTM D 4956 Type III reflective sheeting. The marker shall be secured to the guardrail post with two fasteners, as shown in the Standard Details.

Reflectorized beam guardrail reflectors shall be mounted on all "w" beam guardrail and shall be either the "butterfly" type or linear delineation system panels. "Butterfly" or linear delineation panels shall be installed at approximately 62.5 foot intervals on tangents (after every tenth post) and 31.25 feet on curves (after every fifth post), and shall be centered on the guardrail beam. On Divided highways, the left-hand delineators shall be yellow and the right-hand delineators shall be silver/ white. On two-way directional highways, the right-hand side will have silver / white reflectors and no reflectorized delineator used on the left. Delineators shall have reflective sheeting that meets or exceeds the requirements of Section 719.01.

"Butterfly" reflectors shall be fabricated from high-impact, ultraviolet & weather resistant thermoplastic. Aluminum, galvanized metal or other materials shall not be used. Reflective sheeting will be applied to only one side of the delineator facing the direction of traffic and shall be centered vertically on the guardrail beam as shown in the Standard Detail 606(7).

Linear delineation system panels shall be 1.5 inches wide by approximately 11 inches nominal length, with a minimum of 5 raised lateral ridges spaced at approximately 2.25 inches. The height of each ridge shall be 0.34 inches with a 45 degree profile and a 0.28 inches radius at the top. Sheeting shall be laminated to thin gauge aluminum with a pre-applied adhesive tape on the back. Panels shall not be installed over seams or bolt heads and shall be centered horizontally on the guardrail beam; linear delineation panels shall be attached to only one guardrail beam. The guardrail beam surface shall be cleaned and prepared according to the manufacturer's instructions. Air temperature and guardrail surface temperature must be a minimum of 50 degrees F (10 C) with rising temperature at the time of installation.

Exact locations of the either the "butterfly" type or the linear delineation panels shall be approved by the Resident prior to installation.

Single wood post shall be of cedar, white oak, or tamarack, well-seasoned, straight, and sound and have been cut from live trees. The outer and inner bark shall be removed, and all knots trimmed flush with the surface of the post. Posts shall be uniform taper and free of kinks and bends.

Single steel post shall conform to the requirements of Section 710.07 b.

Single steel pipe post shall be galvanized, seamless steel pipe conforming to the requirements of ASTM A120, Schedule No. 40, Standard Weight.

Acceptable multiple mailbox assemblies shall be listed on the Department's Qualified Products List and shall be MASH 16 tested and approved.

Flared and Tangent w-beam guardrail terminals and guardrail offset blocks shall be from the Department's Qualified Products List. Flared terminals shall be installed with a 4 ft offset as shown in the Manufacturer's installation instructions.

Anchorage assemblies used to anchor trailing ends, radius guardrail, or other ends not exposed to traffic shall meet the applicable standards of "A Guide to Standardized Highway Barrier Hardware" prepared and approved by the AASHTO-AGC-ARTBA Joint Cooperative Committee, Task Force 13 Report, Drawing SEW02a.

Existing materials damaged or lost during adjusting, removing and resetting, or removing, modifying, and resetting, shall be replaced by the Contractor without additional compensation. Existing guardrail posts and guardrail beams found to be unfit for reuse shall be replaced when directed by the Resident.

606.03 Posts Posts for guardrail shall be set plumb in holes or they may be driven if suitable driving equipment is used to prevent battering and distorting the post. When posts are driven through pavement, the damaged area around the post shall be repaired with approved bituminous patching. Damage to lighting and signal conduit and conductors shall be repaired by the Contractor.

When set in holes, posts shall be on a stable foundation and the space around the posts, backfilled in layers with suitable material, thoroughly tamped.

The reflectorized flexible guardrail markers shall be set plumb with the reflective surface facing the oncoming traffic. Markers shall be installed on the protected side of guardrail posts. Markers, which become bent or otherwise damaged, shall be removed and replaced with new markers.

Single wood posts shall be set plumb in holes and backfilled in layers with suitable material, thoroughly tamped. The Resident will designate the elevation and shape of the top. The posts, that are not pressure treated, shall be painted two coats of good quality oil base exterior house paint.

Single steel posts shall be set plumb in holes as specified for single wood posts or they may be driven if suitable driving equipment is used to prevent battering and distorting the post.

Additional bolt holes required in existing posts shall be drilled or punched, but the size of the holes shall not exceed the dimensions given in the Standard Details. Metal around the holes shall be thoroughly cleaned and painted with two coats of approved aluminum rust resistant paint. Holes shall not be burned.

606.04 Rails Brackets and fittings shall be placed and fastened as shown on the plans. Rail beams shall be erected and aligned to provide a smooth, continuous barrier. Beams shall be lapped with the exposed end away from approaching traffic.

End assemblies shall be installed as shown on the plans and shall be securely attached to the rail section and end post.

All bolts shall be of sufficient length to extend beyond the nuts but not more than ½ inch. Nuts shall be drawn tight.

Additional bolt holes required in existing beams shall be drilled or punched, but the size of the holes shall not exceed the dimensions given in the Standard Details. Metal around the holes shall be thoroughly cleaned and painted with two coats of approved aluminum rust resistant paint. Holes shall not be burned.

606.045 Offset Blocks The same offset block material is to be provided for the entire project unless otherwise specified.

606.05 Shoulder Widening At designated locations the existing shoulder of the roadway shall be widened as shown on the plans. All grading, paving, seeding, and other necessary work shall be in accordance with the Specifications for the type work being done.

606.06 Mail Box Post Single wood post shall be installed at the designated location for the support of the mailbox. The multiple mailbox assemblies shall be installed at the designated location in accordance with the Standard Details and as recommended by the Manufacturer. Attachment of the mailbox to the post will be the responsibility of the home or business owner.

606.07 Abraded Surfaces All galvanized surfaces of new guardrail and posts, which have been abraded so that the base metal is exposed, and the threaded portions of all fittings and fasteners and cut ends of bolts shall be cleaned and painted with two coats of approved rust resistant paint.

606.08 Method of Measurement Guardrail will be measured by the linear foot from center to center of end posts along the gradient of the rail except where end connections are made to masonry or steel structures, in which case measurement will be as shown on the plans. When connected to radius rail, measurement will be to the end of the last tangent beam.

Guardrail terminal, reflectorized flexible guardrail marker, terminal end, anchorage assembly, bridge transition, bridge connection, multiple mailbox post, and single post will be measured by each unit of the kind specified and installed.

Widened shoulder will be measured as a unit of grading within the limits shown on the plans.

Excavation in solid rock for placement of posts will be paid under force account unless otherwise indicated in the Bid Documents.

Reflectorized beam guardrail reflectors ("butterfly" type or linear delineation system panels) when identified by pay item, will be measured for payment by each.

606.09 Basis of Payment The accepted quantities of guardrail will be paid for at the contract unit price per linear foot for the type specified, complete in place. Reflectorized beam guardrail ("butterfly"-type) delineators will not be paid for directly but will be considered incidental to guardrail items. Reflectorized flexible guardrail marker, terminal end, anchorage assembly, bridge transition, bridge connection, multiple mailbox post, and single post will be paid for at the contract unit price each for the kind specified complete in place.
Guardrail terminals will be paid for at the contract price each, complete in place which price shall be full payment for furnishing and installing all components including the terminal section, posts, offset blocks, "w" beam, cable foundation posts, plates and for all incidentals necessary to complete the installation within the limits as shown on the Standard Details or the Manufacturer's installation instructions. Pay limits for a flared terminal will be 37.5 feet. Pay limits for a tangent terminal will be 50 feet. Each guardrail terminal will be clearly marked with the Manufacturer's name and model number to facilitate any future needed repair. Such payment shall also be full compensation for furnishing all material, excavating, backfilling holes, assembling, and all incidentals necessary to complete the work, except that for excavation for posts or anchorages in solid ledge rock, payment will be made under 109.7.5 – Force Account. Type III Retroreflective Adhesive Sheeting shall be applied to the approach buffer end sections and sized to substantially cover the end section. On all roadways, the ends shall be marked with alternating black and retroreflective yellow stripes. The stripes shall be 3 in wide and sloped down at an angle of 45 degrees toward the side on which traffic is to pass the end section. Guardrail terminals shall also include a set of installation drawings supplied to the Resident.

Anchorages to bridge end posts will be part of the bridge work. Connections thereto will be considered included in the unit bid price for guardrail.

Guardrail to be placed on a radius of curvature of 150 ft or less will be paid for under the designated radius pay item for the type guardrail being placed.

Widened shoulder will be paid for at the contract unit price each complete in place and will be full compensation for furnishing and placing, grading and compaction of aggregate subbase and any required fill material.

Adjust guardrail will be paid for at the contract unit price per linear foot and will be full compensation for adjusting to grade. Payment shall also include adjusting guardrail terminals where required.

Modify guardrail will be paid for at the contract unit price per linear foot and will be full compensation for furnishing and installing offset blocks, additional posts, and other specified modifications; removing, modifying, installing, and adjusting to grade existing posts and beams; removing plate washers and backup plates, and all incidentals necessary to complete the work. Payment shall also include removing and resetting guardrail terminals where required.

Remove and Reset guardrail will be paid for at the contract unit price per linear foot and will be full compensation for removing, transporting, storing, reassembling all parts, necessary cutting, furnishing new parts when necessary, reinstalling at the new location, and all other incidentals necessary to complete the work. Payment shall also include removing and resetting guardrail terminals when required.

Remove, Modify, and Reset guardrail will be paid for at the contract unit price per foot and will be full compensation for the requirements listed in Modify guardrail and Remove and Reset guardrail.

Bridge Connections will be paid for at the contract unit price each. Payment shall include, attaching the connection to the endpost including furnishing and placing concrete and reinforcing steel necessary to construct new endposts if required, furnishing and installing the terminal connector, and all miscellaneous hardware, labor, equipment, and incidentals necessary to complete the work.

Bridge Transitions will be paid for at the contract unit price each. Payment shall include furnishing and installing the thrie beam or “w”-beam terminal connector, doubled beam section, and transition section, where called for, posts, hardware, precast concrete transition curb, and any other necessary materials and labor, including the bridge connection as stated in the previous paragraph.

No payment will be made for guardrail removed, but not reset and all costs for such removal shall be considered incidental to the various contract pay items.

Reflectorized beam guardrail reflectors ( “butterfly” type and the linear delineation panels ) will not be paid for directly but will be considered incidental to all new guardrail items. The Contractor shall furnish and install either the “butterfly” type or linear delineation panels, at its discretion, for new guardrail items.

Reflectorized beam guardrail reflectors ( either “butterfly” type or linear delineation system panels) will be paid for under the applicable pay items for installation in conjunction with Adjust, Modify, Remove and Reset, Remove Modify and Reset guardrail items. The accepted quantity of “butterfly” type or linear delineation system panels will be paid for at the contract unit price each for all work and materials furnished to install, complete in place, including all incidentals necessary to complete the work.

Payment will be made under:

| Pay Item | | Pay Unit |
|---|---|---|
| 606.1301 | 31” W-Beam Guardrail - Mid-Way Splice – Single Faced | Linear Foot |
| 606.1302 | 31” W-Beam Guardrail - Mid-Way Splice – Double Faced | Linear Foot |
| 606.1303 | 31” W-Beam Guardrail - Mid-Way Splice, 15’ Radius and Less | Linear Foot |
| 606.1304 | 31” W-Beam Guardrail - Mid-Way Splice, Over 15’ Radius | Linear Foot |
| 606.1305 | 31” W-Beam Guardrail - Mid-Way Splice Flared Terminal | Each |
| 606.1306 | 31” W-Beam Guardrail - Mid-Way Splice Tangent Terminal | Each |
| 606.1307 | Bridge Transition (Asymmetrical) – Type IA | Each |
| 606.1721 | Bridge Transition - Type I | Each |
| 606.1722 | Bridge Transition - Type II | Each |
| 606.1731 | Bridge Connection - Type I | Each |
| 606.1732 | Bridge Connection - Type II | Each |
| 606.178 | Guardrail Beam | Linear Foot |
| 606.25 | Terminal Connector | Each |
| 606.257 | Terminal Connector - Thrie Beam | Each |
| 606.259 | Anchorage Assembly | Each |
| 606.265 | Terminal End-Single Rail - Galvanized Steel | Each |
| 606.266 | Terminal End-Single Rail - Corrosion Resistant Steel | Each |
| 606.275 | Terminal End-Double Rail - Galvanized Steel | Each |
| 606.276 | Terminal End-Double Rail - Corrosion Resistant Steel | Each |
| 606.352 | Reflectorized Beam Guardrail Delineators (“Butterfly” type) | Each |
| 606.3521 | Linear Delineation System Panel | Each |
| 606.353 | Reflectorized Flexible Guardrail Marker | Each |
| 606.354 | Remove and Reset Reflectorized Flexible Guardrail Marker | Each |
| 606.356 | Underdrain Delineator Post | Each |
| 606.358 | Guardrail, Modify | Linear Foot |
| 606.362 | Guardrail, Adjust | Linear Foot |
| 606.365 | Guardrail, Remove, Modify, and Reset | Linear Foot |
| 606.366 | Guardrail, Remove and Reset | Linear Foot |
| 606.367 | Replace Unusable Existing Guardrail Posts | Each |
| 606.3671 | Replace Unusable Offset Blocks | Each |
| 606.47 | Single Wood Post | Each |
| 606.48 | Single Galvanized Steel Post | Each |
| 606.50 | Single Steel Pipe Post | Each |
| 606.51 | Multiple Mailbox Support | Each |
| 606.568 | Guardrail, Modify - Double Rail | Linear Foot |
| 606.63 | Thrie Beam Rail Beam | Linear Foot |
| 606.64 | Guardrail Thrie Beam - Double Rail | Linear Foot |
| 606.65 | Guardrail Thrie Beam - Single Rail | Linear Foot |
| 606.66 | Terminal End Thrie Beam | Each |
| 606.70 | Transition Section - Thrie Beam | Each |
| 606.71 | Guardrail Thrie Beam - 15 ft radius and less | Linear Foot |
| 606.72 | Guardrail Thrie Beam - over 15 ft radius | Linear Foot |

| | | |
|---|---|---|
| 606.73 | Guardrail Thrie Beam - Single Rail Bridge Mounted | Linear Foot |
| 606.74 | Guardrail - Single Rail Bridge Mounted | Linear Foot |
| 606.753 | Widen Shoulder for Low Volume Guardrail End | Each |
| 606.754 | Widen Shoulder for Flared Guardrail Terminal | Each |
| 606.78 | Low Volume Guardrail End | Each |
| 606.80 | Buried-in-Slope Guardrail End | Each |

## SECTION 608
## SIDEWALKS

Section 608.022Detectable Warning Materials Standard Revise this section by removing the last sentence of this section beginning with "Concrete…" and replacing it with "**Concrete shall meet the requirements of Section 608.021, Sidewalk Materials, of this specification or may be a prepackaged concrete mix from the Department's Qualified Products List (QPL).**"

## SECTION 609
## CURB

Remove this section in its entirety and replace with the following:

609.01 Description Construct or reset curb, gutter, or combination curb and gutter, paved ditch, and paved flume. The types of curb are designated as follows:

Type 1 - Stone curbing of quarried granite stone
Type 2 – Concrete Curbing
Type 3 - Bituminous curbing
Type 5 - Stone edging of quarried granite stone

609.02 Materials Except as provided below, the materials used shall meet the requirements of the following Sections of Division 700 - Materials:

| | |
|---|---|
| Portland Cement and Portland Pozzolan Cement | 701.01 |
| Water | 701.02 |
| Air Entraining Chemical Admixture | 701.03 |
| Fine Aggregate for Concrete | 703.01 |
| Coarse Aggregate for Concrete | 703.02 |
| Joint Mortar | 705.02 |
| Reinforcing Steel | 709.01 |
| Stone Curbing and Edging | 712.04 |
| Epoxy Resin | 712.35 |
| Hot Mix Asphalt Curbing | 712.36 |
| Structural Precast Concrete Units (Concrete Curb) | 712.061 |

The Contractor shall submit a concrete mix design for the Portland Cement Concrete to the Resident, for the uses specified below or in accordance with the Contract Documents.

Circular curb, terminal sections and transition sections shall be in reasonably close conformity with the shape and dimensions shown on the Plans and to the applicable material requirements herein for the type of curb specified.

Dowels shall be reinforcing steel deformed bars.

Concrete for Slipform Concrete Curb shall meet the requirements below:

a. Class A, with the exception that permeability requirements shall be waived.
b. Entrained air content of Slipform Concrete Curb shall be 4.0% to 7.0%
c. Concrete temperature, prior to discharge, shall not exceed 90 F.
d. Proposed mix designs may contain polypropylene fibers.
e. Partially discharged loads may be retempered with water provided the maximum water to cement ratio is not exceeded.

609.03 Vertical Stone Curb, Terminal Section and Transition Sections and Portland Cement Concrete Curb, Terminal Sections and Transition Sections

a. Installation The curb stone shall be set on a compacted foundation so that the front top arris line conforms to the lines and grades required. The foundation shall be prepared in advance of setting the stone by grading the proper elevation and shaping to conform as closely as possible to the shape of the bottom of the stone. The required spacing between stones shall be assured by the use of an approved spacing device to provide an open joint between stones of at least ¼ inch and no greater than ⅝ inch.

b. Backfilling All remaining spaces under the curb shall be filled with approved material and thoroughly hand tamped so the stones will have a firm uniform bearing on the foundation for the entire length and width. Any remaining excavated areas surrounding the curb shall be filled to the required grade with approved materials. This material shall be placed in layers not exceeding 8 inches in depth, loose measure and thoroughly tamped.

When backfill material infiltrates through the joints between the stones, small amounts of joint mortar or other approved material shall be placed in the back portion of the joint to prevent such infiltrating.

c. Protection The curb shall be protected and kept in good condition. All exposed surfaces smeared or discolored shall be cleaned and restored to a satisfactory condition or the curb stone removed and replaced.

d. Curb Inlets Curb placed adjacent to curb inlets shall be installed with steel dowels cemented into each stone with epoxy grout as shown in the Standard Details.

The epoxy grout shall be used in accordance with the manufacturer's instructions. The grout shall be forced into the hole, after which the dowel shall be coated with grout for one-half its length and inserted into the grout filled hole. The hole shall be completely filled with grout around the dowel. All tools and containers must be clean before using.

The Contractor may elect to substitute concrete to backfill Stone Curbing or Stone Edging at their option. If the concrete backfill option is elected, the Concrete Fill shall meet the requirements of 609.02. The Contractor shall submit a concrete design for the Portland Cement Concrete, with a minimum designated compressive strength of 3000 PSI meeting the requirements of Class S or Class Fill Concrete. The Contractor may elect to choose a Prepackaged Concrete Mix from the Departments Qualified Products list (QPL). Concrete backfill shall be completed in conformance with a Department supplied concrete backfill detail.

609.04 Bituminous Curb

a. Preparation of Base Before placing the curb, the foundation course shall be thoroughly cleaned of all foreign and objectionable material. String or chalk lines shall be positioned on the prepared base to provide guidelines. The foundation shall be uniformly painted with tack coat at a rate of 0.04 to 0.14 gal/yd$^2$.

b. Placing The curb shall be placed by an approved power operated extruding type machine using the shape mold called for. A tight bond shall be obtained between the base and the curb. The Resident may permit the placing of curbing by other than mechanical curb placing machines when short sections or sections with short radii are required. The resulting curbing shall conform in all respects to the curbing produced by the machine.

c. When required, the curb shall be painted and coated with glass beads in accordance with Section 627 - Pavement Marking. Curb designated to be painted shall not be sealed with bituminous sealing compound.

d. Acceptance Curb may be accepted or rejected based on appearance concerning texture, alignment, or both. All damaged curb shall be removed and replaced at the Contractor's expense.

e. Polyester fibers shall be uniformly incorporated into the dry mix at a rate of 0.25 percent of the total batch weight. Certification shall be provided from the supplier with each shipment meeting the following requirements:

| | |
|---|---|
| Average Length | 0.25 inches ± 0.005 |
| Average Diameter | 0.0008 inches ± 0.0001 |
| Specific Gravity | 1.32-1.40 |
| Melting Temperature | 480 °F Minimum |

609.05 Slipform Concrete Curb

a. Preparation of Base Before placing the curb, the foundation course shall be thoroughly cleaned of all foreign and objectionable material. The Contractor shall not place Slipform Concrete Curb on a wet or frozen foundation. The foundation (HMA or concrete) may be in a Saturated Surface Dry condition, but no standing water shall be allowed. String or chalk lines shall be positioned on the prepared foundation to provide guidelines. Prior to placing the curb, the foundation shall be uniformly coated with an epoxy resin adhesive that

meets the requirements of AASHTO M 235, Type I, II, III, IV or V and has been tested by AASHTO Product Evaluation & Audit Solutions. The Contractor shall submit the epoxy resin adhesive that they propose to utilize with the concrete mix design. The epoxy resin adhesive must be approved prior to placement and used in accordance with manufacturer's recommendations.

b. Placing Concrete shall be placed with an approved Slipform machine that will produce a finished product according to the design specified in the Plans. For cold weather slip forming, the outside temperature must be at least 36°F and rising. The curb shall be placed on a firm, uniform foundation, shall conform to the section profile specified in the Plans, and shall match the appropriate grade. Expansion joints shall be placed in the curb where it meets rigid structures such as but not limited to building foundations, catch basin headers or fire hydrants. Contraction joints will be placed at 10-foot intervals using sawing methods, which shall cut 1 to 3 inches into the concrete. Contraction joints shall be cut between 1 and 7 days after placement of the concrete. Joints shall be constructed perpendicular to the subgrade and match other joints in roadways, sidewalks, or other structures when applicable.

c. Curing and Sealing Proper curing shall be provided using either a combination curing/sealing compound spray that meets ASTM 1315 Type 1-Class A, or a curing compound spray that meets ASTM 309 Type 1-D – Class A. Curing may also be accomplished by the methods specified in Standard Specification Section 502.14, Curing Concrete.

If a combination curing/sealing compound spray is not used, a separate sealing compound from the MaineDOT Qualified Products List for a Type 1c sealer shall be applied after the concrete has cured.

d. Protection Slipform curb must be adequately protected after placement. The concrete shall be allowed to cure for at least 72 hours. During cold weather conditions, when temperatures drop below the required temperature of 36°F after placement, curbing shall be protected by concrete blankets or a combination of plastic sheeting and straw. After any placement of Slipform curb, regardless of weather conditions, the placed curb shall be adequately protected by traffic control devices as necessary.

e. Marking When required, the curb shall be painted and coated with glass beads in accordance with Section 627 - Pavement Marking. Curb designated to be painted shall not be sealed unless a combination curing/sealing compound is used.

f. Acceptance Curb shall be accepted or rejected based on finish, alignment, entrained air content, and compressive strength. Concrete Quality Control and Acceptance shall be done in accordance with Standard Specification Section 502, Method C. All damaged curb shall be removed and replaced at the Contractor's expense.

609.06 Stone Edging The curb shall be installed, backfilled and protected in accordance with Section 609.03, except as follows:

a. Slope The edging shall be set on a slope as shown on the Plans or as directed.

b. Joints Joints shall be open and not greater than 1½ inch in width.

609.07 Stone Bridge Curb

a. Installation Each stone and the bed upon which it is to be placed shall be cleaned and thoroughly wetted with water before placing the mortar for bedding and setting the stone. The stone shall be set on a fresh bed of joint mortar and well bedded before the mortar has set so that the front top arris line conforms to the line and grade required. Whenever temporary supporting wedges or other devices are used in setting the stones, they shall be removed before the mortar in the bed has become set, and the holes left by them shall be filled with mortar. Concrete behind the stones shall not be placed until the stones have been in place at least two days. Bedding and pointing mortar for joints shall be cured as required under Section 502 - Structural Concrete.

b. Joints Vertical joints shall be ½ inch in width plus or minus ⅛ inch. Whenever possible, the face and top of the joint shall be pointed with joint mortar to a depth of 1½ inch, before the bedding mortar has set. Joints which cannot be so pointed, shall be prepared for pointing by raking them to a depth of 1½ inch before the mortar has set. Joints not pointed at the time the stone is laid shall be thoroughly wetted with clean water and filled with mortar. The mortar shall be well driven into the joint and finished with an approved pointing tool, flush with the pitch line of the stones.

609.08 Resetting Stone or Portland Cement Concrete Curb, Including Terminal Sections and Transitions

The curb shall be installed, backfilled and protected in accordance with Section 609.03, except as follows:

a. Removal of Curbing The Contractor shall carefully remove and store curb specified on the Plans or designated for resetting. Curb damaged or destroyed, because of the Contractor's operations or because of their failure to store and protect it in a manner that would prevent its loss or damage, shall be replaced with curbing of equal quality at the Contractor's expense.

b. Cutting and Fitting Cutting or fitting necessary in order to install the curbing at the locations directed shall be done by the Contractor.

609.09 Method of Measurement Curb, both new and reset, will be measured by the linear foot along the front face of the curb at the elevation of the finished pavement, complete in place and accepted. Curb inlets at catch basins, including doweling, will not be measured for payment but shall be considered included in the cost of the catch basin. New transition sections and terminal curb will be measured by the unit. Reset transition sections and terminal curb will be included in the measurement for resetting curb.

Concrete Slipform Curb and terminal ends will be measured by the linear foot along the front face of the curb at the elevation of the finished pavement, complete in place and accepted.

609.10 Basis of Payment The accepted quantities of curbing will be paid for at the contract unit price per linear foot for each kind and type of curbing as specified.

Payment for terminal curb shall include only that portion of the curbing modified for installation at ends of curb runs shown in the Standard Details. Curb adjacent to terminal ends shall be paid for at the contract unit price per linear foot for the type of curb installed.

Vertical Curb Type 1 is required to have a radius of 60 feet or less, will be paid for as Vertical Curb Type 1 - Circular.

Curb, Type 5 required to have a radius of 30 feet or less will be paid for as Curb Type 5 - Circular.

There will be no separate payment for concrete fill, mortar, reinforcing steel, anchors, tack coat, drilling for and grouting anchors, pointing and bedding of curbing, and for cutting and fitting, but these will be considered included in the work of the related curb.

Removal of existing curb and necessary excavation for installing new or reset curbing will not be paid for directly but shall be considered to be included in the appropriate new or reset curb pay item. Base and Subbase material will be paid for under Section 304 - Aggregate Base and Subbase Course. Backing up bituminous curb is incidental to the curb items. Loam, as directed, will be paid under 615 – Loam.

