MAINE TURNPIKE AUTHORITY MAINE TURNPIKE

CONTRACT DOCUMENTS

CONTRACT 2018.16

EMERGENCY VEHICLE RAMPS
BLACKSTRAP ROAD UNDERPASS
MILE 52.0

NOTICE TO CONTRACTORS

PROPOSAL

CONTRACT AGREEMENT

CONTRACT BOND

FINAL LIEN AND CLAIM WAIVER AND AFFIDAVIT

SPECIFICATIONS

MAINE TURNPIKE AUTHORITY SPECIFICATIONS

The Specifications are divided into two parts:
Part I, Supplemental Specifications and Part II, Special
Provisions.

The Maine Turnpike Supplemental Specifications are additions and alterations to the 2014 Maine Department of Transportation Standard Specifications. See Subsection 100.1.

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MAINE TURNPIKE AUTHORITY

NOTICE TO CONTRACTORS

Sealed Proposals will be received by the Maine Turnpike Authority for:

CONTRACT 2018.16

EMERGENCY VEHICLE RAMPS BLACKSTRAP ROAD UNDERPASS MILE 52.0

at the office of the Maine Turnpike Authority, 2360 Congress Street, Portland, ME, until 10:00 a.m., prevailing time as determined by the Authority on June 21, 2018 at which time and place the Proposals will be publicly opened and read. Bids will be accepted from Contractors **prequalified** by the Maine Department of Transportation for Highway Construction Projects. All other bids may be rejected. This Project includes a wage determination developed by the State of Maine Department of Labor.

The work consists of constructing two Emergency Vehicle Ramps from Blackstrap Road to the Maine Turnpike in the Town of Falmouth, Maine. The work includes excavation, roadway gravels and pavement, guardrail, maintenance of traffic and all other work incidental thereto in accordance with the Plans and Specifications.

Plans and Contract Documents may be examined by prospective Bidders weekdays between 8:00 a.m. and 4:30 p.m. at the office of the Maine Turnpike Authority, 2360 Congress Street, Portland, Maine. The half size Plans and Contract Documents may be obtained from the Authority upon payment of Seventy-five (\$75.00) Dollars for each set, which payment will not be returned. Checks shall be made payable to: Maine Turnpike Authority. The Plans and Contract be downloaded from link **Documents** may also a on our website http://www.maineturnpike.com/project-and-planning/Construction-Contracts.aspx.

For general information regarding Bidding and Contracting procedures, contact Nate Carll, Purchasing Manager, at (207)482-8115. For information regarding Schedule of Items, plan holders list and bid results, visit our website at http://www.maineturnpike.com/project-and-planning/Construction-Contracts.aspx. For Project specific information, fax all questions to Nate Carll, Purchasing Manager, at (207) 871-7739 or email ncarll@maineturnpike.com. Responses will not be prepared for questions received by telephone. Bidders shall not contact any other Authority staff or Consultants for clarification of Contract provisions, and the Authority will not be responsible for any interpretations so obtained.

All work shall be governed by the Specifications entitled "State of Maine, Department of Transportation, Standard Specifications, Revision of November 2014", "Standard Details, Revision of November 2014" and "Best Management Practices for Erosion and Sediment Control", latest issue. Copies and recent updates to these publications can be downloaded at: http://www.maine.gov/mdot/contractors/publications/.

Proposals must be accompanied by an original bid bond, certified or cashier's check payable to the Maine Turnpike Authority in an amount not less than Five (5%) Percent of the Total Amount in the Proposal, but not less than \$500.00. The Bidder to whom a Contract is awarded will be required to furnish a Surety Corporation Bond, satisfactory to the Authority, on the standard Contract Bond form of the Authority, for a sum not less than the Total Amount of the Proposal.

Proposals must be made upon the Proposal Forms furnished by the Authority separately with the Contract Documents, and must be enclosed in the sealed special addressed envelope provided therefore bearing the name and address of the Bidder, the name of the Contract, and the date and time of Proposal opening on the outside.

A pre-bid conference will be held on June 12, 2018 at 11:00 a.m. at the Maine Turnpike Authority, 2360 Congress Street, Portland, Maine.

The Authority reserves the unqualified right to reject any or all Proposals and to accept that Proposal which in its sole judgment will under all circumstances serve its best interest.

MAINE TURNPIKE AUTHORITY

Nate Carll Purchasing Manager Maine Turnpike Authority

Portland, Maine

Maine Turnpike Authority

MAINE TURNPIKE

PROPOSAL

CONTRACT 2018.16

EMERGENCY VEHICLE RAMPS BLACKSTRAP ROAD UNDERPASS MILE 52.0

MAINE TURNPIKE AUTHORITY

PROPOSAL

CONTRACT 2018.16

EMERGENCY VEHICLE RAMPS BLACKSTRAP ROAD UNDERPASS MILE 52.0

TO MAINE TURNPIKE AUTHORITY:

The work consists of constructing two Emergency Vehicle Ramps from Blackstrap Road to the Maine Turnpike in the Town of Falmouth, Maine. The work includes excavation, roadway gravels and pavement, guardrail, maintenance of traffic and all other work incidental thereto in accordance with the Plans and Specifications.

This Work will be done under a Contract known as Contract 2018.16 according to the Plans and Specifications which are on file in the office of the Maine Turnpike Authority, 2360 Congress Street, Portland, Maine.

On the acceptance of this Proposal for said Work, the undersigned will give the required bond with good security conditioned for the faithful performance of said Work, according to said Plans and Specifications, and the doing of all other work required by said Specifications for the consideration herein named and with the further condition that the Maine Turnpike Authority shall be saved harmless from any and all damages that might accrue to any person, persons or property by reason of the carrying out of said Work, or any part thereof, or by reason of negligence of the undersigned, or any person or persons under his employment and engaged in said Work.

The undersigned hereby declares that he/she has carefully examined the Plans, Specifications and other Contract Documents, and that he/she will contract to carry out and complete the said Work as specified and delineated at the price per unit of measure for each scheduled item of Work stated in the Schedule of Prices as follows:

It is understood that the TOTAL AMOUNT stated by the undersigned in the following Schedule of Prices is based on approximate quantities and will be used solely for the comparison of bids, and that the quantities stated in the Schedule of Prices for the various items are estimates only and may be increased or decreased all as provided in the Specifications.

SCHEDULE OF BID PRICES CONTRACT NO. 2018.16 Emergency Vehicle Ramps Blackstrap Road Underpass Mile 52.0

| Item No | Item Description | Units | Approx. Quantities | Unit Prices in Numbers | | Bid Amount in Numbers | |
|------------|---|----------------|--------------------|------------------------|-------|--------------------------|----------------|
| 110 | nom Becompain | Office | Quantitico | Dollars | Cents | Dollars | Cents |
| 202.202 | Removing Pavement Surface | Square Yard | 940 | | | | |
| 203.20 | Common Excavation | Cubic Yard | 5,090 | | | | |
| 203.25 | Granular Borrow | Cubic Yard | 210 | | | | |
| 304.10 | Aggregate Subbase Course - Gravel | Cubic Yard | 2,400 | | | | |
| 304.14 | Aggregate Base Course - Type A | Cubic Yard | 600 | | | | |
| 403.207 | Hot Mix Asphalt, 19.0 mm Nominal Maximum Size | Ton | 160 | | | | |
| 403.208 | Hot Mix Asphalt, 12.5 mm Nominal Maximum Size (Surface) | Ton | 480 | | | | |
| 403.212 | Hot Mix Asphalt, 4.75 mm Nominal Maximum Size (Shim) | Ton | 30 | | | | |
| 403.213 | Hot Mix Asphalt, 12.5 mm Nominal Maximum Size (Base and Intermediate) | Ton | 480 | | | | |
| 409.15 | Bituminous Tack Coat, Applied | Gallon | 310 | | | | |
| 419.30 | Sawing Bituminous Pavement | Linear Foot | 1,260 | | | | |

| | Туре А | Talu | | | | |
|---------|---|----------------|-------|--------------|------|--|
| 403.207 | Hot Mix Asphalt, 19.0 mm Nominal Maximum Size | Ton | 160 | | | |
| 403.208 | Hot Mix Asphalt, 12.5 mm Nominal Maximum Size (Surface) | Ton | 480 | | | |
| 403.212 | Hot Mix Asphalt, 4.75 mm Nominal Maximum Size (Shim) | Ton | 30 | | | |
| 403.213 | Hot Mix Asphalt, 12.5 mm Nominal Maximum Size (Base and Intermediate) | Ton | 480 | | | |
| 409.15 | Bituminous Tack Coat, Applied | Gallon | 310 | | | |
| 419.30 | Sawing Bituminous Pavement | Linear Foot | 1,260 | | | |
| | | | | | | |
| | | | | CARRIED FORW | ARD: | |
| | | | | | | |

| | 1 | | | CC | NTRACT NO: 2018.1 | О |
|---------|---|----------------|------------|-----------------|-------------------|----------------|
| Item | | | Approx. | Unit Prices | Bid Amount | t |
| No | Item Description | Units | Quantities | in Numbers | in Numbers | ; |
| | | | Qua | Dollars Cen | ts Dollars | Cents |
| | <u> </u> | | | BROUGHT FORWARI |): | |
| 526.306 | Temporary Concrete Barrier, Type I - Supplied by | Lump Sum | 1 | | | |
| | Authority (840') | | | | | |
| 527.431 | Work Zone Crash Cushion | Each | 1 | | | - - |
| 603.155 | 12 inch Reinforced Concrete Pipe Class III | Linear Foot | 4 | | | |
| 603.159 | 12 inch Culvert Pipe Option III | Linear Foot | 72 | | | |
| 603.179 | 18 inch Culvert Pipe Option III | Linear Foot | 38 | | | |
| 603.199 | 24 inch Culvert Pipe Option III | Linear Foot | 80 | | | |
| 603.219 | 36 inch Culvert Pipe Option III | Linear Foot | 72 | | | - - |
| 603.28 | Concrete Collar | Each | 1 | | | |
| | 31" W-Beam Guardrail - Mid- Way Splice (Steel Post, 8" Offset Blocks, Single Faced) | Linear Foot | 250 | | | _ _ _ |
| | 31" W-Beam Guardrail - Mid- Way Splice Flared Terminal (31" Height) | Each | 1 | | | |
| 606.242 | Guardrail Type 3d - Over 15 feet Radius | Linear Foot | 25 | | | |
| 606.278 | Terminal End - Anchored End | Each | 1 | | | |
| | | | | | | |

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| | | T | I | | | ACT NO: 2018 | . 10 |
|----------|---|----------------|------------|--------------|----------------|--------------|-----------------------|
| Item | | | Approx. | Unit Prices | | Bid Amount | |
| No | Item Description | Units | Quantities | in Numbers | | in Numbers | |
| | ' | | | Dollars | Cents | Dollars | Cents |
| | | | | BROUGHT FORV | VARD: | | • |
| 606.3561 | Delineator Post - Remove and Reset | Each | 2 | | | | |
| 606.369 | Guardrail - Remove and Stack | Linear Foot | 385 | | | | |
| 606.48 | Single Galvanized Post | Each | 2 | | | | |
| 607.17 | Chain Link Fence - 6' | Linear Foot | 139 | | | | |
| 607.2325 | Pipe Entry Gate | Each | 3 | | | | |
| 607.2326 | Remove and Reset Pipe Entry Gate | Each | 1 | | | | |
| 607.32 | Bracing Assembly, Type I - Metal Post | Each | 4 | | | | |
| 607.33 | Bracing Assembly, Type II - Metal Post | Each | 2 | | | | |
| 610.08 | Plain Riprap | Cubic Yard | 475 | | | | |
| 610.18 | Stone Ditch Protection | Cubic Yard | 196 | | | | 1 |
| 610.181 | Temporary Stone Check Dams | Cubic Yard | 55 | | | | |
| 613.319 | Erosion Control Blanket | Square Yard | 1,220 | | | | |

| CARRIED FORWARD: |
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| | 1 | | 1 | | CONT | RACT NO: 2018.1 | 0 |
|----------|---|--------|------------|--------------|-------|-----------------|--------|
| Item | | | Approx. | Unit Prices | | Bid Amount | |
| No | Item Description | Units | Quantities | in Numbers | | in Numbers | |
| 110 | nem Beedipuen | 011110 | Quantitioo | Dollars | Cents | Dollars | Cents |
| | | | <u> </u> | 20 | - | 20 | |
| | | | | BROUGHT FORW | ARD: | | |
| 615.07 | Loam | Cubic | 630 | | | | |
| | | Yard | | | | | |
| | | | | | | | |
| C40.44 | Cooding Mathed Number 2 | I Imit | 50 | | | | |
| 618.14 | Seeding Method Number 2 | Unit | 52 | | | | I I |
| | | | | l | | | l I |
| | | | | | | | i |
| 619.1201 | Mulch, Plan Quantity | Unit | 52 | | | | 1 |
| | | | | | | | |
| | | | | | | | |
| 619 1202 | Temporary Mulch | Lump | 1 | | | | |
| 010.1202 | Temporary Water | Sum | ' | | | | i |
| | | | | į | | | İ |
| | | | | | | | |
| 620.58 | Erosion Control Geotextile | Square | 2,570 | | | | ļ |
| | | Yard | | | | | |
| | | | | | | | l |
| 621.043 | Evergreen Tr (6'-8') GP A | Each | 50 | | | | |
| 0200 | | | | į | | | İ |
| | | | | | | | |
| 222.12 | | | | | | | |
| 626.13 | 18" x 12" x 18" Quazite Junction Box | Each | 9 | l | | | l I |
| | duriction box | | | | | | i i |
| | | | | | | | ! |
| 626.32 | 24 inch Diameter Foundation | Each | 4 | | | | |
| | | | | | | | |
| | | | | | | | |
| 629.05 | Hand Labor, Straight Time | Hour | 10 | | | | |
| 629.05 | Hand Labor, Straight Time | Hour | 10 | l | | | ! |
| | | | | | | | i |
| | | | | <u> </u> | | | |
| 631.12 | All Purpose Excavator | Hour | 10 | | | | |
| | (including operator) | | | | | | |
| | | | | ļ | | | |
| 631.171 | Truck - small (including | Hour | 10 | | | | |
| | operator) | | | į | | | i l |
| | | | | j | | | |
| | | | | | | | |
| 631.36 | Foreman | Hour | 10 | | | | |
| | | | | | | | 1 |
| | | | | I I | | | |
| <u> </u> | | | | <u>L</u> | | | |

| CARRIED FORWARD: | |
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| | | Approx. | = . | | |
|---|---|--|--|--------------|---|
| | | | Unit Prices | Bid Amoui | nt |
| Item Description | Units | Quantities | in Numbers | in Number | |
| = 000 mp 100 m | | | Dollars Ce | ents Dollars | Cents |
| | | | BROUGHT FORWAI | RD: | |
| Luminaires | Each | 1 | | | |
| Remove and Reset Light Standard | Each | 3 | | | |
| Conventional Light Standard | Each | 1 | | | |
| #6 AWG THHN Wire | Linear Foot | 2,620 | | | |
| #6 AWG THHN Ground Wire | Linear Foot | 1,320 | | | |
| Relocate Existing Sign Assembly and Post | Each | 1 | | | |
| Flashing Arrow | Each | 1 | | | |
| Drum | Each | 87 | | | |
| Cone | Each | 87 | | | |
| Construction Signs | Square Foot | 650 | | | 1 |
| Maintenance of Traffic Control Devices | Lump Sum | 1 | | | |
| Flaggers | Hour | 300 | | | |
| | Remove and Reset Light Standard Conventional Light Standard #6 AWG THHN Wire #6 AWG THHN Ground Wire Relocate Existing Sign Assembly and Post Flashing Arrow Drum Cone Construction Signs Maintenance of Traffic Control Devices | Remove and Reset Light Standard Conventional Light Standard #6 AWG THHN Wire #6 AWG THHN Ground Wire Relocate Existing Sign Assembly and Post Flashing Arrow Each Cone Cone Each Construction Signs Square Foot Maintenance of Traffic Control Devices Linear Foot Remove and Reset Light Standard Conventional Light Standard #6 AWG THHN Wire #6 AWG THHN Ground Wire #6 AWG THHN Ground Wire Foot Foot Relocate Existing Sign Assembly and Post Flashing Arrow Each Cone Each 87 Cone Each Square Foot Maintenance of Traffic Control Devices Each Sum Assembly and Post Each 1 | Luminaires | BROUGHT FORWARD: Luminaires Each 1 Remove and Reset Light Standard Each 3 Conventional Light Standard Each 1 #6 AWG THHN Wire Linear Foot 1,320 #6 AWG THHN Ground Wire Linear Foot 1 Relocate Existing Sign Each 1 Plashing Arrow Each 1 Drum Each 87 Cone Each 87 Construction Signs Square Foot Foot Sum II Maintenance of Traffic Control Devices Sum II |

| CARRIED FORWARD: |
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| | | | | | CON | TRACT NO: 2018.16 | <u> </u> |
|------------|---|-----------------|--------------------|---------------------------|-------|-----------------------|----------|
| Item No | Item Description | Units | Approx. Quantities | Unit Prices in Numbers | | Bid Amount in Numbers | |
| | , , , , | | | Dollars | Cents | Dollars | Cents |
| | | | | BROUGHT FORV | VARD: | | |
| 652.45 | Truck Mounted Attenuator | Calendar Day | 10 | | | | |
| 652.451 | Automated Trailer Mounted Speed Limit Sign | Calendar Day | 10 | | | | |
| 655.2031 | 2" Schedule 80 PVC conduit | Linear Foot | 1,350 | | | | |
| 655.204 | 3" Schedule 80 PVC conduit | Linear Foot | 280 | | | | |
| 656.50 | Baled Hay,in place | Each | 30 | | | | |
| 656.632 | 30" Temporary Silt Fence | Linear Foot | 3,200 | | | | |
| 659.10 | Mobilization | Lump Sum | 1 | | | | |
| | | | | TC | OTAL: | | |

| Acknowledgment is hereby made o the Plans and Specifications: | f the following Addenda received since issuance of |
|--|--|
| | original bid bond, cashiers or certified check on |
| Turnpike Authority and the undersigned she security required by the Maine Turnpike Ar- time fixed therein, an amount of money equ Proposal for the Contract awarded to the un | Bank, for |
| The performance of said Work und specified in Subsection 107.1. | ler this Contract will be completed during the time |
| my (our) failure to complete the Work v | e of this Contract and that I (we) will, in the event of within the time limit named above, pay to Maine amount or amounts stated in the Specifications. |
| | artnership/Corporation under the laws of the State of at, |
| | (SEAL) |
| Affix Corporate Seal | (SEAL) |
| or Power of Attorney Where Applicable | (SEAL) |
| | |
| | By: |
| | Its: |

Information below to be typed or printed where applicable:

| INDIVIDUAL: | |
|---|--------------|
| (Name) | (Address) |
| PARTNERSHIP - Name and Address of General | al Partners: |
| (Name) | (Address) |
| (Name) | (Address) |
| (Name) | (Address) |
| (Name) | (Address) |
| INCORPORATED COMPANY: | |
| (President) | (Address) |
| (Vice-President) | (Address) |
| (Secretary) | (Address) |
| (Treasurer) | (Address) |

MAINE TURNPIKE AUTHORITY

MAINE TURNPIKE

YORK TO AUGUSTA

CONTRACT AGREEMENT

This Agreement made and entered into between the Maine Turnpike Authority, and

| sometimes termed the "Authority", and |
|---|
| herein termed the "Contractor": |
| WITNESSETH: That the Authority and the Contractor, in consideration of the premises and of the mutual covenants, considerations and agreements herein contained, agree as follows: |
| FIRST: The parties hereto mutually agree that the documents attached hereto and herein incorporated and made a part hereof collectively evidencing and constituting the entire Contract to the same extent as if herein written in full, are the Notice to Contractors, the Accepted Proposal, the Specifications, the Plans, this Agreement, the Contract Bond and all Addenda to the Contract Documents duly issued and herewith enumerated: |
| SECOND: The Contractor for and in consideration of certain payments to be made as hereafter specified, hereby covenants and agrees to perform and execute all of the provisions of this Contract and of all documents and parts attached hereto and made a part thereof, and at his own cost and expense to furnish and perform everything necessary and required to construct and complete, ready for its intended purpose, in accordance with the Contract and such instructions as the Engineer may give, acceptable to the Authority, in the times provided, all of the Work covered and included under Contract No covering as herein described. |