Payment will be made under:

| | Pay Item | Pay Unit |
|---|---|---|
| 609.11 | Vertical Curb Type 1 | Linear Foot |
| 609.12 | Vertical Curb Type 1 - Circular | Linear Foot |
| 609.13 | Vertical Bridge Curb Type 1 | Linear Foot |
| 609.131 | Vertical Bridge Curb Type 1A | Linear Foot |
| 609.132 | Vertical Bridge Curb Type 1B | Linear Foot |
| 609.142 | Vertical Bridge Curb Type 1B - Circular | Linear Foot |
| 609.15 | Sloped Curb Type 1 | Linear Foot |
| 609.151 | Sloped Curb Type 1 - Circular | Linear Foot |
| 609.161 | Concrete Slipform Curb – Vertical Type 2 | Linear Foot |
| 609.21 | Concrete Slipform Curb Type 2 | Linear Foot |
| 609.219 | Concrete Slipform Terminal End Type 2 | Linear Foot |
| 609.23 | Terminal Curb Type 1 | Each |
| 609.234 | Terminal Curb Type 1 - 4 foot | Each |
| 609.237 | Terminal Curb Type 1 - 7 foot | Each |
| 609.2371 | Terminal Curb Type 1 - 7 foot – Circular | Each |
| 609.238 | Terminal Curb Type 1 - 8 foot | Each |
| 609.26 | Curb Transition Section B Type 1 | Each |

| | | |
|---|---|---|
| 609.31 | Curb Type 3 | Linear Foot |
| 609.34 | Curb Type 5 | Linear Foot |
| 609.35 | Curb-Type 5 - Circular | Linear Foot |
| 609.38 | Reset Curb Type 1 | Linear Foot |
| 609.39 | Reset Curb Type 2 | Linear Foot |
| 609.40 | Reset Curb Type 5 | Linear Foot |

## SECTION 610
## STONE FILL, RIPRAP, STONE BLANKET, AND STONE DITCH PROTECTION

610.02 Materials Amend this subsection by adding the following to the end of the material list:
"**Stone Ditch Protection 703.29"**

## SECTION 618
## SEEDING

618.08 Mulching Revise this Section so that the third sentence reads: "Mulch for Seeding Method Number 1 shall only be cellulous fiber mulch Section 619.04 **(b)** or straw mulch Section 619.04 (**a**)."

## SECTION 619
## MULCH

619.03 General Amend this Section by adding the following sentence to the end: **"Straw mulch shall be used in all wetland areas."**

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

Section 626.021 Miscellaneous Materials Revise this section by removing the fourth paragraph beginning with " All Concrete for concrete encasement…" and replace it with "**All concrete for concrete encasement of conduit shall be Class S or Class Fill concrete in accordance with the applicable requirements of Section 502 – Structural Concrete, or a Prepackaged Concrete Mix from the Department's Qualified Products List (QPL).**"

**Section 626.031Conduit** Revise the fifth paragraph beginning with "After the trench has been…" by removing the last sentence beginning with "Where concrete encasement…" and replacing it with **"Where concrete encasement is required around the conduit, the concrete shall meet Class S, Class Fill in accordance with the applicable requirements of Section 502 – Structural Concrete, or a Prepackaged Concrete Mix from the Department's Qualified Products List (QPL)."**

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

Revise the 10th paragraph beginning with "Before placing concrete, the required elbows…" by removing "…**in accordance with Standard Specification 633**."

626.036 Precast Foundations Revise the last sentence of paragraph one so that it reads: "**Construction of precast foundations shall conform to the Standard Details and all requirements of 712.061**."

## SECTION 627
## PAVEMENT MARKINGS

627.02 Materials Amend this section by adding the following to the existing Specification:

**"When pavement marking paint must be applied on pavement with an air temperature between 35 ºF and 50 ºF, a low temperature waterborne paint may be used upon the Department's approval as noted below.**

**The Contractor shall submit the following information for Department review and approval at least 10 calendar days prior to application:**

**The manufacturer and product name of the low temperature waterborne paint**

**The manufacturer's technical product data sheets**

**The product's SDS sheets**

**All required and recommended application specifications for the product**

**The manufacturer's requirements for temperature, surface preparation, paint thickness and the bead application shall be followed. No additional payment will be made for the use of low temperature waterborne paint. "**

627.06 Application Revise this subsection by replacing the paragraph beginning with " On other final pavement markings…" with the following:
**"On other final pavement markings and on curb, where the paint is applied by hand painting or spraying, application shall be one uniform covering coat at least 16 mils thick. Before the paint has dried, the glass beads shall be applied by a pressure system that will force the glass beads onto the undried paint as uniformly as possible.**

**Painted lines and markings shall be applied in accordance with the manufacturer's published recommendations. These recommendations will be supplied to the Resident prior to installation."**

Revise this subsection by replacing the paragraph beginning with " If the final reflectivety values are less…" with the following:

**The final reflectivity will be acceptable if 90 percent or more of the painted pavement lines and markings meet the specified minimum value. If less than 90 percent of the painted pavement lines and markings meet the specified minimum final reflectivity values, the Contractor shall repaint those areas not meeting required reflectivity at no cost to the Department.**

**If, after repainting, analysis of the final reflectivity values results in the need for a second repainting, the Contractor will submit in writing a plan of action to meet the reflectivity minimums prior to continuing any work. Once the plan has been reviewed and approved by the Department, the Contractor shall reapply at no cost to the Department.**

## SECTION 637
## DUST CONTROL

**Revise this section by removing it in its entirety.**

## SECTION 643
## TRAFFIC SIGNALS

643.021 Materials Amend this subsection by adding the following at the end:

"**MaineDOT is transitioning to MASH2016 criteria for Work Zone Traffic Control Devices on the following schedule:**

**Temporary Traffic Control Signals will be crash tested and/or evaluated to MASH2016 criteria by January 1, 2030. Current Category 4 devices in useful serviceable condition that are successfully tested to NCHRP Report 350 or MASH2009 criteria may be utilized through December 31, 2029**."

643.023 Traffic Signal Structures Remove the third paragraph and replace it with the following:

"**Traffic signal support structures shall be classified as Fatigue Category III if they are located on roads with a speed limit of 35 mph or less, Fatigue Category II if they are located on roads with a speed limit of greater than 35 mph, and Fatigue Category I if noted on the Contract Plans. Fatigue Importance Factors shall be as specified in Table 11.6-1 (Fatigue Importance Factors). Fatigue analyses are not required for span-wire (strain) pole traffic signal support structures with heights of 55 feet or less unless required by the current edition of AASHTO "LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals".**

643.09 Service Connection Revise this subsection by removing the paragraph that begins with "Traffic signal services shall have…".

And by removing the paragraphs beginning with " A service ground rod shall be installed…" and "A total of 4, 10' service…" and replace them with "**A total of 4, 10' service ground rods shall be installed and properly connected together on the outside of the cabinet foundation. One ground rod shall be located at each corner and shall be either flush or slightly below finished grade. The connection between the ground rod and the ground wire shall be an exothermic connection such as a Cadweld. The ground wire from the interconnected ground rods shall be routed through a conduit in the foundation and into the base of the cabinet**".

## SECTION 645
## HIGHWAY SIGNING

Section 645.023 Sign Support Structures. Under letter "c.", revise the fifth paragraph beginning with "In addition to the required details…" by removing the words "**and foundation**" from the 5th sentence.

Section 645.08 Method of Measurement. Revise the second paragraph beginning with "Bridge-type, cantilever and…" by removing the words "**including the foundation**" .

Section 645.09 Basis of Payment. Revise the third paragraph beginning with "The accepted bridge-type, cantilever and…" by removing the word "**foundation**" from the second sentence. Add the following sentence to the end of the paragraph "**Conduits, Junction Boxes, and Foundations will be paid for under Section 626.**"

## SECTION 652
## MAINTENANCE OF TRAFFIC

**652.2.5 Portable Changeable Message Sign** Revise the fifth paragraph so it reads:

**"The control system shall include a display screen upon which messages can be reviewed before being displayed on the message sign. The control system shall be capable of maintaining memory when power is unavailable. Messages must be changeable with either a portable electronic device like a notebook computer or an on-board keypad. The controller shall have the capability to store a minimum of 200 user-defined and 200 pre-programmed messages. Controller and battery compartments shall be enclosed in lockable, weather-tight boxes. The cabinet shall be locked at all times that the Contractor is not actively changing the message. The Contractor shall change the password for the controller prior to stationing the PCMS and shall provide the password to the Resident. The password shall be unique per PCMS and secure and shall not be written anywhere in, on, around, or stored in the PCMS."**

Amend this Section by adding the following new subsection:

"**652.2.6 Device Crashworthiness MaineDOT is transitioning to MASH2016 criteria for Work Zone Traffic Control Devices on the following schedule:**

**Category 1 (Cones, Drums, Tubular Markers, Flexible Delineators, and similar devices that have little chance if causing windshield penetration, tire damage, or other significant effect on the control or trajectory of a vehicle) – All Category 1 devices will be manufacturer self-certified as MASH2016 by January 1, 2025. Current Category 1 devices in useful serviceable condition that are not self-certified as MASH2016 compliant may be utilized through December 31, 2024.**

**Category 2 (Barricades, Portable Sign Supports, Category 1 devices with attachments, and similar devices that are not expected to produce significant vehicular velocity change but may be otherwise hazardous) – All Category 2 devices will be crash tested and/or evaluated to MASH2016 criteria by January 1, 2025. Current Category 2 devices in useful serviceable condition that are successfully tested to NCHRP Report 350 or MASH2009 criteria may be utilized through December 31, 2024.**

**Category 3 (Portable Concrete Barrier, Portable Crash Cushions, Truck Mounted Attenuators, Category 2 devices weighing more than 100 pounds, and similar devices that are expected to produce significant vehicular velocity change or other harmful reactions) – All Category 3 devices will be crash tested and/or evaluated to MASH2016 criteria by January 1, 2030. Current Category 3 devices in useful serviceable condition that are successfully tested to NCHRP Report 350 or MASH2009 criteria may be utilized through December 31, 2029. (See Standard Specification 526 for additional Portable Concrete Barrier information).**

**Category 4 (Trailer Mounted Devices: Arrow Boards, Temporary Traffic Control Signals, Area Lighting, Portable Changeable Message Sign, and other similar devices.) – All Category 4 devices will be crash tested and/or evaluated to MASH2016 criteria by January 1, 2030. Current Category 4 devices in useful serviceable condition that are successfully tested to NCHRP Report 350 or MASH2009 criteria may be utilized through December 31, 2029**."

652.3.3 Submittal of Traffic Control Plan Amend this section by adding:

**"n. A security plan for any PCMS shall be included. The Contractor shall provide a plan for secure access to the PCMS and protection from unauthorized users. The plan shall have details on securing the cabinets via a lock and password from unauthorized users, password changing protocols, and where the access information will be kept so it can be used in the event of emergency. The Contractor shall not Identify or store passwords in the TCP."**

652.4 Flaggers Revise the first paragraph of this section so that it reads:

**"The Contractor shall furnish flaggers as required by the TCP or as otherwise specified by the Resident. All flaggers must have successfully completed a flagger test approved by the Department and administered by a Department-approved Flagger-Certifier who is employing that flagger. All flaggers must carry an official certification card with them while flagging that has been issued by their employer."**

## SECTION 681
## PRECAST AGGREGATE-FILLED, CONCRETE BLOCK GRAVITY WALL

681.08 Basis of Payment Amend this section by adding the Item Number "**681.10**' in front of the item "Precast Aggregate-Filled Concrete Block Gravity Wall" at the end of the section.

## SECTION 701
## STRUCTURAL CONCRETE RELATED MATERIAL

701.01 Portland Cement and Portland Pozzolan Cement Amend the first sentence of Paragraph 3 by adding "**or Type 1L Portland Limestone cement**" so that it reads:
"**A Type IP (MS) Portland-pozzolan cement (blended hydraulic cement with moderate sulfate resistance) or Type 1L Portland Limestone cement meeting the requirements of AASHTO M 240, may be used instead of Type II or where Type I Portland cement, meeting the requirements of AASHTO M 85, is allowed**."

## SECTION 703
## AGGREGATES

Add the following to Section 703 - Aggregates

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

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

Fine aggregate shall have a sand equivalent value of not less than 75 when tested in accordance with AASHTO T 176.
Fine aggregate sources shall meet the Alkali Silica Reactivity (ASR) requirements of Section 703.0201.

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

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

| Sieve Designation | Percentage by Weight Passing Square Mesh Sieves |
|---|---|
| ⅜ inch | 100 |
| No. 4 | 95-100 |
| No. 8 | 80-100 |
| No. 16 | 50-85 |
| No. 30 | 25-60 |
| No. 50 | 10-30 |
| No. 100 | 2-10 |
| No. 200 | 0-5.0 |

703.02 Coarse Aggregate for Concrete Coarse aggregate for concrete shall consist of crushed stone or gravel having hard, strong, durable pieces, free from adherent coatings and of which the composite blend retained on the ⅜ inch sieve shall contain no more than 15 percent, by weight of flat and elongated particles when performed in accordance with test method ASTM D 4791, Flat Particles, Elongated Particles, or Flat and Elongated Particles in Coarse Aggregate, using a dimensional ratio of 1:5.

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

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

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

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

| Sieve Designation | Percentage by Weight Passing Square Mesh Sieves | | | |
|---|---|---|---|---|
| Grading | A | AA | S | LATEX |
| Aggregate Size | 1 inch | ¾ inch | 1½ inch | ½ inch |
| 2 inch | | | 100 | |
| 1½ inch | 100 | | 95-100 | |
| 1 inch | 95-100 | 100 | - | |
| ¾ inch | - | 90-100 | 35-70 | 100 |
| ½ inch | 25-60 | - | - | 90-100 |
| ⅜ inch | - | 20-55 | 10-30 | 40-70 |
| No. 4 | 0-10 | 0-10 | 0-5 | 0-15 |
| No. 8 | 0-5 | 0-5 | - | 0-5 |
| No. 16 | - | - | - | - |
| No. 50 | - | - | - | - |
| No. 200 | 0 - 1.5 | 0 - 1.5 | 0 - 1.5 | 0 - 1.5 |

703.0201 Alkali Silica Reactive Aggregates All coarse and fine aggregates proposed for use in concrete shall be tested for Alkali Silica Reactivity (ASR) potential under AASHTO T 303 (ASTM C 1260), Accelerated Detection of Potentially Deleterious Expansion of Mortar Bars Due to Alkali-Silica Reaction, prior to being accepted for use. Acceptance will be based on testing performed by 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:

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

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

| Sieve Designation | Percentage by Weight Passing Square Mesh Sieves |
|---|---|
| ⅜ inch | 85-100 |
| No. 200 | 0-5.0 |

703.06 Aggregate for Base and Subbase The following shall apply to Sections (a.) and (c.) below. The material shall have a Micro-Deval 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.

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

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

| Sieve Designation | Percentage by Weight Passing Square Mesh Sieves | |
|---|---|---|
| | Type A | Type B |
| ½ inch | 45-70 | 35-75 |
| ¼ inch | 30-55 | 25-60 |
| No. 40 | 0-20 | 0-25 |
| No. 200 | 0-6.0 | 0-6.0 |

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

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

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

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

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

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

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

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

Type D aggregate for subbase gravel may contain up to 50 percent by weight Recycled Concrete Aggregate (RCA). When RCA is used, the portion of the resulting blend of gravel and RCA retained on a ½" square mesh sieve shall contain a total of no more than 5 percent by weight of other recycled materials such as brick, concrete masonry block, or asphalt pavement as determined by visual inspection.

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

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

703.08 Recycled Asphalt Pavement Recycled asphalt pavement shall consist of salvaged asphalt materials from milled pavements or production waste that has been processed before use to meet the requirements of the job mix formula. It shall be free of winter sand, granular fill, construction debris, or other materials not generally considered asphalt pavement.

703.081 RAP for Asphalt Pavement Recycled Asphalt Pavement (RAP) may be introduced into hot-mix asphalt pavement at percentages approved by the Department according to the MaineDOT Policies and Procedures for HMA Sampling and Testing.

If approved by the Department, the Contractor shall provide documentation stating the source, test results for average residual asphalt content, and stockpile gradations showing RAP materials have been sized to meet the maximum aggregate size requirements of each mix designation. The Department will obtain samples for verification and approval prior to its use.

The maximum allowable percent of RAP shall be determined by the asphalt content, the percent passing the 0.075 mm sieve, the ratio between the percent passing the 0.075 mm sieve and the asphalt content, and Coarse Micro-Deval loss values as tested by the Department.

The maximum percentage of RAP allowable shall be the lowest percentage as determined according to Table 4 below:

| Classification | Maximum RAP Percentage Allowed | Asphalt content standard deviation | Percent passing 0.075 mm sieve standard deviation | Percent passing 0.075 mm sieve / asphalt content ratio | Residual aggregate M-D loss value |
|---|---|---|---|---|---|
| **Class III** | **10%** | **≤ 1.0** | **N/A** | **≤ 4.0** | **≤ 18** |
| **Class II** | **20%** | **≤ 0.5** | **≤ 1.0** | **≤ 2.8** | |
| **Class I** | **30%** | **≤ 0.3** | **≤ 0.5** | **≤ 1.8** | |

Table 4: Maximum Percent RAP According to Test Results

The Department will monitor RAP asphalt content and gradation during production by testing samples from the stockpile at approximately 15,000 T intervals (in terms of mix production). The allowable variance limits (from the numerical average values used for mix designs) for this testing are determined based upon the maximum allowable RAP percentage and are shown below in Table 5.

Table 5: RAP Verification Limits

| Classification | Asphalt content (compared to aim) | Percent passing 0.075 mm sieve (compared to aim) |
|---|---|---|
| Class III | ± 1.5 | ± 2.0 |
| Class II | ± 1.0 | ± 1.5 |
| Class I | ± 0.5 | ± 0.7 |

For specification purposes, RAP will be categorized as follows:

Class III – A maximum of 10.0 percent of Class III RAP may be used in any base, intermediate base, surface, or shim mixture. A maximum of 20.0 percent of Class III RAP may be used in hand-placed mixes for item 403.209.

Class II – A maximum of 20.0 percent Class II RAP in any base, binder, surface, or shim course.

Class I – A maximum of 20.0 percent Class I RAP may be used in any base, intermediate base, surface, or shim mixture without requiring a change to the specified asphalt binder. A maximum of 30.0 percent Class I RAP may be used in in any base or intermediate base mixture provided that a PG 58-28 or PG 58-34 asphalt binder is used. A maximum of 30.0 percent Class I RAP may be used in any surface or shim mixture provided that PG 58-34 asphalt binder is used. Mixtures exceeding 20.0 percent Class I RAP must be evaluated and approved by the Department.

The Contractor may use up to two different RAP sources in any one mix design. The total RAP percentage of the mix shall not exceed the maximum allowed for the highest classification RAP source used (i.e. if a Class I & Class III used, total RAP must not exceed 30.0%). The blended RAP material must meet all the requirements of the classification for which the RAP is entered (i.e. 10% Class III with 20% Class I, blend must meet Class I criteria). The Department may take belt cuts of the blended RAP to verify the material meets these requirements. If the Contractor elects to use more than one RAP source in a design, the Contractor shall provide an acceptable point of sampling blended RAP material from the feed belt.

In the event that RAP source or properties change, the Contractor shall notify the Department of the change and submit new documentation stating the new source or properties a minimum of 72 hours prior to the change to allow for obtaining new samples and approval.

## SECTION 709
## REINFORCING STEEL AND WELDED STEEL WIRE FABRIC

709.01 Reinforcing Steel Remove the second paragraph of Section 709.01 of the standard specification beginning with "Low-Carbon, Chromium,…" and replace with the following:

**" Low-carbon, chromium, reinforcing steel shall be deformed bars conforming to the requirements of ASTM A1035. Bars shall be Grade 100 and alloy Type CS unless otherwise specified on the Plans. "**

## SECTION 710
## FENCE AND GUARDRAIL

710.06 Fence Posts and Braces Revise the first Paragraph so that it reads:

"Wood posts shall be of cedar, white oak, or tamarack or other AWPA approved species, of the diameter or section and length shown on the plans."

Remove the fourth paragraph which starts " That portion of wood posts…".

Revise the paragraph beginning with "Braces shall be of spruce, eastern hemlock … so that it now reads:

"Braces shall be of spruce, eastern hemlock, Norway pine, pitch pine, or tamarack timbers or other AWPA approved species, or spruce, cedar, tamarack or other AWPA approved species round posts of sufficient length to make a diagonal brace between adjacent posts. All wood posts and braces shall be pressure-treated in accordance with AASHTO M 133 and AWPA U1, UC4A Commodity Specification B: Posts. "

710.07 Guardrail Posts Revise this section so that the first sentence of section a. reads:

"a. Wood posts shall be of Norway pine, southern yellow pine, pitch pine, Douglas fir, red pine, white pine, or eastern hemlock or other AWPA approved species."

Revise the next paragraph so that it reads:

Wood posts and offset brackets shall be preservative treated in accordance with the requirements of AASHTO M 133 and AWPA U1, UC4A Commodity Specification B: Posts.

710.08 Guardrail Hardware Revise this subsection by replacing "**AASHTO M 298**" with "**ASTM B695**"

## SECTION 711
## MISCELLANEOUS BRIDGE MATERIAL

711.06 Stud Shear Connector Anchors and Fasteners Amend this section by deleting it in its entirety and replacing it with:
**"Shear connectors shall meet the dimensional tolerances of Figure 9.1 of the ANSI/AASHTO/AWS D1.5 Bridge Welding Code (D1.5 Code). Shear connectors, anchors and fasteners shall meet the material requirements of Section 9 of the D1.5 Code. Shear connectors shall meet the mechanical property requirements of Table 9.1, Type B of the D1.5 Code. Anchors and fasteners shall meet the mechanical property requirements of Table 9.1 of the D1.5 Code, Type A."**

## SECTION 712
## MISCELLANEOUS HIGHWAY MATERIAL

712.061 Structural Precast Units Amend this section by adding the following sentence to the end of the first paragraph of the Construction subsection:

**"Facilities certified by NPCA or PCI shall provide to the Fabrication Engineer a copy of their annual audit to include deficiency reports and corrective actions."**

Revise this section by changing the letter "b" of ASTM C1611 of the Concrete Testing subsection so that it reads:

"**b. Air content shall be 5.0% to 8.0%**."

## SECTION 713
## STRUCTURAL STEEL AND RELATED MATERIAL

**Section 713.02 High Strength Bolts**
Revise the second sentence of this subsection so that it reads "**Nuts shall meet the requirement of ASTM A563**". Revise the third sentence of this subsection so that it reads "**Circular and beveled washers shall conform to the requirement of ASTM F436**".

## SECTION 718
## TRAFFIC SIGNALS MATERIAL

718.03 Signal Mounting Amend the paragraph beginning with "All trunions, brackets and…" by adding "**For polycarbonate signal heads with more than 3 sections or requiring mounting extensions greater than 12 inches in length, reinforcing plates shall be used to reinforce the housings at the point of attachment.**" to the end of the paragraph.

718.08 Controller Cabinet Revise this subsection by replacing the paragraph beginning with "The cabinet shall be supplied with LED light panels…" on or about page 7-66 with "**The cabinet shall be supplied with white LED light panels which shall automatically illuminate via a door open switch whenever one of the four main cabinet doors are opened for the ground mount cabinet or two main doors for the side of pole cabinet. The ground mounted cabinet shall contain four LED light panels per side totaling eight panels for the cabinet; one panel each at the top and bottom portion of the front side and back side on the Control side and Power/Auxiliary side of the cabinet. Each light panel shall produce a minimum of 250 lumens for a total minimum lumen output of 2000 lumens with all eight panels illuminated. The minimum output per side would be 1000 lumens. The LED panels shall be protected by a clear shatterproof shield. The side of pole mounted cabinet shall contain four light panels; one at the top of the rack assembly and one at the bottom rack assembly on each side of the cabinet.**

**A second door open status switch per door shall activate a controller input to log a report event that one of the doors was opened. All door open status switches shall be connected to the same controller input. For the ground mount cabinet, there shall be two switches on each of the four main doors. For the side-of-pole mount cabinet, there shall be two switches on each of the two main doors**."

Revise this subsection by replacing the paragraph beginning with "The cabinet shall be supplied with a generator panel …" on or about page 7-68 with:

**"The cabinet shall be supplied with a generator panel. The generator panel shall consist of a manual transfer switch and a twist-lock connector for generator hookup. The transfer switch knob and twist-lock connector shall be located inside a stainless steel enclosure with a separate lockable door accessed with a Corbin #2 key. The unit shall be mounted on the left, exterior of the control side wall of the ground mount cabinet a minimum of 36" above the surrounding grade and on the lower left side of the pole mounted cabinet. The generator transfer switch shall be a Reliance C30A1N Signa Series or approved equal. "**

Revise this subsection by removing the following from the paragraph beginning with "The ground mounted cabinet shall be supplied and installed with an electric service meter socket trim and electrical service disconnect switch …" on or about page 7-69: **"(removed: thus preventing that space from being used either by equipment supplied as part of the project, or future equipment that would be installed in the rack system. Joe indicated that he would add this language to the detail so it is covered.)".**

Revise this subsection by replacing the following in the paragraph beginning with "The Contractor shall reconfigure the default user name…" on or around page 7-70; "MaineDOT IT" with "**MaineDOT Traffic Division**".

In the paragraph beginning with "Tests shall be conducted by the contractor…" on or around page 7-73, amend this subsection by removing **"in the state of Maine and"** after "The facility shall be".

Amend this Section by adding the following subsection:

**718.13 Field Monitoring Unit (FMU)** This item of work shall conform to this specification. This item shall consist of furnishing and installing a Field Monitoring Unit (FMU) and software, as well as all needed accessories required for a full and complete installation, including but not limited to power adapters, Ethernet cables, and interface cables, as described herein.

Where applicable, communications from MaineDOT's cloud-based Central Management System (CMS) to the on-street traffic signal controllers shall be made through fiber optic interconnect cable connected back to existing internet connections and/or the Field Monitoring Unit (FMU). The Contractor shall furnish and install all materials necessary for a complete and operational fiber optic interconnection to all project intersections as shown on the plans. All connections to the CMS cloud-based system shall be via a secure VPN network.

The FMU shall be the only remote connection device used by isolated intersections to connect to the cloud-based system. All connections shall be encrypted VPN tunnels. The Contractor shall coordinate all configuration settings with MaineDOT IT and the Engineer.

The FMU central web based interface shall be a separate element from the CMS.

MATERIALS: The materials for this work shall conform to the following requirements:

1. The work under this item specifies the requirements for the FMU. The FMU shall operate independent of the brand/type of intersection controller deployed in the ATC traffic cabinet.

2. The FMU shall conform to the following requirements:
   - 2.1 The FMU shall function correctly between -34 degrees C and +74 degrees C.
   - 2.2 The FMU shall be provided with appropriately rated connectors that allows the FMU to be exchanged by unplugging connectors, without tools.
   - 2.3 The FMU shall monitor and log all ATC Controller and ATC cabinet faults and or alarms.
   - 2.4 The FMU shall be wired directly to the ATC cabinet.
   - 2.5 The FMU shall have an internal cellular modem running at 4G LTE.
     - 2.5.1 The Cellular modem shall be designed to be replaced / upgraded to 5G service when available.
   - 2.6 The FMU shall incorporate an integrated GPS and cell modem.
   - 2.7 The configuration of the FMU shall be accomplished by accessing the internal web server with a browser. It shall be possible to configure the FMU without any special software.