THIRD: In consideration of the performance by the Contractor of his covenants and

agreements as herein set forth, the Authority hereby covenants and agrees to pay the Contractor according to the Schedule of Prices set forth in the Proposal with additions and deductions as elsewhere herein provided in the times and in the manner stated in the Specifications. This Agreement shall insure to the benefit of, and shall be binding upon the parties hereto, and upon their respective successors and assigns; but neither party hereto shall assign or transfer his interest herein in whole or in part without the consent of the other, except as herein provided.

| IN WITNESS | WHEREOF | the | parties | to | this | Agreement | have | executed | the | same | in |
|----------------|---------|-----|---------|----|------|-----------|------|----------|-----|------|----|
| quintuplicate. | | | | | | | | | | | |

| | AUTHORITY - | AUTHORITY - | | |
|-----------|--------------------------|--------------------------|--|--|
| | MAINE TURNPIKE AUTHORITY | MAINE TURNPIKE AUTHORITY | | |
| | By: | | | |
| | Title: CHAIRMAN | | | |
| | Date of Signature: | | | |
| ATTEST: | | | | |
| Secretary | | | | |
| | CONTRACTOR - | | | |
| | CONTRACTOR | | | |
| | By: | | | |
| | Title: | | | |
| | Date of Signature: | | | |
| WITNESS: | | | | |
| | | | | |

CONTRACT BOND

| of | in the County of | and State of | |
|--|--|--|---|
| as Principal, and | | a Corporation duly org | ganized under |
| the laws of the State of | and I | having a usual place of business in | |
| | | unto the Maine Turnpike Authority i | |
| | | Dollars (\$ | |
| foregoing Contract No. satisfy all claims and dequipment and all other contemplated by said Countemplated by s | emands incurred for the ritems contracted for contract, and shall fully incur in making good otherwise it shall remain | n that the Principal, designated as Cornall faithfully perform the Contract or the same and shall pay all bills for later, or used by him, in connection we reimburse the Obligee for all outlay any default of said Principal, then the n in full force and effect. | n his part and bor, material, ith the Work and expense |
| Witnesses: | | CONTRACTOR | |
| | | | (SEAL) |
| | | | (SEAL) |
| | | | (SEAL) |
| | | SURETY | |
| | | | (SEAL) |
| | | | (SEAL) |
| | | | (SEAL) |

(Surety must attach copy of Power of Attorney showing authority of Office or Agent to execute bonds)

FINAL LIEN AND CLAIM WAIVER AND AFFIDAVIT

| Upon receipt of the su | n of, which |
|-----------------------------------|---|
| sum represents the total amount | n of, which aid, including the current payment for work done and materials supplied |
| for Project No. | , in, Maine, under the undersigned's Authority. |
| Contract with the Maine Turnpik | Authority. |
| The undersioned on oat | states that the Final Payment of |
| is the final payment for all work | states that the Final Payment ofabor, materials, services and miscellaneous (all of which are hereinafter |
| referred to as "Work Items") sup | lied to the said Project through and |
| that no additional sum is claimed | olied to the said Project throughand py the undersigned respecting said Project. |
| undersigned in connection with | n, states that all persons and firms who supplied Work Items to the id Project have been fully paid by the undersigned for such Work Items effected immediately upon receipt of this payment. |
| hold harmless the Maine Turnpil | yment herewith made, the undersigned does fully and finally release and Authority, and its Surety, if any, from any and all claims, liens or right Project under any applicable bond, law or statute. |
| | Affidavit is submitted to assure the Owner and others that all liens and furnished by the undersigned are paid. |
| (Contractor) | |
| | By: |
| | Title: |
| State of MAINE | |
| County of | |
| | |
| ī | hereby certify on hehalf of |
| (Company Officer) | hereby certify on behalf of(Company Name) |
| | being first duly sworn and stated that the foregoing representations are |
| are true and correct upon his c | on knowledge and that the foregoing is his free act and deed in said of the above-named |
| capacity and the nee act and acc | (Company Name) |
| The above-named, and swears the | , personally appeared before me this day of this is his free act and deed. |
| | (SEAL) |
| | Notary Public |
| | My Commission Expires: |

MAINE TURNPIKE AUTHORITY

SPECIFICATIONS

PART I – SUPPLEMENTAL SPECIFICATIONS

(Rev. November 10, 2016) Supplemental Specifications available on the Maine Turnpike Authority website

MAINE TURNPIKE AUTHORITY SPECIFICATIONS PART II – SPECIAL PROVISIONS

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<u>PART II – SPECIAL PROVISIONS – Continued</u> Contract 2018.06

| <u>SECTION</u> | TITLE | <u>PAGE</u> |
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| | (Wire) | |
| 645 | HIGHWAY SIGNING (Relocate Existing Sign Assembly and Post) | SP-52 |
| 652. | MAINTENANCE OF TRAFFIC (Specific Project Maintenance of Traffic Requirements) | SP-53 |
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MAINE TURNPIKE AUTHORITY

SPECIFICATIONS

PART II - SPECIAL PROVISIONS

All work shall be governed by the Maine Department of Transportation Standard Specifications, Revision of November 2014, except for that work which applies to sections of the Maine Department of Transportation Standard Specifications which are amended by the Maine Turnpike Supplemental Specifications and the following modifications, additions and deletions.

General Description of Work

The work consists of constructing two Emergency Vehicle Ramps from Blackstrap Road to the Maine Turnpike in the Town of Falmouth, Maine. The work includes excavation, roadway gravels and pavement, guardrail, maintenance of traffic and all other work incidental thereto in accordance with the Plans and Specifications.

Plans

The drawings included in these Contract Documents, and referred to as the Plans, show the general character of the work to be done under this Contract. They bear the general title "Maine Turnpike – Contract 2018.16 – Emergency Vehicle Ramps – Blackstrap Road Underpass Mile 52.0. The right is reserved by the Resident to make such minor corrections or alterations in the Plans as he deems necessary without change in the unit prices on the Schedule of Prices of the Proposal.

101.2 Definition

Holidays

The following is added after Memorial Day in the Supplemental Specifications:

Independence Day 2018 (Fourth of July)

12:01 p.m. preceding Tuesday to noon the following Thursday.

103.4 Notice of Award

The following sentence is added:

The Maine Turnpike Authority Board is scheduled to consider the Contract Award on June 28, 2018.

104.3.8 Wage Rates and Labor Laws

Section 104.3.8 Wage Rates and Labor Laws has been amended as follows:

The fair minimum hourly rates determined by the State of Maine Department of Labor for this Contract are as follows:

THIS DOCUMENT MUST BE CLEARLY POSTED AT THE PERTAINING STATE FUNDED PREVAILING WAGE CONSTRUCTION SITE

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

Wage Determination - In accordance with 26 MRSA §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.

Title of Project -----2018.16-Emergency Vehicle Ramps at Backstrap Road Underpass, MM52.0

Location of Project -- Falmouth, Cumberland County

2018 Fair Minimum Wage Rates Highway & Earth Cumberland County

| | Minimum | Minimum | | | Minimum | Minimum | |
|------------------------------------|---------|----------------|--------------|----------------------------------|---------|----------------|--------------|
| Occupation Title | Wage | Benefit | <u>Total</u> | Occupation Title | Wage | Benefit | <u>Total</u> |
| Asphalt Raker | \$16.00 | \$0.44 | \$16.44 | Ironworker – Ornamental | \$23.13 | \$4.80 | \$27.93 |
| Backhoe Loader Operator | \$20.00 | \$2.23 | \$22.23 | Ironworker - Reinforcing | \$24.79 | \$10.60 | \$35.39 |
| Boom Truck (Truck Crane) Operator | \$21.66 | \$6.86 | \$28.52 | Ironworker - Structural | \$21.80 | \$4.88 | \$26.68 |
| Bulldozer Operator | \$22.30 | \$4.19 | \$26.49 | Laborer (Includes Helper-Tender) | \$14.50 | \$0.94 | \$15.44 |
| Carpenter | \$21.00 | \$2.36 | \$23.36 | Laborer - Skilled | \$17.00 | \$2.22 | \$19.22 |
| Cement Mason/Finisher | \$17.00 | \$0.56 | \$17.56 | Line Erector-Power/Cable Splicer | \$26.00 | \$7.59 | \$33.59 |
| Crane Operator =>15 Tons) | \$26.00 | \$5.97 | \$31.97 | Loader Operator - Front-End | \$19.88 | \$3.74 | \$23.62 |
| Crusher Plant Operator | \$17.75 | \$2.39 | \$20.14 | Mechanic- Maintenance | \$21.00 | \$3.15 | \$24.15 |
| Diver | \$28.50 | \$1.48 | \$29.98 | Painter | \$17.00 | \$0.00 | \$17.00 |
| Driller -Rock | \$18.38 | \$2.60 | \$20.98 | Paver Operator | \$18.00 | \$1.57 | \$19.57 |
| Earth Auger Operator | \$22.97 | \$6.17 | \$29.14 | Pipelayer | \$18.00 | \$3.16 | \$21.16 |
| Electrician - Licensed | \$26.00 | \$4.67 | \$30.67 | Pump Installer | \$21.00 | \$3.73 | \$24.73 |
| Electrician Helper/Cable Puller | \$17.00 | \$2.84 | \$19.84 | Reclaimer Operator | \$19.13 | \$2.98 | \$22.11 |
| (Licensed) | | | | | | | |
| Elevator Constructor/Installer | \$19.25 | \$1.62 | \$20.87 | Roller Operator - Earth | \$16.00 | \$1.89 | \$17.89 |
| Excavator Operator | \$21.54 | \$3.44 | \$24.98 | Roller Operator - Pavement | \$18.00 | \$2.07 | \$20.07 |
| Fence Setter | \$17.25 | \$1.72 | \$18.97 | Screed/Wheelman | \$22.88 | \$4.25 | \$27.13 |
| Flagger | \$12.50 | \$0.00 | \$12.50 | Truck Driver - Light | \$17.83 | \$3.74 | \$21.57 |
| Grader/Scraper Operator | \$21.33 | \$5.65 | \$26.98 | Truck Driver - Medium | \$18.00 | \$1.89 | \$19.89 |
| Highway Worker/Guardrail Installer | \$16.50 | \$0.79 | \$17.29 | Truck Driver - Heavy | \$16.50 | \$1.53 | \$18.03 |
| Hot Top Plant Operator | \$23.38 | \$5.55 | \$28.93 | Truck Driver - Tractor Trailer | \$19.00 | \$2.79 | \$21.79 |

The Laborer classifications include a wide range of work duties. Therefore, if any specific occupation to be employed on this project is not listed in this determination, call the Bureau of Labor Standards at the above number for further clarification.

Welders are classified in the trade to which the welding is incidental.

12-31-2018

Apprentices - The minimum wage rate for registered apprentices are those set forth in the standards and policies of the Maine State Apprenticeship and Training Council for approved apprenticeship programs.

Posting of Schedule - Posting of this schedule is required in accordance with 26 MRSA §1301 et. seq., by any contractor holding a State contract for construction valued at \$50,000 or more and any subcontractors to such a contractor.

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.

Determination No: HI-084-2018 A true copy

Filing Date: March 16, 2018 Attest:

Scott A. Cotnoir
Wage & Hour Director

BLS(Highway & Earth Cumberland)

Expiration Date:

104.4.6 Utility Coordination

This Subsection is amended by the addition of the following:

These Special Provisions outline the arrangements which have been established by the Authority for coordination of the work to be accomplished by the utilities. The scope and schedule of utility relocation work is noted herein. The Contractor shall plan and conduct his work accordingly.

General

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

The Contractor shall plan and conduct his operations in accordance with the following utility schedule. The Contractor must comply with all OSHA regulations pertaining to work adjacent to utility wires. The Contractor shall plan and conduct his work accordingly.

The following utilities are located within the Project limits. The Contractor shall ascertain the location of the existing utilities and any other necessary information by direct inquiry at the office of the following utility owners:

AERIAL UTILITIES

ELECTRIC:

Central Maine Power Company 83 Edison Drive Augusta, ME 04336

ATTN: Jason Ward (207) 791-1060

CENTRAL MAINE POWER (CMP)

There are no planned improvements or work by CMP. Contractor shall provide MTA Resident and CMP with 10 working days notice of construction beneath all transmission lines and work adjacent to any aerial line.

UNDERGROUND UTILITIES

None identified through the utility coordination process.

104.4.7 Cooperation With Other Contractors

This Subsection is amended by the addition of the following:

Adjacent contracts currently scheduled for the 2018 construction season include:

MaineDOT Blackstrap Road Bridge over the Presumpscot River

105.8.2 Permit Requirements

The Project is being constructed under the Maine Department of Environmental Protection (DEP). Natural Resources Protection Act Permit by Rule regulations Section 11 – State Transportation Facilities, updated June 08, 2012. A copy of the Section 11 – State Transportation Facilities Permit by Rule regulations are attached in **Appendix A**. The Contractor must abide by all of the conditions of the permit.

The Project is being permitted under Section 404 of the Clean Water Act, through the US Army Corps of Engineers Programmatic General Permit, Category 2. The Project is subject to the General Conditions of the Category 2 Authorization dated October 13, 2015 through October 13, 2020. A copy of the General Permit is attached in **Appendix B**.

The Project is subject to the requirements of the Maine Pollutant Discharge Elimination System (MPDES) General Permit for Stormwater Discharge from Construction Activity, as promulgated by the US Environmental Protection Agency (US EPA) and Administrated by the Maine Department of Environmental Protection (DEP).

A Notice of Intent (NOI), accompanied by a preliminary Limit of Disturbance (LOD) plan was submitted by the Authority to the DEP for coverage under the Maine Construction General Permit (MCGP). Compliance with the erosion and sedimentation control requirements outlined in this Contract is required by the Contractor.

The Contractor shall prepare a LOD plan illustrating the Contractor's proposed limit of earthwork disturbance. The LOD plan shall show all construction access locations, field office locations, material and temporary waste storage locations, as well as include the Contract limits of earthwork disturbance. All applicable erosion and sedimentation control devices needed shall be detailed on the Contractor's LOD plan and are not limited to those devices shown on the Contract LOD plan. This Plan shall be submitted for review and approval, to the Resident within 14 days of Contract award. Payment for creating, revising, and completing this plan shall be incidental to Item 659.10, Mobilization.

The LOD for this Contract, which were submitted as part of the NOI, has been estimated to be <u>2.9 acres</u>; which includes an additional 0.5 acres for contractor access.

At any time during the Contract, if the Limit of Disturbance needs to be adjusted to accommodate construction activities, the Contractor shall resubmit the LOD plan (including any additional erosion and sedimentation control measures needed) to the Resident for review and approval prior to any additional disturbance taking place:

- If the cumulative area of disturbance exceeds the estimated LOD noted above, by less than one acre, the Resident shall have a minimum of five (5) working days to approve the revised LOD plan.
- If the cumulative area of disturbance exceeds the estimated LOD noted above, by over one acre, the Resident shall first approve of the plan and then possibly

resubmit the NOI for MaineDEP approval. The approval may take a minimum of 21 working days.

Compliance with the erosion and sedimentation control requirements outlined in this Contract is required by the Contractor.

The Contractor shall comply with the conditions outlined in the Army Corps General Permit, Maine Department of Environmental Protection NRPA Permit by Rule, the US Army Corps of Engineers General Permit, and the Maine Pollutant Discharge Elimination System General Permit for stormwater discharge associated with construction activity. The Contractor shall indemnify and hold harmless the Maine Turnpike Authority or its agents, representatives and employees against any and all claims, liabilities or fines arising from or based on the violation of the above noted permits.

This Project is also subject to the requirements of the Maine Pollutant Discharge and Elimination System (MPDES) General Permit for the Discharge of Stormwater from MTA's Municipal Separate Storm Sewer Systems (MS4), because it is located within an Urbanized Area (UA) as defined by the 2000 and 2010 Decennial Census by the U.S. Bureau of the Census. MS4 compliance requires all Contractors to be properly trained in Erosion and Sedimentation Control (ESC) measures (as per MTA Supplemental Specification Subsections 105.8.1 and 656.07) and implement measures to reduce pollutants in stormwater runoff from construction activities. See **Appendix C** for MS4 Stormwater Awareness Plan and MS4 Targeted BMP Adoption Plan.

107.1 Contract Time and Contract Completion Date

This Subsection is amended by the addition of the following:

All work shall be completed on or before May 31, 2019. The contract shall be substantially complete by November 2, 2018.

107.1.1 Substantial Completion

This Subsection is amended by the addition of the following:

Substantially complete shall be defined by the Authority as the following:

- All roadway work, including surface pavement, shoulder widening, gates, and guardrail installation complete and available for traffic.
- All disturbed slopes loamed, seeded, and mulched and protected with temporary erosion control mix and/or blanket where necessary.

Supplemental Liquidated damages on a calendar day basis in accordance with Subsection 107.8 shall be assessed for each calendar day that substantial completion is not achieved.

107.4.6 Prosecution of Work

The Contractor shall submit to the Authority a construction schedule which shall document that the Contractor has the necessary labor and equipment to work immediately and continuously

at the project site once the bridge is closed. The intent of this specification is to minimize the amount of time for bridge closure, while providing the Contractor sufficient time to complete the work in a diligent manner and reopen the bridge as prescribed by the project's Substantial Completion date.

SPECIAL PROVISION

SECTION 202

REMOVING STRUCTURES AND OBSTRUCTIONS

(Removing Pavement Surface-Mainline) (Removing Existing Pavement Surface)

202.01 Description

The following sentences are added:

This work shall also consist of removing the surface of the bituminous concrete pavement in all locations to the depth, width, grade, and cross section on the mainline as shown on the Plans or as directed by the Resident.

Removal of the pavement and membrane surface from the bridge decks shall be completed by scraping or other methods that will not damage the existing concrete deck surface. Milling of bridge deck pavement shall not be allowed.

Removal of approach pavement shall be completed through the use of a milling machine. The milling machine(s) shall be capable of accurately establishing profile grades by referencing from a floating straight edge, a minimum of 30 feet.

Areas requiring shim pavement to reach final pavement grade shall not be milled.

This work shall also consist of construction of temporary ramps at all butt joints as shown in the MaineDOT Standard Details, November 2014 Edition – Pavement Overlay Butt Joint Detail (Roadways), Page 202(01) or as approved by the Resident. The length of the temporary ramp shall be at least 1/2 L.

The following subsection is added:

202.032 Removing Bridge Pavement Surface and Membrane

All bridge deck pavement, membrane and scrapings shall be disposed of by the Contractor off of the turnpike right-of-way in accordance with the Maine Department of Environmental Protection Solid Waste Management Requirements.

The following paragraph is added:

Extreme care shall be taken to avoid damaging the existing concrete or bituminous pavement intended to remain. All existing bituminous pavement and bridge deck concrete, intended to remain, damaged by the Contractor's removal operations shall be repaired by the Contractor as approved by the Resident at no additional cost to the Authority.

202.061 Removing Pavement Surface

This Subsection is deleted and replaced with the following:

The equipment for removing the bituminous surface, excluding bridge decks, shall be a power-operated milling machine or planer capable of removing the bituminous concrete pavement to the required depth, transverse cross slope, and profile grade by use of an automated grade and slope control system. The controls shall automatically increase or decrease the pavement removal depth as required, and readily maintain desired cross slope to compensate for surface irregularities in the existing pavement course. The mill head on the machine shall have a maximum 8mm tooth spacing pattern and a minimum triple wrap configuration. The milling machine shall be capable of accurately establishing profile grades by referencing from a floating straight edge, minimum of 30± feet. The equipment shall also have an effective means for removing excess material from the surface and preventing flying material in compliance with Subsections 105.2.5 Compliance with Health and Safety Laws and 105.2.6 Convenience of the Public, of the Specification.

The contractor shall operate the milling machine such that the forward operating speed of the machine in feet per minute (fpm) does not exceed 65% of the mill head in revolutions per minute (rpm). i.e. 100 rpm head speed equals maximum forward operating speed of 65 fpm. The contractor shall avoid stopping the milling operation during truck exchanges by staging the haul units accordingly.

The Contractor shall locate, identify and remove all objects in the pavement through the work area that would be detrimental to the milling machine.

The Contractor shall be responsible for the layout of the longitudinal centerline between the travel lane and passing lane.