2.8 The FMU shall be powered via a standard 120V input power.

2.9 The FMU shall allow for the routing of the controller configuration packets to and from the controller (either by Ethernet or serial communications) for any type of controller utilized by the MaineDOT. In this way it shall be possible to configure the controller and utilize the controller specific software to interrogate the controller, and the FMU shall provide the communications pipe which allows this to be accomplished.

2.10 The FMU shall, within the size limitations above, include a battery and battery charging/monitoring circuit, to allow the FMU to function correctly even when all power to the intersection has failed. The battery shall continue to power the FMU for a minimum of 5 hours after all power has failed to the intersection.

2.11 The FMU shall incorporate an integrated GPS which will allow the FMU to geo-locate itself on the FMU management software map, without configuration.

2.12 The FMU shall operate without requiring a static IP address. The only configuration required at the FMU is to enter the URL of where the FMU management software is hosted.

2.13 In the event that the cell service is interrupted or is not available, the FMU shall store any events that occur in internal memory and forward these events automatically to the FMU management software when the cell service is restored. In this way, a complete record of events at the device can be maintained even if cell service is interrupted for a period. The system will store 5000 events.

2.14 The FMU shall utilize HTTP and HTTPS protocols, and XML data structures, for communication with the FMU management software. In this way the data will be open for future expansion and competition. The use of secret proprietary protocols is not permitted.

2.15 The FMU shall include Ethernet communications via an Ethernet Port with RJ45 connector.

2.16 The FMU shall include weather proof antennas.

3. **Map Display FMU Management Software**

3.1 The FMU shall include a scrollable, zoomable map display, with the intersections and other monitored devices shown as representative icons on the map. The map shall include the ability to see the intersections using Google Streetview.

3.2 The alarm status of the intersection shall be clearly indicated on the icon on the map, so that the user can see at a glance which intersections are in alarm.

3.3 The map display shall also include a list of intersections, with the number and priority of alarms indicated on the list. Intersections in high priority alarm shall be moved to the top of the list, followed by medium priority, low priority and then finally by intersections not in alarm.

3.4 The icons shall change to be able to clearly indicate if an intersection is offline.

3.5 Clicking on the icon on the map shall expose a box with the current parameters of the intersection shown.

3.6 The default map display position and zoom shall be configurable by user, so that the user's view will default to show the intersections that the user is responsible for managing.

3.7 The map view shall have the ability to show Google traffic overlays on the map.

4. **Intersection Detail Display FMU Management Software**

4.1 It shall be possible to drill down, either from the map icon or from the list, to a device level detail for the intersection, which as a minimum shall display the following parameters:

4.1.1 The alarm status, with priority indicated, and a text description of the alarm (if an alarm is present for this device).

4.1.2 The time since the last communication with the device

4.1.3 The following parameters (real time now values, minimum for the day values, maximum for the day values, and average for the day values)

4.1.3.1 The AC mains voltage (value)

4.1.3.2 The battery back-up voltage (value)

4.1.3.3 The cabinet temperature (value)

4.1.3.4 The cabinet humidity (value)

4.1.3.5 The presence of AC power (OK or Fail)

4.1.3.6 The flashing status of the intersection (OK or Flashing)

4.1.3.7 Stop Time status (OK or Stop Time Active)

4.1.3.8 The cabinet door status (Open or Closed)

4.1.3.9 The intersection fan status (Fan On or Fan off)

4.1.4 It shall be possible to view graphs of each of the value parameters in graphical form, over the recent two-week period. This includes real time graphs of:

4.1.4.1 The AC mains voltage

4.1.4.2 The battery back-up voltage

4.1.4.3 The cabinet temperature

4.1.4.4 The cabinet humidity

5. **Diagnostics and Log Display FMU Management Software**

5.1 From the device level detail within the FMU management software, it shall be possible to drill down to get the raw data; the error logs; and the communications logs to allow a technician to fault-find problems.

5.2 It shall be possible to filter the logs by Device; by Device Type and/or by Group as well as between dates.

5.3 It shall be possible to print these selected logs to a local printer or a PDF file.

5.4 It shall be possible to export these logs to Excel on the local computer for further analysis.

6. **Alarms FMU Management Software**

6.1 The FMU management software shall have a comprehensive alarm generation capability

6.2 It shall be possible to configure alarms to be generated on any parameter becoming out of tolerance, including analog values, digital values and enumerated values.

6.3 Alarms shall be configurable to be of Low, High or Critical Priority.

6.4 The alarm priority shall be displayed throughout the FMU management software, on all displays, using color codes such as red-critical; yellow – high; and amber-low to indicate the priority of the alarm.

6.5 The current active alarms shall be accessible for view via an expandable window, to see which alarms are active and when the alarm occurred. The highest priority alarms shall rise to the top of the list.

7. **Alerts FMU Management Software**

7.1 The FMU management software shall have comprehensive alerting capability, to enable the response personnel to be notified when an abnormal situation has occurred.

7.2 It shall be possible to configure alerts to one or more personnel for each alarm. This will cause, as selected, an SMS and/or an email to be sent to the person when an alarm occurs.

7.3 The alert shall be configurable to optionally send via email and/or via SMS a message when an alarm clears.

7.4 The intention is that the FMU management software provides the alerts to the user in near real time. The SMS and email shall be issued within 30 seconds of the occurrence of event which results in an alert being issued.

8. **Hosting and Connectivity and Service FMU / FMU Management Software**

8.1 The contractor shall supply the FMU with the FMU manufacturers 10 year options for Connectivity and Service, as part of the purchase price. The Connectivity and Service agreement shall include at a minimum:

8.1.1 Cellular Connectivity

8.1.2 No cellular overage charges

8.1.3 Extended warranty on the hardware for the period of the Connectivity and Service Agreement

8.1.4 Over-the-air software updates

8.1.5 Over-the-air security updates

8.1.6 Future Connected Vehicles Service

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

720.12 Wood Sign Posts Revise the first sentence so that it reads:

Wood sign posts shall be rectangular, straight and sound timber, cut from live growing native spruce, red pine, hemlock, cedar trees or other AWPA approved species, free from loose knots or other structurally weakening defects of importance, such as shake or holes or heart rot.

Revise the third paragraph that starts with “When pressure treated…” so that it reads:

All sign posts shall be pressure-treated in accordance with AASHTO M 133 and AWPA Standard U1, UC4A, Commodity Specification A: Sawn Products.

# APPENDIX A

To

2022 Title VI Implementation Plan

The United States Department of Transportation (USDOT) Standard Title VI/Non-Discrimination 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 Non-discrimination 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);

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 the FHWA."***

The Civil Rights Restoration Act of 1987 clarified the original intent of Congress, with respect to Title VI and other Non-discrimination 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 non-discrimination statutes and requirements to include all programs and activities of the Recipient, so long as any portion of the program is Federally assisted.

**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 ***Highway Program:***

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-Aid Highway Program activities*** and, in adapted form, in all proposals for negotiated agreements regardless of fundingsource:

> "The ***Maine Department of Transportation,*** in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 US.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair 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 C and G of this Assurance in every contract or agreement subject to the Acts and the Regulations.

4. The Recipient will insert the clauses of Appendix E 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 D and Appendix F 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.

By signing this ASSURANCE, the ***Maine Department of Transportation*** also agrees to comply (and require any sub-recipients, sub-grantees, contractors, successors, transferees, and/or assignees to comply) with all applicable provisions governing the ***FHWA and USDOT*** 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 the ***FHWA and USDOT***. You must keep records, reports, and submit the material for review upon request to ***FHWA and USDOT***, or its designee 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.

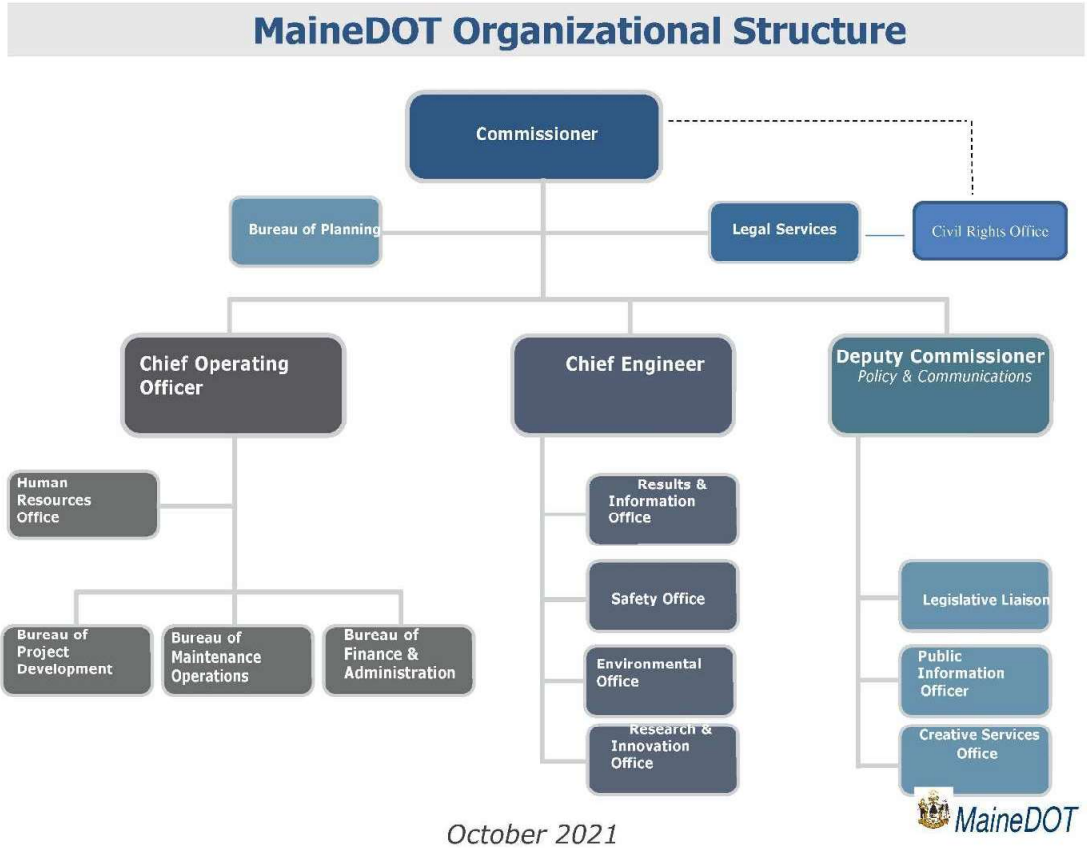
The ***Maine Department of Transportation*** gives this ASSURANCE in consideration of and for obtaining any Federal grants, loans, contracts, agreements, property, and/or discounts, or other Federal-aid and Federal financial assistance extended after the date hereof to the recipients by the U.S. Department of Transportation under the ***Federal Aid Highway Program***. This ASSURANCE is binding on ***Maine,*** other recipients, sub-recipients, sub-grantees, contractors, subcontractors and their subcontractors', transferees, successors in interest, and any other participants in the ***Federal Aid Highway Program***. The person(s) signing below is authorized to sign this ASSURANCE on behalf of the Recipient.

**MAINE DEPARTMENT OF TRANSPORTATION**
(***Name of Recipient***)

by _____
**Bruce A. Van Note, Commissioner**

DATED Sept. 13, 2021

APPENDIX B


MaineDOT Organizational Structure
Commissioner
Bureau of Planning
Legal Services
Civil Rights Office
Chief Operating Officer
Chief Engineer
Deputy Commissioner
Policy & Communications
Human Resources Office
Bureau of Project Development
Bureau of Maintenance Operations
Bureau of Finance & Administration
Results & Information Office
Safety Office
Environmental Office
Research & Innovation Office
Legislative Liaison
Public Information Officer
Creative Services Office
October 2021
MaineDOT

# APPENDIX C

Performance Requirements

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 Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Federal Highway Administration (FWHA), as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

2. Non-discrimination: 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, 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 Nondiscrimination 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 FHWA 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 FHWA, 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 FHWA 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.

6. 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 FHWA 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 D

## CLAUSES FOR DEEDS TRANSFERRING UNITED STATES PROPERTY

The following clauses will be included in deeds effecting or recording the transfer of real property, structures, or improvements thereon, or granting interest therein from the United States pursuant to the provisions of Assurance 4:

NOW, THEREFORE, the U.S. Department of Transportation as authorized by law and upon the condition that the Maine Department of Transportation will accept title to the lands and maintain the project constructed thereon in accordance with 23 IJ.S. Code 5 107, the Regulations for the Administration of the Federal Aid Highway Program, and the policies and procedures prescribed by the FHWA of the U.S. Department of Transportation in accordance and in compliance with all requirements imposed by Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Non-discrimination in Federally-assisted programs of the U.S Department of Transportation pertaining to and effectuating the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252; 42 U.S.C. S 2000d to 2000d-4), does hereby remise, release, quitclaim and convey unto the Maine Department of Transportation all the right, title and interest of the U.S. Department of Transportation in and to said lands described in Exhibit A attached hereto and made a part hereof.

### (HABENDUM CLAUSE)

TO HAVE AND TO HOLD said lands and interests therein unto Maine Department of Transportation and its successors forever, subject, however, to the covenants, conditions, restrictions and reservations herein contained as follows, which will remain in effect for the period during which the real property or structures are used for a purpose for which Federal financial assistance is extended or for another purpose involving the provision of similar services or benefits and will be binding on the Maine Department of Transportation, its successors and assigns.

The Maine Department of Transportation, in consideration of the conveyance of said lands and interests in lands, does hereby covenant and agree as a covenant running with the land for itself, its successors and assigns, that (1) no person will 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 with regard to any facility located wholly or in part on, over, or under such lands hereby conveyed l,] [and] * (2) that the Maine Department of Transportation will use the lands and interests in lands and interests in lands so conveyed, in compliance with all requirements imposed by or pursuant to Title 49, Code of Federal Regulations, US. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-assisted programs of the U.S. Department of Transportation, Effectuation of Title VI of the Civil Rights Act of 1964, and as said Regulations and Acts may be amended [i and (3) that in the event of breach of any of the above-mentioned non-discrimination conditions, the Department will have a right to enter or re-enter said lands and facilities on said land, and that above described land and facilities will thereon revert to and vest in and become the absolute property of the U.S. Department of Transportation and its assigns as such interest existed prior to this instruction].*

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary in order to make clear the purpose of Title VI.)

# APPENDIX E

## CLAUSES FOR TRANSFER OF REAL PROPERTY ACQUIRED OR IMPROVED UNDER THE ACTIVITY, FACILITY, OR PROGRAM

The following clauses will be included in deeds, licenses, leases, permits, or similar instruments entered into by the Maine Department of Transportation pursuant to the provisions of Assurance 7(a):

A. The (grantee, lessee, 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. In the event facilities are constructed, maintained, or otherwise operated on the property described in this (deed, license, lease, permit, etc.) for a purpose for which a U.S. Department of Transportation activity, facility, or program is extended or for another purpose involving the provision of similar services or benefits, the (grantee, licensee, lessee, permittee, etc.) will maintain and operate such facilities and services in compliance with all requirements imposed by the Acts and Regulations (as may be amended) such that no person on the grounds 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.

B. With respect to licenses, leases, permits, etc., in the event of breach of any of the above Nondiscrimination covenants, Maine Department of Transportation will have the right to terminate the (lease, license, permit, etc.) and to enter, re-enter, and repossess said lands and facilities thereon, and hold the same as if the (lease, license, permit, etc.) had never been made or issued. *

C. With respect to a deed, in the event of breach of any of the above Non-discrimination covenants, the Maine Department of Transportation will have the right to enter or re-enter the lands and facilities thereon, and the above described lands and facilities 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 F

## 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 discrimination, (3) that the (grantee, licensee, 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 Nondiscrimination 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 Nondiscrimination 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 G

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 nondiscrimination 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. 5 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.Ce 5 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. 5 324 et seq.), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. S 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. 5 6101 et seq.), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC 5 471, 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. 55 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. 5 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 Non-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 because of sex in education programs or activities (20 U.S.C. 1681 et seq).

## FEDERAL HIGHWAY ADMINISTRATION CIVIL RIGHTS ASSURANCE

The **Maine Department of Transportation** HEREBY CERTIFIES THAT, as a condition of receiving Federal financial assistance under the Civil Rights Act of 1964, as amended, it will ensure that:

1. No person on the basis of race, color or national origin will be subjected to discrimination in the level and quality of transportation services and transportation-related benefits.

2. The Maine Department of Transportation will compile, maintain, and submit in a timely manner Title VI information required in compliance with the Department of Transportation's Title VI regulation, 49 CFR Part 21.9.

3. The Maine Department of Transportation will make it known to the public that those person or persons alleging discrimination on the basis of race, color or national origin as it relates to the provision of transportation services and transportation-related benefits may file a complaint with the Federal Highway Administration and/or the U.S. Department of Transportation.

The person or persons whose signature appears below is authorized to sign this assurance on behalf of the grant applicant or recipient.

DATE: 9/19/23

Bruce A. Van Note, Commissioner
Maine Department of Transportation

# APPENDIX I

## TITLE VI/NONDISCRIMINATION POLICY STATEMENT

The Commissioner of the Maine Department of Transportation (MaineDOT) is ultimately responsible for and committed to the effective implementation of the Title VI Program to achieve compliance with Title VI of the Civil Rights Act of 1964, as amended, the Civil Rights Restoration Act of 1987, and related statutes and regulations in all Federal programs and activities. Understanding that the Commissioner will not be performing any day-to-day implementation duties, the MaineDOT conducts its Title VI/Environmental Justice Program in a team approach by involving personnel from all program areas, with guidance from the Title VI Coordinator. Responsibility for the day to day administration of the Program will be delegated to the Title VI Program Coordinator who is currently the Director of the Civil Rights Office. The Title VI Program Coordinator has been delegated sufficient authority and responsibility to effectively carry out her duties.

The Title VI Program Coordinator ensures MaineDOT's compliance with Title VI/Environmental Justice implementing regulations. Bureau Directors are responsible for Program implementation in their Bureaus and shall identify and delegate Title VI/Nondiscrimination Federal Program Area Liaisons to perform the routine data collection/data analysis and process reviews.

Inquiries concerning the MaineDOT's policies, investigations, complaints, compliance with applicable laws, regulations, and concerns regarding compliance with Title VI/Environmental Justice may be directed to:

Maine Department of Transportation
# 16 State House Station
Augusta, Maine 04333-1116
Telephone (207) 624-3066 | TTY users Dial Relay: 711
sherry.tompkins@maine.gov

MaineDOT is committed to ensuring that the fundamental principles of equal opportunity are upheld in all decisions involving our employees and contractors/consultants, and to ensuring that the public-at-large is afforded access to all of our programs and services whether those programs and activities are federally funded or not.

This Policy Statement will be circulated throughout the MaineDOT, made available to the public, and be included by reference in all contracts, agreements, programs and services administered by the Department of Transportation.

Date: 7/23/21

Bruce A. Van Note, Commissioner

APPENDIX J

# SAMPLE QUESTIONS FOR PROGRAM AREA REVIEWS

**Bureau of Planning**

- What measures do you take to ensure that a cross-section of people representative of the populations affected by the Department's projects, including identifying and proactively reaching out to various and diverse social, economic and ethnic groups, participate in the Department's Public Involvement Process?
- How do you ensure that appropriate accommodations are made for persons with Limited English Proficiency (LEP) (persons who have difficulty speaking, reading, writing and/or understanding English)? Were interpreters available when needed to assist with LEP needs?
- How do you collect and analyze statistical data on race, color and national origin of populations in all areas impacted by the Department's programs or services?

**Bureau of Project Development**

**Property Office**

- What mechanisms are used to identify what communities (minority, LEP) are represented in the negotiation phase of property acquisition?
- How do you ensure that Property Office staff who have direct contact with persons affected by the Department's acquisition of property needed for projects, including compliance with the Uniform Relocation Act of 1970?
- Have you received any complaints related to discrimination on the basis of race, color or national origin? How many and how did you process them?

**Multimodal Program**

- How do you ensure that Local Public Agencies (LPA) provide the Department with signed Title VI assurances (Form 1050.2A), including Appendices A and K, annually?
- How do you ensure that LPAs include in their subcontracts FHWA Form 1273 and Title VI Assurances, including Appendices A and K?
- Have you received any complaints related to discrimination on the basis of race, color or national origin? How many and how did you process them?
- How do ensure that public meetings and notices related to LPA projects comply with Title VI?

**Bureau of Maintenance and Operations**

- How do you ensure that the Bureau's activities comply with Title VI requirements of nondiscrimination on the basis of race, color or national origin?
- Have you received any complaints related to discrimination on the basis of race, color or national origin? How many and how did you handle them?

# APPENDIX K

Subrecipient Reviewed: _____ Date(s) of Desk Audit _____

Reviewer(s) _____

- ☐ Title VI/Nondiscrimination Policy Statement
- ☐ Title VI/Nondiscrimination Assurances
- ☐ Name and position of Title VI/Nondiscrimination Coordinator
- ☐ Title VI/Nondiscrimination Plan
- ☐ Procedures for processing external discrimination complaints
- ☐ A list of external discrimination complaints and lawsuits
- ☐ Any Accommodations for Limited English Proficient Persons
- ☐ Addressing Environmental Justice in minority populations and low-income populations
- ☐ Ensuring nondiscrimination in the public participation process
- ☐ Collecting and analyzing data to ensure nondiscrimination in programs and activities
- ☐ Process for ensuring that solicitations for bid/requests for proposals contain the Title VI/Nondiscrimination Assurance paragraph
- ☐ Process for ensuring subcontracts contain the appropriate contract provisions and language from the Title VI Assurances
- ☐ Process for Ensuring nondiscrimination in the award of contracts
- ☐ Developing a Title VI/Nondiscrimination Annual Work Plan & Accomplishment Report

APPENDIX L

# SUB-RECIPIENT TITLE VI COMPLIANCE ASSESSMENT TOOL

23 Code of Federal Regulations (CFR) Part 200.9 (b)(7) requires that the Maine Department of Transportation (MaineDOT) conduct periodic reviews of cities, planning agencies and other recipients of federal-aid highway funds, including locally public agencies, to ensure that they are complying with Title VI of the Civil Rights Act of 1964. Title VI states that "no person in the United States shall be excluded from participation, denied the benefits of, or be subjected to discrimination in any Federally-funded program, policy or activity on the basis of race, color or national origin."

MaineDOT has developed this assessment as a means of determining sub-recipient compliance; helping sub-recipients understand their Title VI responsibilities; and assisting MaineDOT in planning future training and technical assistance.

This assessment is part of MaineDOT's Title VI review process and has been designed to take only a few minutes of your time. Please fax (207-624-3021) or mail (16 State House Station, Augusta, ME 04333-0016) the completed questionnaire with attachments to: Sherry Tompkins, Director of Civil Rights, no later than August 30, 2021

Questions or concerns may be emailed to: sherry.tompkins@maine.gov or you may reach Sherry by phone at (207) 624-3066.

## Baseline Questionnaire

1. Name of your Agency: _____

2. Number of full-time and part-time employees: F/T _____ P/T _____

3. Has your agency provided written Title VI Assurances to MaineDOT? If not, please attach a copy. _____

4. Does your agency physically include the Civil Right Special Provisions (FHWA-Form 1273) in all contracts and ensure that they are included in all sub-contracts, including third-tier contracts? _____
   _____

5. Who is the Title VI contract person for your agency? _____.
   Does this person accept complaints from the public? _____ If not, who does?_____.
   Please include title, email and telephone number for each person listed. _____
   _____

6. In the past three years, has your agency been named in a discrimination complaint or lawsuit? _____. If so, when and what was the nature of the complaint or lawsuit and the outcome. _____

_____

_____

_____

7. Does your agency have a written discrimination complaint process? If so, please attach a copy. _____

8. Has your agency made the public aware of the right to file a complaint? _____ If so, by what mechanism _____

_____. Please attach a copy.

9. Does your agency provide free translation services for persons with Limited English Proficiency (LEP)? _____. Please explain _____

_____

_____

_____

10. In the past twelve (12) months, what has your agency done to receive and consider input from all citizen groups, especially minority, low income, disabled and transit-dependent? Please describe, if applicable. _____

_____

_____

_____

11. Does your agency have a method to collect racial and ethnic data on citizens impacted by your projects? _____. If so, please describe. _____

_____

_____

_____

12. Does your agency include the required Disadvantaged Business Enterprise (DBE) assurance language at 49 CFR 26.13(a) and (b) verbatim in all financial agreements, contracts and sub-contracts? (Please see DBE Assurance language below.) _____

**********

**§26.13 What assurances must recipients and contractors make?**

(a) Each financial assistance agreement you sign with DOT operating administration (or a primary recipient) must include the following assurance:

The recipient shall not discriminate on the basis of race, color, national origin or sex in the award and performance of any DOT-assisted contract or in the administration of its DBE program or the requirements of 49 CFR Part 26. The recipient shall take all necessary and reasonable steps under 49 CFR Part 26 to ensure nondiscrimination in the award and administration of DOT assisted contracts. The recipient's DBE program, as required, by 49 CFR Part 26 and as approved by DOT, is incorporated by reference in this agreement. Implementation of this program is a legal obligation and failure to carry out its terms shall be treated as a violation of this agreement. Upon notification to the recipient of its failure to carry out its approved program, the Department may impose sanctions as provided for under Part 26 and may, in appropriate cases, refer the matter for enforcement under 18 U.S.C. 1001 and/or the Program Fraud Civil Remedies Act of 1986 (31 U.S. C. 3801 et seq.).

(b) Each contract you sign with a contractor (and each sub-contract the prime contractor signs with a sub-contract) must include the following assurance:

The contractor, sub recipient or sub-contractor shall not discriminate on the basis of race, color, national origin or sex in the performance of this contract. The contactor 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 breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.

**********

13. Does your agency monitor DBEs on construction projects to ensure they are performing a commercially useful function (CUF)? _____. If so, where is this documented? _____.
If a DBE is not performing a CUF, what actions for steps have you taken? _____

_____

_____

Who do you notify? _____

14. Do you have any questions regarding this assessment or Title VI? _____ Please include them here along with your email address and/or phone number and a MaineDOT representative will respond. _____

15. Would your agency like Title VI training or other Civil Rights technical assistance from MaineDOT? _____. If yes, please explain. _____

Does your agency have teleconferencing ability? _____

16. Please provide the name, title and contact information of the person who completed this baseline assessment. _____

17. Provide an annual report on Title VI accomplishments for the previous year and goals for the next year. _____

## APPENDIX M

**Maine Department of Transportation**
**External Discrimination Complaint Form**

**(Title VI/Nondiscrimination and ADA/Section 504 Complaints)**

| Name | Phone | Name of Person(s) That Discriminated Against You |
|---|---|---|
| Address | | Location and Position of Person (If Known) |
| City, State, Zip | | City, State, Zip |
| Agency involved | | Date of Alleged Incident |
| Discrimination Because of: ☐ Race ☐ Color ☐ National Origin ☐ Sex ☐ Age ☐ Disability | | What Remedy are you requesting? |
| Explain As Briefly And Clearly As Possible What Happened And How You Were Discriminated Against. Indicate Who Was Involved. Be Sure To Include How Other Persons Were Treated Differently Than You. Also Attach Any Written Material Pertaining To Your Case. | | |
| Signature | | Date |

## Please Mail Complaint to:

Maine Department of Transportation
Civil Rights Office
# 16 State House Station
Augusta, Maine 04333-0016
Or Call (207) 624- 3066 or TYY Relay 711

APPENDIX N

MaineDOT

Integrity • Competence • Service

# NON-DISCRIMINATION/TITLE VI POSTER

**Title VI and Nondiscrimination Commitment to all USDOT funded programs:**
Pursuant to Title VI of the Civil Rights Act of 1964 and related laws and regulations, MaineDOT will not exclude from participation in, deny the benefits of, or subject to discrimination anyone on the grounds of race, color, national origin, sex, age or disability.