The finished milled surface will be inspected before being accepted, and any deviations in the profile exceeding 3/8 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 the centerline will be corrected. In no case shall the cross slope in a single lane width be inverted resulting in a depression as measured transverse to the direction of travel. Any cross slope inversions or depressions shall be corrected by spot shimming the area with HMA as directed by the resident prior to installing any leveling or wearing course. These corrections shall be done with no additional expense to the Authority.

All surplus pavement grindings, except for the amount specified above, shall be disposed of by the Contractor off the turnpike right-of-way. All grindings shall be disposed of in accordance with the Maine Department of Environmental Protection Solid Waste Management Requirements.

202.07 Method of Measurement

The removal of existing bituminous concrete pavement – mainline will be measured by the square yard of material removed to the required depth.

The following sentences are added:

Transporting and stockpiling of the pavement grindings at the maintenance facilities will not be measured separately for payment, but shall be incidental to the Removing Pavement Surface items.

Installation of temporary bituminous ramps will not be measured separately for payment, but shall be incidental to the Contract.

Removal of temporary bituminous ramps will not be measured separately for payment, but shall be incidental to the Contract.

202.08 Basis of Payment

Removing Pavement Surface – Mainline will be paid for at unit price per square yard which price shall be full compensation for removing and disposing of the bituminous and gravel materials.

Payment will be made under:

| Pay Item | Pay Unit | | |
|----------|--------------------------------------|-------------|--|
| 202.202 | Removing Pavement Surface – Mainline | Square Yard | |

SPECIAL PROVISION

SECTION 203

EXCAVATION AND EMBANKMENT

203.01 Description

The following paragraph is added:

This work shall consist of cutting, removing and disposing of the full depth of existing bituminous concrete pavement at the approaches to the bridge structures within the limits of work as shown on the Plans or as approved by the Resident. The pavement shall be sawcut to the full depth of pavement at the limits of the excavation to provide a clean, vertical cut surface.

203.04 General

The following sentence is added to the end of the third paragraph.

There are no approved waste storage areas or waste areas within the Project limits unless shown on the Plans. Unsuitable materials shall be disposed of off-site in accordance with Subsection 203.06.

All excavations shall be accomplished in accordance with the applicable OSHA Standards. The Resident reserves the right to request the Contractor to prepare an excavation plan. This plan shall include, but not necessarily be limited to, the limit and depth of excavation, side slope, shoring, trench box and utility support.

203.10 Embankment Construction - General

The thirteenth and fourteenth paragraphs are deleted and replaced with the following:

All portions of the embankment shall be compacted in accordance with the designated embankment compaction requirements specified for the Project.

The existing slopes should be benched as shown on the drawings prior to placing additional fill. Embankment fill should be placed in lifts which extend laterally beyond the limits of the design side slopes such that the specified degree of compaction is achieved within the limits of the completed embankment. The slopes should then be trimmed back to design dimensions.

203.16 Winter Construction of Embankments

The word "core" is deleted from the first and second sentences in the first paragraph.

203.18 Method of Measurement

The following paragraphs are added:

There will be no additional payment for the required excavation plan, and costs shall be incidental to the Excavation items.

SECTION 401

HOT MIX ASPHALT PAVEMENT

Section 401 of the Maine Turnpike Authority 2016 Supplemental Specifications is modified as follows:

401.01 Description

The following paragraph is added:

A Quality Control Plan(QCP) is required.

401.02 Materials

Section 401.02 is deleted in its entirety and replaced with the following:

Aggregates for HMA Pavements Coarse Aggregate and fine aggregate for HMA pavements shall be graded such that when combined in the proper proportions, including filler if required, the resultant blend will meet the composition of mixture for the type of pavement specified. 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 |

Mainline Surface HMA Coarse aggregate: The material retained on the No. 4 sieve, shall consist of angular fragments obtained from crushed quarry stone and be free of dirt or other objectionable materials. Coarse aggregate shall have a Micro-Deval value of 16.0 percent or less as determined by AASHTO T 327. The crushed stone shall have a maximum of 1.5% material finer than the No. 200 mesh when tested in accordance with AASHTO T-11. Flat and elongated particles shall not exceed a maximum of 8% at a 5:1 ratio in accordance with ASTM D-4791. Coarse aggregate angularity shall be a minimum of 95/90 in accordance with AASHTO T-335.

Mainline Surface HMA Fine aggregate: The material passing the No. 4 sieve, shall be crushed manufactured sand free from dirt, clay balls, or other objectionable material. Natural sand may be incorporated into the mix at a rate no greater than 13 percent by weight of total aggregate. The unconfined void content of the fine aggregate blend shall be a 45 minimum value when tested in accordance with AASHTO T-304, method A. AASHTO T-176 sand equivalent value shall be 45 minimum.

Asphalt Low Modulus Joint Sealer: Asphalt Low Modulus Joint Sealer shall be a modified asphalt and rubber compound designed for sealing and improving the strength and performance of the base asphalt cement and shall conform to ASTM D6690 Type IV and the following specifications:

Cone Penetration 90-150

Flow @ 60°C [140°F] 3.0mm [1/8 in] max

Bond, non-immersed Three 12.7mm [½ in] specimens pass

3 cycles @ 200% extension @ -29°C

[-20°F]

Resilience, % 60 min

Asphalt Compatibility, ASTM D5329 pass*

The contractor shall provide the Resident or authorized representative with a copy of the material manufacturer's recommendations pertaining to heating, application, and reheating prior to the beginning of operations or the changing of materials.

Section 401.03 Composition of Mixtures

Section 401.03 is deleted in its entirety and replaced with the following:

HMA pavement mixtures for local road and bridge projects shall be a currently approved MDOT design.

HMA pavement mixtures for Mainline paving projects shall conform to the following requirements:

The Contractor shall compose the Hot Mix Asphalt Pavement with aggregate, Performance Graded Asphalt Binder (PGAB), and mineral filler if required. HMA shall be designed and tested according to AASHTO R35 and the volumetric criteria in Table 1. The Contractor shall size, uniformly grade, and combine the aggregate fractions in proportions that provide a mixture meeting the grading requirements of the Job Mix Formula (JMF). The Contractor may use a maximum of 15 percent reclaimed asphalt pavement (RAP) in any mainline surface course, and a maximum of 20 percent RAP in any base, intermediate, or shim course. Current MaineDOT approved designs with up to 20 percent RAP will be allowed on local roads.

The Contractor shall submit a job mix formula (JMF) developed for each specified mixture at least 30 days prior to placement.

The JMF shall establish a single percentage of aggregate passing each sieve size within the limits shown in Subsection 703.09. The mixture shall be designed and produced, including all production tolerances, to comply with the allowable control points for the particular type of mixture as outlined in Subsection 703.09. The JMF shall state the original source, gradation, and percentage to be used of each portion of the aggregate and mineral filler if required. It shall also state the proposed PGAB content, the name and location of the refiner, the supplier, the source of

^{*} There shall be no failure in adhesion, formation of any oily exudate at the interface between the sealant and asphaltic concrete or other deleterious effects on the asphaltic concrete or sealant when tested at 60°C [140°F].

PGAB submitted for approval, the type of PGAB modification if applicable, and the location of the terminal if applicable.

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

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

At the time of JMF submittal, the Contractor shall identify and make available the stockpiles of all proposed aggregates at the plant site. There must be a minimum of 150 ton for stone stockpiles, 75 ton for sand stockpiles, and 50 ton of blend sand before the Authority will sample. The Authority shall obtain samples for laboratory testing. The Contractor shall also make available to the Authority the PGAB proposed for use in the mix in sufficient quantity to test the properties of the asphalt and to produce samples for testing of the mixture. Before the start of paving, the Contractor and the Authority shall split a production sample for evaluation. The Contractor shall test its split of the sample and determine if the results meet the requirements. If the results are found to be acceptable, the Contractor will forward their results to the Authority's Lab, which will test the Authority's split of the sample. The results of the two split samples will be compared and shared between the Authority and the Contractor. If the Authority finds the mixture acceptable, an approved JMF will be forwarded to the Contractor.

The Authority will then notify the Contractor that paving may commence. The first day's production shall be monitored, and the approval may be withdrawn if the mixture exhibits undesirable characteristics such as checking, shoving or displacement. The Contractor shall be allowed to submit aim changes within 24 hours of receipt of the first Acceptance test result for an individual JMF. Adjustments will be allowed of up to 2% on the percent passing the 2.36 mm sieve through the 0.075 mm and 3% on the percent passing the 4.75 mm or larger sieves. Adjustments will be allowed on the %PGAB of up to 0.2 percent. Adjustments will be allowed on GMM of up to 0.010.

The Contractor shall submit a new JMF for approval each time a change in material source or materials properties is proposed. The same approval process shall be followed. The cold feed percentage of any aggregate except natural sand 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. Natural sand may be adjusted up to 5 percent from the amount listed on the JMF but shall not exceed 13% by weight of total aggregates. The cold feed percentage for RAP may be reduced up to five 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.

<u>TABLE 1</u> VOLUMETRIC DESIGN CRITERIA

| Design ESAL's (Millions) | Required Density (Percent of G _{mm}) | | Voids in the Mineral Aggregate (VMA)(Minimum Percent) Nominal Maximum Aggregate Size (mm) | | | | Voids Filled with Binder (VFB) (Minimum %) | Fines/Eff. Binder Ratio | |
|--------------------------------|---|---------------------|---|------|------|------|--|-------------------------------|---------|
| | Ninitial | N _{design} | N _{max} | 19 | 12.5 | 9.5 | 4.75 | , | |
| 10 to <30 | ≤89.0 | 96.0 | <u>≤</u> 98.0 | 13.5 | 14.5 | 15.5 | 15.5 | 65-80* | 0.6-1.2 |

^{*} For 9.5 mm nominal maximum aggregate size mixtures, the maximum VFB is 82.

As part of the JMF submittal, there are Hamburg Wheel Tracker requirements, the Contractor shall provide the Authority the test results in accordance with AASHTO T324. The results shall be generated by a third party independent testing laboratory as approved by the Authority. The test results shall meet the requirements of Table 1A

TABLE 1A HAMBURG WHEEL TRACKER REQUIREMENTS

| Specified PG | Test Temperature | Maximum Rut | Minimum | Minimum |
|--------------|------------------|-------------|------------------|----------------|
| Binder Grade | (°C) | Depth (mm) | Number of Passes | Allowable SIP* |
| 64-28 | 45 | 12.5 | 20,000 | 15,000 |
| 64E-28 | 45 | 8.0 | 20,000 | 15,000 |
| 70E-34 | 45 | 6.3 | 20,000 | 15,000 |

^{*} As calculated by the most recently published version of the Maine DOT HWT worksheet, which is available online at http://www.maine.gov/mdot/contractors/publications/

^{*} For 4.75 mm nominal maximum aggregate size mixtures, the maximum VFB is 84.

^{*} For 4.75mm nominal maximum aggregate size mixtures, the Fines/Effective Binder Ratio is 0.6-1.4

Section 401.08 Hauling Equipment Trucks for Hauling HMA

Add the following paragraph:

The undercarriage of haul units actively hauling HMA to the site shall be relatively free of dust / mud agglomerations. Haul units found to be contaminating the paving surface shall be removed from the site and cleaned prior to returning.

Section 401.091 Material Transfer Vehicle (MTV)

The fourth paragraph shall be deleted and replaced with:

The MTV shall be designed so that the mix receives additional mixing action.

Section 401.165 Longitudinal Joint Density

The first paragraph shall be deleted and replaced with:

When noted in Special Provision Section 403, the Authority will measure the pavement density of longitudinal joints between adjoining mainline travel lanes in both the unconfined and confined condition as determined by the days paving operation.

The eighth paragraph shall be deleted and replaced with:

The minimum density of the completed pavement shall be 92.0 percent of the theoretical maximum density obtained. Two consecutive failing tests shall result in production shut down. Prior to resuming paving operations, the contractor quality control unit shall satisfy the Authority that the paving operation will produce joint densities in compliance with the Specifications.

The eleventh paragraph and associated table shall be deleted and replaced with:

Payment reduction will be applied to each sublot that has a density lower than 92.0% as outlined below.

| PERCENT COMPACTION | PERCENT PAY |
|--------------------|-------------|
| 92.0 or greater | 100 |
| 91.9 to 90.0 | 95 |
| 89.9 or less | 90 |

Section 401.17 Joints

The fourth paragraph shall be deleted and replaced with:

When required by Special Provision Section 403, Mainline Longitudinal joints shall be constructed as notched-wedge joint and constructed in a manner that will best ensure joint integrity.

Section 401.18 Quality Control

The following shall be added to section c. Quality Control Technician(s) QCT:

The QCT shall be on site during paving operations performing quality control activities. QCT's shall not act as equipment operators or laborers.

Section 401.191 Inspection/Testing

In paragraph nine delete and replace Item #8 with:

8. Secure High Speed Internet Access

SECTION 403

HOT MIX ASPHALT PAVEMENT

| Course | HMA | Item | Total | No. of | Complimentary |
|--------|---------|--------|-----------|--------|---------------|
| | Grading | Number | Thickness | Layers | Notes |

Emergency Vehicle Ramps

| Wearing | 12.5mm | 403.208 | 2.0" | 1 | B,C,E,J,L,N |
|--------------|--------|---------|------|---|-------------|
| Intermediate | 12.5mm | 403.213 | 2.0" | 1 | B,C,E,J,L,N |
| Base | 12.5mm | 403.213 | 1.5" | 1 | B,C,E,J,L,N |
| Shim | 4.75mm | 403.212 | 1/2" | 1 | B,C,E,J,L,N |

Southbound Pavement Widening

| Wearing | 12.5mm | 403.208 | 1.5" | 1 | B,C,E,J,L,N |
|--------------|--------|---------|------|---|-------------|
| Intermediate | 12.5mm | 403.213 | 1.5" | 1 | B,C,E,J,L,N |
| Base | 19.0mm | 403.207 | 2.5" | 1 | B,C,E,J,L,N |
| Base | 19.0mm | 403.207 | 4.5" | 1 | B,C,E,J,L,N |

COMPLEMENTARY NOTES

- A. The required PGAB for this mixture shall be **64E-28**.
- B. The required PGAB for this mixture shall be **64-28**.
- C. A maximum of 15 percent RAP may be used.
- D. RAP may not be used.
- E. The Maine DOT will conduct the job mix verification. The aggregate qualities shall meet the design traffic level of 3 to <10 million ESALS for mix placed under this contract. The design verification, Quality Control, and Acceptance tests for this mix will be performed at **75 gyrations**. (N design) Minimum and Maximum PGAB content shall not apply.
- F. The MTA will conduct the job mix verification. The aggregate qualities shall meet the design traffic level of 10 to <30 million ESALS for mix placed under this contract. The design verification, Quality Control, and Acceptance tests for this mix will be performed at **75 gyrations**. (N design)
- G. A material transfer vehicle (MTV) shall be used for the placement of Hot Mix Asphalt wearing surface on all roadways including acceleration and deceleration lanes and all ramps.
- H. Joints shall be constructed as the "notched wedge" type in accordance with Subsection 401 17
- I. Joint density will be measured in accordance with Subsection 401.165.
- J. Tack coat shall be applied between all layers of pavement at a rate of 0.04 G/SY.
- K. PGAB shall conform to the provisions of 403.02 Polymer Modified PGAB for HMA
- L. The contractor shall furnish a quality control technician equipped with an approved densometer to ensure density requirements are met.
- M. Hydrated Lime shall be incorporated into the mixture.

N. No vehicular loads shall be permitted on newly completed pavement until adequate stability has been attained and the material has cooled sufficiently to prevent distortion or loss of fines. The newly paved area may be opened to traffic after the internal temperature of the pavement has cooled to 120° F. The Resident will test the internal temperature of the pavement and shall be the sole judge as to the opening to traffic. The period of time before opening to traffic may be extended at the discretion of the Resident. The lane closure may not be removed until the internal temperature has cooled to 120° F.

SECTION 409

BITUMINOUS TACK COAT

409.02 Bituminous Material

This Subsection is deleted and replaced with the following:

Bituminous material shall conform to the Specifications for Emulsified Asphalt RS-1h, of the AASHTO Designation M-140.

409.05 Equipment

Add "or as determined by the Resident", after the words "gal/yd²]" in the fourth line of the second paragraph of this Subsection.

409.06 Preparation of Surface

The following paragraph is added:

All existing pavement and shoulder areas on which bituminous concrete mixtures are to be placed shall receive a tack coat. The surface area where the tack coat is to be applied shall be dry and cleaned of all dirt, sand, and loose material. Cleaning shall be accomplished by use of revolving brooms or mechanical sweepers. Undesirable material not removed by the above means shall be cleaned by hand sweeping or scraping, or a combination of both. Small areas otherwise inaccessible may be swept with hand brooms. The tack coat shall be applied only when the existing surface is dry.

409.08 Method of Measurement

The following paragraphs are added:

Measurement will be based on delivery slips made out in duplicate by the Contractor and signed by the Resident, or his representative, at the point of delivery. One of these slips shall be retained by the Resident and one by the Contractor. Delivery slips shall be furnished by the Contractor and shall provide space for identifying the vehicle and driver, for stating the volume of material carried, the source of the material, the date, and the Resident or his representative's signature.

Material included in the delivery slips and not used or rejected shall be deducted from the amount being measured for payment. Each day's delivery slips shall be reconciled by the Contractor and the Resident within 24-hours

Cleaning of the surface area where tack coat is to be applied shall be incidental to Item 409.15, Bituminous Tack Coat - Applied.

409.09 Basis of Payment

The following pay items are added:

| Pay Item | | Pay Unit |
|----------|--------------------------------|----------|
| 409.15 | Bituminous Tack Coat – Applied | Gallon |

SECTION 419

SAWING AND SEALING JOINTS IN BITUMINOUS PAVEMENT

(Sawing Bituminous Pavement)

419.01 Description

This work consists of sawing bituminous concrete pavement as shown on the Plans, as specified herein or as approved by the Resident.

419.02 General

The bituminous concrete pavement to be sawed shall be accurately marked before cutting. The marking shall be in accordance with the locations as shown on the Plans or as approved by the Resident. Cutting shall be with an approved power driven saw with an abrasive blade.

Unless otherwise noted or directed, the sawcut shall be vertical, a minimum of 3/8 inch wide, and extend to the depth as shown on the Plans.

Residue or debris from the sawing operation shall be removed immediately and legally disposed of by the Contractor.

419.03 Method of Measurement

Sawing Bituminous Pavement will be measured by the linear foot of pavement actually cut and accepted. No additional payment will be made for variations in the pavement thickness.

419.04 Basis of Payment

Sawing Bituminous Pavement will be paid for at the Contract unit price per linear foot which shall be full compensation for all materials, tools, equipment labor, and all incidentals necessary for the completion of the work to the satisfaction of the Resident. The disposal of sawcut residue shall be incidental to this item.

| Pay Item | | <u>Pay Unit</u> |
|----------|----------------------------|-----------------|
| 419.30 | Sawing Bituminous Pavement | Linear Foot |

SECTION 526

CONCRETE BARRIER

(Temporary Concrete Barrier Type I - Supplied by Authority)

526.01 Description

The following paragraphs are added:

This work shall consist of loading, transporting, setting, resetting, removing, transporting and stacking Temporary Concrete Barrier Type I – Supplied by Authority. The barrier shall have attachments allowing individual sections to be connected into a continuous barrier.

The work also includes supplying connecting pins and furnishing and mounting retroreflective delineators, per Subsection 526.02 and 526.03.

Concrete barriers supplied by Authority shall be available at the following location(s):

Maintenance Area

Linear Feet of Barrier

Crosby Maintenance Area Mile 45.8 Southbound

840

Upon substantial completion of work, the Contractor shall remove and transport the barrier back to its maintenance area of origin. All barrier shall be returned, sorted and stacked according to type in locations directed by the project Resident or maintenance area foreman.

526.02 Materials

The following paragraphs are added:

e. Delineators shall be bi-directional with a minimum effective reflective area of eight square inches as approved by the Resident. The reflectors shall be methyl methacrylate and the housing of acrylonitrile butadiene styrene. Color shall be in accordance with the MUTCD.

526.021 Acceptance

The Resident shall have the authority to accept or reject all Temporary Concrete Barrier Type I – Supplied by Authority used on the Project that does not meet the requirements of this specification

526.03 Construction Requirements

The following paragraphs are added:

The Contractor shall notify the Resident prior to the scheduled pick-up and delivery of concrete barrier. No barrier shall be removed from or stacked at the Turnpike Maintenance Area without approval of the Resident.

The Contractor shall move and place barrier-utilizing methods that will not damage the barrier. Barrier that is damaged by the Contractor by failing to use proper methods shall be replaced by the Contractor at no additional cost to the Maine Turnpike Authority.

Concrete barrier supplied by the Authority consists of several different styles. Not all barriers may be compatible. The Contractor shall utilize caution when setting barrier to use identical barrier types as adjacent barrier. Non-compatible barrier that cannot be attached together shall be overlapped by a minimum of 10 feet with the blunt end on the non-traffic side of the barrier. This work will not be measured separately for payment, but shall be incidental to the concrete barrier.

Concrete barrier placed at roadway low points shall be shimmed on 1" by 2" by 2' long wood planks to allow drainage to pass under the barrier. In addition, the Resident may direct the Contractor to shim the concrete barrier at other locations to provide for proper roadway drainage. All labor, material, and equipment necessary to shim the barrier will not be measured separately for payment, but shall be incidental to the Concrete Barrier.

The removal of concrete barrier from adjacent to the travel lane may be conducted without a lane closure if it is accomplished in accordance with the following requirements:

- 1. Barrier is removed from the trailing end and the workmen and equipment involved in the operation are always behind the barrier. No workmen or equipment shall enter the travel lane.
- 2. Barrier shall be dragged away from the travel lane to at least a 30-degree angle by the use of a cable.
- 3. Barrier shall be lifted no more than six inches while within 10 feet of the travel lane.

Retro-Reflective Delineators shall be mounted as follows:

- 4. One on top of each barrier.
- 5. One on the traffic side of every barrier used in a taper.
- 6. One on the traffic side of every other barrier at regularly spaced intervals and locations
- 7. Delineators shall be installed on both sides of the barrier if barrier is used to separate opposing traffic.
- 8. Delineators shall be physically adhered so as to withstand the force of throw from a snow plow.
- 9. If more than 25% of delineators in any 50 foot section of barrier fall off for any reason, the Contractor will be responsible for reinstalling all the delineators in that run at that their own cost.
- 10. Contractor is required to submit the installation method for review and approval to the Resident.

526.04 Method of Measurement

The following paragraphs are added:

Temporary Concrete Barrier Type I – Supplied by Authority shall be measured for payment by the lump sum.

The loading, transporting, setting, resetting, removing, transporting, sorting and stacking of the barrier, the furnishing, installation and maintenance of the barrier delineators, and furnishing and installing connector pins will not be measured separately for payment, but shall be incidental to the cost of the Barrier. Temporary storage of Concrete Barrier between construction phases, if required, will not be measured separately for payment, but shall be incidental to the cost of the Barrier. All equipment required to load, unload, transport and stack Concrete Barrier shall be supplied by the Contractor.

Any Barrier lost or damaged by the Contractor shall be replaced by the Contractor at no additional cost to the Authority.

526.05 Basis of Payment

The fifth paragraph is deleted and not replaced.

The following paragraphs are added:

Temporary Concrete Barrier Type I – Supplied by Authority will be paid for at the Contract lump sum price, complete in place. Such payment shall be full compensation for loading, transporting, setting, resetting, temporary storage, removing, transporting and stacking at the area designated, furnishing all materials, and all other incidentals necessary to complete the work. Temporary Concrete Barrier Type I – Supplied by Authority and all connecting pins shall remain the property of the Authority, and shall be returned to the Turnpike Maintenance Area as designated in Subsection 526.01.

Payment of Concrete Barrier shall be based on a percentage of the work accomplished during that pay period.

| Pay Item | | Pay Unit |
|----------|--|----------|
| 526.306 | Temporary Concrete Barrier, Type I – Supplied by Authority | Lump Sum |

SECTION 527

ENERGY ABSORBING UNIT

(Work Zone Crash Cushion)

527.01 Description

The first paragraph is deleted in its entirety and replaced with the following:

The Contractor shall furnish and install work zone crash cushions where shown on the Plans, as specified herein, in Special Provision 652, or as approved by the Resident. Work zone crash cushions are required at each exposed end of temporary concrete barrier or guardrail.

The exposed end of the concrete barrier within 30 feet of the mainline travel lane shall be protected at all times. Barrier shall not be reset until after the work zone crash cushion(s) has been set to protect the exposed end of the barrier.

527.02 Materials

The following paragraph is added:

Only work zone crash cushions meeting the NCHRP Report 350 TL-3 crash test requirements may be used on the turnpike and local roadways with posted speeds of 45 MPH or greater. Work zone crash cushions meeting the NCHRP Report 350 TL-2 crash test requirements may be used on local roadways with posted speeds of 40 MPH or less. The Contractor shall provide the Resident with documentation of the proposed work zone crash cushion's NCHRP Report 350 Crash Test Results prior to installation at the jobsite.

527.03 Construction Requirements

The following is added to the end of the first paragraph:

The design speeds for work zone crash cushions shall be 45 mph for local road and 70 mph for turnpike roadways unless otherwise noted on the Plans.

527.04 Method of Measurement

Work Zone Crash Cushions used to protect exposed ends of guardrail for steel girder erection will not be measured separately for payment, but shall be included under the Maintenance of Traffic for Steel Girder Erection item.

527.05 Basis of Payment

| Pay Item | | Pay Unit |
|----------|---------------------------------|----------|
| 527.341 | Work Zone Crash Cushions – TL-3 | Unit |

SECTION 603

PIPE CULVERTS AND STORM DRAINS

(Reinforced Concrete Pipe) (Concrete Collar) (Corrugated Polyethylene Pipe)

603.01 Description

The following paragraphs are added:

This work shall also consist of furnishing and installing Class III or Class V reinforced concrete pipe at the locations as shown on the Plans or as approved by the Resident.

This work also consists of furnishing and installing a concrete collar to join existing concrete pipe to the proposed concrete or Corrugated High Density Polyethylene (HDPE) pipe in accordance with the details as shown on the Plans. The Contractor shall note that the concrete pipe ends may be of different sizes and may not fit snugly together.

This work shall also consist of furnishing and installing various sizes of corrugated HDPE pipe, including a dual wall adaptor fitting by Hancor or an approved equal as shown on the plans.

No other pipe types within the Option III alternatives will be accepted.

603.02 Materials

All Corrugated High Density Polyethylene (HDPE) pipe for storm water and drainage systems shall meet the requirements of Subsection 706.06.

Concrete admixtures from MaineDOT's QPL may be used to accelerate concrete curing time of the concrete collar.

603.11 Method of Measurement

The following paragraph is added:

The Concrete Collar shall be measured by each unit installed, complete in place and accepted. This shall be full compensation for furnishing labor and materials to construct a Concrete Collar to connect the existing and proposed pipe ends in a working like manner.

Dual Wall Adapter Fitting shall be included for payment as three additional linear feet of the largest pipe involved.

603.12 Basis of Payment

Concrete Collars will be paid for at the Contract unit price each regardless of the size of the existing and proposed pipes.

Corrugated HDPE pipe will be paid for under the appropriate sized Culvert Pipe Option III pay items

| 12 inch Reinforced Concrete Pipe - Class III 603.165 15 inch Reinforced Concrete Pipe - Class III 603.1653 15 inch Reinforced Concrete Pipe - Class V 603.175 18 inch Reinforced Concrete Pipe - Class III 603.1753 18 inch Reinforced Concrete Pipe - Class V 603.1753 18 inch Reinforced Concrete Pipe - Class V 603.195 24 inch Reinforced Concrete Pipe - Class III 603.1953 24 inch Reinforced Concrete Pipe - Class V 603.205 30 inch Reinforced Concrete Pipe - Class III 603.205 30 inch Reinforced Concrete Pipe - Class V 603.205 30 inch Reinforced Concrete Pipe - Class V 603.205 30 inch Reinforced Concrete Pipe - Class V 603.205 30 inch Reinforced Concrete Pipe - Class V 603.205 30 inch Reinforced Concrete Pipe - Class V 603.205 30 inch Reinforced Concrete Pipe - Class V 603.205 30 inch Reinforced Concrete Pipe - Class V 603.205 30 inch Reinforced Concrete Pipe - Class V 603.205 30 inch Reinforced Concrete Pipe - Class V 603.205 | Pay Item | | Pay Unit |
|---|----------|--|-------------|
| 603.165 15 inch Reinforced Concrete Pipe - Class III Linear Foot 603.1653 15 inch Reinforced Concrete Pipe - Class V Linear Foot 603.175 18 inch Reinforced Concrete Pipe - Class III Linear Foot 603.1753 18 inch Reinforced Concrete Pipe - Class V Linear Foot 603.195 24 inch Reinforced Concrete Pipe - Class III Linear Foot 603.1953 24 inch Reinforced Concrete Pipe - Class V Linear Foot 603.205 30 inch Reinforced Concrete Pipe - Class III Linear Foot 603.205 30 inch Reinforced Concrete Pipe - Class V Linear Foot 603.2053 | 602 155 | 12 inch Dainfarcad Congreta Dina, Class III | Linear Foot |
| 603.165315 inch Reinforced Concrete Pipe - Class VLinear Foot603.17518 inch Reinforced Concrete Pipe - Class IIILinear Foot603.175318 inch Reinforced Concrete Pipe - Class VLinear Foot603.19524 inch Reinforced Concrete Pipe - Class IIILinear Foot603.195324 inch Reinforced Concrete Pipe - Class VLinear Foot603.20530 inch Reinforced Concrete Pipe - Class IIILinear Foot603.205330 inch Reinforced Concrete Pipe - Class VLinear Foot | | <u> </u> | |
| 603.17518 inch Reinforced Concrete Pipe - Class IIILinear Foot603.175318 inch Reinforced Concrete Pipe - Class VLinear Foot603.19524 inch Reinforced Concrete Pipe - Class IIILinear Foot603.195324 inch Reinforced Concrete Pipe - Class VLinear Foot603.20530 inch Reinforced Concrete Pipe - Class IIILinear Foot603.205330 inch Reinforced Concrete Pipe - Class VLinear Foot | | • | |
| 603.175318 inch Reinforced Concrete Pipe - Class VLinear Foot603.19524 inch Reinforced Concrete Pipe - Class IIILinear Foot603.195324 inch Reinforced Concrete Pipe - Class VLinear Foot603.20530 inch Reinforced Concrete Pipe - Class IIILinear Foot603.205330 inch Reinforced Concrete Pipe - Class VLinear Foot | | <u> </u> | |
| 603.19524 inch Reinforced Concrete Pipe - Class IIILinear Foot603.195324 inch Reinforced Concrete Pipe - Class VLinear Foot603.20530 inch Reinforced Concrete Pipe - Class IIILinear Foot603.205330 inch Reinforced Concrete Pipe - Class VLinear Foot | | | |
| 603.1953 24 inch Reinforced Concrete Pipe - Class V Linear Foot 603.205 30 inch Reinforced Concrete Pipe - Class III Linear Foot 603.2053 30 inch Reinforced Concrete Pipe - Class V Linear Foot | | <u> </u> | |
| 603.205 30 inch Reinforced Concrete Pipe - Class III Linear Foot 603.2053 30 inch Reinforced Concrete Pipe - Class V Linear Foot | | 1 | |
| 603.2053 30 inch Reinforced Concrete Pipe - Class V Linear Foot | 603.1953 | 24 inch Reinforced Concrete Pipe - Class V | Linear Foot |
| | 603.205 | 30 inch Reinforced Concrete Pipe - Class III | Linear Foot |
| (02.215 20: 1 D : C 1 C 4 D: C1 III I: E 4 | 603.2053 | 30 inch Reinforced Concrete Pipe - Class V | Linear Foot |
| 603.215 36 inch Reinforced Concrete Pipe - Class III Linear Foot | 603.215 | 36 inch Reinforced Concrete Pipe - Class III | Linear Foot |
| 603.2153 36 inch Reinforced Concrete Pipe - Class V Linear Foot | 603.2153 | 36 inch Reinforced Concrete Pipe - Class V | Linear Foot |
| 603.225 42 inch Reinforced Concrete Pipe - Class III Linear Foot | 603.225 | 42 inch Reinforced Concrete Pipe - Class III | Linear Foot |
| 603.2253 42 inch Reinforced Concrete Pipe - Class V Linear Foot | 603.2253 | 42 inch Reinforced Concrete Pipe - Class V | Linear Foot |
| 603.235 48 inch Reinforced Concrete Pipe - Class III Linear Foot | 603.235 | 48 inch Reinforced Concrete Pipe - Class III | Linear Foot |
| 603.2353 48 inch Reinforced Concrete Pipe - Class V Linear Foot | 603.2353 | 48 inch Reinforced Concrete Pipe - Class V | Linear Foot |
| 603.245 54 inch Reinforced Concrete Pipe - Class III Linear Foot | 603.245 | 54 inch Reinforced Concrete Pipe - Class III | Linear Foot |
| 603.2453 54 inch Reinforced Concrete Pipe - Class V Linear Foot | 603.2453 | • | Linear Foot |
| 603.255 60 inch Reinforced Concrete Pipe - Class III Linear Foot | 603.255 | | Linear Foot |
| 603.2553 60 inch Reinforced Concrete Pipe - Class V Linear Foot | 603.2553 | | Linear Foot |
| 603.265 66 inch Reinforced Concrete Pipe - Class III Linear Foot | 603.265 | <u> </u> | Linear Foot |
| 603.2653 66 inch Reinforced Concrete Pipe - Class V Linear Foot | | <u> </u> | Linear Foot |
| 603.275 72 inch Reinforced Concrete Pipe - Class III Linear Foot | 603.275 | 1 | Linear Foot |
| 603.2753 72 inch Reinforced Concrete Pipe - Class V Linear Foot | | <u> </u> | Linear Foot |
| 603.155 12 Inch Reinforced Concrete Pipe – Class III Linear Foot | | <u> </u> | |
| 603.28 Concrete Collar Each | | <u> •</u> | |

SECTION 606

GUARDRAIL

(Guardrail Mid-Way Splice) (Guardrail Mid-Way Splice Flared Terminal)

606.01 Description

The following sentences are added:

This work shall consist of furnishing and installing 31" W-Beam Guardrail - Mid-Way Splice (Steel Post, 8" Offset Blocks, Single Faced), 31" W-Beam Guardrail - Mid-Way Splice Flared Terminal and retroreflective adhesive sheeting in accordance with these Specifications and in reasonably close conformity with the lines and grades as shown on the Plans or as approved by the Resident.

606.02 Materials

The following sentence is added:

Reflective sheeting shall meet the requirements of Subsection 719.01, Reflective Sheeting – minimum ASTM Type XI; 3MTM Diamond GradeTM DG³ Reflective Sheeting Series 4000 or approved equal, color WHITE.

The following Subsections are added:

606.041 Reflective Sheeting

The color for the reflective sheeting shall be silver (WHITE) when installed on the outside shoulder. Black chevron on yellow background will not be acceptable.

606.08 Method of Measurement

The second paragraph is amended by the addition of: "31" W-Beam Guardrail - Mid-Way Splice Flared Terminal" after the words "breakaway cable terminal".

31" W-Beam Guardrail - Mid-Way Splice Flared Terminal – New will be measured by each unit satisfactorily complete in place and accepted.

606.09 Basis of Payment

The second paragraph is amended by the addition of: "and 31" W-Beam Guardrail - Mid-Way Splice Flared Terminal" after the words "breakaway cable terminal".

The retroreflective sheeting will not be measured separately for payment, but shall be incidental to the 31" W-Beam Guardrail - Mid-Way Splice Flared Terminal item.

This following pay items are added:

| Pay Item | | Pay Unit |
|----------|---|-------------|
| 606.1301 | 31" W-Beam Guardrail - Mid-Way Splice (Steel Post, 8" Offset Blocks, Single Faced) | Linear Foot |
| 606.1305 | 31" W-Beam Guardrail - Mid-Way Splice Flared Terminal (31" Height) | Each |

SECTION 606

GUARDRAIL

(Terminal End - Anchored End) (Terminal End - Anchored End, Thrie Beam)

606.01 Description

The following sentence is added:

This work shall consist of furnishing and installing Terminal End – Anchored End, and Terminal End, Anchored End – Thrie Beam end treatments in accordance with these Specifications, the AASHTO-AGC-ARBTA Joint Committee Task Force 13 Report: A Guide to Standardized Highway Barrier Hardware, dated May 1995; and in reasonably close conformity with the lines and grades as shown on the Plans or as approved by the Resident.

606.02 Materials

The following sentences are added:

The guardrail elements shall be per the Components' List found on Sheet No. 2 of 2 of Drawing SEW02a – Trailing End Terminal – Foundation Tube Option in the Task Force 13 Report noted above and/or as noted in the Contract Documents.

The following Subsection is added:

606.042 Terminal End - Anchored End

Installation of the Terminal End – Anchored End shall be in strict accordance with the AASHTO-AGC-ARBTA Joint Committee Task Force 13 Report and the Details on Sheet No. 1 of 2 of Drawing SEW02a – Trailing End Terminal – Foundation Tube Option.

Height of installation of Terminal End – Anchored End units shall be 27.5-inches to the top of rail, transitioning to the standard height of 30-inches over a 25-foot length of Type 3d rail located immediately after the last post of the Anchored End unit.

Height of installation of Terminal End – Anchored End, Thrie Beam units shall be 32.0-inches to the top of rail, transitioning to the standard height of 30-inches over a 25-foot length of Type 3d rail located immediately after the last post of the Thrie Beam Anchored End unit.

The reveal on the soil tube for the Anchored End units shall not exceed 3.5-inches. If site grading is be required to achieve the required rail height and soil tube reveal height, then such work will be incidental to the installation of the Anchored End units

606.08 Method of Measurement

The second paragraph is amended by the addition of: "Terminal End - Anchored End," after the words "NCHRP 350 end treatments,".

606.09 Basis of Payment

The second paragraph is amended by the addition of: "Terminal End - Anchored End," after the words "NCHRP 350 end treatments,".

| Pay Item | | Pay Unit |
|----------|---|----------|
| 606.278 | Terminal End - Anchored End | Each |
| 606.279 | Terminal End - Anchored End, Thrie Beam | Each |

SECTION 606

GUARDRAIL

(Delineator Post – Remove and Reset) (Delineator Post - Remove and Stack)

606.01 Description

The following paragraphs are added:

This work shall also consist of furnishing and installing new delineator posts and/or removing and resetting and/or removing and stacking existing delineator posts within the Contract limits. The existing reflectorized delineator panels shall be removed and replaced with new reflectorized delineator panels as required by the Resident.

Existing and new delineator posts shall be located as follows, with the indicated panel:

Outside Shoulder:

- One at guardrail trailing ends (green delineator).
- Two at guardrail approach ends (one red delineator on first post and one red delineator on angle points.)

Median:

- One at guardrail trailing ends (green delineator, facing traffic).
- Two at guardrail approach ends (one red delineator on first post of CAT units, green on guard rail side, red on median opening side; and one red (both sides) delineator at angle point.)
- One at all other median guardrail angle points (red on both sides)

Other Locations:

- One at culvert outlets (green delineator).
- Twenty per mile evenly spaced at the edge of outside shoulder (white delineator).
- One at electrical junction boxes not associated with another item (red delineator).
- One at communication only junction boxes not associates with another item(orange delineator).

Delineator posts that do not exist in the locations described above, shall be supplied and installed by the Contractor. The installation of the delineator post shall include the demountable reflectorized delineator panel.

White edge delineators shall not be installed on any portion of the widened shoulder for Guardrail 350 Flared Terminal installations, and shall not be installed behind the Guardrail 350 Flared Terminal rail segments.

606.02 Materials

The following paragraphs are added:

Non-guardrail Delineator Posts shall conform to Subsection 606.02 paragraph 3.

The seventh through ninth sentences of the fourth paragraph are deleted and replaced with the following:

Reflectorized flexible guardrail markers shall be a minimum of 2-inches in diameter, a maximum of 36" in length, ovalized at the top of the post to allow application of 3 inch by 9 inch high intensity reflective sheeting, and shall be capable of recovering from repeated impacts. The flexible guardrail delineator markers shall be grey and capped at the top with a flexible rubber cap; Safe-Hit Flexible Guardrail Delineator or approved equal. Reflective material shall meet the requirements of ASTM Type IX Diamond Grade VIP (Visual Impact Performance).