**Complaint Procedures:**
MaineDOT has established a discrimination complaint procedure and will take prompt and reasonable action to investigate and eliminate discrimination when found. Any person who believes that he or she has been aggrieved by an unlawful discriminatory practice under Title VI has a right to file a formal complaint with MaineDOT. Any such complaint must be in writing and filed with the MaineDOT Title VI Coordinator within one hundred eighty (180) calendar days following the date of the alleged discriminatory occurrence. For more information, please contact the MaineDOT's Title VI Coordinator.

**ADA/504 Statement:**
Pursuant to Section 504 of the Rehabilitation Act of 1973 (Section 504), the Americans with Disabilities Act of 1990 (ADA) and related federal and state laws and regulations, MaineDOT will make every effort to ensure that its facilities, programs, services, and activities are accessible to those with disabilities. MaineDOT will provide reasonable accommodation to disabled individuals who wish to participate in public involvement events or who require special assistance to access MaineDOT facilities, programs, services or activities. Because providing reasonable accommodation may require outside assistance, organization or resources, MaineDOT asks that requests be made at least five (5) calendar days prior to the need for accommodation. Questions, concerns, comments or requests for accommodation should be made to MaineDOT's ADA Coordinator.

Services are provided free without charge for individuals with special needs with disabilities. Any fees will be paid by the recipient or subrecipient. The public will have access to translators, "I Speak Cards", TTY/TDD services and vital documents translated when requested.

**MaineDOT Title VI**

Sherry Y. Tompkins, Director
Civil Rights Office
Maine Department of Transportation
16 State House Station
Augusta, Maine 04333
Office Phone: (207) 624-3066
Cell Phone: (207) 592-0686
TYY: Users Dial MAINE RELAY 711

## *Call Us with Questions*

If you believe that you have been discriminated against because of your race, color, national origin, sex, age, disability or income level, or because you have difficulty with the English language, call us at 207-624-3056. MaineDOT's Civil Rights Office will explain the process for filing a complaint. Complaint forms are on our website.

**mainedot.gov/civilrights/title-vi**

**Language translation services available upon request.**

Services de traduction de langue disponibles sur demande.

Servicios de traducción disponibles bajo petición.

要求提供的 语言翻译服务。

Lugha ya tafsiri huduma inapatikana juu ya ombi.
Ladenan panarjamahan Basa aya kana paménta.

خدمات الترجمة اللغة متاحة عند الطلب

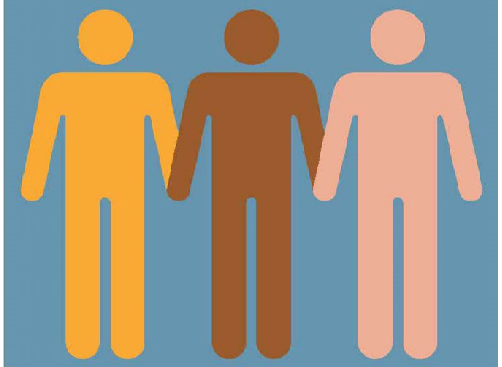
Có các dịch vụ phiên dịch khi quý vị yêu cầu.

MaineDOT

**Maine Department of Transportation**
**Civil Rights Office**
16 State House Station
Augusta, Maine 04333-0016
Phone: 207-624-3056
TTY Users Dial Maine Relay 711

mainedot.gov

# Know YOUR Rights



MaineDOT
Civil Rights Office

APPENDIX O

# TITLE VI PROGRAM *of the Civil Rights Act*

MaineDOT's mission is to provide the people of Maine with a safe, efficient and effective transportation system. Our work is intended to serve the transportation needs of all people in Maine, regardless of race, color, national origin, sex, age, disability, income level or limited English proficiency.

MaineDOT is committed to assuring that none of its activities or programs encourage discrimination. We manage our programs without regard to race, color, national origin, sex, age, disability, income level, or the ability to speak or understand English.

MaineDOT will not allow discrimination by a MaineDOT employee or by recipients of federal-aid funds such as cities, counties, contractors, or planning agencies. MaineDOT prohibits all discriminatory practices which may result in:

- Unfair denial of any service, financial aid or benefit provided by the federally funded program;
- Different standards or requirements for participation in programs;
- Segregation or separate treatment within our programs;
- Differences in the quality, quantity or way in which a benefit is provided;
- Discrimination in any activities in a facility built with federal funds.

To ensure compliance with Title VI, and other related laws, MaineDOT:

- Avoids or reduces harmful health and environmental impacts which programs or activities might have on minority and low-income populations;
- Ensures the full and fair participation by all communities in its decision-making process;
- Prevents the denial, reduction or delay of benefits for minority and low-income populations;
- Provides language interpreters to people who have difficulty understanding English.

# *How to File a Complaint*

If you believe you have been discriminated against, you will need to file a written complaint. The complaint must be submitted within 180 days of the alleged discrimination. The complaint form is on our website for you to download.

***Be prepared to fill in:***

- Your name, address and phone number;
- The name and address of the organization you believe discriminated against you;
- Details of the alleged discrimination and any other relevant information; and
- The names of anyone we could contact regarding the alleged discrimination.

***Once you have filled in the form, mail it to us:***

**MaineDOT Civil Rights Office**

16 State House Station
Augusta, Maine 04333-0016

207-624-3056

**DEPARTMENT OF THE ARMY**
**U.S. ARMY CORPS OF ENGINEERS**
**NEW ENGLAND DISTRICT**
**696 VIRGINIA ROAD**
**CONCORD, MASSACHUSETTS 01742-2751**

February 26, 2025

Regulatory Division
Transportation & Utility Section
File Number: NAE-2025-00314
ME DOT WIN: 27670.00

Cara O'Donnell
Maine Department of Transportation
41 Rice Street
Presque Isle, Maine 04769
Via Email: cara.m.odonnell@maine.gov

Dear Cara O'Donnell:

This letter is in response to the application you submitted to the U.S. Army Corps of Engineers (USACE), New England District, on February 3, 2025, for a Department of the Army general permit verification to replace a 1.25-foot-diameter by 42-foot-long pipe culvert with a three-foot-diameter by 56-foot-long pipe culvert. The culvert connects a freshwater wetland that flows under the road and into a small pond, which drains to an unnamed tributary to Fish Stream. The work will result in the discharge of 42 square feet of permanent fill and 250 square feet of temporary impacts within the wetland. The culvert is located on State Route 159 in Crystal, Aroostook County, Maine (Latitude 46.00909° and Longitude -68.30704°). The work is shown on the enclosed plan titled "WIN 27670.00 XC-138568 Impact Plan," in one sheet dated February 4, 2025.

Based on the information you have provided, we verify that the activity is authorized under General Permit 22, Stream and Wetland Work and Crossings of the October 14, 2020, federal permits known as the Maine General Permits (GPs). You can find a copy of these permits at: https://www.nae.usace.army.mil/Missions/Regulatory/State-General-Permits/.

Please review the enclosed GPs carefully, in particular the general conditions beginning on page 5, and ensure that you and all personnel performing work authorized by the GPs are fully aware of and comply with its terms and conditions. A copy of the GPs and this verification letter must be available at the work site as required by General Condition 33. Any deviation from the terms and conditions of the permit, or your submitted plans, may subject the permittee to the enforcement provisions of our

regulations. You must perform this work in compliance with the terms and conditions of the GPs listed above, and also in compliance with the following special conditions:

**Project Specific Special Conditions:**

1. The permittee shall complete and return the enclosed Work-Start Notification Form to this office at least two weeks prior to the anticipated construction start date.

2. The permittee shall complete and return the enclosed Completion Certification Form to this office within one month following the completion of the authorized work.

3. All construction shall be completed in accordance with the limits of construction and construction sequences detailed on the enclosed plan titled "WIN 27670.00 XC-138568 Impact Plan," in one sheet dated February 4, 2025. If changes are made to the plans or construction methods for work within or adjacent to waters of the U.S, the permittee shall contact USACE immediately to discuss modification of this authorization. USACE must approve any changes before they are undertaken.

4. This project shall be performed in accordance with erosion control measures conforming with the latest versions of the *State of Maine Department of Transportation Standard Specifications for Highways and Bridges* and the *Department of Transportation's Best Management Practices for Erosion and Sediment Control*.

5. If the authorized work is not complete before the monarch butterfly (*Danus plexippus*) is listed under the Endangered Species Act (ESA), the permittee shall contact USACE to initiate ESA Section 7 consultation with the U.S. Fish and Wildlife Service.

6. If the authorized work is not complete before the Suckley's cuckoo bumble bee (*Bombus suckleyi*) is listed under the Endangered Species Act (ESA), the permittee shall contact USACE to initiate ESA Section 7 consultation with the U.S. Fish and Wildlife Service.

This verification is valid until October 14, 2025. You must commence or be under contract to commence the work authorized herein by October 14, 2025 and complete the work by October 14, 2026. If not, you must contact this office to determine the need for further authorization before beginning or continuing the activity. It is recommended that you contact this office before this authorization expires to discuss if permit reissuance is a possibility.

This GP verification and any associated authorizations does not preclude the necessity to obtain any other federal, state, or local permits, licenses, and/or certifications, which may be required.

If you have any questions related to this verification or have issues accessing documents referenced in this letter, please contact Jami MacNeil, Project Manager, at 978-778-6497 or by email at jami.e.macneil@usace.army.mil. This agency continually strives to improve our customer service. To better serve you, please complete the Customer Service Survey located at: https://regulatory.ops.usace.army.mil/customer-service-survey/.

Sincerely,

Grace Moses
Chief, Technical Support Branch
Regulatory Division

Enclosures

cc (w/ enclosures):
Paulo Ribeiro, Maine DOT; paulo.b.ribeiro@maine.gov
Joshua Brown, Maine DOT; joshua.brown@maine.gov
Sarah Rubenstein, U.S. FWS; sarah_rubenstein@maine.gov
Maine DEP; LandOnCall@maine.gov

# Work-Start Notification Form

**File Number: NAE-2025-00314 State: Maine County: Aroostook**

**Permittee: Maine Department of Transportation**
**Date Verification Issued: 3/25/2025**
**Project Manager: Jami MacNeil**

At least two weeks prior to commencing the activity authorized by this permit, sign this certification and return it to the following address:

**US ARMY CORPS OF ENGINEERS**
**New England District**
**Attn: Jami MacNeil**
**442 Civic Center Drive Suite 350**
**Augusta, Maine 04330**
**or**
**cenae-r-tu@usace.army.mil**
**978-778-6497**

Please note that your permitted activity is subject to a compliance inspection by a U. S. Army Corps of Engineers (USACE) representative. Failure to comply with any terms or conditions of this authorization may result in the USACE suspending, modifying or revoking the authorization and/or issuing a Class I administrative penalty, or initiating other appropriate legal action.

**The people (e.g. contractor) listed below will do the work, and they understand the permit's conditions and limitations.**

**Contractor Name/Contractor Firm:** _____
**Business Address:** _____
_____
**Contractor Phone and Email:** _____

**Proposed Construction Dates: Start:** _____ **Finish:** _____

_____ _____
**Signature of Permittee** **Date**

U.S. Army Corps of Engineers (USACE)

# CERTIFICATION OF COMPLIANCE WITH DEPARTMENT OF THE ARMY PERMIT

For use of this form, see Section 404 of the Clean Water Act, Section 10 of the Rivers and Harbors Act of 1899, and Section 103 of the Marine Protection, Research, and Sanctuaries Act; the proponent agency is CECW-COR.

***Form Approved - OMB No. 0710-0003 Expires 2027-10-31***

**The Agency Disclosure Notice (ADN)**

The Public reporting burden for this collection of information, 0710-0003, is estimated to average 10 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services, at whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

**PURPOSE**: This form is used by recipients of U.S. Army Corps of Engineer Regulatory permits to certify compliance with the permit terms and conditions.

Your permitted activity is subject to a compliance inspection by a U.S. Army Corps of Engineers representative. If you fail to comply with this permit, you are subject to permit suspension, modification, or revocation.

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the U.S. Army Corps of Engineers, New England District, Regulatory Office.

The certification can be submitted by email at cenae-r-tu@usace.army.mil or by mail at the below address:

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the U.S. Army Corps of Engineers, New England District, Regulatory Office.

U.S. Army Corps of Engineers
New England District Office
Street Address: 696 Virginia Road
City: Concord State: MA Zip Code: 01742

## COMPLETED BY THE CORPS

Corps Action Number: NAE-2025-00314

Permit Type: General Permit

General Permit Number and Name (*if applicable*): 22. Stream and Wetland Work and Crossings

Name of Permittee: Maine Department of Transportation

Project Name: ME DOT Crystal WIN 27670.00

Project Location (*physical address*): Route 159, Crystal, ME

Latitude 46.00909° and Longitude -68.30704°

## PERMITTEE'S CERTIFICATION

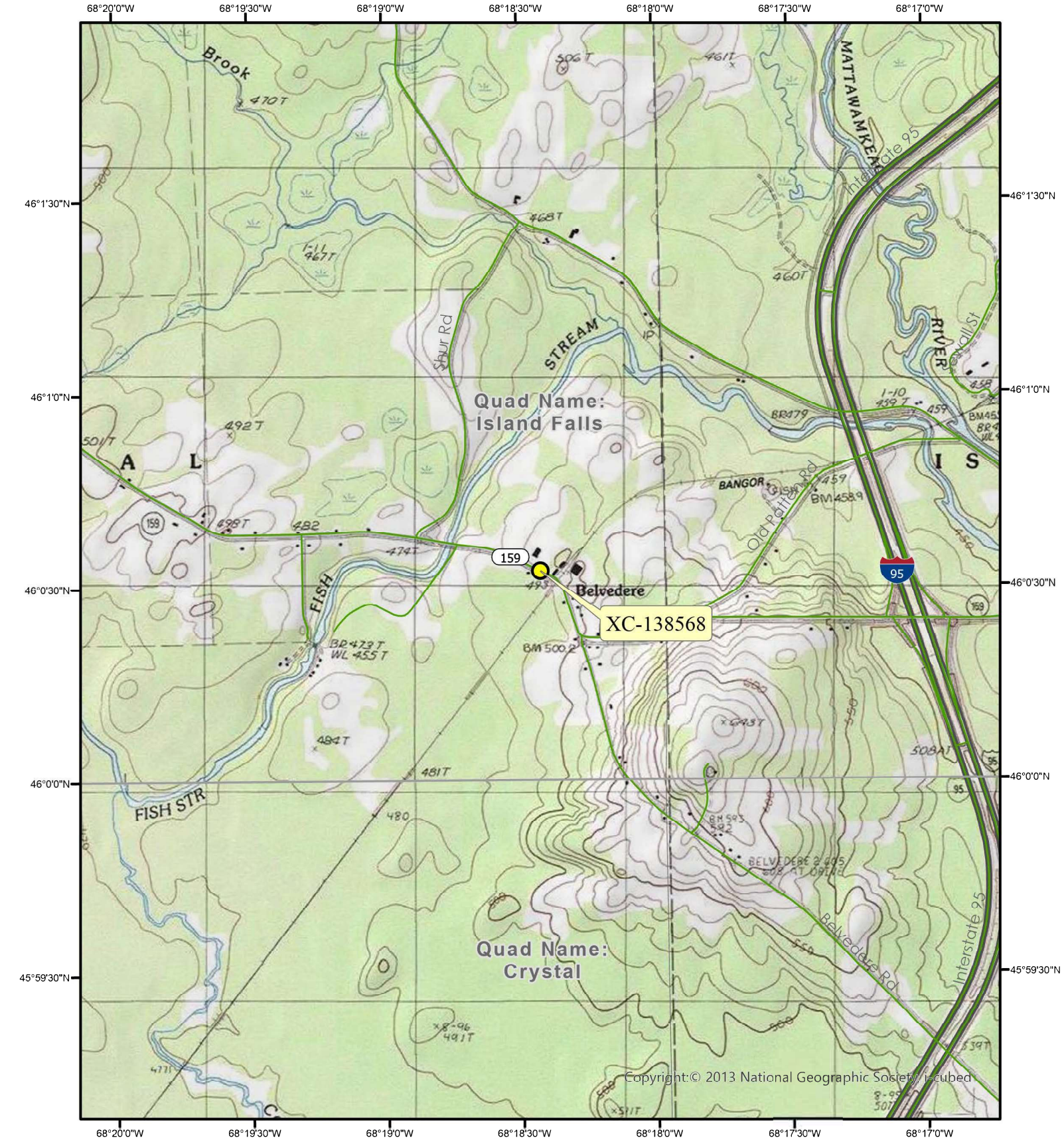
Date Work Started: _____

Date Work Completed: _____

Enclose photographs showing the completed project (*if available*).

I _____ hereby certify that the work authorized by the above referenced permit has been completed in accordance with all of the permit terms and conditions, and that any required compensatory mitigation has been completed in accordance with the permit conditions.

| Name | Date | Signature |
|---|---|---|
| | | |




WIN: 27670.00
Crystal
Island Falls, ME USGS 24K Topo map
46.00909, -68.30704

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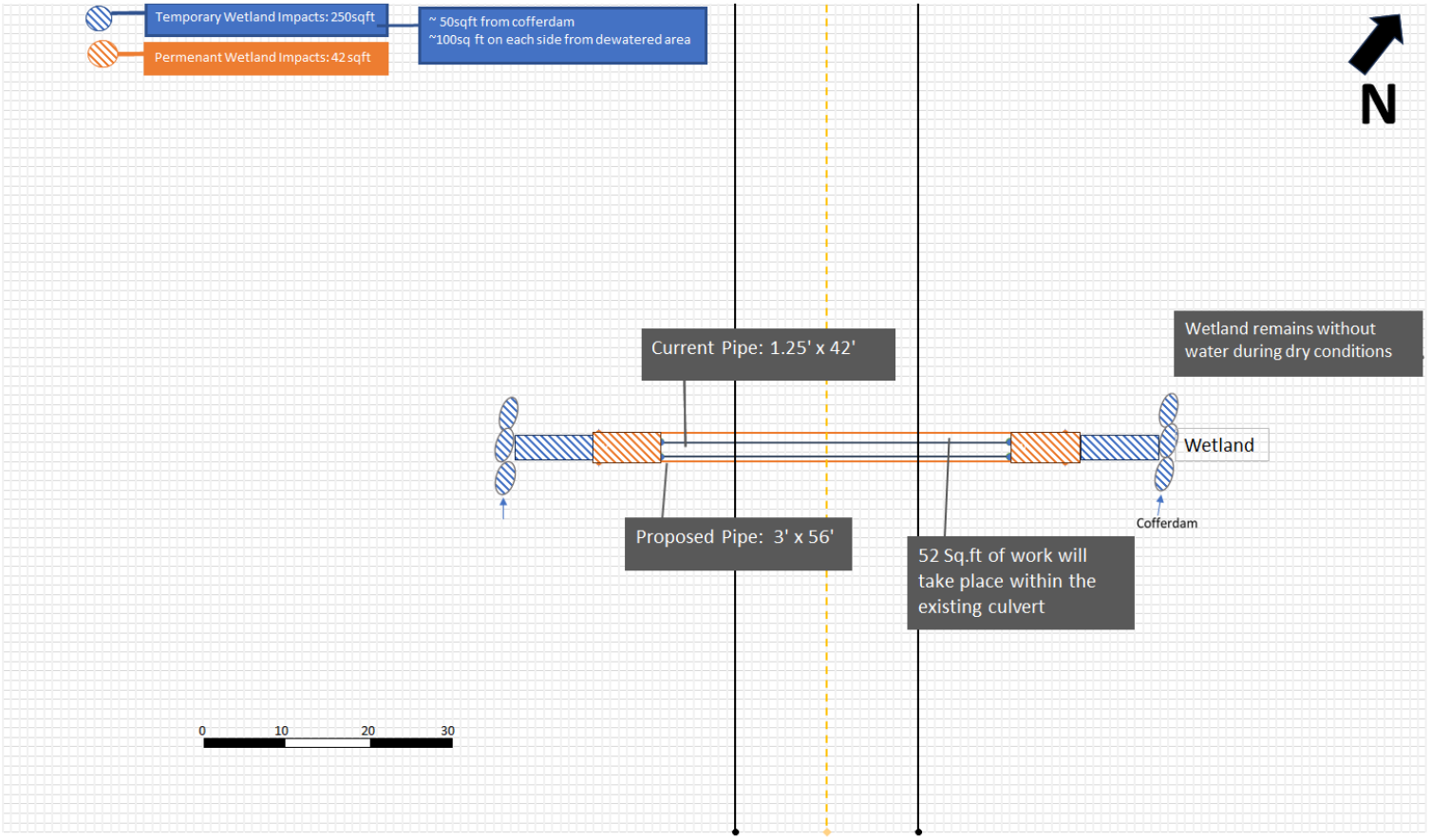
0 0.25 0.5
Miles

Crystal, Rte 159 Culvert Replacement
MaineDOT WIN# 27670.00
02.04.2025

**WIN 27670.00 XC-138568 Impact Plan**
**Wetland Culvert Replacement**



Applicant: General Public, State of Maine

Effective Date: October 14, 2020
Expiration Date: October 14, 2025

**DEPARTMENT OF THE ARMY**
**GERNERAL PERMITS FOR**
**THE STATE OF MAINE**

The New England District of the U.S. Army Corps of Engineers (Corps) hereby issues 23 General Permits (GPs), listed below, for activities subject to Corps jurisdiction in waters of the United States within the boundaries of the State of Maine including tribal lands, and in adjacent ocean waters to the seaward limit of the outer continental shelf. These GPs are issued in accordance with Corps regulations at 33 CFR 320 – 332 and specifically 33 CFR 325.2(e)(2). These GPs will protect the aquatic environment and the public interest while effectively authorizing activities that have no more than minimal individual and cumulative adverse environmental effects.



## I. CORPS JURISDICTION

**1.** Permits are required from the Corps for the following work:

a. The construction of any structure in, over, or under any navigable water of the U.S. (see 33 CFR 328), 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. including wetlands. The Corps regulates these activities under Section 404 of the Clean Water Act (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 of 1972 (see 33 CFR 324).

**2.** Related laws: Section 408 of the Rivers and Harbors Act of 1899, Section 401 of the Clean Water Act, Section 402 of the Clean Water Act, Section 307(c) of the Coastal Zone Management Act of 1972, Section 106 of the National Historic Preservation Act of 1966, Section 7 of the Endangered Species Act, the Fish and Wildlife Coordination Act of 1956, the Magnuson-Stevens Fishery Conservation and Management Act, Section 302 of the Marine Protection, Research and Sanctuaries Act of 1972, and Section 7(a) of the Wild and Scenic Rivers Act.

## II. GENERAL CRITERIA

**1.** In order for activities to qualify for these General Permits (GPs), they shall meet the GPs terms and eligibility criteria on pages 1-4, all applicable general conditions (GCs) in Section IV, and terms of the Maine General Permits in Section V. Any activity not specifically listed may still be eligible for authorization under these GPs; prospective permittees are advised to contact the Corps for specific eligibility determination.

**2.** Under these GPs, activities may qualify for the following:

- **SELF-VERIFICATION (SV)**: Notification to the Corps is required at least two weeks before work commences; the Corps will acknowledge receipt and GP eligibility of the SV activity in writing.
- **PRE-CONSTRUCTION NOTIFICATION (PCN)**: Notification to and written verification from the Corps is required. *No work under PCN may proceed until written verification from the Corps is received.*

The thresholds for activities eligible for SV and PCN are defined in the general conditions in Section IV and Maine General Permits in Section V.

**3.** Prospective permittees shall review:

a. Section I to determine if the activity requires Corps authorization.

b. Sections III , IV, and V to determine if the activity is eligible for authorization under these GPs, and specifically whether it is eligible for SV, or whether a PCN is required.

**4.** Prospective permittees are encouraged to contact the Corps with questions at any time (U.S. Army Corps of Engineers, Maine Project Office, 442 Civic Center Drive, Suite 350, Augusta, Maine 04330, ph. 207-623-8367). Pre-application meetings, whether arranged by the Corps or requested by a prospective permittee, are encouraged to facilitate the review of projects. Pre-application meetings and/or site visits help streamline the authorization process by alerting the prospective permittee to potentially time-consuming factors 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, vernal pools, and dredging of contaminated sediments).

**5.** Permittees shall ensure compliance with all applicable GCs in Section IV and GPs in Section V. Non-compliance with these GPs and GCs may subject the permittee to criminal, civil, or administrative criminal penalties, and/or an ordered restoration, and/or the permit may be modified, suspended or revoked by the Corps.

## III. PROCEDURES

**1.** State Approvals. Applicants are responsible for applying for and obtaining any required state or local approvals. Federal and state jurisdiction and review criteria may differ in some instances. State permits may be required for specific projects regardless of the GP category.

In order for authorizations under these GPs to be valid, when any of the following state approvals or statutorily-required reviews is also required, the approvals shall 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 Agriculture, Conservation and Forestry: Land Use Planning Commission (LUPC) permit.
- Maine Department of Marine Resources: Aquaculture Leases and Licenses.
- Maine Department of Agriculture, Conservation and Forestry, Bureau of Parks and Lands, Submerged Lands: Submerged Lands Lease.

**2.** How to Obtain/Apply for Corps Authorization.

a. **Self-Verification (SV)**: Prospective permittees shall confirm that the activity meets all the applicable terms and conditions of SV. 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 (GC 15), the Endangered Species Act (GC 16), the Magnuson-Stevens Fishery Conservation and Management Act (GC 17), and the Wild and Scenic Rivers Act (GC 13). Activities that are eligible for SV are authorized under these GPs provided the prospective permittee has:

i. Confirmed that the activity meets all applicable terms and conditions of SV.

ii. Provided notifications to the State Historic Preservation Officer (SHPO) (the SHPO in the State of Maine is the Maine Historic Preservation Commission, or MHPC) and all five federally-recognized tribes in the State of Maine (Tribal Historic Preservation Officers, or THPOs) listed in Section VIII before submitting the SV to the Corps in order to be reviewed for the presence of historic, archeological, architectural, or tribal resources in the action area that the activity may affect (see GC 15). Prospective permittees are not required to wait for a response to their notifications before submitting the SV to the Corps.

iii. At least two weeks before work is to commence, submitted to the Corps a Self-Verification Notification Form (SVNF, page 36) with all of the following attachments: location map, project plans, and an Official Species List of federally threatened and endangered species that may occur in the activity's action area and the email address of the person who generated the list (see GC 16).