The demountable reflectorized delineator panels shall meet the material requirements of Subsection 719.06. The delineator panel shall be rectangles measuring 9" x 3".

606.03 Posts

The following paragraphs are added:

The top of delineator posts shall be installed 4' - 6" (54")) above edge of pavement elevation. Delineators shall be installed four feet from edge of pavement except those delineating end treatments, culverts and electrical items.

Mile marker posts shall be mounted on breakaway supports. The bottom of the sign shall be 5' - 0" (60") above the pavement at the solid white line and shall be offset five feet from the edge of pavement.

A mock-up of the guardrail delineator posts shall be submitted to the Resident for approval prior to installation.

Any materials damaged by the Contractor's operations shall be replaced at no additional cost to the Authority.

Top of the delineator panel shall be flush with the top of post.

606.08 Method of Measurement

The following paragraphs are added:

Delineator Posts shall be measured by each unit satisfactorily installed. Delineator Post-Removed and Reset will be measured by each unit satisfactorily removed and reset. Delineator Posts Removed and Stacked will be measured by each unit satisfactorily removed and stacked.

Mile Marker post shall be measured for payment as Delineator Post. The breakaway supports shall be incidental to the Underdrain Delineator Post pay item.

606.09 Basis of Payment

The following sentences are added:

The accepted quantity of Delineator Posts will be paid for under the Underdrain Delineator Post item, at the Contract unit price per each which price shall be full compensation for the post and specified delineator or mile marker panel, complete in place.

The accepted quantity of Delineator Post - Removed and Reset will be paid for at the Contract unit price each, which price shall be full compensation for removing and resetting the delineator panel or mile marker panel and post and all incidentals necessary to complete the work.

The accepted quantity of Delineator Posts Removed and Stacked will be paid for at the Contract unit price each, which price shall be full compensation for removing and stacking delineator panel or mile marker panel and posts and all incidentals necessary to complete the work.

| Pay Item | | Pay Unit |
|----------|------------------------------------|----------|
| 606.3561 | Delineator Post - Remove and Reset | Each |
| 606.3562 | Delineator Post - Remove and Stack | Each |

SECTION 606

GUARDRAIL

(Guardrail – Remove, Modify and Reset, Single Rail) (Guardrail – Remove, Modify and Reset, Double Rail) (Guardrail - Remove and Stack) (Guardrail Adjust – Single Rail) (Guardrail Adjust – Double Rail)

606.01 Description

The following paragraphs are added:

This work shall also consist of adjusting the height of the existing single and double rail guardrail in locations where the existing height of rail is not 30 inches. The guardrail shall be adjusted to a height of 30 inches. Existing single and double rail shall also be adjusted for lean.

The guardrail adjustment shall take place at all necessary locations; approximate locations are listed in the schedule of guardrail limits both median and outside shoulder. Exact locations for adjustment shall be determined by the Resident. If, during the course of the work, the contractor finds additional rail to be adjusted, then he shall notify the Resident, and the Resident determine if the rail is to be adjusted.

This work shall also consist of removing, stockpiling and stacking of existing single and double guardrail elements, component parts and hardware suitable for replacement as approved by the Resident. At the completion of the Contract, any unused guardrail elements, posts, component parts and hardware shall become property of the Contractor.

Stockpiled materials, suitable for reuse, shall be utilized on Remove, Modify and Reset items prior to new materials being paid for.

This work shall consist of removing, disposing of existing guardrail elements, component parts and hardware, as directed by the Resident. All materials shall become the property of the Contractor and shall be removed from the site at the completion of the Project. The Contractor shall provide the Resident with an affidavit stating the final location of all disposed material and that the material was disposed of in accordance with the Maine Department of Environmental Protection Solid Waste Regulations.

606.02 Materials

The following paragraph is added at the end of the subsection:

New non-wood offset blocks conforming to NCHRP 350 Test Level 3 shall be installed on all guardrail being reset. The existing steel offset brackets and backup plates shall become the property of the contractor.

The following Subsection is added:

606.021 General

All existing guardrail to be raised or lowered shall be completed prior to new guardrail or end treatments being attached.

606.036 Adjusting Existing Guardrail

Any materials or galvanizing damaged by the Contractor's operations shall be replaced or touched-up at no additional cost to the Authority.

Guardrail posts shall be raised to a minimum of five inches above final elevation prior to driving post to final elevation; this applies to both raising and lowering rail.

Any given length of guardrail to be adjusted shall be done in such a way that top of rail elevations do not vary drastically between each section of guardrail. Rail height tolerance shall be 30 inches, plus 0 inches, minus 1/2 inch. The 30 inches shall be measured from the edge of pavement to the top of rail beam when within 2 feet of the edge of pavement.

Rail shall be adjusted for lean where needed. All posts shall be plumb after adjusting for lean.

When the rail tapers from one bound to the other the rail shall be adjusted to the correct height on the farthest ends and shall be adjusted towards the center of the median to create a smooth line.

Earth around each adjusted or reset post shall be raked and compacted with a minimum 8 pound hand tamper or an approved device. Holes created due to adjusting or resetting a post shall be filled with a similar surrounding material and compacted.

606.08 Method of Measurement

The following paragraphs are added:

Adjusting of both single and double rail guardrail shall be measured by the linear foot of Guardrail adjusted and accepted.

Raking and compacting the earth around each reset post with a minimum 8 pound hand tamper or an approved device, and infilling and compacting holes created due to resetting posts

with a similar surrounding material wil not be paid separately, but shall be incidental to the Guardrail - Remove, Modify and Reset Pay or Guardrail - Adjust pay items.

Guardrail Remove and Stack will be measured on a linear foot basis of guardrail satisfactorily removed and stockpiled whether single rail or double rail. Single and double twisted end sections will be measured for payment on a linear foot basis as 25 feet of guardrail removed.

Guardrail removed and not reset or stacked shall be incidental to Contract Items and include all removal, disposal, equipment and labor necessary to satisfactorily complete the work.

Steel posts to replace damaged posts shall come from the stockpile of guardrail components to be disposed of, from this Contract and will not be measured separately for payment. If, in the opinion of the Resident, there are no suitable steel posts in the stockpile then steel posts will be measured for payment.

W-beam rail elements to replace damaged rail elements shall come from the stockpile of guardrail from the Remove and Stack or the guardrail to be disposed of from this Contract and will not be measured separately for payment. If, in the opinion of the Resident, there are no suitable W-beam rail elements in the stockpile then the W-beam rail elements will be measured for payment.

606.09 Basis of Payment

The following paragraphs are added:

Adjusting of single and double rail guardrail will be paid for at the Contract unit price per linear foot and shall be full compensation for furnishing all labor, equipment and materials necessary to complete the work. Guardrail Adjust will not be measured for payment until all compaction has been completed.

The accepted quantity of guardrail removal will be paid for at the Contract unit price bid, which price shall be full compensation for removing, transporting and stacking all guardrail elements, component parts and hardware, equipment, labor and all incidentals necessary to complete the work. No additional payment will be made for double rail.

| Pay Item | | <u>Pay Unit</u> |
|----------|---|-----------------|
| 606.3605 | Guardrail – Remove, Modify, and Reset Single Rail | Linear Foot |
| 606.3606 | Guardrail – Remove, Modify, and Reset Double Rail | Linear Foot |
| 606.369 | Guardrail - Remove and Stack | Linear Foot |
| 606.3621 | Guardrail Adjust, Single Rail | Linear Foot |
| 606.3622 | Guardrail Adjust, Double Rail | Linear Foot |

SECTION 607

FENCES

(Pipe Entry Gate) (Remove and Reset Pipe Entry Gate)

607.01 Description

The following paragraphs is added:

This work shall also consist of installing a pipe entry gate in reasonably close conformity with the lines and grades as shown on the Plans or as approved by the Resident.

This work shall also include removing existing pipe entry gate and resetting pipe entry gate in reasonably close conformity with the lines and grades as shown on the Plan or as approved by the Resident.

The installation shall include the assembly and erection of all parts and materials complete at the locations as shown on the Plans or as approved by the Resident.

607.02 Materials

The following sentences are added:

The pipe entry gate width is designated on the Plans.

Pipe entry gate and associated hardware shall be of galvanized steel as specified in AASHTO M181 and shall be galvanized in accordance with the applicable requirements of ASTM A153.

607.06 Method of Measurement

Pipe Entry Gate and Remove and Reset Pipe Entry Gate will be measured by each unit of the kind specified and installed.

607.07 Basis of Payment

Pipe Entry Gate will be paid for at the Contract price each, complete in place, which payment shall be compensation for furnishing and installing all necessary hardware, excavation and concrete.

Remove and Reset Pipe Entry Gate will be paid for at the Contract price each, complete in place, which payment shall be compensation for complete disassembly, moving, stacking, furnishing and installing all necessary hardware, including broken, missing, or damaged components, excavation and concrete.

Gate connection to proposed fence will not be measured separately for payment, but shall be incidental to the gate work.

| Pay Item | | Pay Unit |
|----------|----------------------------------|----------|
| 607.2325 | Pipe Entry Gate | Each |
| 607.2326 | Remove and Reset Pipe Entry Gate | Each |

SECTION 610

STONE FILL, RIPRAP, STONE BLANKET AND STONE DITCH PROTECTION

(Temporary Stone Check Dams)

610.01 Description

Paragraph (g) is added as follows:

(g) Stone Check Dams – Machine placed stone, including the placement, removal and storage of the stone used for temporary stone check dams.

610.032.e. Stone Check Dams

The following paragraph is added:

Stone check dams shall be constructed in accordance with the details as shown on the Plans, detailed in the MaineDOT's latest Best Management Practices, or as approved by the Resident. The stone shall be placed in one operation without special handling or handwork except to create a low point along the top gradient above the ditch flow lines.

The following Subsection is added:

610.033 Removing Stone

The stone for temporary stone check dams shall be removed after vegetation has been established in the ditches as approved by the Resident.

Any damage to the slopes and ditches caused by the removal of the stone check dams shall be repaired by the Contractor at his own expense.

The area directly under the temporary stone check dams shall be loamed, seeded and mulched immediately after the removal of the stone check dams. The loam, seed and mulch will be measured for payment under the appropriate pay items.

Stone used for temporary stone check dams shall be removed and stored and shall become the property of the Contractor at the completion of the Project.

The following Subsection is added:

610.034 Maintenance

Stone check dams shall be maintained by the Contractor. Sediment deposits behind check dams shall be removed when the depth of sediment reaches 50 percent of the check dam height.

610.05 Method of Measurement

The following paragraphs are added:

Stone for Temporary Stone Check Dams will be measured by the cubic yard complete in place. The removal and storage of the stone will not be measured separately for payment, but shall be incidental to the Temporary Stone Check Dam item. This shall include the transporting and unloading of the stone. If this stone is reused on the Project, it will be measured separately for payment under the appropriate pay item.

The removal and disposal of sediment from behind the Temporary Stone Check Dams will not be measured separately for payment, but shall be incidental to the Temporary Stone Check Dam pay item.

610.06 Basis of Payment

The following sentences are added:

The accepted quantities of stone for Temporary Stone Check Dams will be paid for at the Contract unit price per cubic yard.

| Pay Item | | <u>Pay Unit</u> |
|----------|---------------------------|-----------------|
| 610.181 | Temporary Stone Check Dam | Cubic Yard |

SECTION 619

MULCH

(Mulch – Plan Quantity) (Temporary Mulch)

619.01 Description

The first paragraph is modified by the addition of the following:

"as a temporary or permanent erosion control measure" after the word "mulch".

Add the following sentence at the end of the first paragraph:

Refer to Section 656 Temporary Soil and Water Pollution Control, for more information on Temporary Mulch.

619.03 General

The first paragraph is deleted and replaced with the following:

Cellulose fiber mulch shall not be used within 200 feet of a wetland or stream. The limits shall be 200 feet up station and down station of the wetland or streams as well as the slopes adjacent to the stream. The application of hay or straw mulch with an approved binder shall be used at these locations to prevent erosion.

The use of cellulose fiber mulch will only be allowed at other areas with the approval of the Resident. The Contractor may be required to demonstrate that the material may be applied in a manner that will prevent erosion and will aid in the establishment of permanent vegetation. The Resident reserves the right to require the use of hay or straw mulch at all locations if he determines that the cellulose mulch is ineffective. Cellulose fiber mulch is not acceptable for winter stabilization.

610.06 Method of Measurement

The following sentence is added:

Temporary Mulch will be paid for by the lump sum.

656.10 Basis of Payment

Temporary Mulch will be paid for at the Contract price per lump sum which shall be full compensation for furnishing and spreading the Temporary Mulch as many times as necessary as determined by the Contractor's operations and staging. The price shall also include the additional mulch netting and snow removal necessary during the winter months.

| Pay Item | | Pay Unit |
|----------|-----------------------|----------|
| 619.1201 | Mulch – Plan Quantity | Unit |
| 619.1202 | Temporary Mulch | Lump Sum |

SECTION 621

LANDSCAPING

(Plant Species Specification and Quantities List)

The following list of items provides the estimated quantities for use on this project. The contractor shall follow MaineDOT Standard Specifications (Section 621) for landscape materials and installation procedures. Plantings shall be located as shown on the plans or as directed by the resident engineer.

| ITEM NO | Description | Unit | Quantity |
|---------|--------------------------------|------|----------|
| 621.043 | Evergreen Tree (6'-8') Group A | EA | 50 |

| Pay Item | | Pay Unit |
|----------|---------------------------|----------|
| 621.043 | Evergreen TR (6'-8') GP A | Each |

SECTION 626

FOUNDATIONS, CONDUIT, AND JUNCTION BOXES FOR HIGHWAY SIGNING, LIGHTING AND SIGNALS

(Quazite Junction Box 18 x 12)

626.02 General

The following paragraph is added:

Junction boxes for the electrical conduit associated with the toll equipment and intelligent transportations systems shall be polymer concrete as manufactured by QUAZITE® a division of Hubbell Power Systems. The boxes shall be 36" x 24" and 36" deep or 18" x 12" and 18" deep, as specified on the plans. The words ELECTRICAL or COMMUNICATION shall be stamped on the cover as noted in the Plans or directed by the Resident. The boxes shall have a 15,000 lb. load rating. All existing QUAZITE® Junction Boxes in useable condition shall be removed and relocated as directed by the Resident Engineer.

Junction boxes for the electrical associated with highway lighting shall be polymer concrete as manufactured by QUAZITE® a division of Hubbell Power Systems. The boxes shall be 18" x 12" and 18" deep. Junction boxes in shall have the words MTA LIGHTING stamped on the cover. The boxes shall have a 15,000 lb. load rating.

626.04 Method of Measurement

The following sentences are added:

Quazite junction box shall be measured by each unit in place and accepted existing or new.

626.05 Basis of Payment

The words, "polymer concrete" shall be added after the words, "precast concrete" in the second sentence of the second paragraph.

| Pay Item | | <u>Pay Unit</u> |
|----------|--------------------------------------|-----------------|
| 626.13 | 18" x 12" x 18" Quazite Junction Box | Each |

SECTION 634

HIGHWAY LIGHTING

(Remove and Reset Light Standard)

634.01 Description

The following paragraph is added:

This work shall consist of removing existing light standards, luminaires, and any breakaway devices and resetting with all associated appurtenances and wiring system on to new or relocated concrete foundations at locations as shown on the Plans.

634.021 Materials

The following paragraphs are added:

Junction boxes shall be polymer concrete (Item 626.13). Provide manufacturer's listed cover for each junction box with logo stating "MTA LIGHTING".

Splices in junction boxes shall be made with ILSCO USPA-350-SS-DB Safetysub Watertight Direct Bury Splice Wire Range 350MCM-10-STR connectors for the appropriate wire count only. Splices in hand holes shall be Ideal SLK Disconnect Fuse Kit 30-S2212.

634.04 Cable Installation

The reset light standards shall be wired with new wiring unless existing wiring is new and approved to be left by MTA Resident.

634.051 Removing Light Standards

The first and second paragraph are deleted and replaced with the following:

Before removing light standards, the luminaires shall be removed from the light standard and carefully stored for reassembly at the new location. Care shall be exercised in handling the light standards and luminaires. The Contractor will be required to replace, at his own expense, all equipment damaged or destroyed by his operation.

Breakaway devices shall be required on all light standards. If breakaway devices do not exist on the existing light standard, new breakaway devices shall be supplied and installed. The Contractor will be allowed to temporarily remove a single luminaire from the lighting circuit to allow removing and resetting the light standards, including replacing luminaires and testing. At a minimum, the remaining luminaires at the plaza shall be maintained and operational while relocated light standards are being installed and made fully operational.

634.092 Method of Measurement

The following sentence is added:

Remove and Reset Light Standard will be measured by the single unit each, complete in place and accepted.

634.093 Basis of Payment

The accepted quantity of Remove and Reset Light Standard will be paid at the Contract unit price each for the number of units that are removed and reset. Payment shall be full compensation for the removal and resetting of the light standard, removing and reinstalling the luminaire, resetting the breakaway device or installing a new breakaway device, new pole wiring to the reset fixture if needed and all incidentals necessary to complete the work. Payment for the foundation shall be under the appropriate 626 item.

Payment will be made under:

| Pay Item | | <u>Pay Unit</u> |
|----------|---------------------------------|-----------------|
| 634.208 | Remove and Reset Light Standard | Each |

SECTION 634

HIGHWAY LIGHTING

(Wire)

634.01 Description

The following paragraph is added:

Work shall consist of furnishing and installing wiring for the highway lighting system as shown on the Plans.

634.092 Method of Measurement

The following sentences are added:

Wiring will be measured by the linear foot of each Wire installed complete in place and accepted.

634.093 Basis of Payment

The following paragraphs are added:

The accepted quantity of Wiring will be paid for at the Contract unit price per linear foot for the respective size of wire. Payment shall be full compensation for supplying the wire, installation, splicing, and any other incidentals necessary to complete the work.

| Pay Item | | <u>Pay Unit</u> |
|----------|-------------------------|-----------------|
| 634.2156 | #6 AWG THHN Wire | Linear Foot |
| 634.2157 | #6 AWG THHN Ground Wire | Linear Foot |

SECTION 645

HIGHWAY SIGNING

(Relocate Existing Sign Assembly and Post)

645.07 Demounting and Reinstalling Existing Signs and Poles

The following paragraphs are added:

At locations noted on the Plans, existing ground-mounted signs are designated to be removed and relocated. This work shall consist of removing the sign panels, removing and relocating or disposing of the existing wood post and resetting the sign panels on a new wood post if required in the appropriate specified location. The Resident will determine if a new wood post is required.

Any existing signs not shown on the Plans are to remain in their existing condition unless directed otherwise by the Resident.

645.08 Method of Measurement

The following sentences are added:

Relocating existing sign assembly and post shall be measured as complete units each, removed, relocated and accepted.

645.09 Basis of Payment

The following paragraphs are added:

The accepted relocated signs will be paid for at the Contract unit price each as specified. Such price will include removing and relocating sign panels, removing and relocating or disposing existing wood post and resetting the sign panels on the existing or new wood post and new hardware as required to complete the sign installation. Any signs or supports damaged by the Contractor shall be replaced by him with new signs or supports conforming to the applicable Specifications at no additional cost to the Authority.

Payment will be made under:

Pay Item

Pay Unit

Relocate Existing Sign Assembly and Post

Each

SECTION 652

MAINTENANCE OF TRAFFIC

(Specific Project Maintenance of Traffic Requirements)

This Specification describes the specific project maintenance of traffic requirements for this Project.

The following minimum traffic requirements shall be maintained. These requirements may be adjusted based on the traffic volume when authorized by the Authority.

Local Road Traffic Control Requirements

Two lanes of traffic shall be maintained on Blackstrap Road at all times in accordance with the details shown on the Plans. Short durations of alternating two-way traffic in a single lane will be permitted with proper maintenance of traffic signage and flaggers. A minimum 12' lane width shall be maintained at all times. The Contractor shall coordinate directly with the Authority for acceptable lane closure dates. The Contractor shall notify the Resident/Authority two weeks prior to the closure. The Resident/Inspector shall notify the Town of Falmouth.

Maine Turnpike Traffic Control Requirements

This Section outlines the minimum requirements that shall be maintained for work on, over, or adjacent to the Maine Turnpike roadway. Operations are allowed as outlined below:

| Temporary Lane Closures | Northbound |
|-------------------------|---|
| | Two lanes of traffic plus the northbound on ramp lane |
| | shall be maintained at all times. |
| | |
| | Southbound |
| | Mon-Thurs. |
| | May 1 until June 15, 2018 AND October 19 until |
| | November 2, 2018– allowable single lane closure all |
| | hours except 6 a.m to 9 a.m. |
| | June 15 until September 7, 2018 AND October 5 until October 19, 2018- allowable single lane closure 6 p.m. to 5 a.m. |
| | p.iii. to 3 a.iii. |
| | September 7 until October 5, 2018 - allowable single lane closure all hours except 6 a.m. to 9 a.m and 3 p.m. to 6 p.m. |
| | |
| | |
| | |
| | |

| | Friday May 1 until June 15, 2018 AND September 7 until November 2, 2018- allowable single lane closure all hours except 6 a.m. to 9 a.m and 3 p.m. to 6 p.m. June 15 until September 7, 2018 - allowable single lane closure 7 p.m. to 5 a.m. |
|--------------------------------------|--|
| Temporary Mainline Shoulder Closures | 24 hours per day starting at 7:00 p.m. Sunday thru 6:00 p.m. Friday |

On Mondays through Fridays in July and August, a four-foot lateral buffer space must be maintained between the solid white edge line and the drums from 6:00 a.m. to 9:00 a.m. and again from 3:00 p.m. to 6:00 p.m.

SECTION 652

MAINTENANCE OF TRAFFIC

(Truck Mounted Attenuator)

Section 652 of the Maine Turnpike Authority 2016 Supplemental Specifications is modified as follows:

652.1 Description

The following paragraph is added:

When a pay item for a Truck Mounted Attenuator (TMA) is included in the contract at least one TMA will be required on the project and its use will be required. The truck mounted attenuator should be utilized in lane closures and other construction operations where workers are exposed to traffic and not protected by other positive means. The Contractor shall manage the utilization and operation of the TMA and if at least one is not used as described above then it will be considered a Traffic Control Plan violation and result in a reduction of payment as outlined in Section 652.

652.2.1 Truck Mounted Attenuator

This section is deleted in its entirety and replaced with the following:

The truck mounted attenuator system shall conform to the following requirements:

- Truck and attached attenuator shall conform to the NCHRP Report 350, Test Level 3 criteria.
- A mounted revolving amber light or amber strobe light with 360-degree visibility.
- An arrow light bar fixed to the vehicle.
- The attenuator shall be mounted to a vehicle with a minimum weight of 10,000 lbs.

652.3.7 Operations

This section is deleted in its entirety and replaced with the following:

The Contractor shall manage the operation of the truck mounted attenuator. The truck mounted attenuator should be utilized in lane closures and other construction operations where workers are exposed to traffic and not protected by positive means. The operation of the vehicle shall be in accordance with the Manual of Uniform Traffic Control Devices and the manufacturer's recommendation.

<u>Installation:</u> The chart below identifies the distance from the work zone or hazard where the TMA shall be deployed. If the work zone is within a marked lane closure, the barrier truck distances shall apply and if the work is mobile, then shadow truck distances

shall apply. The TMA shall not be located in the buffer zone. When used as a barrier, the barrier truck shall be parked in low gear with brakes applied and the front wheels turned away from the work zone and the adjacent traffic lane. For placement details, reference the Manual of Uniform Traffic Control Devices (MUTCD).

| Weight of Truck | Barrier Truck Distance from | Shadow Truck Distance from |
|-----------------|-----------------------------|----------------------------|
| weight of Truck | Work Zone of Hazard | Work Vehicle or Work Zone |
| 10,000 lbs | 250 ft | 300 ft |
| 15,000 lbs | 200 ft | 250 ft |
| >24,000 lbs | 150 ft | 200 ft |

652.7 Method of Measurement

The last paragraph is deleted and replaced with:

Truck mounted attenuator shall be measured for payment by the calendar day for each calendar day that a unit is used on a travel lane or shoulder on the project, as approved by the resident.

652.8.2 Basis of Payment

The last two paragraphs are deleted and replaced with:

The Truck Mounted Attenuator(s) will be paid for at the Contract unit price per calendar day for each TMA used. This price shall include all costs associated with the use of the vehicle. Payment shall include operator, fuel, truck, maintenance, flashing lights, arrow board and all other incidentals necessary to operate the vehicle.

Payment will be made under:

| Pay Item | | <u>Pay Unit</u> |
|----------|--------------------------|-----------------|
| 652.45 | Truck Mounted Attenuator | Calendar Day |

SECTION 652

MAINTENANCE OF TRAFFIC

(Automated Speed Limit Sign)

652.1 Description

This special provision provides for furnishing, operating, and maintaining an Automated Trailer Mounted Radar Speed Limit Sign for project use. When a pay item for an Automated Trailer Mounted Radar Speed Limit Sign is included in the Contract at least one will be required on the project when there is a Work Zone Speed Limit in place. The Contractor shall furnish, operate, and maintain the Automated Trailer Mounted Radar Speed Limit Signs during the project operations.

<u>652.1.1</u> Instruction and maintenance manuals shall be provided.

652.2 Materials

Automated Trailer Mounted Speed Limit Sign

Trailer mounted speed limit signs shall be self-contained units including sign assembly, flashing lights, directional radar to measure speed limits, a regulatory speed limit sign, and power supply specifically constructed to operate as a trailer-mounted sign. The preferred color of the unit shall be "construction orange".

Signs

Base material for the regulatory speed limit signs shall be weather proof, rigid substrate specifically manufactured for highway signing and meet the retro-reflective sheeting application requirements of the sheeting manufacturer.

Sign text shall consist of the letters, digits and symbols either applied by stick-on or silk screen, to conform to the dimensions and designs indicated in the Contract, MUTCD and/or FHWA Standard Highway Signs. The materials and methods shall be in accordance with standard commercial processes.

"Work Zone" construction signs shall be mounted on the trailer unit above the regulatory speed limit sign. (see Attached).

Signs and secondary signs shall follow the MUTCD for minimum mounting heights.

Power supply

The power supply shall be either full battery power with solar panel charging (capable of maintaining a charged battery level) and 135 ampere, 12 volt deep cycle batteries, or diesel powered generator with a fuel capacity sufficient for 10 hours of continuous operation.

Flashing Lights

Each unit shall be equipped with two mono-directional flashing lights, placed in accordance with the MUTCD, with amber lenses and reflectors, which are visible through a range of 120 degrees when viewed facing the sign. The lights, either strobe, halogen, or incandescent lamps, shall be visible for a minimum distance of one mile under daylight conditions and shall have a minimum flash rate of 40 flashes per minute. An "On" indicator light shall be mounted on the back of the signs, which is visible for at least 500 feet to provide confirmation that the flashing lights are operating.

Radar

The directional radar shall monitor approaching traffic only. The radar shall be capable of measuring speeds from 5 to 70 MPH at a distance of up to 1500 feet and shall have a high speed cut off thresh hold.

CONSTRUCTION REQUIREMENTS

652.3.2 Responsibility of the Contractor

The Contractor shall furnish the Automated Trailer Mounted Speed Limit Sign as described in this Special Provision for this project.

All existing speed limit signs, which conflict with the construction zone trailer mounted speed limit signs shall be covered completely when the work zone speed limit is in place.

Automated Trailer Mounted Speed Limit Signs shall only be used when a work zone speed limit is in place. The Contractor shall manage the utilization and operation of the Automated Trailer Mounted Speed Limit Signs and if at least one is not used when work zone speed limits are in place then it will be considered a Traffic Control Plan violation and result in a reduction of payment as outlined in Section 652.

The Resident will record the actual time and location for the signs on a daily basis when the Automated Trailer Mounted Speed Limit Signs are in use.

The Automated Trailer Mounted Radar Speed Limit Sign may be placed as shown on the plans, or may replace the posted regulatory speed limit signs or may be placed at a location within the closed lane that has a reduced speed limit.

Automated Trailer Mounted Speed Limit Signs shall be delineated with retro-reflective temporary traffic control devices while in use and shall also be delineated by affixing a retro-reflective material directly on the trailer.

Upon delivery of the Automated Trailer Mounted Speed Limit Sign and before acceptance by the Authority, the Contractor shall have a representative of the manufacturer review the condition and notify the Resident in writing, of all deficiencies noted.

The Contractor shall arrange to have all necessary repairs performed at no cost to the Authority.

To avoid impairing driver vision, the Contractor shall dim the lighted speed limit readings by 50 percent during nighttime use, and restore full power lighting during daytime operation.

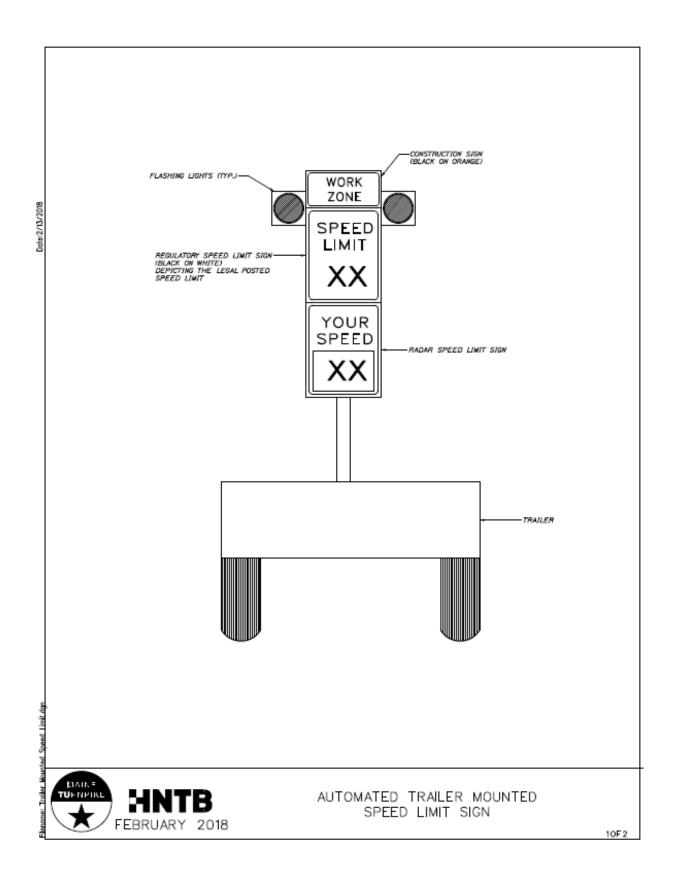
652.7 Method of Measurement

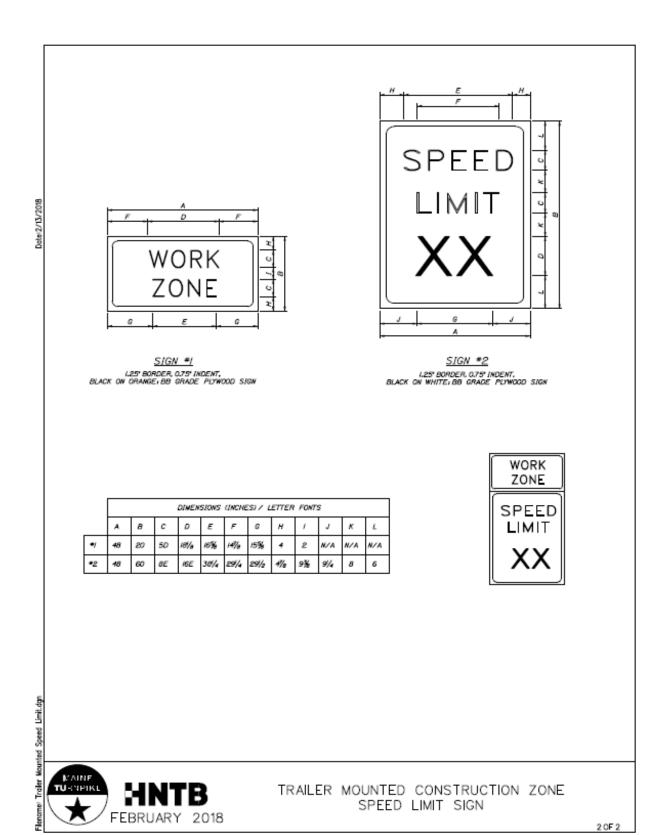
Automated Trailer Mounted Speed Limit Sign shall be measured for payment by the calendar day for each calendar day that the unit is used on a travel lane or shoulder on the project or per each for the continued use for the duration of the project. Payment shall include the Trailer, Radar Speed Limit Sign, flashing beacon amber lights, regulatory speed limit sign, fuel, necessary maintenance, and all checking of Radar Speed Limit Signs by manufacturer and all project moves including the transporting and delivery of the unit.

652.8 Basis of Payment

The Automated Trailer Mounted Speed Limit Sign(s) will be paid for at the Contract unit price per calendar day or per each. This price shall include all costs associated with the use of the Automated Trailer Mounted Speed Limit Sign.

| Pay Item | | Pay Unit |
|----------|--|--------------|
| 652.451 | Automated Trailer Mounted Speed Limit Sign | Calendar Day |
| 652.452 | Automated Trailer Mounted Speed Limit Sign | Each |





SECTION 652

MAINTENANCE OF TRAFFIC

(Temporary Portable Rumble Strips)

652.1 Description:

This work consists of furnishing and placing temporary portable rumble strips RoadQuake 2F TPRS or an approved equal.

652.2 Materials:

Furnish a temporary portable rumble strip system, which includes a method to transport and move these to on-site locations where they will be used. The Contractor shall submit for approval, literature and all necessary certifications to the Maine Turnpike prior to procurement of the product.

652.3 General:

If used, Temporary Portable Rumble Strips may not be practicable in areas where the roadway has more than two travel lanes, where volume windows do not allow for breaks in traffic to set up and monitor and adjust, or during night time lane closures.

Placement:

Provide rumble strips where the plans show or as directed by the Resident as follows:

Prior to placing rumble strips, clean the roadway of sand and other materials, that may cause slippage.

Place one end of the rumble strips 6 inches from the roadway centerline. Extend the strips perpendicular to the direction of travel. Ensure strips lay flat on the roadway surface.

Only one series of rumble strips, placed before the first work zone, is required per direction of travel for multiple work zones spaced 1 mile or less apart. Work zones spaced greater than 1 mile apart require a separate series of rumble strips. Each lane shall use one group of temporary rumble strips.

Bracketed "Rumble Strip Ahead" and "Bump" signs shall be utilized and will be paid for under the respective construction sign pay items.

Maintenance:

Maintain rumble strips as follows:

If rumble strips slide, become out of alignment, or are no longer in the wheel path of approaching vehicles during the work period, thoroughly clean both sides of the rumble strips and reset on a clean roadway.

Repair or replace damaged rumble strips immediately.

652.4 Method of Measurement:

The accepted quantity of temporary portable rumble strips shall be measured by the unit complete in place, per lane closure application. A unit shall consist of 1 group of 3 full-lane width of rumble strips. As shown in the plans, a maximum of 3 units may be used at each lane closure. A unit shall be measured for each group of rumble strips, each time they are used for a lane closure.

652.5 Basis of Payment:

The accepted quantity of temporary portable rumble strips will be paid for at the contract unit price per unit which shall include the transport device. Payment is full compensation for providing, relocating, maintaining or replacing, and removing temporary portable rumble strips.

If the pay item is not included in the contract quantities, then the Authority does not anticipate the use of this item on the contract. If contractor wishes to utilize temporary portable rumble strips and the item is not in the contract, then the contractor may propose use of them to the Authority for consideration.

| Pay Item | | Pay Unit |
|----------|---------------------------------|----------|
| 652.46 | Temporary Portable Rumble Strip | Unit |

SECTION 655

ELECTRICAL

(PVC Conduit)

This task shall include providing and the installation of PVC Conduit as shown on the Plan drawings and described herein. All conduit shall be installed per NEC specification. Connections to specialized fittings are to be compatible with adjoining conduit.

Joints shall be made in accordance with ASTM D 2855. Solvent cement shall meet the requirements of ASTM D 2564 with particular attention to matching the viscosity to the conduit size.

Joint adhesives shall be in accordance with ASTM D2517.

All conduit runs shall be watertight. Slope conduit to drain into junction boxes.

All empty conduits shall have a labeled pull string. Pull strings shall have length markings and should be used for long conduits over 50 feet or for all underground installations. Clean, plug and seal conduit ends after installation.

Basis of Payment

Measurement and payment for installing PVC Conduit as shown on the Plan drawings and described herein will be per linear foot of each type of underground or exposed conduit actually furnished, installed, and accepted at the Contract price per linear foot. It shall include the furnishing, installing, supporting and connection of the conduit and all various hardware necessary for the installation. This price shall include the cost of hand digging, trenching, or plowing; furnishing and installing the conduit; furnishing special backfilling materials, pull string, fittings, groundings and bonding; test cleaning interiors of conduits and all materials, labor, equipment and incidentals necessary to complete the work.

Payment will be made under:

| Pay Item | | Pay Unit |
|----------|------------------------------|-------------|
| 655.2001 | 3/4" Schedule 40 PVC Conduit | Linear Foot |
| 655.2002 | 1" Schedule 40 PVC Conduit | Linear Foot |
| 655.200 | 1½" Schedule 40 PVC Conduit | Linear Foot |
| 655.2003 | 2" Schedule 40 PVC Conduit | Linear Foot |
| 655.201 | 3" Schedule 40 PVC Conduit | Linear Foot |
| 655.202 | 4" Schedule 40 PVC Conduit | Linear Foot |
| 655.2021 | 1" Schedule 80 PVC Conduit | Linear Foot |
| 655.203 | 1½" Schedule 80 PVC Conduit | Linear Foot |
| 655.2031 | 2" Schedule 80 PVC Conduit | Linear Foot |
| 655.204 | 3" Schedule 80 PVC Conduit | Linear Foot |
| 655.205 | 4" Schedule 80 PVC Conduit | Linear Foot |
| 655.2052 | 5" Schedule 80 PVC Conduit | Linear Foot |
| 655.2051 | 6" Schedule 80 PVC Conduit | Linear Foot |

SECTION 719

SIGNING MATERIAL

Section 719.01 Reflective Sheeting

This Subsection is deleted in its entirety and replaced with the following:

Retroreflective sheeting for signs shall meet at a minimum the requirements for ASTM 4956 – Type XI (Prismatic) manufactured by 3M Company, for all signs.

Reflective sheeting, used in sign construction, shall have been manufactured within the six months immediately prior to the fabrication of each sign. Upon delivery at the job site of each shipment of signs, a letter of certification shall be provided that the reflective sheeting conforms to the requirements.

For Type 1 Guide Signs, all reflective sheeting shall be color matched on each sign unit.

All warning signs shall be fluorescent yellow except for Ramp Advisory Speed signs which shall be yellow.

All Construction Series signs that use orange backgrounds shall be fluorescent orange.

All Pedestrian Signs shall be fluorescent yellow-green.

EZ-PASS Purple shall conform to the FHWA Purple color box.

719.02 Demountable High Intensity Reflectorized Letters, Numerals, Symbols, and Borders

This Subsection, including the title, is deleted in its entirety and replaced with the following:

719.02 Direct Applied Reflectorized Letters, Numerals, Symbols, and Borders

Direct applied letters, numerals, symbols and borders shall consist of cut out sheeting that shall meet at a minimum the requirements for ASTM 4956 – Type XI (Prismatic) sheeting. The sheeting material used for the direct applied legend shall be the same type as used for the background.

APPENDIX A

Section 11 – State Transportation Facilities Permit by Rule Regulations

Chapter 305: PERMIT BY RULE

1. Introduction. A "permit by rule" or "PBR", when approved by the Department of Environmental Protection (DEP), is an approval for an activity that requires a permit under the Natural Resources Protection Act (NRPA). Only those activities described in this chapter may proceed under the PBR process. A PBR activity will not significantly affect the environment if carried out in accordance with this chapter, and generally has less of an impact on the environment than an activity requiring an individual permit. A PBR satisfies the Natural Resources Protection Act (NRPA) permit requirement and Water Quality Certification requirement.

If a proposed activity is not described in this chapter, or will not be conducted in accordance with the standards of this chapter, the applicant must obtain an individual permit prior to beginning the activity.