***NOTE: A copy of a state permit application form may be an acceptable surrogate for the SVNF itself; however, the applicant shall not rely on the state permitting agency to provide the Corps a copy of their state permit application.***

b. **Pre-Construction Notification (PCN)**: Notification to, and written verification from the Corps is required. For activities that do not qualify for SV or where otherwise required by the terms and conditions of the GPs, the prospective permittee shall submit a PCN and obtain written verification from the Corps before starting work in Corps jurisdiction. The Corps will coordinate review of all PCN activities with other federal and state agencies, as appropriate. The Corps will attempt to issue written verification of the PCN within 60 days of receiving a complete application.

All prospective permittees for PCN activities shall follow the instructions on found on pages 37 – 42, and in particular:

i. Submit directly to the Corps application form *ENG Form 4345* (pages 40 – 42), or the surrogate state permit application form as noted above.

ii. Provide project information outlined on pages 37 – 42 (Content of a Pre-Construction Notification).
iii. Submit an Official Species List of federally threatened and endangered species that may occur in the activity's action area and the email address of the person who generated the list (GC 16).
iv. Provide notifications to the SHPO (MHPC) and all five THPOs in the State of Maine listed in Section VIII before submitting the PCN to the Corps in order to be reviewed for the presence of historic, archeological, architectural, or tribal resources in the action area that the activity may affect (see GC 15). The PCN shall include documentation that MHPC and all of the THPOs were notified (a copy of the prospective permittee's cover letter or emails to MHPC and the THPOs is acceptable). Prospective permittees are not required to wait for a response to their notifications before submitting a PCN to the Corps.

*c.* **Individual Permit (IP):** Projects that are not eligible for these GPs require an IP (33 CFR 325.5(b)) and prospective permittees shall submit an application directly to the Corps. These GPs do not affect the Corps IP review process or activities exempt from Corps regulation. For general information regarding IPs prospective permittees are encouraged to contact the Corps. ***In addition, the Corps retains discretionary authority on a case-by-case basis to elevate GP-eligible activities 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 a prospective permittee that an IP is required, no work in Corps jurisdiction may be conducted until the Corps issues the required authorization in writing indicating that the work may proceed.***

d. **Emergency Situations:** Contact the Corps immediately in the event of an emergency situation for information on the verification process. Emergency situations are limited to sudden, unexpected occurrences that could potentially 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 an application under standard procedures. Emergency work is subject to the same terms and conditions of these GPs as non-emergency work, and similarly, must qualify for authorization under these GPs; otherwise an IP is required. The Corps will work with all applicable agencies to expedite verification according to established procedures in emergency situations.

## IV. GENERAL CONDITIONS

An activity is authorized under the General Permits (GPs) only if that activity and the permittee satisfy all of the applicable GPs terms and following general conditions (GCs):

**1.** Federal Jurisdiction.
**2.** Minimal Direct, Secondary and Cumulative Effects.
**3.** Other Permits.
**4.** Water Quality and Coastal Zone Management.
**5.** Fills Within 100-Year Floodplains.
**6.** Discretionary Authority.
**7.** Single and Complete Project.
**8.** Use of Multiple General Permits.
**9.** Mitigation (Avoidance, Minimization, and Compensatory Mitigation).
**10.** Corps Projects and Property.
**11.** Navigation.
**12.** National Lands.
**13.** Wild and Scenic Rivers.
**14.** St. John/St. Croix Rivers.
**15.** Historic Properties.
**16.** Federal Threatened and Endangered Species.
**17.** Essential Fish Habitat.
**18.** Aquatic Life Movements and Management of Water Flows.
**19.** Spawning, Breeding, and Migratory Areas.
**20.** Vernal Pools.
**21.** Restoration of Special Aquatic Sites (Including Wetland Areas).
**22.** Invasive and Other Unacceptable Species.
**23.** Soil Erosion, Sediment, and Turbidity Controls.
**24.** Time-of-Year Work Windows/Restrictions.
**25.** Pile Driving and Pile Removal in Navigable Waters.
**26.** Temporary Fill.
**27.** Heavy Equipment in Wetlands or Mudflats.
**28.** Bank and Shoreline Stabilization Including Living Shorelines.
**29.** Stream Work and Crossings, and Wetland Crossings.
**30.** Utility Line Installation and Removal.
**31.** Storage of Seasonal Structures.
**32.** Aquaculture.
**33.** Permit(s)/Authorization Letter On-Site.
**34.** Inspections.
**35.** Maintenance.
**36.** Federal Liability.
**37.** Property Rights.
**38.** Previously Authorized Activities.
**39.** Transfer of GP Verifications.
**40.** Modification, Suspension, and Revocation.
**41.** Special Conditions.
**42.** False or Incomplete Information.
**43.** Abandonment.
**44.** Enforcement Cases.
**45.** Duration of Authorization.

**1. Federal Jurisdiction.**

a. Applicability of these GPs shall be evaluated with reference to federal jurisdictional boundaries (e.g. mean high water mark, high tide line, ordinary high water mark, and wetland boundary). Activities shall be evaluated with reference to "waters of the U.S." under the Clean Water Act (33 CFR 328) and "navigable waters of the U.S." under Section 10 of the Rivers and Harbors Act of 1899 (33 CFR 329). Prospective permittees are responsible for ensuring that the boundaries used satisfy the federal criteria defined at 33 CFR 328 – 229. These sections prescribe the policy, practice and procedures to be used in determining the extent of the Corps jurisdiction. Note: Waters of the U.S. includes all waters pursuant to 33 CFR 328.3(a), and in adjacent wetlands as that term is defined in 33 CFR 328.3(c).

b. Permittees shall identify on project plans wetlands, other special aquatic sites (SAS) including vegetated shallows (or submerged aquatic vegetation, SAV) and mudflats, and other waters, such as lakes and ponds, and perennial and intermittent streams on the project site. Wetlands shall be delineated in accordance with the Corps of Engineers Wetlands Delineation Manual and the most recent regional supplement pertaining to the State of Maine. GP-eligible activities may utilize wetland determinations conducted by State of Maine staff in-lieu of a wetland delineation. For activities located in Essential Fish Habitat (GC 17), permittees shall also identify on project plans natural rocky habitats and shellfish areas in order to satisfy the Magnuson-Stevens Fishery Conservation and Management Act.

**2. Minimal Direct, Secondary and Cumulative Effects.** To be eligible and subsequently authorized by these GPs, an activity shall 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 these GPs and GCs. This may require project modifications involving avoidance, minimization, or compensatory mitigation for unavoidable impacts to ensure that the net adverse effects of an activity are no more than minimal.

**3. Other Permits.** Permittees shall obtain other Federal, State, or local authorizations as required by law. Permittees are responsible for applying for and obtaining all required State of Maine or local approvals including a Flood Hazard Development Permit issued by the town/city. Work that is not regulated by the State of Maine, but is subject to Corps jurisdiction, may still be eligible for authorization under these GPs.

**4. Water Quality and Coastal Zone Management.**

a. Permittees shall satisfy any conditions imposed by the State of Maine and EPA, where applicable, in their Clean Water Act Section 401 Water Quality Certification (WQC) for these GPs, or in any Individual Section 401 WQC. See Section VIII for state-specific contact info 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 these GPs shall be designed, constructed and operated to minimize or eliminate the discharge of pollutants.

b. Permittees shall satisfy any additional conditions imposed by the State of Maine in their Coastal Zone Management (CZM) Act of 1972 consistency concurrences for these GPs, 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.

**5. Fills Within 100-Year Floodplains.** The activity shall comply with applicable Federal Emergency Management Agency (FEMA) approved State of Maine or municipal floodplain management requirements. Permittees should contact FEMA and/or the State of Maine Floodplain Management Program regarding floodplain management requirements (see Section VIII for Federal and state-specific contact info).

**6. Discretionary Authority.** Notwithstanding compliance with the terms and conditions of these GPs, the Corps retains discretionary authority to require a PCN or IP review based on concerns for the aquatic environment or for any other factor of the public interest (see 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.

**7. Single and Complete Project.** 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. These GPs shall not be used for piecemeal work and shall be applied to single and complete projects and as such, the same GP shall not be used more than once for the same single and complete project.

a. For non-linear projects, a single and complete project shall have independent utility. 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.

b. Unless the Corps determines the activity has independent utility, 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. If any component of a single and complete project requires a PCN, the entire single and complete project shall be reviewed under PCN.

c. For linear projects such as power lines or pipelines with multiple crossings, a "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.

**8. Use of Multiple General Permits.** The use of more than one GP for a single and complete project is prohibited, except when the acreage loss of waters of the U.S. authorized by the GPs does not exceed the acreage limit of the GPs with the highest specified acreage limit. For example, if a road crossing over waters is constructed under GP 10, with an associated utility line crossing authorized by GP 9, if the maximum acreage loss of waters of the U.S. for the total project is ≥3 acres it shall be evaluated as an IP.

**9. Mitigation (Avoidance, Minimization, and Compensatory Mitigation).**

a. Activities shall be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the U.S. to the maximum extent practicable to ensure that adverse effects to the aquatic environment are no more than minimal.

b. Compensatory mitigation for unavoidable impacts to waters of the U.S., including direct, secondary and temporal loss, will generally be required for permanent impacts that exceed the SV limits (SV limits are detailed in Section V), and may be required for temporary impacts that exceed the SV 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 secondary effects may generally be excluded from this requirement.

*c.* Mitigation proposals shall follow the guidelines found in the Compensatory Mitigation for Losses of Aquatic Resources; Final Rule April 10, 2008; 33 CFR 332 (which can be found at: *www.nae.usace.army.mil/Missions/Regulatory/Mitigation* under "Compensatory Mitigation for Losses of Aquatic Resources, 33 CFR 332 (Compensatory Mitigation Rule)") and any other regulation. Permittees considering the use of a monetary payment *in-lieu* of permittee-responsible mitigation as compensation for unavoidable impacts to waters of the U.S. in the State of Maine may utilize the Maine Natural Resources Conservation Program (MNRCP). Information regarding this compensatory program can be found at: *www.mnrcp.org* For unavoidable jurisdictional impacts affecting federally-endangered Atlantic salmon and/or its critical habitat, permittees may be required to compensate for the impacts by utilizing the Maine Atlantic Salmon Restoration and Conservation Program. Information regarding this *in-lieu-fee* compensatory program can be found at: *www.maine.gov/dmr/science-research/searun/programs/ilffacts.html*

**10. Corps Projects and Property.**

*a.* Corps projects and property can be found at: *www.nae.usace.army.mil/Missions/Civil-Works*

b. In addition to any authorization under these GPs, prospective permittees shall 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.

c. Any proposed temporary or permanent modification or use 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 or maintained but not necessarily owned by the United States), which may obstruct or impair the usefulness of the Federal project in any manner, is not eligible for SV and requires review and approval by the Corps pursuant to 33 USC 408 (Section 408).

d. A PCN is required for all work in, over, under, or within a distance of three times the authorized depth of a Corps Federal Navigation Project (FNP) and may require permission under Section 408.

e. Any structure or work that extends closer to the horizontal limits of any FNP 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.

f. Where a Section 408 permission is applicable, written verification for the PCN will not be issued prior to the decision on the Section 408 permission request.

**11. Navigation**

a. There shall be no unreasonable interference with general 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.

b. Work in, over, under, or within a distance of three times the authorized depth of an FNP shall specifically comply with GC 10.

c. Any safety lights and/or signals prescribed by the U.S. Coast Guard, State of Maine or municipality, through regulations or otherwise, shall be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the U.S.

d. The permittee understands and agrees that, if future operations by the U.S. 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.

**12. National Lands.** Activities that impinge upon the value of any National Lands or Federal Properties including but not limited to a National Wildlife Refuge, National Forest, or any area administered by the National Park Service , U.S. Fish and Wildlife Service or U.S. Forest Service are not eligible for SV and require PCN.

**13. Wild and Scenic Rivers.**

a. The following activities in designated rivers of the National Wild and Scenic River (NWSR) System, or in a river designated by Congress as a "study river" for possible inclusion in the system, require a PCN unless the National Park Service has determined in writing to the prospective permittee that the proposed work will not adversely affect the NWSR designation or study status:

i. Activities that occur in NWSR segments, in and 0.25 miles up or downstream of NWSR segments, or in tributaries within 0.25 miles of NWSR segments.
ii. Activities that occur in wetlands within 0.25 miles of NWSR segments.
iii. Activities that have the potential to alter free-flowing characteristics in NWSR segments.

b. As of October 14, 2020, National Wild and Scenic Rivers and congressional study rivers in Maine include: the 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 92.5 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 tributaries (the York River is currently under study).

**14. St. John/St. Croix Rivers.** A PCN is required for any work within the Saint John and Saint Croix River basins that requires approval of the International Joint Commission. In addition, a PCN 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.

**15. Historic Properties.**

a. No undertaking shall cause effects (as 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, 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 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 archeological consultants in coordination with the Corps and the State Historic Preservation Officer (SHPO) (the SHPO in the State of Maine is the Maine Historic Preservation Commission, MHPC) and/or the five federally-recognized tribes in the State of Maine (Tribal Historic Preservation Officers, or THPOs). The MHPC, the THPOs, 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 MHPC and/or the THPO(s).

b. For activities eligible for these GPs, permittees shall ensure that the activity will not cause effects as stated above in 15(a). In order to comply with this condition, both SV and PCN prospective permittees shall notify MHPC and all five THPOs for their identification of historic properties. MHPC and the THPOs will generally respond within 30 days of receiving the notification if they believe that the activity may have an adverse effect to historic properties. A PCN is required if an activity may have an adverse effect to historic properties. The PCN shall be submitted as soon as possible if a proposed activity may cause effects as stated above in 15(a) a to ensure that the Corps is aware of any potential effects of the proposed activity on any historic property to ensure all Section 106 requirements are met.

c. All PCNs shall:

i. Show notification to MHPC and all five THPOs 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 MHPC or the THPO(s) indicating that there are or are not historic properties affected.

*d.* The requirements to comply with Section 106 of the NHPA may be satisfied by a Programmatic Agreement (PA) or Programmatic Consultation (PC) with the Corps, New England District or another federal agency. New England District PAs and PCs are found at *www.nae.usace.army.mil/Missions/Regulatory*

e. If the permittee discovers any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by these permits, the permittee shall immediately notify the district engineer of what was found, and 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.

f. Federal agencies should follow their own procedures for complying with the requirements of Section 106 of the NHPA. Federal permittees shall provide the Corps with the appropriate documentation to demonstrate compliance with those requirements.

g. Federal and non-federal applicants should coordinate with the Corps before conducting any onsite archeological work (reconnaissance, surveys, recovery, etc.) requested by MHPC or the THPOs, as the Corps will determine the Permit Area for the consideration of historic properties based on 33 CFR 325 Appendix C. This is to ensure that work done is in accordance with Corps requirements.

**16. Federal Threatened and Endangered Species.**

a. No activity is authorized by these GPs 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 or proposed 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;

iii. Is "likely to adversely affect" a listed species or critical habitat unless Section 7 consultation has been completed by the Corps or another lead action agency in coordination with the Corps under the provisions of a Programmatic Agreement (PA) or Programmatic Consultation (PC); or

iv. Violates the ESA.

b. All prospective permittees shall attach to their SVNF or PCN an Official Species List obtained from the U.S. Fish and Wildlife Service's Information for Planning and Consultation (IPaC) found at: *https://ecos.fws.gov/ipac* and provide the email address of the person who generated the list.

*c.* For proposed activities in tidal waters, prospective permittees should also refer to the National Oceanic and Atmospheric Administration (NOAA) Fisheries' Section 7 Mapper for federally-listed species found at: *https://noaa.maps.arcgis.com/apps/webappviewer/index.html*

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, may be affected by the proposed work. An activity may remain eligible for SV if the only listed species affected is the northern long-eared bat (*Myotis septrionalis*), and only after Section 7 consultation has been completed by the Corps under the 4(d) Rule Streamlined Consultation.

e. Federal agencies shall follow their own procedures for complying with the requirements of the ESA while ensuring that the Corps and any other federal action agencies are included in the consultation process.

f. Non-federal representatives designated by the Corps to conduct informal consultation or prepare a biological assessment shall follow the requirements in the designation document(s) and the ESA. Non-federal representatives shall also provide the Corps with the appropriate documentation to demonstrate compliance with those requirements. The Corps will review the documentation and determine whether it is sufficient to address ESA compliance for the GP activity, or whether additional ESA consultation is necessary.

*g.* The requirements to comply with Section 7 of the ESA may be satisfied by a Programmatic Agreement (PA) or Programmatic Consultation (PC) with the Corps, New England District or another federal agency. New England District PAs and PCs are found at: *www.nae.usace.army.mil/Missions/Regulatory*

**17. Essential Fish Habitat (EFH)**.

a. PCN activities in tidal waters and the following rivers and streams, including all tributaries to the extent that they are currently or were historically accessible for salmon migration, shall be reviewed for the potential to adversely affect EFH (activities meeting SV criteria have been determined to result in no more than minimal adverse effects to EFH and therefore need no additional review):

| | | | |
|---|---|---|---|
| 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 | | | |

b. Prospective permittees may be required to describe and identify potential adverse effects to EFH and should refer to the NOAA Fisheries' EFH Mapper found at: *www.fisheries.noaa.gov/resource/map/essential-fish-habitat-mapper*

*c.* The requirements to comply with the Magnuson-Stevens Fishery Conservation and Management Act may be satisfied by a Programmatic Agreement (PA) or Programmatic Consultation (PC) with the Corps, New England District or another federal agency. New England District PAs and PCs are found at: *www.nae.usace.army.mil/Missions/Regulatory*

**18. Aquatic Life Movements and 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 permanently 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 and wetlands shall be:

i. Suitably spanned, bridged, culverted, 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 crossing.

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. For work in tidal waters, in-stream controls (e.g. cofferdams) should be installed in such a way as to not obstruct fish passage.

d. To the maximum extent practicable, the preconstruction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity shall 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 pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g. stream restoration or relocation activities).

e. Activities that temporarily or permanently adversely impact upstream or downstream flood conditions require a PCN.

**19. Spawning, Breeding, and Migratory Areas.**

a. Jurisdictional activities in waters of the U.S. such as certain excavations, discharges of dredged or fill material, and/or suspended sediment producing activities 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 U.S. that provide value as breeding areas for migratory birds must be avoided to the maximum extent practicable. The permittee is responsible for ensuring their action complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting the U.S. Fish and Wildlife's Maine Field Office (see Section VIII for contact info) to determine applicable measures to reduce impacts to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

**20. Vernal Pools.**

a. A PCN is required if a discharge of dredged or fill material is proposed within a vernal pool depression located within waters of the U.S.

b. GC 20(a) above does not apply to projects that are within a municipality that meets the provisions of a Corps-approved vernal pool Special Area Management Plan (SAMP) and are otherwise eligible for SV, and the applicant meets the requirements to utilize the vernal pool SAMP.

**21. Restoration of Special Aquatic Sites (Including Wetland Areas).**

a. In areas of authorized temporary disturbance, if trees are cut they 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.

b. The introduction or spread of invasive plant species in disturbed areas shall be controlled. If construction mats are to be used in areas of invasive plant species, they shall be thoroughly cleaned before re-use.

c. Wetland areas where permanent disturbance is not authorized shall be restored to their original condition and elevation. Original condition means 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. Restoration shall typically commence no later than the completion of construction.

*d.* Upon completion of construction, all areas of authorized disturbed wetland area shall be stabilized with a wetland seed mix containing only plant species native to New England and shall not contain any species listed in the "Invasive and Other Unacceptable Plant Species" Appendix K in the "New England District Compensatory Mitigation Guidance" found at: *www.nae.usace.army.mil/Missions/Regulatory/Mitigation*

**22. Invasive and Other Unacceptable Species.**

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 these GPs. 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 shall justify the use of non-native species or cultivars.

c. For the purposes of these GPs, plant species that are considered invasive and unacceptable are provided in Appendix K "Invasive and Other Unacceptable Plant Species" of the most recent "New England District Compensatory Mitigation Guidance" and is found at: *www.nae.usace.army.mil/Missions/Regulatory/Mitigation* The June 2009 "U.S. Army Corps of Engineers Invasive Species Policy" provides policy, goals and objectives and is located at *www.nae.usace.army.mil/Missions/Regulatory/Invasive-Species* If an Invasive Species Control/Management Plan has been prepared it should be included with any SV or PCN.

**23. 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.

**24. Time-of-Year Work (TOY) Windows/Restrictions.** In-water work shall be conducted during the following TOY work windows (work allowed) under SV and any in-water work proposed during the following TOY restrictions (no work) shall be reviewed under PCN (and shall contain written justification for deviation from the work allowed windows). The term "in-water work" does not include conditions where the work site is "in-the-dry" (e.g. intertidal areas exposed at low tide). The term also does not include work contained in a cofferdam so long as the cofferdam was installed and subsequently removed within the work allowed window.

| | TOY Restriction (***no work***) | TOY Work Window (***work allowed***) |
|---|---|---|
| Non-tidal waters | Oct. 1st to Jul. 14th | Jul. 15th to Sep. 30th |
| Tidal waters | Apr. 10th to Nov. 7th | Nov. 8th to Apr. 9th |

Alternate work windows proposed under PCN will generally be coordinated with the U.S. Fish and Wildlife Service, National Marine Fisheries Service, Maine Department of Inland Fisheries and Wildlife, and/or Maine Department of Marine Resources and resulting written verifications may include species-specific work allowed windows.

**25. Pile Driving and Pile Removal in Navigable Waters.**

a. Derelict, degraded, or abandoned piles and sheet piles in the project area shall be removed in their entirety as practicable and properly disposed of in an upland location and not in wetlands. In areas of fine-grained substrates, piles/sheets shall be removed by direct, vibratory, or clamshell pull method in order to minimize potential turbidity and sedimentation impacts. If removal is not practicable, said piles/sheets shall be cut off or driven to a depth of at least one foot below substrate.

b. Work involving pile installation and/or removal should adhere to one of the five methods below:

i. "In-the-dry", or

ii. In-water between Nov. 8th to Apr. 9th, or

iii. Drilled and pinned to ledge, or

iv. Vibratory hammers used to install any size and quantity of wood, concrete, or steel, or impact hammers limited to one hammer and <50 piles installed/day with the following: wood piles of any diameter, concrete piles ≤18-inches diameter, steel piles ≤12-inches diameter if: (1) the hammer is ≤3,000 pounds and a wood cushion or equivalent is used between the hammer and steel pile, or (2) a soft start is used. Soft starts require an initial set of three strikes from the impact hammer at 40% energy, followed by a 1-minute waiting period between subsequent three-strike sets. The soft-start procedure shall be conducted any time hammering ceases for more than 30 minutes.

**26. Temporary Fill.**

a. Temporary fills, including but not limited to 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.

b. 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. Temporary fill shall be placed in a manner that will prevent it from being eroded by expected high flows.

c. Unconfined temporary fill authorized for discharge into waters of the U.S. shall consist of material that minimizes impacts to water quality (e.g. washed stone, stone, etc.).

d. Appropriate measures shall 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. Materials shall be placed 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.

e. Construction debris and/or deteriorated materials shall not be placed or otherwise located in waters of the U.S.

***27.*** **Heavy Equipment in Wetlands or Mudflats.** Operating heavy equipment (drill rigs, fixed cranes, etc.) within wetlands shall be minimized, and to the maximum extent practicable such equipment shall not be stored, maintained or repaired in wetlands. Where construction requires heavy equipment operation in wetlands, the equipment shall: a) have low ground pressure (typically <3 psi); b) be placed on swamp/construction/timber mats (herein referred to as "mats") that are adequate to support the equipment in such a way as to minimize disturbance of wetland soil and vegetation; or c) be operated on adequately dry or frozen wetlands such that shear pressure does not cause subsidence of the wetlands immediately beneath equipment and upheaval of adjacent wetlands. Mats are to be placed in the wetland from the upland or from equipment positioned on mats if already working within a wetland. Other support structures that are capable of safely supporting equipment may be used with written Corps authorization. Similarly, the permittee may request written authorization from the Corps to waive use of mats during frozen or dry conditions. Construction mats should be managed in accordance with construction mat best management practices (BMPs) found at:
*www.nae.usace.army.mil/Missions/Regulatory/State-General-Permits/Maine-General-Permit*

**28. Bank and Shoreline Stabilization Including Living Shorelines.**

a. Projects involving construction of or repair, replacement, and maintenance of bank or shoreline stabilization structures including living shorelines within Corps jurisdiction shall be designed to minimize environmental effects, effects to neighboring properties, scour, etc. to the maximum extent practicable.

b. Prospective permittees shall design and construct these stabilization projects using this sequential avoidance and minimization process: avoidance of aquatic resource impacts, diversion of overland flow, vegetative stabilization, living shorelines, stone-sloped surfaces, and walls/bulkheads. New vertical walls/bulkheads shall only be used in situations where reflected wave energy can be tolerated. Prospective permittees proposing new vertical walls/bulkheads shall provide written justification demonstrating why other methods of stabilization are not practicable and how the surrounding area would be affected by the resulting reflected wave energy.

**Additional conditions to meet SV eligibility criteria for *non-tidal* bank and shoreline stabilization activities:**

a. Fill shall be ≤500 linear feet in total length as measured below the plane of the ordinary high water mark (OHWM), includes total if more than one stream bank.
b. Fill placed below the plane of the OHWM shall be ≤1 cubic yard per linear foot.
c. Fill shall not be angled steeper than 1H:1V.
d. No discharge of fill in special aquatic sites other than wetlands.
e. Stone revetment shall be comprised of angular material.
f. No material shall be of the type, or placed in any location, or in any manner, to impair surface water flow into or out of any water of the U.S.
g. No material shall be 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).
h. The activity shall not be a stream channelization activity.

**Additional conditions to meet SV eligibility criteria for *tidal* bank and shoreline stabilization activities:**

a. All in-water work shall be conducted "in-the-dry".
b. Fill shall be ≤500 linear feet in total length as measured below the plane of the high tide line (HTL) and shall be ≤200 linear feet in total length as measured below the plane of the mean high water mark (MHWM), includes total for more than one bank. Vertical structures shall be ≤200 linear feet in total length as measured below the plane of the MHWM and shall be ≤18 inches waterward of the existing vertical face.
c. Fill placed below the plane of the HTL shall be ≤1 cubic yard per linear foot.
d. Stone revetment shall be comprised of angular material.
e. Shall not impact special aquatic sites (SAS, incl. submerged aquatic vegetation, SAV), impacts to natural rocky habitats are ≤100 square feet, and impacts to intertidal and shellfish areas are ≤1,000 square feet).
f. No structures/fill shall be steeper than 1H:1V.
g. No new groins, breakwaters, or jetties.