- **A.** Location of activity. The location of an activity may affect whether an activity qualifies for PBR, and whether review by the Department of Inland Fisheries and Wildlife is required.
 - (1) Type of resource. For some types of activities, the availability of a PBR is affected by the type of natural resource in or adjacent to which the activity is proposed. For example, an applicant proposing an activity consisting of "Movement of rocks or vegetation" may receive a PBR only if the activity will take place in a great pond, river, stream or brook. Limitations concerning the location of activities are addressed in the "Applicability" provision in each section of this chapter.
 - (2) Essential habitat. Essential habitats include areas critical to the survival of threatened and endangered species such as the bald eagle, least tern, roseate tern, and piping plover. If the activity is located in essential habitat, such as near an eagle nesting site, a PBR is only available if the applicant obtains written approval from the Department of Inland Fisheries and Wildlife (IF&W). This approval from IF&W must be submitted to the DEP with the PBR notification form, and the applicant must follow any conditions stated in the IF&W approval.

NOTE: Maps showing areas of essential habitat are available from the Department of Inland Fisheries and Wildlife regional headquarters, municipal offices, the Land Use Regulation Commission (for unorganized territories) and DEP regional offices. If the activity is located in essential habitat, IF&W must be contacted to request and obtain a "certification of review and approval".

B. Notification. The applicant must file notice of the activity with the DEP prior to beginning work on the activity. The notification must be on a form provided by the DEP and must include any submissions required in this chapter. The applicant must keep a copy to serve as the permit.

The notification form must be sent to the DEP by certified mail (return receipt requested), or hand delivered to the DEP and date stamped by the department. By signing the notification form, the applicant is representing that the activity will meet the applicability requirements and standards of the rule. In addition, by signing the notification form the applicant represents that the applicant has sufficient title, right, or interest in the property where the proposed activity is to take place.

C. Effective period

(1) Beginning of period. The PBR becomes effective 14 calendar days after the DEP receives the notification form, unless the DEP approves or denies the PBR prior to that date. If the DEP does not speak with or write to the applicant within this 14 day period regarding the PBR notification, the applicant may proceed to carry out the activity.

There are three exceptions regarding the effective date of an approved PBR:

- (a) Activities listed in Section 10 (Stream crossings) occurring in association with forest management are exempt from the 14 day waiting period.
- (b) Activities listed in Section 10 (Stream crossings) performed or supervised by individuals currently certified in erosion control practices by the DEP are exempt from the 14 day waiting period. To be certified in erosion control practices, an individual must successfully complete all course requirements of the Voluntary Contractor Certification Program administered by the DEP's Nonpoint Source Training and Resource Center.
- (c) Activities that are part of a larger project requiring a permit under the Site Location of Development or the Storm Water Management Acts may not proceed until any required permit under those laws is obtained.
- NOTE: Activities that are part of a larger project may require other permits from the DEP also. These other laws may prohibit the start of construction of any part of the project unless a permit under that law is obtained. In these cases, while not a violation of this rule, starting work on a PBR approved activity would be a violation of those other applicable laws.
- (2) End of period. The PBR is generally effective for 2 years from the date of approval, except that a PBR for "Replacement of structures" under Section 4 is effective for 3 years.
- NOTE: Activities that qualify under this chapter may need to meet other local, state and federal requirements. Examples -- (1) If an activity extends below the low water line of a lake, coastal wetland or international boundary water, the applicant should contact the Bureau of Parks and Lands (287-3061) concerning possible lease or easement requirements, or (2) If an activity will involve work below the mean high water line in navigable waters of the United States, the applicant should contact the Army Corps of Engineers (623-8367).
- **D. Discretionary authority.** Notwithstanding compliance with the PBR applicability requirements and standards set forth in this chapter, the DEP may require an individual permit application to be filed in any case where credible evidence indicates that the activity:
 - (1) May violate the standards of this rule or the NRPA (38 M.R.S.A. Section 480-D);
 - (2) Could lead to significant environmental impacts, including cumulative impacts; or
 - (3) Could adversely impact a resource of special concern.

If an individual permit is required pursuant to this subsection, the DEP shall notify the applicant in writing within the 14 calendar day waiting period described in sub-section (C) above. When the DEP notifies an applicant than an individual permit is required, no work may be conducted unless and until the individual permit is obtained.

- **E. Violations.** A violation of law occurs when a person, or his or her agent, performs or causes to be performed any activity subject to the NRPA without first obtaining a permit from the DEP, or acts contrary to the provisions of a permit. The person, his or her agent, or both, may be held responsible for the violation. Commonly, the "person" is the landowner, and the "agent" is the contractor carrying out the activity. A violation occurs when:
 - (1) An activity occurs that is not allowed under PBR, whether or not a PBR notification form has been filed with and/or approved by the DEP;
 - (2) An activity occurs that is allowed under PBR, but a PBR for the activity has not become effective prior to the beginning of the activity; or
 - (3) An activity occurs that is allowed under PBR and a PBR for the activity is in effect, but the standards specified in this chapter are not met.

See the "applicability" provision under each activity for rules concerning what activities are allowed under PBR. A PBR is only valid for the person listed on the notification form, or for his or her agent.

Each day that a violation occurs or continues is considered a separate offense. Violations are subject to criminal penalties and civil penalties of not less than \$100 nor more than \$10,000 for each day of that violation (38 M.R.S.A. Section 349).

NOTE: A local Code Enforcement Officer (CEO) may take enforcement action for a violation of the Natural Resources Protection Act if he or she is authorized to represent a municipality in District Court, and he or she has been certified as familiar with court procedures, 30-A M.R.S.A. Section 4452(7).

2. Activities adjacent to protected natural resources

A. Applicability

- (1) This section applies to an activity adjacent to, but not in:
 - (a) A coastal wetland, great pond, river, stream or brook or significant wildlife habitat contained within a freshwater wetland; or
 - (b) Freshwater wetlands consisting of or containing:
 - (i) Under normal circumstances, at least 20,000 square feet of aquatic vegetation, emergent marsh vegetation or open water, except for artificial ponds or impoundments; or
 - (ii) Peatlands dominated by shrubs, sedges and sphagnum moss.

- **D. Definitions.** The following terms, as used in this chapter, have the following meanings, unless the context indicates otherwise:
 - (1) **Cross-sectional area**. The cross-sectional area of a stream channel is determined by multiplying the stream channel width by the average stream channel depth. The stream channel width is the straight line distance from the normal high water line on one side of the channel to the normal high water line on the opposite side of the channel. The average stream channel depth is the average of the vertical distances from a straight line between the normal high water marks of the stream channel to the bottom of the channel.
 - (2) **Crossing**. Any activity extending from one side to the opposite side of a protected natural resource, or to an island or upland within a protected natural resource whether under, through or over that resource. Such activities include, but are not limited to roads, fords, bridges, culverts, utility lines, water lines, sewer lines and cables, and the clearing and removal of vegetation necessary to install and maintain these crossings.
 - (3) **Fill**. a. (verb) To put into or upon, supply to, or allow to enter a water body or wetland any earth, rock, gravel, sand, silt, clay, peat, or debris; b. (noun) Material, other than structures, placed in or adjacent to a water body or wetland.
 - (4) **Ford**. A permanent crossing of a stream utilizing an area of existing, non-erodible substrate of the stream, such as ledge or cobble, or by placing non-erodible material such as stone or geotextile on the stream bottom.
 - (5) **Perennial watercourse**. A river, stream or brook depicted as a solid line on the most recent edition of a United States Geological Survey 7.5 minute series topographic map, or if not available, a 15 minute series topographic map.
 - (6) **Riprap.** Heavy, irregularly-shaped rocks that are fit into place, without mortar, on a slope. Square or rectangular rocks with flat faces, such as quarry stone or manufactured blocks, do not qualify as "irregularly-shaped".
 - (7) Used for navigation. Those rivers, streams or brooks used by motorized watercraft.

11. State transportation facilities

A. Applicability

- (1) This section applies to the maintenance, repair, reconstruction, rehabilitation, replacement or minor construction of a State Transportation Facility carried out by, or under the authority of, the Maine Department of Transportation (MaineDOT) or the Maine Turnpike Authority, including any testing or preconstruction engineering, and associated technical support services.
- (2) This section does not apply to an activity within a coastal sand dune system.

NOTE: The construction of a transportation facility other than roads and associated facilities may be subject to the Storm Water Management Law, 38 M.R.S.A. Section 420-D.

B. Standards

- (1) Photographs of the area to be altered by the activity must be taken before work on the site begins. The photographs must be kept on file and be made available at the request of the DEP.
- (2) The activity must be reviewed by the Department of Inland Fisheries and Wildlife and the Department of Marine Resources, as applicable. The applicant must coordinate with the reviewing agencies and incorporate any recommendations from those agencies into the performance of the activity.
- (3) All construction activities undertaken must be detailed in a site-specific Soil Erosion and Water Pollution Control Plan and conducted in accordance with MaineDOT's Best Management Practices for Erosion and Sediment Control, dated January 2000, and Standard Specifications, dated December 2002.
- (4) Alignment changes may not exceed a distance of 200 feet between the old and new center lines in any natural resource.
- (5) The activity may not alter more than 300 feet of shoreline (both shores added together) within a mile stretch of any river, stream or brook, including any bridge width or length of culvert.
- (6) The activity may not alter more than 150 feet of shoreline (both shores added together) within a mile stretch of any outstanding river segment identified in 38 M.R.S.A. 480-P, including any bridge width or length of culvert.
- (7) The activity must minimize wetland intrusion. The activity is exempt from the provisions of Chapter 310, the Wetland and Waterbodies Protection Rules, if the activity alters less than 15,000 square feet of natural resources per mile of roadway (centerline measurement) provided that the following impacts are not exceeded within the 15,000 square foot area:
 - (a) 1,000 square feet of coastal wetland consisting of salt tolerant vegetation or shellfish habitat; or
 - (b) 5,000 square feet of coastal wetland not containing salt tolerant vegetation or shellfish habitat; or
 - (c) 1,000 square feet of a great pond.

All other activities must be performed in compliance with all sections of Chapter 310, the Wetland Protection Rules, except 310.2(C), 5(A), 9(A), 9(B) and 9(C).

(8) The activity may not permanently block any fish passage in any watercourse containing fish. The applicant must coordinate with the reviewing agencies listed in paragraph 2 above to improve fish passage and incorporate any recommendations from those agencies into the performance of the activity.

NOTE: For guidance on meeting the design objectives for fish passage, including peak flow, maximum velocity, mining depth and gradient, see the MaineDOT Waterbody and Wildlife Crossing Policy and Design Guide (July 2008), developed in conjunction with state and federal resource and regulatory agencies.

- (9) Rocks may not be removed from below the normal high water line of any coastal wetland, freshwater wetland, great pond, river, stream or brook except to the minimum extent necessary for completion of work within the limits of construction.
- (10) If work is performed in a river, stream or brook that is less than three feet deep at the time and location of the activity, the applicant must isolate the work area from the resource and divert stream flows around the work area, maintaining downstream flows while work is in progress.
- (11) Wheeled or tracked equipment may not operate in the water. Equipment operating on the shore may reach into the water with a bucket or similar extension. Equipment may cross streams on rock, gravel or ledge bottom. If avoiding the operation of wheeled or tracked equipment in the water is not possible, the applicant must explain the need to operate in the water. Approval from the DEP to operate in the water must be in writing, and any recommendations from the DEP must be incorporated into the performance of the activity.
- (12) All wheeled or tracked equipment that must travel or work in a vegetated wetland area must travel and work on mats or platforms.
- (13) Any debris or excavated material must be stockpiled either outside the wetland or on mats or platforms. Erosion and sediment control best management practices must be used, where necessary, to prevent sedimentation. Any debris generated during the activity must be prevented from washing downstream and must be removed from the wetland or water body. Disposal of debris must be in conformance with the Maine Hazardous Waste, Septage and Solid Waste Management Act, 38 M.R.S.A. Section 1301 *et seq*.
- (14) Work below the normal high water line of a great pond, river, stream or brook must be done at low water except for emergency work or work agreed to by the resource agencies listed in paragraph 2 above.
- (15) Perimeter controls must be installed before the work starts. Disturbance of natural resources beyond the construction limits shown on the plans is not allowed under this rule.

NOTE: Guidance on the location of construction limits can be obtained from the on site Construction Manager.

(16) The use of untreated lumber is preferred. Lumber pressure treated with chromated copper arsenate (CCA) may be used only if necessary and only if use is allowed under federal law and not prohibited from sale under 38 M.R.S.A. 1682, and provided it is cured on dry land in a manner that exposes all surfaces to the air for a period of at least 21 days prior to construction. Wood treated with creosote or pentachlorophenol may not be used where it will contact water.

- (17) A temporary road for equipment access must be constructed of crushed stone, blasted ledge, or similar materials that will not cause sedimentation or restrict fish passage. Such roads must be completely removed at the completion of the activity. In addition, any such temporary roads which are in rivers, streams or brooks, must allow for a passage of stormwater flows associated with a 10-year storm.
- (18) Non-native species may not be planted in restored areas.
- (19) Disposal of debris must be in conformance with Maine Hazardous Waste, Septage and Solid Waste Management Act, 38 M.R.S.A. Sections 1301 *et seq*.
- (20) Disturbance of vegetation must be avoided, if possible. Where vegetation is disturbed outside of the area covered by any road or structure construction, it must be reestablished immediately upon completion of the activity and must be maintained.
- (21) A vegetated area at least 25 feet wide must be established and maintained between any new stormwater outfall structure and the high water line of any open water body. A velocity reducing structure must be constructed at the outlet of the stormwater outfall that will create sheet flow of stormwater, and prevent erosion of soil within the vegetated buffer. If the 25 foot vegetated buffer is not practicable, the applicant must explain the reason for a lesser setback in writing. Approval from the DEP must be in writing and any recommendations must be incorporated into the activity.
- **C. Definitions.** The following terms, as used in this chapter, have the following meanings, unless the context indicates otherwise:
 - (1) **Diversion**. The rerouting of a river, stream or brook around a construction site and then back to the downstream channel.
 - (2) **Fill**. a. (verb) To put into or upon, supply to, or allow to enter a water body or wetland any earth, rock, gravel, sand, silt, clay, peat, or debris; b. (noun) Material, other than structures, placed in or immediately adjacent to a wetland or water body.
 - (3) **Floodplain wetlands**. Freshwater wetlands that are inundated with flood water during a 100-year flood event based on flood insurance maps produced by the Federal Emergency Agency or other site specific information.
 - (4) **Riprap**. Heavy, irregularly shaped rocks that are fit into place, without mortar, on a slope as defined in the MaineDOT Standard Specifications, dated December 2002.

12. Restoration of natural areas

A. Applicability

(1) This section applies to the restoration of an altered portion of a coastal wetland, freshwater wetland, great pond, river, stream or brook to its pre-existing natural condition through the removal of fill, structures or debris which is located in, on over, or adjacent to the natural resource.

(6) **Structure**. Anything built for the support, shelter or enclosure of persons, animals, goods or property of any kind, together with anything constructed or erected with a fixed location on or in the ground. Examples of structures include buildings, utility lines and roads.

NOTE: The significant wildlife habitats subject to this section are depicted on GIS data layers maintained by IF&W and available from either IF&W or the DEP.

STATUTORY AUTHORITY: 38 M.R.S.A., Section 480-H & 341-D(1)

EFFECTIVE DATE:

February 15, 1989

AMENDED:

March 23, 1991 April 11, 1992 May 19, 1992 May 1, 1995

EFFECTIVE DATE (ELECTRONIC CONVERSION):

May 4, 1996

NON-SUBSTANTIVE CORRECTIONS:

May 12, 1997 - punctuation, formatting, comparison with May 14, 1995 amendment October 29, 1998 - APA Office Note added to first Section 5

AMENDED:

June 1, 1999

July 16, 1999 (EMERGENCY, expires October 14, 1999) - Section 10(A)

October 15, 1999 - language reverted to June 1, 1999 version

February 14, 2000 - Section 10

NON-SUBSTANTIVE CORRECTIONS:

November 23, 2000 - removed erroneous April 21, 1995 amendment date

AMENDED:

September 1, 2002

NON-SUBSTANTIVE CORRECTIONS:

September 5, 2002 - title of Section 2 only

AMENDED:

May 25, 2005 – filing 2005-174

December 5, 2006 – filing 2006-496

February 25, 2008 – Section 20 only, filing 2008-88

July 15, 2009 – filing 2009-339

July 30, 2011 – Section 16 only, filing 2011-211 (Final adoption, major substantive)

June 8, 2012 – filing 2012-146 (Final adoption, major substantive)

APPENDIX B

General Conditions Army Corps of Engineers Programmatic General Permit

Applicant: General Public, State of Maine

Effective Date: October 13, 2015 Expiration Date: October 13, 2020

DEPARTMENT OF THE ARMY GENERAL PERMIT FOR THE STATE OF MAINE

The New England District of the U.S. Army Corps of Engineers (Corps) hereby issues a General Permit (GP) for activities subject to Corps jurisdiction in waters of the U.S. within the boundaries of the State of Maine. This GP is issued in accordance with Corps regulations at 33 CFR 320 - 332 [see 33 CFR 325.2(e)(2)]. This GP authorizes activity-specific categories of work that are similar in nature and cause no more than minimal individual and cumulative adverse environmental impacts. Refer to Page 2 for the list of activities and Appendix A for activity specific conditions of eligibility in inland and tidal waters.

I. GENERAL CRITERIA

- 1. In order for activities to qualify for this GP, they must meet the GP's terms and eligibility criteria (Pages 1-4), General Conditions (GC) (Pages 5-20), and Appendix A Definition of Categories.
- 2. Under this GP, projects may qualify for the following:
 - <u>Category 1</u>: Category 1 Self Verification Notification Form is required (SVNF see Appendix B).
 - <u>Category 2</u>: Application to and written approval from the Corps is required (Pre-Construction Notification (PCN)). <u>No work may proceed until written approval from the Corps is received.</u>

If your project is ineligible for Category 1, it may qualify for Category 2 or an Individual Permit and you must submit an application (see Page 3). The thresholds for activities eligible for Categories 1 and 2 are defined in Appendix A. This GP does not affect the Corps Individual Permit review process or activities exempt from Corps regulation.

- 3. Prospective permittees need to read:
 - a. Section II to determine if the activity requires Corps authorization.
- b. Sections III and IV to determine if the activity may be eligible for authorization under this GP, specifically whether it is eligible for Self-Verification (SV) or whether Pre-Construction Notification (PCN) is required.
- 4. Permittees must ensure compliance with <u>all</u> applicable General Conditions in Section IV. The Corps will consider unauthorized any activity requiring Corps authorization if that activity is under construction or completed and does not comply with all of the terms and conditions.
- 5. Project proponents are encouraged to contact the Corps with questions at any time. Pre-application meetings (see 33 CFR 325.1(b)), whether arranged by the Corps or requested by permit applicants, are encouraged to facilitate the review of projects. Pre-application meetings and/or site visits can help streamline the permit process by alerting the applicant to potentially time-consuming concerns that are likely to arise during the evaluation of their project (e.g., avoidance, minimization and compensatory mitigation requirements, historic properties, endangered species, essential fish habitat, and dredging contaminated sediments).

Section I 1

II. CORPS JURISDICTION/ACTIVITIES COVERED

- 1. Permits are required from the Corps of Engineers for the following work:
- a. The construction of any structure in, over or under any navigable water of the United States (U.S.)¹, the excavating or dredging from or depositing of material in such waters, or the accomplishment of any other work affecting the course, location, condition, or capacity of such waters. The Corps regulates these activities under Section 10 of the Rivers and Harbors Act of 1899. See 33 CFR 322;
- b. The discharge of dredged or fill material and certain discharges associated with excavation into waters of the U.S. (e.g. sidecasting). The Corps regulates these activities under Section 404 of the Clean Water Act (CWA). See 33 CFR 323; and
- c. The transportation of dredged material for the purpose of disposal in the ocean. The Corps regulates these activities under Section 103 of the Marine Protection, Research and Sanctuaries Act. See 33 CFR 324.

2. Related laws:

33 CFR 320.3 includes a list of related laws, including: Section 401 of the CWA, Section 402 of the CWA, Section 307(c) of the Coastal Zone Management (CZM) Act of 1972, The National Historic Preservation Act of 1966, the Endangered Species Act, the Fish and Wildlife Act of 1956, the Marine Mammal Protection Act of 1972, Magnuson-Stevens Act, and Section 7(a) of the Wild and Scenic Rivers Act.