**29. Stream Work and Crossings, and Wetland Crossings.**

a. A PCN is required for all new and replacement crossings in navigable waters.

b. In order to effectively size and configure crossings in navigable waters, new and replacement crossings shall consider factors including but not limited to: local tidal elevations over the range of tidal heights, basin topography and bathymetry, existing and proposed road elevations. Flood risk tolerance, conditions of habitat and natural community types present, and sea level rise during the useful life of the crossing.

c. A PCN is required for activities that result in unavoidable impacts to wetlands in excess of SV thresholds.

d. In-stream work and crossings and wetland crossings shall adhere to all applicable GCs including but not limited to:

i. GC 16 (Federally Threatened and Endangered Species)
ii. GC 17 (Essential Fish Habitat)
iii. GC 18 (Aquatic Life Movements and Management of Water Flows)

iv. GC 23 (Soil Erosion, Sediment and Turbidity Controls)
v. GC 24 (Time-of-Year Work Windows/Restrictions)
vi. GC 26 (Temporary Fill)
vii. GC 28 (Bank Stabilization)

e. Slip Lining. Work resulting in a decreased width, height, or diameter of an existing crossing (e.g. slip lining and invert lining) is discouraged and requires PCN. Written justification shall be provided for this activity.

f. Culvert Extensions. A PCN is required for any extension to an existing culvert.

g. Scour protection or armoring of the inlet and/or outlet of a crossing shall not disrupt normal flow patterns or 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 (see GC 18).

h. 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 18. 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 temporary stream crossings).

**Additional conditions to meet SV eligibility criteria for Stream Work and Crossings:**

a. Crossings shall be designed and constructed using the techniques and principles outlined in Stream Simulation, Stream Smart, Habitat Connectivity Design.
*b.* Crossings shall be designed to be at least 1.2 times bankfull width. Any footings, abutments, and/or abutment armoring shall also be at least 1.2 times bankfull width.
c. Crossings shall have a natural bottom substrate under or within the structure matching the characteristics of the substrate in the natural stream channel. Crossings shall be designed and constructed with appropriate streambed forms and streambed characteristics so that water depths and velocities are comparable to those found in the adjacent natural channel at a variety of flows.
d. Crossings shall include a bank on both sides of the stream matching the horizontal profile of the existing stream and banks in order to allow terrestrial passage for wildlife and to prevent undermining of the footings as applicable.
e. Closed bottom culverts shall be embedded at least 25 percent of the maximum height of the culvert.
f. No unconfined fill or excavation in flowing waters is allowed. In-stream construction work shall be conducted "in-the-dry" under no-flow conditions or by using cofferdams, temporary flume pipes, culverts, etc. Downstream flows shall be maintained during in-stream construction. It is recommended that project plans include pertinent details for working in-the-dry and maintaining downstream flows.
g. Conditions (a) thru (e) immediately above do not apply to temporary stream crossings; however, in addition to conditions (f) immediately above, temporary stream crossings shall adhere to the following:
    i. Be 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 shall be large enough to allow for easy removal without disrupting the streambed.
    ii. Be designed and maintained to withstand and pass high flows. Water height shall be no higher than the top of the culvert's inlet. A minimum culvert diameter of two feet is required to pass debris. Culverts shall be aligned to prevent bank erosion or streambed scour.
    iii. Be equipped with energy dissipating devices installed downstream if necessary to prevent scour.
    iv. Be designed and maintained to prevent soil from entering the waterbody.
    v. Be removed upon the completion of work. Impacts to the streambed or banks requires restoration to their original condition using the methods in (a) above.

**PCN Conditions for Stream Work and Crossings:**

a. Crossings are recommended to meet the conditions for SV; written justification shall be provided for any deviation from SV conditions.

b. Crossings shall 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, Stream Smart, or Habitat Connectivity.

**Additional Conditions for Wetland Crossings:**

a. New and replacement wetland crossings that are permanent shall be constructed in such a manner as to preserve hydraulic and ecological connectivity, at its present level, between the wetlands on either side of the road. Crossing structures commonly include but are not limited to spans and culverts. To meet this condition, spans or culverts should be placed at least every 50 feet with an opening at least 2 feet high and 3 feet wide at ground level. Closed bottom culverts should be embedded at least 6 inches and should have a natural bottom substrate within the structure. Alternative crossing designs that preserve wetland hydraulic and ecological connectivity (e.g. "rock sandwiches) may also be considered.

b. Any work that results in flooding, or impacts to wetland drainage from the upgradient side of the wetland crossing does not qualify for SV.

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.

**30. Utility Line Installation and Removal.**

a. Utility lines in jurisdictional waters should be installed subsurface and shall be maintained in such a way so that they remain subsurface. If it is necessary to discharge dredged or filled material 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 casting into wetlands from utility trenches).

b. For subsurface utility lines the bottom and side slope cover associated with the initial installation under Federal Navigation Projects (FNPs) is a technical determination. The depth requirement varies based on geotechnical (composition of bottom materials and layering), hydraulic (current, or wave induced scour depth), navigation (propeller induced scour depth and ships' anchor penetration), maintenance dredging (penetration of barge spuds), construction factors (energy from blasting potentially transmitted to utility crossings), physical conditions (exposed open water conditions or sheltered/harbor conditions), and the proposed location of the utility crossing within any FNP or within navigable waters, including areas dredged by others. On a case-by-case basis, the Corps will determine the depth and cover requirements for each proposed utility crossing. Additional conditions to the GP will be attached to address pre and post installation requirements. 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 crossing navigable waters require PCN and shall meet minimum clearances per 33 CFR 322.5(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 these GPs. 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. For new installations within waters of the U.S., any abandoned or inactive utility lines should be removed and faulty lines (e.g., leaking hazardous substances, petroleum products, etc.) shall be removed or repaired to the extent practicable. A PCN 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.

g. Trenches should be backfilled with native sediment immediately after completion of work.

h. Pre-construction elevations should be re-established. Any additional material needed to accomplish this should be of consistent type and grain-size as the existing substrate sediment.

i. Utility line activities in non-tidal waters adjacent to special aquatic sites, and all work in tidal waters should utilize horizontal directional drilling as practicable.

**31. 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 shall be stored in an upland location and not in wetlands, tidal wetlands, their substrate, or on mudflats. These seasonal structures may be stored on the fixed, pile-supported portion of a structure that is waterward of the mean high water mark or the ordinary high water mark, e.g. the storage of a ramp or gangway on the pile-supported pier. Seasonal storage of structures in navigable waters, e.g., in a protected cove, requires prior Corps approval and local harbormaster approval.

**32. Aquaculture.** Activities involving the cultivation of Atlantic salmon and other salmonids, or other federally-listed threatened or endangered species are not eligible for authorization under these GPs. All other aquaculture activities shall adhere to all applicable GCs including but not limited to:

a. GC 3 (Other Permits) In particular, permittees shall maintain a current State of Maine Department of Marine Resources lease or license.
b. GC 10 (Corps Projects and Property)
c. GC 11 (Navigation)
d. GC 16 (Federal Threatened and Endangered Species)
e. GC 17 (Essential Fish Habitat)
f. GC 18 (Aquatic Life Movements and Management of Water Flows)
g. GC 31 (Storage of Seasonal Structures)

**Additional conditions to meet SV eligibility criteria for Tidal Aquaculture:**

a. Shall not exceed 400 square feet in area.
b. Shall receive signed approval from Harbormaster or appropriate Town Official.
c. Shall not include enclosures or impoundments.
d. Shall not be located in or within a distance of three times the authorized depth of a FNP.
e. Shall not be located in or impinge upon the value of National Lands and Federal Properties including but not limited to National Parks and National Wildlife Refuges.
f. Shall not impact special aquatic sites (SAS, incl. submerged aquatic vegetation, SAV), impacts to natural rocky habitats are ≤100 square feet, and impacts to intertidal and shellfish areas are ≤1,000 square feet.
g. No structures, cages, gear, or shell hash shall be located in/within 25 feet of SAV.
h. All gear, except for mooring tackle, when not in use on the site shall be stored in an upland location above the mean high water mark and not on wetland (incl. salt marsh).

**33. Permit(s)/Authorization Letter On-Site.** The permittee shall ensure that a copy of the terms and conditions of these GPs and any accompanying authorization letter with attached plans are at the site of the work authorized by these GPs whenever work is being performed and that all construction personnel performing work which may affect waters of the U.S. are fully aware of the accompanying 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 these GPs. This shall be achieved by including the entire permit authorization in the specifications for work. The term "entire permit authorization" means all terms and conditions of the GPs, the GPs, and the authorization letter (including its drawings, plans, appendices and other attachments) and subsequent permit modifications as applicable. 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.

**34. Inspections.** The permittee shall allow the Corps to make periodic inspections at any time deemed necessary in order to ensure that the work is eligible for authorization under these GPs, is being, or has been performed in accordance with the terms and conditions of these GPs. To facilitate these inspections, the permittee shall

complete and return to the Corps the Work-Start Notification Form and the Compliance Certification Form when either is provided with an authorization letter. The Corps may also require post-construction engineering drawings and/or photographs for completed work or post-dredging survey drawings for any dredging work to verify compliance.

**35. Maintenance**. The permittee shall maintain the activity authorized by these GPs in good condition and in conformance with the terms and condition of these permits. This does not include maintenance dredging, related disposal, or beach nourishment projects, which are subject to review thresholds for GP 5 on page 30, unless specified in written authorization from the Corps.

**36. Federal Liability.** In issuing these permits, 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; or

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

**37. Property Rights.** Per 33 CFR 320.4(g)(6), these GPs do 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.

**38. Previously Authorized Activities.**

a. Projects that received prior authorization from the Corps (via Category 1 or 2) and that completed authorized work under the previous nationwide permits, programmatic permits, regional general permits or letters of permission, shall remain authorized in accordance with the original terms and conditions of those authorizations, including their terms, general conditions, expiration date, and any special conditions provided in a written verification.

b. Activities authorized pursuant to 33 CFR Part 330.3 ("Activities occurring before certain dates") are not affected by these GPs.

c. Any work not commenced, not under contract to commence, nor completed that was originally authorized by the Corps under the GP in effect between October 13, 2015 and October 13, 2020 remains authorized subject to the terms and general conditions of this GP along with any special conditions included in written authorizations. Exception: if previously authorized work has not commenced or not under contract to commence and a new federally-listed threatened or endangered species may be affected, the Corps shall consult with the U.S. Fish and Wildlife Service or NOAA Fisheries prior to re-authorizing the work under these GPs. Requests for re-authorization shall include an Official Species List per GC 16.

**39. Transfer of GP Verifications**. 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 to validate the transfer. A copy of the GP verification shall be attached to the letter, the letter shall contain the name, address, phone number and email of the transferee (new owner), shall include the following statement and signature, and be mailed to: U.S. Army Corps of Engineers, Maine Project Office, 442 Civic Center Drive, Suite 350, Augusta, Maine 04330:

> "When the structures or work authorized by these GPs are still in existence at the time the property is transferred, the terms and conditions of these GPs, including any special conditions, will continue to be binding on the new owner(s) of the property."
>
> _____
> Transferee Printed Name
>
> _____
> Transferee Signature Date

**40. Modification, Suspension, and Revocation.** These GPs and any individual authorization issued thereof may be either modified, suspended, or revoked, in whole or in part, pursuant to the policies and procedures of 33 CFR 325.7, and any such action shall not be the basis for any claim for damages against the U.S.

**41. Special Conditions.** The Corps may independently or in coordination with federal resource agencies impose special conditions on a project authorized pursuant to these GPs 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.

**42. False or Incomplete Information.** If the Corps makes a determination regarding the eligibility of a project under these GPs 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.

**43. Abandonment.** If the permittee decides to abandon the activity authorized under these GPs, 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.

**44. Enforcement cases.** These GPs do 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.

**45. Duration of Authorization.**

a. These GPs expire on October 14, 2025 unless otherwise specifically indicated in an individual authorization letter. Activities authorized under these GPs that have either commenced or are under contract to commence in reliance upon this authorization will have an additional year from the expiration date to complete the work. The permittee must be able to document to the Corps' satisfaction that the activity commenced or was under contract to commence by the expiration date of these GPs. If work is not completed within the one year extended timeframe, the permittee must contact the Corps. The Corps may issue a new authorization, provided the activity meets the applicable terms and conditions of the Maine GPs that are in effect at the time.

b. Activities authorized under these GPs will remain authorized until these GPs expire, unless discretionary authority has been exercised on a case-by-case basis to modify, suspend, or revoke the authorization in accordance with 33 CFR 325.2(e)(2). Activities completed under the SV or PCN authorizations of these GPs will continue to be authorized after its expiration date.

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Tammy R. Turley
Chief, Regulatory Division

## V. MAINE GENERAL PERMITS

An activity is authorized under General Permits 1 through 23 listed below only if that activity and the permittee satisfy all of the applicable GP terms and general conditions. Any activity not specifically listed may still be eligible for authorization under these GPs; prospective permittees are advised to contact the Corps for specific eligibility determination.

**1. Repair, Replacement, and Maintenance of Authorized Structures and Fills**;
Repair, rehabilitation, or replacement of any previously authorized, currently serviceable structure, or fill and minor expansions thereof.

**2. Moorings**
New moorings and mooring fields, the relocation of previously authorized moorings, expansions, boundary reconfigurations or modifications of previously authorized mooring fields, conversion of mooring types (e.g. private to rental), and maintenance and replacement of moorings. Moored floats, lobster cars, rafts, and similar float structures are not included in this GP.

**3. Structures, Floats and Lifts**
New, expansions, reconfigurations or modifications of structures for navigational access in waters of the U.S. including but not limited to temporary/seasonal or permanent pile and crib-supported piers, floats, stairs, shore outhauls, and boat and float lifts/ways. Floats may include lobster cars, work floats, moored floats, swim floats, and shellfish upweller floats.

**4. Aids to Navigation, and Temporary Recreational Structures**
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, chapter I, subchapter C, part 66) and temporary buoys, markers, small floating docks, and similar structures placed for recreational use during specific events such as fireworks displays, water skiing competitions, and boat races or seasonal use.

**5. Dredging, Disposal of Dredged Material, Beach Nourishment, and Rock Removal and Relocation**
New, maintenance, and improvement dredging, including: a) Disposal of dredged material at a confinedaquatic disposal, beach nourishment, near shore, designated open water or ocean water disposal site(s), provided the Corps finds the dredged material to be suitable for such disposal; (b) Beach nourishment not associated with dredging; (c) Rock removal and relocation for navigation.

**6. U.S. Coast Guard Approved Bridges and Causeways**
Discharges of dredged or fill material incidental to the construction and modification of bridges across navigable waters of the U.S., including cofferdams abutments, foundation seals, piers, approach fills, and temporary construction and access fills provided that the USCG authorizes the construction of the bridge structure under Section 9 of the Rivers and Harbors Act of 1899 or other applicable laws.

**7. Bank and Shoreline Stabilization Including Living Shorelines**
Bank stabilization activities necessary for erosion protection along the banks of lakes, ponds, streams, and marine/tidal waters. Includes bulkheads, seawalls, riprap, revetments or slope protection & similar structures as well as vegetative planting, soil bioengineering or alternative techniques that are a combination of the two (i.e. living shorelines), specifically for the purpose of shoreline protection.

**8. Residential, Commercial and Institutional Developments, and Recreational Facilities**
Discharges of dredged or fill material into waters of the U.S for the construction or expansion of: residences and residential subdivisions; commercial and institutional buildings or subdivisions; and recreational facilities; and attendant features including but not limited to roads, parking lots, garages, stormwater management facilities, yards, and utilities.

**9. Utility Line Activities**

Activities required for (a) the construction, maintenance, relocation, repair, & removal of utility lines, including outfall and intake structures, and the associated excavation, backfill, or bedding for utility lines; (b) the construction, maintenance or expansion of utility line substation facilities associated with a power/utility line in non-tidal waters; and (c) the construction and maintenance of foundations for overhead utility line towers, poles, and anchors provided the foundations are the minimum size necessary and separate footings for each tower leg (rather than a larger single pad) are used where feasible. This GP authorizes the construction of access roads to facilitate construction of the above activities provided the activity, in combination with all other activities included in one single and complete project.

**10. Linear Transportation Projects**

Activities required for the construction, expansion, modification, or improvement of linear transportation projects (e.g., driveways, roads, highways, railways, trails, airport runways, and taxiways) and attendant features.

**11. Mining Activities**

Temporary or permanent discharges of dredged or fill material into waters of the U.S. for mining activities.

**12. Boat Ramps and Marine Railways**

Temporary or permanent discharges of dredged or fill material, excavation and other work in waters of the U.S. required for the construction of temporary or permanent boat ramps and marine railways.

**13. Land and Water-Based Renewable Energy Generation Facilities and Hydropower Projects**

Structures and work and discharges of dredged or fill material into waters of the U.S. for the construction, expansion, modification or removal of: (a) land-based renewable energy production facilities (e.g. solar and wind) and their attendant features; (b) water-based wind or hydrokinetic renewable energy generation pilot projects and their attendant features; and (c) discharges of dredged or fill materialassociated with hydropower projects. Attendant features may include, but are not limited to, land-based collection and distribution facilities, control facilities, and parking lots.

**14. Reshaping Existing Drainage Ditches and Mosquito Management**

Discharges to modify the cross-sectional configuration of currently serviceable drainage ditches constructed in waters of the U.S., for the purpose of improving water quality by regrading the drainage ditch with gentler slopes, which can reduce erosion, increase growth of vegetation, and increase uptake of nutrients and other substances by vegetation. Also authorized are mosquito reduction activities.

**15. Response Operations for Oil or Hazardous Substances**

Activities conducted in response to a discharge or release of oil and hazardous substances that are subject to the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR 300) including containment, cleanup, and mitigation efforts, provided activities are done under either (i) The Spill Prevent, Control & Countermeasure Plan require by 40 CFR 112.3; (ii) The direction or oversight of the Federal on-site coordinator designated by 40 CFR 300; or (iii) Any approved existing State, regional or local contingency plan provided that the Regional Response Team (if one exists in the area) concurs with the proposed response efforts or does not object to the response effort. Activities required for the cleanup of oil releases in waters of the U.S. from electrical equipment that are governed by EPA's polychlorinated biphenyl (PCB) spill response regulations at 40 CFR 761. Booms placed in tidal waters. Use of temporary structures & fills for spill response training exercises.

**16. Cleanup of Hazardous and Toxic Waste**

Specific 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.

**17. Scientific Measurement Devices**

Scientific devices for measuring and recording scientific data, such as staff gauges, tide and current gauges, meteorological stations, water recording and biological observation devices, water quality testing and improvement devices, and similar structures.

**18. Survey Activities**

Survey activities such as soil borings, core sampling, seismic exploratory operations, plugging of seismic shot holes and other exploratory-type bore holes, exploratory trenching and historic resources surveys (but not recovery).

**19. Agricultural Activities**

Regulated discharges of dredged or fill material in non-tidal waters of the U.S. for agricultural activities, including the construction of building pads for farm buildings. Authorized activities include: (a) installation, placement, or construction of drainage tiles, ditches, or levees; mechanized land clearing; land leveling; the relocation of existing serviceable drainage ditches; and similar activities; (b) construction of farm ponds, excluding perennial streams, provided the farm pond is used solely for agricultural purposes; and (c) discharges of dredged or fill material to relocate existing serviceable drainage ditches constructed in non-tidal streams.

**20. Fish and Wildlife Harvesting, Enhancement, and Attraction Devices**

Activities in waters of the U.S. associated with fish and wildlife harvesting devices including pound nets, crab and lobster traps, crab dredging, eel pots, duck blinds, and clam and oyster digging, fish aggregating devices, and small fish attraction devices such as open water fish concentrators (sea kites, etc.). This GP does not include aquaculture activities.

**21. Habitat Restoration, Establishment and Enhancement Activities**

Activities in waters of the U.S. associated with the restoration, enhancement and establishment of non-tidal and tidal wetlands and riparian areas, including invasive, non-native or nuisance species control; the restoration and enhancement of non-tidal streams and other non-tidal open waters; the relocation of non-tidal waters, including non-tidal streams & associated wetlands for reestablishment of a natural stream morphology and reconnection of the floodplain; the restoration and enhancement of shellfish, finfish and wildlife; and the rehabilitation or enhancement of tidal streams, tidal wetlands and tidal open waters; provided those activities result in net increases in aquatic resource functions and services. Also included are shellfish enhancement measures including but not limited to “brushing”, clam pots, boxes, and netting.

**22. Stream and Wetland Work and Crossings**

Activities required for the construction, expansion, modification, or improvement of linear transportation projects that cross waters of the U.S. (e.g., driveways, roads, highways, railways, trails, airport runways, and taxiways) and attendant features. Crossing structures include, but are not limited to temporary or permanent jurisdictional spans, bridges, culverts, and fords. Any stream channel modification is limited to the minimum necessary to construct or protect the project; such modifications must be in the immediate vicinity of the project.

**23. Aquaculture**

The installation of buoys, floats, racks, trays, nets, lines or other structures in waters of the U.S. for the containment and cultivation of fish, shellfish and seaweed/kelp. Also authorized are anchored upweller floats, small-scale shellfish hatchery seawater intake/discharge structures, and discharges of dredged or fill material associated with cultivation such as the placement of cultch or spatted-shell on bottom.

***USER NOTE: All Self-Verification and Pre-Construction Notification activities shall comply with all applicable terms (pages 1 - 4), General Conditions (pages 5 - 19), and additional terms below.***

| GENERAL PERMITS FOR THE STATE OF MAINE | | |
|---|---|---|
| **A. INLAND WATERS AND WETLANDS** | Inland Waters and Wetlands are defined as waters that are regulated under Section 404 of the Clean Water Act, including rivers, streams, lakes, ponds, and wetlands, and ***excludes Section 10 Navigable Waters of the U.S.*** The jurisdictional boundaries are the ordinary high water mark (OHWM) in the absence of adjacent wetlands; beyond the OHWM to the limit of adjacent wetlands when adjacent wetlands are present; and the wetland limit when only wetlands are present. For the purposes of these GPs and designated activities, fill placed in the area between the mean high water mark (MHWM) and the high tide line (HTL), and in the bordering and contiguous wetlands to tidal waters are reviewed in the Navigable Waters section below beginning on page 28. | |
| | Activities not meeting the Self-Verification terms below require Pre-Construction Notification and activities not meeting the Pre-Construction Notification terms below require an application for an Individual Permit (IP). | |
| **GENERAL PERMIT #** | **SELF-VERIFICATION (SV)** | **PRE-CONSTRUCTION NOTIFICATION (PCN)** |
| **1. Repair, Replacement, and Maintenance of Authorized Structures and Fills** *(for stream crossings see GP 22)* | Repair, replacement, and maintenance of existing, currently serviceable, authorized fills with no expansion or change in use, provided:<br>• Conditions of the original authorization apply.<br>• Minor deviations in fill design allowed.<br>• 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 work is commenced, or is under contract to commence, within two years of the date of their destruction or damage.<br>• Drawdown of impoundments for dam/levee repair does not exceed 18 months and one growing season (Apr-Sept). | Repair, replacement, and maintenance of existing authorized fills not eligible for SV, provided:<br>• <3 acres of permanent and/or temporary inland waterway and/or wetland fill, and associated secondary impacts. |
| **2. Moorings** | Not Applicable – these activities in non-navigable inland waters do not require Corps authorization. | Not Applicable – these activities in non-navigable inland waters do not require Corps authorization. |
| **3. Structures, Floats, and Lifts** | Pile-supported structures, floats and lifts located in non-navigable inland waters do not require Corps authorization.<br><br>Solid fill or crib-supported structures with <15,000 SF of permanent and/or temporary inland waterway and/or wetland fill, and associated secondary impacts. | Fill activities associated with structures, floats, and lifts not eligible for SV, provided:<br>• <3 acres of permanent and/or temporary inland waterway and/or wetland fill, and associated secondary impacts. |
| **4. Aids to Navigation and Temporary Recreational Structures** | Not Applicable – these activities in non-navigable inland waters do not require Corps authorization. | Not Applicable – these activities in non-navigable inland waters do not require Corps authorization. |
| **5. Dredging, Disposal of Dredged Material, Beach Nourishment, and Rock Removal and Relocation** | Those activities with <15,000 SF of permanent and/or temporary inland waterway and/or wetland fill, and associated secondary impacts, provided:<br>• No stream channelization, relocation, or loss of streambed including impoundments or discharges of tailings into streams. | Those activities not eligible for SV, provided:<br>• <3 acres of permanent and/or temporary inland waterway and/or wetland fill, and associated secondary impacts. |

| | SELF-VERIFICATION (SV) | PRE-CONSTRUCTION NOTIFICATION (PCN) |
|---|---|---|
| **6. U.S. Coast Guard Approved Bridges and Causeways** | Not applicable in inland waters and wetlands; see B. Navigable Waters on page 31 below. | Not applicable in inland waters and wetlands; see B. Navigable Waters on page 31 below. |
| **7. Bank and Shoreline Stabilization Including Living Shorelines (see also GC 28)** | Bank and shoreline stabilization activities with <15,000 SF of permanent and/or temporary inland waterway and/or wetland fill, and associated secondary impacts, provided:<br>• Fill is ≤500 LF in total length as measured below the plane of the OHWM, includes total if more than one stream bank.<br>• Fill placed below the plane of the OHWM is ≤1 CY per linear foot.<br>• There is no discharge in special aquatic sites other than wetlands.<br>• Revetment is comprised of angular material.<br>• In-stream work is limited to Jul. 15th to Sep. 30th<br>• No structures angled steeper than 1H:1V. | Bank and shoreline stabilization activities not eligible for SV, provided:<br>• <3 acres of permanent and/or temporary inland waterway and/or wetland fill, and associated secondary impacts. |
| **8. Residential, Commercial and Institutional Developments, and Recreational Facilities** | Those developments and facilities with <15,000 SF of permanent and/or temporary inland waterway and/or wetland fill, and associated secondary impacts. Fill area includes all temporary and permanent fill, and regulated discharges associated with excavation. Provided:<br>• The historic fill and proposed fill area <15,000 SF specifically complies with GC 5 Single and Complete Projects.<br>• No work in special aquatic sites other than wetlands. | Those developments and facilities not eligible for SV, provided:<br>• <3 acres of permanent and/or temporary inland waterway and/or wetland fill, and associated secondary impacts.<br><br>*Mechanical clearing of areas within Corps jurisdiction without grubbing or other soil disturbance >3 acres as a secondary impact may still be eligible for PCN at the discretion of the Corps.* |
| **9. Utility Line Activities (see also GC 30)** | Utility line activities with <15,000 SF of permanent and/or temporary inland waterway and/or wetland fill (excluding mats), and associated secondary impacts, provided:<br>• There is no permanent change in pre-construction contours in waters in the U.S.<br>• 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 is not dispersed by current or other forces.<br>• The line does not run parallel to, or along a streambed.<br>• No stream channelization, relocation, or loss of streambed including impoundments.<br>• There is no discharge in special aquatic sites other than wetlands.<br>• Construction mats of any area necessary to conduct activities provided mats are removed as soon as work is completed and shall be in place no longer than one single growing season.<br>• In-stream work is limited to Jul. 15th to Sep. 30th<br>• In-water work is conducted in-the-dry.<br>• Intake structures that are dry hydrants used exclusively for firefighting activities with no stream impoundments.<br>• Construction mats of any area necessary to conduct activities provided mats are removed as soon as work is completed and shall be in place no longer than one single growing season. | Utility line activities not eligible for SV, provided:<br>• <3 acres of permanent and/or temporary inland waterway and/or wetland fill, and associated secondary impacts.<br><br>*Mechanical clearing of areas within Corps jurisdiction without grubbing or other soil disturbance >3 acres as a secondary impact may still be eligible for PCN at the discretion of the Corps.* |

| | SELF-VERIFICATION (SV) | PRE-CONSTRUCTION NOTIFICATION (PCN) |
|---|---|---|
| **10. Linear Transportation Projects** *(for stream crossings refer to GP 22)* | Linear transportation activities with <15,000 SF of permanent and/or temporary inland waterway and/or wetland fill (excl. mats), and associated secondary impacts, provided:<br>• The historic fill and proposed fill area <15,000 SF specifically complies with GC 5 Single and Complete Projects.<br>• There is no discharge in special aquatic sites other than wetlands.<br>• Construction mats of any area necessary to conduct activities provided mats are removed as soon as work is completed and shall be in place no longer than one single growing season. | Linear transportation activities not eligible for SV, provided:<br>• <3 acres of permanent and/or temporary inland waterway and/or wetland fill, and associated secondary impacts.<br><br>*Mechanical clearing of areas within Corps jurisdiction without grubbing or other soil disturbance >3 acres as a secondary impact may still be eligible for PCN at the discretion of the Corps.* |
| **11. Mining Activities** | Mining activities with <15,000 SF of permanent and/or temporary inland waterway and/or wetland fill, and associated secondary impacts, provided:<br>• No stream channelization, relocation, or loss of streambed including impoundments. | Mining activities not eligible for SV, provided:<br>• <3 acres of permanent and/or temporary inland waterway and/or wetland fill, and associated secondary impacts. |
| **12. Boat Ramps** | Boat ramps with <15,000 SF of permanent and/or temporary inland waterway and/or wetland fill, and associated secondary impacts, and temporary fills. | Boat ramps not eligible for SV, provided:<br>• <3 acres of permanent and/or temporary inland waterway and/or wetland fill, and associated secondary impacts. |
| **13. Land and Water-Based Renewable Energy Generation Facilities and Hydropower Projects** | Those facilities and projects with <15,000 SF of permanent and/or temporary inland waterway and/or wetland fill, and associated secondary impacts, provided:<br>• No stream channelization, relocation, or loss of streambed including impoundments.<br>• No new water-based facilities are eligible. | Those facilities and projects not eligible for SV, provided:<br>• <3 acres of permanent and/or temporary inland waterway and/or wetland fill, and associated secondary impacts.<br><br>*Mechanical clearing of areas within Corps jurisdiction without grubbing or other soil disturbance >3 acres as a secondary impact may still be eligible for PCN at the discretion of the Corps.* |
| **14. Reshaping Existing Ditches and Mosquito Management** | Not applicable in inland waters and wetlands; see B. Navigable Waters on page 33 below. | Not applicable in inland waters and wetlands; see B. Navigable Waters on page 33 below. |
| **15. Response Operations for Oil or Hazardous Substances** | The SVNF or a surrogate state reporting form may be submitted after-the-fact for response operations.<br><br>This GP also authorizes the use of temporary structures and fills in waters of the U.S. for spill response training exercises with <15,000 SF of permanent and/or temporary inland waterway and/or wetland fill, and associated secondary impacts (*SVNF is required prior to the activity*). | Those response operations not eligible for SV, provided:<br>• <3 acres of permanent and/or temporary inland waterway and/or wetland fill, and associated secondary impacts. |

| | SELF-VERIFICATION (SV) | PRE-CONSTRUCTION NOTIFICATION (PCN) |
|---|---|---|
| **16. Cleanup of Hazardous and Toxic Waste** | Those cleanup activities with <15,000 SF of permanent and/or temporary inland waterway and/or wetland fill, and associated secondary impacts, provided:<br>• No stream channelization, relocation, or loss of streambed including impoundments.<br>• The activity does not involve establishing new disposal sites or expanding existing sites used for the disposal of hazardous or toxic waste. | Those cleanup activities not eligible for SV, provided:<br>• <3 acres of permanent and/or temporary inland waterway and/or wetland fill, and associated secondary impacts.<br>• The activity does not involve establishing new sites for the disposal of hazardous or toxic waste. |
| **17. Scientific Measurements Devices** | Those devices with <15,000 SF of permanent and/or temporary inland waterway and/or wetland fill, and associated secondary impacts, provided:<br>• No biological sampling devices.<br>• Devices do not restrict or concentrate movement of aquatic organisms.<br>• Upon completion of use, the devices and any associated fills shall be removed in their entirety. | Those devices not eligible for SV, provided:<br>• <3 acres of permanent and/or temporary inland waterway and/or wetland fill, and associated secondary impacts. |
| **18. Survey Activities** | Those survey activities with <15,000 SF of permanent and/or temporary inland waterway and/or wetland fill, and associated secondary impacts, provided:<br>• Exploratory trenches are restored in accordance with GC 21.<br>• No discharge of excavated material from test wells for oil and gas exploration (the plugging of such wells is authorized). | Those survey activities not eligible for SV, provided:<br>• <3 acres of permanent and/or temporary inland waterway and/or wetland fill, and associated secondary impacts. |
| **19. Agricultural Activities** | Those agricultural activities subject to Corps jurisdiction with <15,000 SF of permanent and/or temporary inland waterway and/or wetland fill, and associated secondary impacts, provided:<br>• No stream channelization, relocation, or loss of streambed including impoundments. | Those agricultural activities subject to Corps jurisdiction not eligible for SV, provided:<br>• <3 acres of permanent and/or temporary inland waterway and/or wetland fill, and associated secondary impacts. |
| **20. Fish and Wildlife Harvesting, Enhancement and Attraction Devices and Activities** | Not applicable in inland waters and wetlands; see B. Navigable Waters on page 34 below. | Not applicable in inland waters and wetlands; see B. Navigable Waters on page 34 below. |
| **21. Habitat Restoration, Establishment, and Enhancement** | Those activities with <15,000 SF of permanent and/or temporary inland waterway and/or wetland fill, and associated secondary impacts, provided:<br>• No water impoundments allowed.<br>• No conversion of a stream to wetland or vice versa, a wetland to a pond or uplands, or one wetland type to another.<br>• No dam removal. | Those activities not eligible for SV, provided:<br>• <3 acres of permanent and/or temporary inland waterway and/or wetland fill, and associated secondary impacts. |

| | SELF-VERIFICATION (SV) | PRE-CONSTRUCTION NOTIFICATION (PCN) |
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| **22. Stream and Wetland Work and Crossings (see also GC 29)** | Stream work and crossings with <15,000 SF of permanent and/or temporary inland waterway and/or wetland fill, and associated secondary impacts, provided:<br>• No work in designated or proposed critical habitat for endangered species.<br>• Crossings are designed and constructed using the techniques and principles outlined in Stream Simulation, Stream Smart, or Habitat Connectivity Design.<br>• Crossings are designed to be 1.2 times bankfull width.<br>• Crossings have a natural bottom substrate.<br>• Crossings include a bank on both sides of the channel.<br>• Closed bottom culverts are embedded at least 25% of the maximum width of the culvert.<br>• In-stream work is limited to Jul. 15th to Sep. 30th<br>• In-stream work is conducted "in-the-dry".<br>• No slip lining.<br>• No culvert extensions.<br>• No stream channelization, relocation, or loss of streambed including impoundments.<br>Wetland work and crossings, provided:<br>• No flooding or impacts to wetland drainage from the upgradient side of the crossing. | Stream and Wetland Work and Crossings not eligible for SV, provided:<br>• <3 acres of permanent and/or temporary inland waterway and/or wetland fill, and associated secondary impacts. |
| **23. Aquaculture (see also GC 32)** | Aquaculture activities with <15,000 SF of permanent and/or temporary inland waterway and/or wetland fill, and associated secondary impacts, provided:<br>• No water impoundments allowed.<br>• No conversion of i) a stream to wetland or vice versa, a wetland to a pond or uplands, and ii) one wetland type to another. | Aquaculture activities not eligible for SV, provided:<br>• <3 acres of permanent and/or temporary inland waterway and/or wetland fill, and associated secondary impacts. |

***USER NOTE: All Self-Verification and Pre-Construction Notification activities shall comply with all applicable terms (pages 1 - 4), General Conditions (pages 5 - 19), and additional terms below.***

| | | |
|---|---|---|
| **B. NAVIGABLE WATERS** | **Navigable Waters of the U.S. are defined as** those waters that are subject to the ebb and flow of the tide in addition to the non-tidal portions of the following federally-designated waters in Maine (the Kennebec River to Moosehead Lake, the Penobscot River to the confluence of the East and West Branch at Medway and, Lake Umbagog within the State of Maine) (Section 10 Rivers and Harbors Act of 1899). The jurisdictional limits are the mean high water mark (MHWM) in tidal waters and the ordinary high water mark (OHWM) in non-tidal portions of the federally-designated navigable rivers. For the purposes of these GPs, fill placed in the area between the mean high water mark (MHWM) and the high tide line (HTL), and in the bordering and contiguous wetlands to tidal waters are also reviewed in this Navigable Waters section. | |
| | Activities not meeting the Self-Verification terms below require Pre-Construction Notification and activities not meeting the Pre-Construction Notification terms below require an application for an Individual Permit. | |
| **GENERAL PERMIT #** | **SELF-VERIFICATION** | **PRE-CONSTRUCTION NOTIFICATION** |
| **1. Repair, Replacement, and Maintenance of Authorized Structures and Fills**<br>**See GC 25 for pile driving and removal conditions.* | Repair, replacement, or maintenance of previously authorized, currently serviceable structures or fills, provided:<br>• Conditions of the original authorization apply.<br>• No expansion or change in use. Shall be rebuilt in same footprint, however minor deviations in design allowed.<br>• The repair, rehabilitation, or replacement of those structures or fills destroyed or damaged by storms, floods, fire or other discrete events is authorized, provided that work is commenced, or is under contract to commence, within two years of the date of their destruction or damage.<br>• In-water work is conducted "in-the-dry" (see GC 24).<br>• No impacts to special aquatic sites (SAS) (incl. submerged aquatic vegetation, SAV), impacts to natural rocky habitat ≤100 SF, and impacts to intertidal area ≤1,000 SF<br>• Slope stabilization is ≤500 LF in total length as measured below the plane of the HTL and is ≤200 LF in total length as measured below the plane of the MHWM or OHWM. Vertical structures are ≤200 LF in total length as measured below the plane of the MHWM or OHWM and are ≤18 inches waterward of existing face.<br>• Dam and flood control, or levee work does not alter water levels or flood elevations.<br>• Discharge of accumulated bottom sediments from or through a dam is not more than *de minimus*.<br>• Tide gate work has a Corps-approved operation and maintenance plan and no effect to hydraulic regime, or tide gates that solely convey stormwater and/or Maine National Pollutant Discharge Elimination System-permitted discharges. | Repair, replacement, or maintenance of previously authorized structures or fills not eligible for SV, provided:<br>• ≤0.5 acre temporary or permanent impacts, fill, excavation, and/or secondary impacts.<br>• Temporary and/or permanent fill or excavation in SAV <1,000 SF<br>• Permanent fill or excavation in other SAS <4,300 SF |

| | SELF-VERIFICATION (SV) | PRE-CONSTRUCTION NOTIFICATION (PCN) |
|---|---|---|
| **2. Moorings** | Private, non-commercial, non-rental, single-boat moorings, provided:<br>• Authorized by the local harbormaster/town.<br>• Not associated with any boating facility (e.g. marinas).<br>• Not located within a Federal Navigational Project (other than in a Federal Anchorage) or within a distance of three times the authorized depth of a Federal Navigation Project. Moorings in a Federal Anchorage must not be associated with a boating facility and must not be for rent.<br>• No interference with navigation.<br>• Mooring is not located in SAS (incl. SAV) or intertidal areas.<br><br>Minor relocation of previously authorized moorings, provided:<br>• Authorized by the local harbormaster/town.<br>• Relocation is not within a Federal Navigational Project (other than in a Federal Anchorage) or within a distance of three times the authorized depth of a Federal Navigation Project.<br>• No interference with navigation.<br>• Relocated mooring is not located in SAS (incl. SAV) or intertidal areas.<br>**SV Moorings above do not require a SVNF.* | Moorings not eligible for SV and don't require an IP. This includes private moorings with no harbormaster or means of local approval or moorings associated with a boating facility (e.g. marina).<br><br>*Locating new moorings in SAS (incl. SAV) shall be avoided to the maximum extent practicable. If SAS cannot be avoided, consideration shall be given to alternative mooring systems that prevents mooring chains from resting or dragging on the bottom substrate at all tides.*<br><br>An IP is required for moorings located within the horizontal limits, or with moored vessels that extend into the horizontal limits of a Federal Navigation Project (other than in a Federal Anchorage). |
| **3. Structures, Floats, and Lifts**<br><br>*Cont'd below on page 30* | Reconfiguration of such existing authorized structures with all intertidal work conducted "in-the-dry" (see GC 24).<br><br>Minor relocation of previously authorized floats provided:<br>• Relocation is not into a Federal Navigation Project or within a distance of three times the authorized depth of a Federal Navigation Project (other than a Federal Anchorage).<br>• No interference with navigation.<br>• Not relocated in or within 25 feet of SAV.<br>• Seasonal floats are stored above the MHWM and not on wetland (incl. salt marsh).<br><br>New private, non-commercial ramp and float structures attached to land (no piers) or new floats provided:<br>• Not located in or within a distance of three times the authorized depth of a Federal Navigation Project.<br>• No interference with navigation.<br>• No structure extends across >25% of the waterway width at mean low water.<br>• Not located in or within 25 feet of SAV.<br>• Ramp is <150 LF over salt marsh waterward of the MHWM and is ≥1:1 height:width ratio over salt marsh. | New structures, floats, and/or lifts including floatways/skidways, built to access waterway (both seasonal and permanent). Includes pile-supported, solid fill-supported, and crib-supported structures. Also includes expansions to existing authorized boating facilities (e.g. marinas). Provided:<br>• <1 acre temporary or permanent impacts, fill, excavation, and/or secondary impacts.<br>• Temporary and/or permanent fill or excavation in SAV <1,000 SF<br>• Permanent fill or excavation in other SAS <4,300 SF<br><br>**See GC 25 for pile driving and pile removal conditions.*<br><br>Compliance with the following is recommended:<br>• *Lowermost part of floats are ≥18 inches above the substrate during all tides.*<br>• *Structures are ≥1:1 height:width ratio over salt marsh.*<br>• *Structures and floats are not located in or within 25 feet of SAV.*<br>• *Moored vessels are not positioned over SAV.*<br>• *Structures attached to land are located ≥ 25 feet from the property line (The Corps may require a letter of no objection from the abutter if located within 25 feet of the property line.)* |

| | SELF-VERIFICATION (SV) | PRE-CONSTRUCTION NOTIFICATION (PCN) |
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| *Cont'd from page 29* | • Ramp and floats attached to land are located ≥25 feet from the property line.<br>• Seasonal ramp and floats are stored above the HTL and not on wetland (incl. salt marsh).<br><br>Compliance with the following is recommended:<br>• *Lowermost part of floats is ≥18 inches above the substrate during all tides.* | • *No structure extends across >25% of the waterway width at mean low water.*<br>• *Not located within a distance of three times the authorized depth of a Corps Federal Navigation Project.*<br><br>An IP is required for structures, floats, and/or lifts including floatways/skidways, located in such that they and/or vessels docked or moored at them are within the horizontal limits of a Corps Federal Navigation Project. An IP is also required for structures and floats associated with a new or previously unauthorized boating facility (e.g. marinas). |
| **4. Aids to Navigation and Temporary Recreational Structures** | 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).<br>**These SV Aids do not require a SVNF.*<br><br>Temporary buoys, markers, floats, etc. for recreational use during specific events, provided:<br>• They are removed within 30 days after the specific event has concluded.<br>• No interference with navigation.<br>• No impact to SAV. | Aids and temporary structures not eligible for SV. |
| **5. Dredging, Disposal of Dredged Material, Beach Nourishment, and Rock Removal and Relocation** | Maintenance dredging of <1,000 CY for navigational purposes with upland disposal including return water from upland contained disposal area, provided:<br>• Proper siltation controls are used.<br>• No expansion of footprint.<br>• No dredging in or within a distance of three times the authorized depth of a Federal Navigation Project.<br>• Dredging operation is limited to Nov. 8th to Apr. 9th (it is recommended that in areas populated by winter flounder, dredging should cease by March 15th).<br>• No impacts to SAS (incl. SAV), impacts to natural rocky habitat ≤100 SF, and impacts to intertidal area ≤1,000 SF<br>• No dredging within 25 feet of SAV.<br>• No dredging in or within 100 feet of shellfish areas.<br>• No blasting.<br>• No dredging in designated or proposed critical habitat for endangered species. | Maintenance dredging not eligible for SV and new dredging <25,000 CY Includes return water from upland contained disposal areas. Disposal includes:<br>• Upland.<br>• Beach nourishment (above MHW line) of any area provided the dredging's primary purpose is navigation or the sand is from an upland source.<br>• Open water & confined aquatic disposal if Corps finds the material suitable.<br><br>Beach nourishment associated with dredging when the primary purpose is not navigation requires at least a PCN.<br><br>Temporary and/or permanent fill or excavation in SAV <1,000 SF and Permanent fill or excavation in other SAS <4,300 SF |

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| **6. U.S. Coast Guard Approved Bridges and Causeways** | Discharges of dredged or fill material associated with U.S. Coast Guard Approved Bridges and Causeways, provided:<br>• In-water work is conducted "in-the-dry" (see GC 24).<br>• Discharge of dredged or fill material <15,000 SF<br>• No impacts to SAS (incl. SAV), impacts to natural rocky habitat ≤100 SF, and impacts to intertidal area ≤1,000 SF<br><br>Compliance with the following is recommended:<br>• *Discharge of dredged or fill material should not occur within 100 feet of SAV or within 25 feet of natural rocky habitat or other SAS.*<br><br>*Note: new causeways and approach fills are not eligible for SV.* | Discharges of dredged or fill material associated with U.S. Coast Guard Approved Bridges and Causeways not eligible for SV, provided:<br>• <1 acre temporary or permanent impacts, fill, excavation, and/or secondary impacts.<br>• Temporary and/or permanent fill or excavation in SAV <1,000 SF<br>• Permanent fill or excavation in other SAS <4,300 SF |
| **7. Bank and Shoreline Stabilization Including Living Shorelines (see also GC 28)** | Bank and shoreline stabilization activities, provided:<br>• In-water work is conducted "in-the-dry" (see GC 24).<br>• Fill is ≤500 LF in total length as measured below the plane of the HTL and is ≤200 LF in total length as measured below the plane of the MHWM or OHWM (includes total for more than one bank). Replacement vertical structures are ≤200 LF in total length as measured below the plane of the MHWM or OHWM and are ≤18 inches waterward of existing face.<br>• Fill placed below HTL is ≤1 CY per linear foot.<br>• Stone revetment is comprised of angular material.<br>• No fills angled steeper than 1H:1V.<br>• No impacts to SAS (incl. SAV), impacts to natural rocky habitat ≤100 SF, and impacts to intertidal or shellfish areas ≤1,000 SF<br>• No new groins, breakwaters, or jetties. | Bank and shoreline stabilization activities not eligible for SV, provided:<br>• <1 acre temporary or permanent impacts, fill, excavation, and/or secondary impacts, provided:<br>• Temporary and/or permanent fill or excavation in SAV <1,000 SF<br>• Permanent fill or excavation in other SAS <4,300 SF |
| **8. Residential, Commercial and Institutional Developments, and Recreational Facilities** | Not Eligible | Residential, commercial and institutional developments and recreational facilities, provided:<br>• <1 acre temporary or permanent impacts, fill, excavation, and/or secondary impacts, provided:<br>• Temporary and/or permanent fill or excavation in SAV <1,000 SF<br>• Permanent fill or excavation in other SAS <4,300 SF<br><br>Conversions of previously authorized pile-supported buildings over navigable waters to residences, offices, or other non-water dependent uses require PCN. Floating house boats or businesses on floats require PCN. |

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| **9. Utility Line Activities (see also GC 30)** | Repair, replacement, or maintenance of previously authorized, currently serviceable utilities with no expansion or change in use, provided:<br>• Conditions of the original authorization apply.<br>• In-water work limited to Nov. 8th to Apr. 9th.<br>• Trenching or filling confined to existing footprint and <100 LF; trenches shall be backfilled immediately.<br>• Jet-plow, fluidization, or other direct burial methods confined to existing footprint and <200 LF<br>• No impacts to SAS (incl. SAV), impacts to natural rocky habitat ≤100 SF, and impacts to intertidal or shellfish areas ≤1,000 SF<br>• No work in designated or proposed critical habitat for endangered species.<br><br>New work in, over, or under navigable waters including new outfalls and any intake structure work requires PCN.<br><br>Aerial utility lines over navigable waters requires PCN. | Those utility activities not eligible for SV, provided:<br>• <1 acre temporary or permanent impacts, fill, excavation, and/or secondary impacts.<br>• Temporary and/or permanent fill or excavation in SAV <1,000 SF<br>• Permanent fill or excavation in other SAS <4,300 SF |
| **10. Linear Transportation Projects** *(for stream crossings refer to GPs 6 and 22)* | Not Eligible | Linear transportation projects, provided:<br>• <1 acre temporary or permanent impacts, fill, excavation, and/or secondary impacts.<br>• Temporary and/or permanent fill or excavation in SAV <1,000 SF<br>• Permanent fill or excavation in other SAS <4,300 SF |
| **11. Mining Activities** | Not Eligible | Not Eligible |
| **12. Boat Ramps and Marine Railways** | No new boat ramps or marine railways.<br><br>In-water work is conducted "in-the-dry" (see GC 24).<br><br>No impacts to SAS (incl. SAV), impacts to natural rocky habitat ≤100 SF, and impacts to intertidal or shellfish areas ≤1,000 SF<br><br>Boat ramp and marine railway work not eligible for maintenance (i.e. not currently serviceable) may be replaced "in-kind" with minor deviations provided:<br>• Work is confined to the intertidal zone.<br>• No impacts to SAS (incl. SAV), impacts to natural rocky habitat ≤100 SF, and impacts to intertidal or shellfish areas ≤1,000 SF | Those ramps and railways not eligible for SV, provided:<br>• <1 acre temporary or permanent impacts, fill, excavation, and/or secondary impacts, provided:<br>• Temporary and/or permanent fill or excavation in SAV <1,000 SF<br>• Permanent fill or excavation in other SAS <4,300 SF |

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| **13. Land and Water-Based Renewable Energy Generation Facilities and Hydropower Projects** | Not Eligible | Work associated with those facilities and projects, provided:<br>• <1 acre temporary or permanent impacts, fill, excavation, and/or secondary impacts.<br>• Temporary and/or permanent fill or excavation in SAV <1,000 SF<br>• Permanent fill or excavation in other SAS <4,300 SF<br><br>For each single and complete project, no more than 10 generation units (e.g., wind turbines or hydrokinetic devices) may be authorized.<br><br>No new impoundments. |
| **14. Reshaping Existing Ditches and Mosquito Management** | ≤500 LF 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 shall be the same as originally constructed and it cannot drain additional wetlands or other waters of the U.S.).<br><br>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 shall be approximately the same as the location of the centerline of the original drainage ditch.<br><br>No impacts to SAS (incl. SAV), impacts to natural rocky habitat ≤100 SF, and impacts to intertidal or shellfish areas ≤1,000 SF | Those activities not eligible for SV, provided:<br>• <1 acre temporary or permanent impacts, fill, excavation, and/or secondary impacts.<br>• Temporary and/or permanent fill or excavation in SAV <1,000 SF<br>• Permanent fill or excavation in other SAS <4,300 SF |
| **15. Response Operations for Oil or Hazardous Substances** | The SVNF or a surrogate state reporting form may be submitted after-the-fact for spill response activities.<br><br>This GP also authorizes the use of temporary structures and fills in waters of the U.S. for spill response training exercises (*SVNF is required prior to the activity*), provided:<br>• No impacts to SAS (incl. SAV), impacts to natural rocky habitat ≤100 SF, impacts to intertidal or shellfish areas ≤1,000 SF, and impacts to tidal resources <0.5 acre | Those response operations not eligible for SV, provided:<br>• <1 acre temporary or permanent impacts, fill, excavation, and/or secondary impacts.<br>• Temporary and/or permanent fill or excavation in SAV <1,000 SF<br>• Permanent fill or excavation in other SAS <4,300 SF |
| **16. Cleanup of Hazardous and Toxic Waste** | Only booms placed for hazardous and toxic waste containment and absorption and prevention are eligible for SV.<br>*A SVNF is not required for these eligible containment booms.* | Cleanup activities not eligible for SV, provided:<br>• <1 acre temporary or permanent impacts, fill, excavation, and/or secondary impacts.<br>• Temporary and/or permanent fill or excavation in SAV <1,000 SF<br>• Permanent fill or excavation in other SAS <4,300 SF<br><br>An IP is require for the establishment of new disposal sites or expanding existing sites used for the disposal of hazardous or toxic waste. |

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| **17. Scientific Measurements Devices** | Those scientific measurements devices, provided:<br>• Devices do not restrict or concentrate movement of aquatic organisms.<br>• No interference with navigation.<br>• No blasting.<br>• No biological sampling devices.<br>• No impacts to SAS (incl. SAV), impacts to natural rocky habitat ≤100 SF, impacts to intertidal areas ≤1,000 SF, and impacts to tidal resources ≤0.5 acre<br>• Upon completion of use, the devices and any associated structures or fills are removed in their entirety. | Those scientific measurements devices not eligible for SV, provided:<br>• <1 acre temporary or permanent impacts, fill, excavation, and/or secondary impacts.<br>• Temporary and/or permanent fill or excavation in SAV <1,000 SF<br>• Permanent fill or excavation in other SAS <4,300 SF |
| **18. Survey Activities** | Those survey activities, provided:<br>• No blasting.<br>• No interference with navigation.<br>• No seismic exploratory operations.<br>• No oil and gas exploration.<br>• No trenching or other silt-producing activities.<br>• No fill for roads or construction pads.<br>• No impacts to SAS (incl. SAV), impacts to natural rocky habitat ≤100 SF, impacts to intertidal areas ≤1,000 SF, and impacts to tidal resources <0.5 acre<br>• No blasting.<br>• No biological sampling devices.<br>*A SVNF is not required for required sediment sampling for Corps-regulated dredge proposals.* | Those survey activities not eligible for SV, provided:<br>• <1 acre temporary or permanent impacts, fill, excavation, and/or secondary impacts.<br>• Temporary and/or permanent fill or excavation in SAV <1,000 SF<br>• Permanent fill or excavation in other SAS <4,300 SF |
| **19. Agricultural Activities** | Not Eligible | Not Eligible |
| **20. Fish and Wildlife Harvesting, Enhancement and Attraction Devices and Activities**<br>*(for aquaculture refer to GP 23)* | Those devices and activities, provided:<br>• No impacts to SAS (incl. SAV), impacts to natural rocky habitat ≤100 SF, impacts to intertidal areas ≤1,000 SF, and impacts to tidal resources ≤0.5 acre<br>• No interference with navigation.<br>• No artificial reefs or enclosures<br>• No impoundments or semi-impoundments for the culture or holding of motile species such as lobster, or the use of covered oyster trays or clam racks.<br>• Structures and shell hash should not be located within 25 feet of SAV.<br>• All gear, except for mooring tackle, when not in use on the site is stored in an upland location above the MHWM and not on wetland (incl. salt marsh).<br>*A SVNF is not required for these eligible devices and activities.* | Those devices and activities not eligible for SV, provided:<br>• <1 acre temporary or permanent impacts, fill, excavation, and/or secondary impacts.<br>• Temporary and/or permanent fill or excavation in SAV <1,000 SF<br>• Permanent fill or excavation in other SAS <4,300 SF<br><br>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 <0.5 acre |

| | SELF-VERIFICATION (SV) | PRE-CONSTRUCTION NOTIFICATION (PCN) |
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| **21. Habitat Restoration, Establishment, and Enhancement** | Those activities, provided:<br>• No impacts to SAS (incl. SAV), impacts to natural rocky habitat ≤100 SF, impacts to intertidal areas ≤1,000 SF, and impacts to tidal resources <0.5 acre<br>• No thin layer deposition for salt marsh restoration.<br>• SAS planting and transplanting is <100 SF<br>• No artificial or living reefs.<br>• The activity is authorized in writing by a local, state, or non-Corps federal environmental agency. Water impoundments require PCN.<br>• No conversion of i) a stream to wetland or vice versa, wetland to a pond or uplands, and ii) one wetland type to another.<br>• No dam removal. | Those activities not eligible for SV provided those activities are proactive and result in net increases in aquatic resource functions and services. |
| **22. Stream and Wetland Work and Crossings (see also GC 29)** (*see GP 6 for bridges & causeways*) | Not Eligible | Those crossings of tidal navigable water not including bridges and causeways, provided:<br>• <1 acre temporary or permanent impacts, fill, excavation, and/or secondary impacts.<br>• Temporary and/or permanent fill or excavation in SAV <1,000 SF<br>• Permanent fill or excavation in other SAS <4,300 SF |
| **23. Aquaculture* (see also GC 32)** | Shellfish and marine algae installations that do not exceed 400 SF in area, provided:<br>• Signed approval from Harbormaster or appropriate Town Official.<br>• No enclosures or impoundments.<br>• Not located in or within a distance of three times the authorized depth of a Federal Navigation Project.<br>• Not located in or impinge upon the value of any National Lands or Federal Properties.<br>• No impacts to SAS (incl. SAV), impacts to natural rocky habitat ≤100 SF, and impacts to intertidal and shellfish areas ≤1,000 SF<br>• No structures, cages, gear, or shell hash located in/within 25 feet of SAV.<br>• All gear, except for mooring tackle, when not in use on the site is stored in an upland location above the MHWM and not on wetland (incl. salt marsh). | Shellfish, finfish, and marine algae 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.<br><br>***State of Maine Aquaculture guidelines are provided at: *www.maine.gov/dmr/aquaculture/index.html***<br><br>***State of Maine Aquaculture guidelines are provided at: *www.maine.gov/dmr/aquaculture/index.html*** |

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## Section VI: Self-Verification Notification Form

(for all tidal and non-tidal projects in Maine subject to Corps jurisdiction)

At least two weeks before work commences, complete all fields (write "none" if applicable) below or use the fillable form found at www.nae.usace.army.mil/Missions/Regulatory/State-General-Permits/Maine-General-Permit/ The two-week lead time is not required for emergency situations. **Send this form, an Official Species List, and project plans to the following email address: cenae-r-me@usace.army.mil**

Maine Project Office
U.S. Army Corps of Engineers
442 Civic Center Drive, Suite 350
Augusta, Maine 04330

State Permit #: _____
Date of State Permit: _____
State Project Manager: _____

Permittee: _____

Address, City, State, Zip: _____

Email, Phone: _____

Agent: _____

Address, City, State, Zip: _____

Email, Phone: _____

Contractor: _____

Address, City, State, Zip: _____

Email, Phone: _____

Project Name: _____

Address, City, State, Zip: _____

Lat °N, Long °W: _____ Tax Map/Lot: _____

Waterway Name: _____

Description of Work: _____

Proposed Starting Date: _____ Proposed Finish Date: _____

Area of wetland impact (SF): Permanent: _____ Temporary: _____
Area of waterway impact (SF): Permanent: _____ Temporary: _____

Work will be done under the following Section V General Permits (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
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

Have MHPC and all five federally-recognized tribes in Maine been notified of the proposed work? _____Yes _____No

*Your signature below, as permittee, indicates that you accept and agree to comply with the terms, eligibility criteria, and general conditions for Self-Verification under the Maine General Permit.*

Permittee Signature: _____ Date: _____

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## Section VII: Content of a 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* >> Forms >> Application and Plan Guideline Checklist. Please check with the Corps for project-specific requirements.

**Information required for all projects:**

- □ DIGITAL SUBMISSIONS ARE ENCOURAGED (email PCN to **cenae-r-me@usace.army.mil**)
- □ Completed Corps application form (ENG Form 4345 attached below or found electronically at *www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/Obtain-a-Permit*) or appropriate state application form. Forms may need to be supplemented to include the information noted below.
- □ Proof of notification to MHPC and all five federally-recognized tribes (see Section VIII for contact info).
- □ Official Species List for any federally-listed endangered or threatened species and email address of the person who generated the list.
- □ 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 8.5”x11”, with bar scale (plans overlaid on aerial photos are discouraged). Wetland area impact sheets shall 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 be on a section of color USGS topographic map.
- □ 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.
  - □ Document on project plans wetlands, other special aquatic sites (SAS) including vegetated shallows (or submerged aquatic vegetation, SAV) and mudflats, natural rocky habitat, shellfish areas, vernal pools, and other waters, such as lakes and ponds, and perennial, and intermittent streams on the project site (GC1).
  - □ MLW line, MHW mark, and HTL elevations in tidal waters. Show OHWM elevation in lakes and non-tidal streams.
  - □ **Existing and proposed conditions.**
- □ 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 OHWM in inland waters and below the HTL in coastal waters.
- □ If applicable, a restoration plan showing how all temporary fills and structures will be removed and the area restored to pre-project conditions (see GC 21).

**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 and projects in towns bordering coastal waters shall be in U.S. survey feet and referenced to MLLW and include current tidal epoch, with a reference chart showing conversion factor to the North American Vertical Datum of 1988. Do not use local datum. See *www.nae.usace.army.mil/missions/regulatory* >> Forms and Publications >>Vertical Datum - FEMA (Jul 2007);
  - □ The horizontal state plane coordinates shall be shown on plan and elevation views and shall be in the North American Datum of 1983 (NAD83) State Plane Coordinate System in U.S. survey feet.
- □ 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;
- □ Alternatives analysis;
- □ Wetland delineation data sheets;
- □ 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 (see GC 17).
- □ Identification of potential discharges of pollutants to waters, including potential impacts to impaired waters, in the project area.
- □ Invasive Species Control Plan (see GC 22). For sample control plans, see *www.nae.usace.army.mil/Missions/Regulatory/Invasive-Species*
- □ Wildlife Action Plan (WAP) maps. Contact the Maine Department of Inland Fisheries & Wildlife (Section VIII) or online at *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 must 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 tidal crossing projects that may be required**:

- □ A graphic longitudinal elevation profile plot of the tidal stream channel thalweg, both up and downstream of the proposed project site. Thalweg elevations shall extend from the crossing to beyond the zone of scour, channel widening, or other channel alteration resulting from the present or pre-existing crossings. The profile plot should include labeled elevations for the:
  - □ crossing invert and top of the inlet and outlet
  - □ roadbed crown
  - □ lowest and highest recorded tides at the site
  - □ reference datums, such as MLLW, MHHW, and astronomical high tide
  - □ hydraulic controls and nearest crossings that could influence or be influenced by the proposed crossing
- □ A graphic plot of continuous tidal water levels recorded up and downstream, simultaneously, of the proposed crossing for an entire lunar cycle. The water level plot should include labeled elevations for the:
  - □ crossing invert and crossing top at the inlet and outlet
  - □ roadbed crown
  - □ reference datums, such as MLLW, MHHW, and astronomical high tide
- □ A map showing projected extents of maximum flooding within the area influenced by the crossing under current conditions and as a result of sea level rise. The present minimum sea level rise scenario suggested for planning purposes by the Maine Climate Council Scientific and Technical Subcommittee is the Intermediate Scenario, which projects an increase of 3.0-4.6 feet by 2100.

**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*
- □ In addition to the information required above, applications should also include:
  - □ Results of coordination with Harbor Master and U.S. Coast Guard
  - □ Whether canopy predator nets are being used.

U.S. Army Corps of Engineers (USACE)

# APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT

33 CFR 325. The proponent agency is CECW-CO-R.

***Form Approved - OMB No. 0710-0003 Expires: 02-28-2022***

The public reporting burden for this collection of information, OMB Control Number 0710-0003, is estimated to average 11 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services, at whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR APPLICATION TO THE ABOVE EMAIL.

PRIVACY ACT STATEMENT

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of a public notice as required by Federal law. Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued. One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and/or instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned. System of Record Notice (SORN). The information received is entered into our permit tracking database and a SORN has been completed (SORN #A1145b) and may be accessed at the following website: http://dpcld.defense.gov/Privacy/SORNsIndex/DOD-wide-SORN-Article-View/Article/570115/a1145b-ce.aspx

**(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)**

| 1. APPLICATION NO. | 2. FIELD OFFICE CODE | 3. DATE RECEIVED | 4. DATE APPLICATION COMPLETE |
|---|---|---|---|
| | | | |

***(ITEMS BELOW TO BE FILLED BY APPLICANT)***

| 5. APPLICANT'S NAME | 8. AUTHORIZED AGENT'S NAME AND TITLE (agent is not required) |
|---|---|
| First - Middle - Last - | First - Middle - Last - |
| Company - | Company - |
| E-mail Address - | E-mail Address - |
| 6. APPLICANT'S ADDRESS: | 9. AGENT'S ADDRESS: |
| Address- | Address- |
| City - State - Zip - Country - | City - State - Zip - Country - |
| 7. APPLICANT'S PHONE NOs. w/AREA CODE | 10. AGENTS PHONE NOs. w/AREA CODE |
| a. Residence b. Business c. Fax | a. Residence b. Business c. Fax |

**STATEMENT OF AUTHORIZATION**

11. I hereby authorize,_____to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

_____ _____

SIGNATURE OF APPLICANT DATE

**NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY**

12. PROJECT NAME OR TITLE (see instructions)

| 13. NAME OF WATERBODY, IF KNOWN (if applicable) | 14. PROJECT STREET ADDRESS (if applicable) |
|---|---|
| | Address |
| 15. LOCATION OF PROJECT | City - State- Zip- |
| Latitude: ◦N Longitude: ◦W | |

16. OTHER LOCATION DESCRIPTIONS, IF KNOWN (see instructions)

State Tax Parcel ID Municipality

Section - Township - Range -

17. DIRECTIONS TO THE SITE

18. Nature of Activity (Description of project, include all features)

19. Project Purpose (Describe the reason or purpose of the project, see instructions)

**USE BLOCKS 20-23 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED**

20. Reason(s) for Discharge

21. Type(s) of Material Being Discharged and the Amount of Each Type in Cubic Yards:

| Type<br>Amount in Cubic Yards | Type<br>Amount in Cubic Yards | Type<br>Amount in Cubic Yards |
|---|---|---|

22. Surface Area in Acres of Wetlands or Other Waters Filled (see instructions)

Acres

or

Linear Feet

23. Description of Avoidance, Minimization, and Compensation (see instructions)

24. Is Any Portion of the Work Already Complete? ☐ Yes ☐ No IF YES, DESCRIBE THE COMPLETED WORK

25. Addresses of Adjoining Property Owners, Lessees, Etc., Whose Property Adjoins the Waterbody (if more than can be entered here, please attach a supplemental list).

a. Address-

City - State - Zip -

b. Address-

City - State - Zip -

c. Address-

City - State - Zip -

d. Address-

City - State - Zip -

e. Address-

City - State - Zip -

26. List of Other Certificates or Approvals/Denials received from other Federal, State, or Local Agencies for Work Described in This Application.

| AGENCY | TYPE APPROVAL* | IDENTIFICATION NUMBER | DATE APPLIED | DATE APPROVED | DATE DENIED |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

* Would include but is not restricted to zoning, building, and flood plain permits

27. Application is hereby made for permit or permits to authorize the work described in this application. I certify that this information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

SIGNATURE OF APPLICANT DATE SIGNATURE OF AGENT DATE

The Application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than $10,000 or imprisoned not more than five years or both.

## Section VIII: Agency Contacts

### 1. Federal

U.S. Army Corps of Engineers
Maine Project Office
442 Civic Center Drive, Suite 350
Augusta, Maine 04330
(207) 623-8367; (207) 623-8206 (fax)
Email: cenae-r-me@usace.army.mil

U.S. Environmental Protection Agency
5 Post Office Square
Suite 100 (OEP05–2)
Boston, Massachusetts 02109-3912
(617) 918-1589

U.S. Fish and Wildlife Service
Maine Field Office
P.O. Box A
East Orland, Maine 04431
(207) 469-7300; (207) 902-1588 (fax)
*(Federal endangered species)*

National Marine Fisheries Service
Maine Field Office
17 Godfrey Drive, Suite 1
Orono, Maine 04473
(207) 866-7379; (207) 866-7342 (fax)
*(Federal endangered species)*

FEMA Region 1
Federal Insurance and Mitigation Division
99 High Street 6th Floor
Boston, Massachusetts 02110
*(floodplains)*

Federal Emergency Management Agency
99 High Street
Boston, Massachusetts 02110
(877) 336-2734
*(Floodplain Management)*

National Marine Fisheries Service
55 Great Republic Drive
Gloucester, Massachusetts 01930
(978) 281-9102; (978) 281-9301 (fax)
*(Federal endangered species & EFH)*

National Park Service
North Atlantic Region
15 State Street
Boston, Massachusetts 02109
(617) 223-5203
*(Wild and Scenic Rivers)*

Commander (dpb)
First Coast Guard District
One South Street - Battery Building
New York, New York 10004-1466
(212) 668-7021; (212) 668-7967 (fax)
*(bridge permits)*

### 2. State of Maine

a. Department of Environmental Protection (*State permits & Water Quality Certifications*)

Augusta Regional Office
17 State House Station
Augusta, Maine 04333
(207) 287-7688

Southern Maine Regional Office
312 Canco Road
Portland, Maine 04103
(201) 822-6300

Eastern Maine Regional Office
106 Hogan Road
Bangor, Maine 04401
(207) 941-4570

Northern Maine Regional Office
1235 Central Drive
Presque Isle, Maine 04769
(207) 764-0477

b. Department of Agriculture, Conservation and Forestry

i. Maine Land Use Planning Commission (LUPC) (*State permits & Water Quality Certifications for the unorganized areas of the State*)

Augusta Office
22 State House Station
Augusta, Maine 04333-0022
(207) 287-2631; (207) 287-7439 (fax)

Greenville Regional Office
43 Lakeview Drive
P.O. Box 1107
Greenville, Maine 04441
(207) 695-2466; (207) 695-2380 (fax)

Western Region Office
932 U.S. Route 2
East Wilton, Maine 04992
(207) 670-7492; (207) 287-7439 (fax)

Downeast Regional Office
106 Hogan Road, Suite 8
Bangor, Maine 04401
(207) 215-4685; (207) 941-4222 (fax)

Ashland Regional Office
45 Radar Road
Ashland, Maine 04732-3600
(207) 435-7963; (207) 435-7184 (fax)

Eastern Region Office
191 Main Street
East Millinocket, Maine 04430
(207) 399-2176; (207) 746-2243 (fax)

ii. Maine Coastal Program

21 State House Station
Augusta, Maine 04333
(207) 707-2324; (207) 624-6024 (fax)
*(CZM consistency determinations)*

iii. Division of Parks and Public Lands

22 State House Station
Augusta, Maine 04333
(207) 287-3061; (207) 287-6170 (fax)
*(submerged lands leases)*

iv. Maine Floodplain Management Program

17 Elkins Lane
Augusta, Maine 04333
(207) 287-8063
*(floodplains)*

c. Department of Marine Resources

21 State House Station
Augusta, Maine 04333
(207) 633-9500; (207) 624-6024 (fax)
*(aquaculture leases/licenses)*

**3. Historic Properties**

a. State Historic Preservation Officer (SHPO)

Kirk F. Mohney, Director
Maine Historic Preservation Commission
65 State House Station
Augusta, Maine 04333-0065
(207) 287-2132; (207) 287-2335 (fax)

b. Tribal Historic Preservation Officers (THPOs)

*Houlton Band of Maliseet Indians*
88 Bell Road
Littleton, Maine 04730
(207) 532-4273, x215; (207) 532-6883 (fax)
istjohn@maliseets.com

*Aroostook Band of Micmacs*
7 Northern Road
Presque Isle, Maine 04769
(207) 764-1972; (207) 764-7667 (fax)
jdennis@micmac-nsn.gov

*Passamaquoddy Tribe of Indians*
Pleasant Point Reservation
P.O. Box 343
Perry, Maine 04667
(207) 853-2600; (207) 853-6039 (fax)
soctomah@gmail.com

*Penobscot Nation*
Cultural and Historic Preservation Dept.
12 Wabanaki Way
Indian Island, Maine 04468
(207) 817-7471
chris.sockalexis@penobscotnation.org

*Passamaquoddy Tribe of Indians*
Indian Township Reservation
P.O. Box 301
Princeton, Maine 04668
(207) 796-2301; (207) 796-5256 (fax)
soctomah@gmail.com

## Section IX: Definitions

**Action Area:** 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]."

**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)). Prospective permittees are strongly advised to contact the Corps for a determination of whether their activity is exempt or requires a permit.

**Attendant Features:** Occurring with or as a result of; accompanying.

**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 January 6, 2017 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 shall be planted at the site.

**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, dockominiums, 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.

**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 mark 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.

**Brushing:** 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."

**Currently Serviceable:** Useable as-is or with some maintenance, but not so degraded as to essential require reconstruction.

**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.

**Fill area:** Fill area includes all temporary and permanent fill (including mats), and regulated discharges associated with excavation.

**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* >> 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.

**Habitat Connectivity Design:** projects designed and constructed for consistency with natural stream dimensions, profiles, and dynamics, in accordance with the following technical references: U.S. Forest Service guide (Forest Service Stream-Simulation Working Group 2008), augmented by documents published by the states of Washington (Barnard et al. 2013), Vermont (Bates and Kirn 2009) and California (Love and Bates 2009).

**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.

**Living Shoreline:** Living shorelines stabilize banks and shores in coastal waters along shores with small fetch and gentle slopes that are subject to low-to mid-energy waves. A living shoreline has a footprint that is made up mostly of native material. It incorporates vegetation or other living, natural "soft" elements alone or in combination with some type of harder shoreline structure (e.g., oyster or mussel reefs or rock sills) for added protection and stability. Living shorelines shall maintain the natural continuity of the land-water interface, and retain or enhance shoreline ecological processes. Living shorelines must have a substantial biological component, either tidal or lacustrine fringe wetlands or oyster or mussel reef structures.

**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 SV 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 SV or PCN thresholds in Section V.

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 PCN.

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."

The following definition is also 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 environ-mental effects resulting from such repair, rehabilitation, or replacement are minimal.

**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.

**Natural Rocky Habitats:** Natural rocky habitats are intertidal and subtidal substrates composed of pebble-gravel, cobble, boulder, or rock ledge and outcrops. Manufactured stone (e.g. cut or engineered rip-rap) is not considered a natural rocky habitat. Natural rocky habitats are either found as pavement (consolidated pebble-gravel, cobble, or boulder areas) or as a mixture with fines (i.e. clay and sand) and other substrates.

**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.

**Pre-construction notification (PCN):** A request submitted by a prospective permittee 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.

**Re-establishment:** The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/ historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in again in aquatic resource area and functions.

**Rehabilitation:** The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area. Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

**Restoration:** The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

**Riffle and pool complexes:** Riffle and pool complexes are special aquatic sites under the 404(b)(1) Guidelines. Riffle and pool complexes sometimes characterize steep gradient sections of streams. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a course substrate in riffles results in a rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. A slower stream velocity, a streaming flow, a smooth surface, and a finer substrate characterize pools.

**Secondary effects:** See "Direct, secondary, and cumulative effects."

**Shellfish Areas:** Areas that currently support molluscan shellfish. Information regarding these locations can be obtained from the State of Maine GeoLibrary Data Catalog at: *www.maine.gov/geolib/catalog.html*

**Shellfish seeding:** The placement of shellfish seed and/or suitable substrate to increase shellfish production. Shellfish seed consists of immature individual shellfish or individual shellfish attached to shells or shell fragments (i.e., spat on shell). Suitable substrate may consist of shellfish shells, shell fragments, or other appropriate materials placed into waters for shellfish habitat.

**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 shall have independent utility (see definition).

**Special aquatic sites (SAS):** These are defined at 40 CFR 230 Subpart E. They include sanctuaries and refuges, wetlands, mud flats, vegetated shallows (submerged aquatic vegetation, SAV), coral reefs, and riffle and pool complexes.

**Stream:** The term "stream" in the document means rivers, streams, brooks, etc.

**Stream bed:** The substrate of the stream channel between the ordinary high water marks. The substrate may be bedrock or inorganic particles that range in size from clay to boulders. Wetlands contiguous to the stream bed, but outside of the ordinary high water marks, are not considered part of the stream bed.

**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.

**Stream Simulation:** A method for designing and building road-stream crossings intended to permit free and unrestricted movements of any aquatic species. Reference:
*https://www.nae.usace.army.mil/Missions/Regulatory/Stream-and-River-Continuity/*

**Stream Smart Design:** projects designed to allow the stream to act like a stream by passing fish and wildlife as well as the higher flows that come with large infrequent storms while protecting the stability of the road and public safety. Stream Smart Design follows the "Four S's": The culvert must SPAN the stream, allowing for passage of aquatic and terrestrial wildlife. The culvert has to be SET at the right elevation. The SLOPE of the culvert must match the stream. There must be SUBSTRATE (natural sediment) in the crossing. Reference:
*www1.maine.gov/mdot/publications/docs/brochures/pocket_guide_stream_smart_web.pdf*

**Temporary impacts:** Temporary impacts include waters of the U.S. that are temporarily filled, flooded, excavated, drained or mechanically cleared because of the regulated activity.

**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).

**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/Submerged Aquatic Vegetation (SAV):** Permanently inundated areas that under normal circumstances support communities of rooted aquatic vegetation, such as eelgrass in marine systems as well as a number of freshwater species in rivers and lakes. Note: Eelgrass surveys should be conducted be conducted between May and October unless otherwise directed.

**Vernal pools (VPs):** The State of Maine, Department of Environmental Protection has specific protections for VPs. For the purposes of these GPs, 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). In most years, VPs support one or more of the following obligate indicator species: wood frogs (*Rana sylvatica*), spotted salamanders (*Ambystoma maculatum*), blue-spotted salamanders (*Ambystoma laterale*), and fairy shrimp (*Eubranchipus* sp.). However, they should preclude sustainable populations of predatory fish.

**Water dependency:** activity requiring access or proximity to or siting within a special aquatic site (SAS) to fulfill its basic project purpose.

**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 United States (U.S.)**

**Waters of the 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 shall not be taken as an indication that the waterbody is not navigable: In Maine, navigable waters are those waters that are subject to the ebb and flow of the tide in addition to the non-tidal portions of the following federally-designated waters in Maine (the Kennebec River to Moosehead Lake, the Penobscot River to the confluence of the East and West Branch at Medway and, Lake Umbagog within the State of Maine).

**Non-tidal wetland:** A non-tidal wetland is a wetland that is not subject to the ebb and flow of tidal waters. Non-tidal wetlands contiguous to tidal waters are located landward of the high tide line (i.e., spring high tide line).

**Tidal wetland:** A tidal wetland is a jurisdictional wetland that is inundated by tidal waters. Tidal waters rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by other waters, wind, or other effects. Tidal wetlands are located channelward of the high tideline.

# Environmental Summary Sheet

**WIN: 027670.00 and 27670.10** **Date Submitted: 2/26/2025**
**Town: Crystal, Route 159**
**CPD Team Leader: Joshua Brown**
**ENV Field Contact: Cara O'Donnell**

**NEPA Complete:** State Funded, ACOE is the lead action agency

**Section 106**
No Effect

**Section 4(f) and 6(f)**

| Section 4(f) | Section 6(f) |
|---|---|
| No ROW/no takes | No ROW/no takes |

**Maine Department of Inland Fisheries and Wildlife Essential Habitat and state Endangered Species**
Project not mapped within Essential Habitat
Project site in showy lady slipper polygon, 9/24/2024 survey found no individuals present at the project Site.

**Section 7**
**Species of Concern:** Atlantic Salmon – No Effect, no in water work
Canada Lynx – (NLAA), NE Dkey

**Essential Fish Habitat**
NA not designated on project site

**Maine Department of Agriculture, Conservation, and Forestry**
Public Lands, Submerged Land Lease: NA
Maine Land Use Planning Commission: NA

**Maine Department of Environmental Protection**
NA, exempt activity

**Army Corps of Engineers: Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act.**
**Army Corps of Engineers: Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act.**
**Maine General Permit 22 - Corps Permit #NAE-2025-00314**
-Work Start Notification form to be completed by ENV Field Contact and submitted to ACOE with copy to Team Leader
-Compliance Certification Form to be completed by ENV Field Contact and submitted to ACOE with copy to Team Leader
**-Special Conditions apply. See Special Provision 105**
**Applicable Standards and Permits are included with the contract*

**Stormwater Review**
NA, based on scope

**Hazardous Materials Review**
NA, based on scope

**Special Provisions Required**

| | | |
|---|---|---|
| **Special Provision 105-Environmental Requirements** | N/A☐ | Applicable☒ |
| **Special Provision 203-Dredge material** | N/A☒ | Applicable☐ |
| **Standard Specification 656-Erosion Control Plan** | N/A☐ | Applicable☒ |
| **Special Provision 656-Minor Soil Disturbance** | N/A☒ | Applicable☐ |
| **Special Provision 203-Dredge Spec** | N/A☒ | Applicable☐ |

*Applicable standards and approvals based on plans/scope as of: 2/26/2025*