- 3. An activity listed below may be authorized by this GP only if that activity and the permittee satisfy all of the GP's terms and conditions. Any activity not specifically listed below may still be eligible for the GP; applicants are advised to contact the Corps for a specific eligibility determination. Category 1 and Category 2 eligibility criteria for each activity in both Inland and Tidal waters can be found in Appendix A.
- 1. Repair, Replacement, Expansion, and Maintenance of Authorized Structures and Fills
- 2. Moorings
- 3. Structures, Floats and Lifts
- 4. Aids to Navigation, and Temporary Recreational Structures
- 5. Dredging, Disposal of Dredged Material, Beach Nourishment, and Rock Removal and Relocation
- 6. Discharges of Dredged or Fill Material Incidental to the Construction of Bridges
- 7. Bank and Shoreline Stabilization
- 8. Residential, Commercial, Industrial, and Institutional Developments, and Recreational Facilities
- 9. Utility Line Activities
- 10. Linear Transportation Projects
- 11. Mining Activities
- 12. Boat Ramps and Marine Railways
- 13. Land and Water-Based Renewable Energy Generation Facilities and Hydropower Projects
- 14. Reshaping Existing Drainage Ditches and Mosquito Management
- 15. Oil Spill and Hazardous Material Cleanup
- 16. Cleanup of Hazardous and Toxic Waste
- 17. Scientific Measurement Devices
- 18. Survey Activities
- 19. Agricultural Activities
- 20. Fish and Wildlife Harvesting, Enhancement, and Attraction Devices
- 21. Habitat Restoration, Establishment and Enhancement Activities
- 22. Previously Authorized Activities
- 23. Stream & Wetland Crossings
- 24. Aquaculture

Note: Multiple activities may be authorized in the same GP, e.g. a recreational pier (#3) with an associated mooring (#2) or a windpower facility (#13) with an associated transmission line (#9).

¹ Defined in Appendix F, Definitions and at 33 CFR 328. Section II

III. PROCEDURES

1. State Approvals. Applicants are responsible for applying for and obtaining any of the required state or local approvals. Federal and state jurisdictions may differ in some instances. State permits may be required for specific projects regardless of the general permit category.

In order for authorizations under this GP to be valid, when any of the following state approvals or statutorily-required reviews is also required, the approvals must be obtained prior to the commencement of work in Corps jurisdiction.

- Maine Department of Environmental Protection (DEP): Natural Resources Protection Act (NRPA) permit, including permit-by-rule (PBR) and general permit authorizations; Site Location of Development Act permit; Maine Waterway Development and Conservation Act permit; and Maine Hazardous Waste, Septage, and Solid Waste Management Act license.
- Maine Department of Conservation, Agriculture & Forestry: Land Use Planning Commission (LUPC) permit.
- Maine Department of Marine Resources: Aquaculture Leases.
- Maine Department of Conservation, Bureau of Parks and Lands, Submerged Lands: Submerged Lands Lease.

NOTE: This GP may also be used to authorize projects that are not regulated by the State of Maine (e.g., certain seasonal floats or moorings).

- 2. How to Obtain/Apply for Authorization.
- a. Category 1 (<u>Self-Verification</u>): Self-Verification Notification Form (SVNF) required. The SVNF is required for all SV eligible work in Maine unless otherwise stated in Appendix A. Activities that are eligible for SV are authorized under this GP and may commence without written verification from the Corps provided the prospective permittee has:
- i. Confirmed that the activity will meet the terms and conditions of Category 1. Consultation with the Corps and/or other relevant federal and state agencies may be necessary to ensure compliance with the applicable general conditions (GCs) and related federal laws such as the National Historic Preservation Act (see GC 6), the Endangered Species Act (GC 8) and the Wild and Scenic Rivers Act (GC 9). Prospective permittees are encouraged to contact the Corps with SV eligibility questions. Activities not meeting the SV criteria must submit a PCN to the Corps.
- ii. Submitted the SVNF (see GC 27 and Appendix B) to the Corps. **NOTE: A copy of a state** permit application form may be an acceptable surrogate for the SVNF. Whichever form chosen needs to include a location map, plans, and an Official Species List for federally listed threatened or endangered species (Reference Appendix D).
- b. Category 2 (<u>Pre-Construction Notification (PCN)</u>): Application to and written verification from the Corps is required before work can proceed. For activities that do not qualify for SV or where otherwise required by the terms of the GP, the permittee must submit a PCN and obtain a written permit before starting work in Corps jurisdiction.
- i. The Corps will coordinate review of all activities requiring PCN with federal and state agencies and federally recognized tribes, as appropriate. To be eligible and subsequently authorized, an activity must result in no more than minimal individual and cumulative effects on the aquatic environment as determined by the Corps in accordance with the criteria listed within this GP. This may require project modifications involving avoidance, minimization, or compensatory mitigation for unavoidable impacts to ensure that the net adverse effects of a project are no more than minimal.
- ii. The Corps will attempt to issue a written eligibility determination within the state's review period. Regardless, work eligible for Category 2 may not proceed before Corps written approval is received.
 - c. All applicants for Category 2 projects must:

Section III 3

- i. Apply directly to the Corps using the state application form or the Corps application form (ENG Form 4345²), and apply directly to the state (DEP, LUPC, BPL or DMR) as applicable using the appropriate state form, if the work is regulated by the Corps and the state; or
- ii. Apply directly to the Corps using the Corps application form (ENG Form 4345²) if the work is regulated by the Corps but not the state (DEP, LUPC, BPL or DMR).
- iii. Provide application information (see "Information Typically Required" in Appendix C) to help ensure the application is complete and to speed project review.
- iv. Obtain an Official Species List of federally threatened or endangered species in the project area (GC 8).
- v. Submit a copy of their application materials to the Maine Historic Preservation Commission (MHPC) *and* <u>all five Indian tribes</u> listed at Appendix E, at the same time, or before, they apply to the Corps, to be reviewed for the presence of historic, archaeological or tribal resources in the permit area that the proposed work may affect. Submittals to the Corps shall include information to indicate that this has been done (a copy of the applicant's cover letter to MHPC and tribes or a copy of the MHPC and tribal response letters is acceptable).
- d. Work that is not regulated by the State of Maine, but is subject to Corps jurisdiction, may still be eligible for authorization under this GP.
- **e. Emergency Situations:** 33 CFR 325.2(e)4 states that an "emergency" is a situation which would result in an unacceptable hazard to life, a significant loss of property, or an immediate, unforeseen, and significant economic hardship if corrective action requiring a permit is not undertaken within a time period less than the normal time needed to process the application under standard procedures." <u>Emergency work is subject to the same terms and conditions of this GP as non-emergency work, and similarly, must qualify for authorization under the GP; otherwise an IP is required. The Corps will work with all applicable agencies to expedite verification according to established procedures in emergency situations.</u>
- 3. Individual Permits. Projects that are not authorized by this GP require an Individual Permit (IP) (33 CFR 325.5) and proponents must submit an application directly to the Corps. This GP does not affect the Corps IP review process or activities exempt from Corps regulation. For general information and application form, see the Corps website or contact the Corps (see Appendix E). The Corps encourages applicants to apply concurrently for a Corps IP and applicable state permits.

The Corps retains discretionary authority on a case-by-case basis to elevate a GP eligible project to an IP based on concerns for the aquatic environment or for any other factor of the public interest [33 CFR 320.4(a)]. Whenever the Corps notifies an applicant that an IP is required, no work in Corps jurisdiction may be conducted until the Corps issues the required authorization in writing indicating that work may proceed.

4. Enforcement/Non-Compliance. Work performed without the required Corps of Engineers permits is subject to administrative, civil, and criminal penalties. The Corps will evaluate unauthorized activities for enforcement action under 33 CFR 326.

The Corps will consider unauthorized any activity requiring Corps authorization if that activity is under construction or completed and does not comply with all of the terms and conditions of a GP or an IP. The Corps may elect to suspend enforcement proceedings if the permittee modifies his project to comply with a GP.

After considering whether a violation was knowing or intentional, and other indications of the need for a penalty, the Corps can elect to terminate an enforcement proceeding with an after-the- fact authorization under a GP, if all terms and conditions of the GP have been satisfied, either before or after the activity has been accomplished.

² Located at <u>www.nae.usace.army.mil/missions/regulatory</u> under "Forms & Publications." Section III 4

IV. GENERAL CONDITIONS

To qualify for GP authorization, the prospective permittee must comply with the following general conditions, as applicable.

- 1. Other Permits
- 2. Federal Jurisdictional Boundaries
- 3. Minimal Direct, Secondary, and Cumulative Impacts
- 4. Mitigation (Avoidance, Minimization, and Compensatory Mitigation)
- 5. Single and Complete Projects
- 6. Historic Properties
- 7. Corps Projects and Property
- 8. Federal Threatened and Endangered Species
- 9. Wild and Scenic Rivers
- 10. Navigation
- 11. Federal Liability
- 12. Utility Line Installation and Removal
- 13. Heavy Equipment in Wetlands or Mudflats
- 14. Temporary Fill
- 15. Restoration of Special Aquatic Sites (including wetland areas).
- 16. Soil Erosion, Sediment and Turbidity Controls
- 17. Time of Year Windows/Restrictions.
- 18. Aquatic Life Movements & Management of Water Flows
- 19. Water Quality and Coastal Zone Management
- 20. Floodplains and Floodways
- 21. Storage of Seasonal Structures
- 22. Spawning, Breeding, and Migratory Areas
- 23. Vernal Pools
- 24. Invasive and Other Unacceptable Species
- 25. Programmatic Agreements
- 26. Permit On-Site
- 27. Self-Verification Notification Form (SVNF)
- 28. Inspections
- 29. Maintenance
- 30. Property Rights
- 31. Transfer of GP Verifications
- 32. Modification, Suspension, and Revocation
- 33. Special Conditions
- 34. False or Incomplete Information
- 35. Abandonment
- 36. Enforcement Cases
- 37. Duration of Authorization
- 38. Previously Authorized Activities
- 39. Discretionary Authority
- 40. St. John/St. Croix Rivers.
- 41. National Lands
- 42. Essential Fish Habitat (EFH)
- 43. Work Site Restoration
- 44. Bank Stabilization
- 45. Stream Work & Crossings and Wetland Crossings

Section IV 5

1. Other Permits. Permittees must obtain other federal, state, or local authorizations required by law. Applicants are responsible for applying for and obtaining all required state or local approvals. This includes, but is not limited to, the project proponent obtaining a Flood Hazard Development Permit issued by the town, if necessary. Inquiries may be directed to the municipality or to the Maine Floodplain Management Coordinator at (207) 287-8063. See http://www.maine.gov/dacf/flood/

2. Federal Jurisdictional Boundaries

- a. Applicability of this GP shall be evaluated with reference to federal jurisdictional boundaries. Applicants are responsible for ensuring that the boundaries used satisfy the federal criteria defined at 33 CFR 328 "Waters of the U.S." and 33 CFR 329 "Navigable Waters of the U.S."
 - NOTE: Waters of the U.S. include the subcategories "navigable waters of the U.S." and "wetlands."
- b. For Category 1 projects, proponents are not required to delineate the waters of the U.S. that they plan to impact, but must approximate the square footage of impacts in order to determine the review category (1 or 2 or Individual Permit). For projects filling <15,000 square feet (SF) of waters of the U.S. that do not qualify for Category 1 (e.g., vernal pool, secondary or endangered species impacts, etc.) and therefore require an application to the Corps (PCN), and for those filling ≥15,000 SF, applicants shall delineate all waters of the U.S. that will be filled (direct impacts) in accordance with the Corps of Engineers Wetlands Delineation Manual and the most recent regional supplement (see Appendix C). In addition, applicants shall approximately identify all waters of the U.S. on the property and *known* waters adjacent to the property in order for the Corps to evaluate secondary impacts. The waters of the U.S. shall be clearly shown on the project plans submitted with the application. This includes all waters of the U.S. in areas under DEP or LUPC jurisdiction regardless of whether they're shown on LUPC zoning maps.
- c. On a case-by-case basis, the Corps may modify/refine the above delineation and identification requirements for waters of the U.S. See www.nae.usace.army.mil/missions/regulatory >> Jurisdictional Limits and Wetlands for more information on delineating jurisdictional areas.

3. Minimal Direct, Secondary, and Cumulative Effects³

- a. Projects authorized by this GP shall have no more than minimal direct, secondary and cumulative adverse environmental impacts. Category 2 applicants should provide information on secondary and cumulative impacts as stated in Appendix C. Compensatory mitigation may be required to offset unavoidable impacts (see GC 4) and to ensure that they are no more than minimal. Compensatory mitigation requirements will be determined on a case-by-case basis.
- b. Secondary impacts to waterway and/or wetland areas, (e.g., areas drained, flooded, cleared, excavated or fragmented) shall be added to the total fill area when determining whether the project qualifies for Category 1 or 2. Direct, secondary and cumulative impacts are defined at Appendix A, Endnote 2 and Appendix F.
- c. Site clearing, grading and construction activities in the upland habitat surrounding vernal pools ("Vernal Pool Management Areas") are secondary impacts. See GC 23 for avoidance and minimization requirements and recommendations.
- d. Bank stabilization activities in tidal waters are provided at Appendix A, Page 30. Direct impacts in tidal waters from contiguous bank stabilization projects in excess of 200 linear feet (Applicant or Applicant + Abutters combined) must undergo Category 2 review.

4. Mitigation (Avoidance, Minimization, and Compensatory Mitigation)

- a. Discharges of dredged or fill material into waters of the U.S., including wetlands, shall be avoided and minimized to the maximum extent practicable through consideration of alternatives. The Corps may require compensatory mitigation of unavoidable direct and secondary impacts associated with Category 2 projects on a case-by-case basis.
- b. Applicants proposing work in jurisdictional waters should consider riparian/forested buffers for stormwater management and low impact development (LID) best management practices (BMPs) to reduce

³ Direct, secondary and cumulative effects are defined at Appendix F, Definitions and Acronyms. Section IV 6

impervious cover and manage stormwater to minimize secondary impacts to aquatic resources to the maximum extent practicable.⁴

Compensatory mitigation⁵ for effects to waters of the U.S., including direct, secondary and temporal⁶, may be required for permanent impacts that exceed the SV area limits, and may be required for temporary impacts that exceed the SV area limits, to offset unavoidable impacts which remain after all appropriate and practicable avoidance and minimization has been achieved and to ensure that the adverse effects to the aquatic environment are no more than minimal. Proactive restoration projects or temporary impact work with no lasting secondary effects may generally be excluded from this requirement. Refer to Appendix G.

5. Single and Complete Projects⁷

- This GP shall not be used to piecemeal work and shall be applied to single and complete projects. When determining the review category in Appendix A (Category 1 or 2) for a single and complete project, proponents must include any permanent historic fill placed since October 1995 that is associated with that project and all currently proposed temporary and permanent impact areas.
 - A single and complete project must have independent utility⁷.
 - c. Unless the Corps determines the activity has independent utility:
- This GP shall not be used for any activity that is part of an overall project for which an Individual Permit is required.
- 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.
- For linear projects, such as power lines or pipelines with multiple crossings, the single and complete project is all crossings of a single water of the U.S. (i.e., single waterbody) at a specific location. For linear projects crossing a single waterbody several times at separate and distant locations, each crossing is considered a single and complete project. However, individual channels in a braided stream or river, or individual arms of a large, irregularly-shaped wetland or lake, etc., are not separate waterbodies and crossings of such features cannot be considered separately. If any crossing requires a Category 2 activity, then the entire linear project shall be reviewed as one project under Category 2.

6. **Historic Properties**

No undertaking shall cause effects (defined at 33 CFR 325 Appendix C and 36 CFR 800) on properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places⁸, including previously unknown historic properties within the permit area, unless the Corps or another Federal action agency has satisfied the consultation requirements of Section 106 of the National Historic Preservation Act (NHPA). The State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer (THPO) and the National Register of Historic Places can assist with locating information on: i) previously identified historic properties; and ii) areas with potential for the presence of historic resources, which may require identification and evaluation by qualified historic preservation and/or archaeological consultants in consultation with the Corps and the SHPO and/or THPO(s).

Section IV

⁴ See: www.nae.usace.army.mil/missions/regulatory >> State General Permit >> Permit Resources >> Mitigation for this additional information: a) "Wetland BMP Manual - Techniques for Avoidance & Minimization," b) riparian/forested buffer BMPs, and c) LID BMPs. LID BMPs include, but are not limited to: replacing curbs and gutters with swales; using an open space design for subdivisions; using permeable, pervious or porous pavements; constructing bio-retention systems; and/or, adding a green roof or rain garden.

⁵ Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR 332. See also the New England District Compensatory Mitigation Guidance at www.nae.usace.army.mil/regulatory >> Mitigation.

⁶ 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).

⁷ Single and Complete Project and Independent Utility are defined in Appendix F - Definitions.

⁸ The majority of historic properties are not listed on the National Register of Historic Places and may require identification and evaluation by qualified historic preservation and/or archaeological consultants in consultation with the Corps and the SHPO and/or THPO(s). 7

- For activities eligible for SV, proponents must ensure and document that the activity will not cause effects as stated in 6(a). Proponents must submit a PCN if the authorized activity may cause effects as stated in 6(a) as soon as possible to ensure that the Corps is aware of any potential effects of the permitted activity on any historic property to ensure all Section 106 requirements are met.
- All PCNs shall: i) show notification to the SHPO and applicable THPO(s)⁹ for their identification of historic properties, ii) state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties, and iii) include any available documentation from the SHPO or THPO(s) indicating that there are or are not historic properties affected. Starting consultation early in project planning can save proponents time and money.
- If you discover any previously unknown historic, cultural or archeological remains and artifacts d. while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

7. **Corps Projects and Property**

- In addition to any authorization under this GP, proponents must contact the Corps Real Estate Division at (978) 318-8585 for work occurring on or potentially affecting Corps properties and/or Corpscontrolled 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.
- Any proposed temporary or permanent alteration, or modification or use, including occupation, of a federal project (including but not limited to a levee, dike, floodwall, channel, anchorage, breakwater, seawall, bulkhead, jetty, wharf, pier or other work built but not necessarily owned by the United States), which would obstruct or impair the usefulness of the federal project in any manner, and/or would involve changes to the authorized federal project's scope, purpose, and/or functioning that go beyond minor modifications required for normal operations and maintenance, is not eligible for SV and requires review and approval by the Corps pursuant to 33 USC 408. Where Section 408 is applicable, a decision on a Department of the Army general permit application will not be rendered prior to the decision on a Section 408 request.
- Any structure or work within any Corps Federal Navigation Project (FNP) or its buffer zone¹⁰, shall be subject to removal at the owner's expense prior to any future Corps dredging or the performance of periodic hydrographic surveys. See GC 10 for more requirements related to FNPs.

Federal Threatened and Endangered Species 8.

- No activity is authorized which: i) is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species; ii) "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed; or iii) violates the ESA.
- All applicants must request an Official Species List from the US Fish & Wildlife Service and must include the list in the Corps permit application. To request an Official Species List, refer to the instructions in Appendix D.
- For federally listed species in tidal waters, applicants should contact the National Marine **Fisheries Service at:** http://www.greateratlantic.fisheries.noaa.gov/protected/section7/

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⁹ Appendix E, 3(a)&(b). Historic Resources, provides contact information and each tribe's "area of concern." ¹⁰ See Appendix H for a list of FNPs. The buffer zone is equal to three times the authorized depth of the FNP. 8

- d. A PCN is required if a threatened or endangered species, a species proposed for listing as threatened or endangered, or designated or proposed critical habitat (all hereinafter referred to as "listed species or habitat"), as identified under the ESA, is present in the action area¹¹.
- e. Federal agencies should follow their own procedures for complying with the requirements of the ESA but should coordinate that consultation with the Corps as well.
- 9. Wild and Scenic Rivers. Any activity that occurs in the designated main stem of, within 0.25 mile up or downstream of the designated main stem of, or in tributaries within .25 miles of the designated main stem of a National Wild and Scenic River, or in "bordering and contiguous wetlands" (see Appendix A, Endnote 1) that are adjacent to the designated main stem of a National Wild and Scenic River, or that has the potential to alter flows within a river within the National Wild and Scenic River System, is not eligible for Category 1 regardless of size of the impacts. This condition applies to both designated Wild and Scenic Rivers and rivers officially designated by Congress as study rivers for possible inclusion while such rivers are in an official study status. National Wild and Scenic Rivers System segments for Maine as of October 2015 include: Allagash River beginning at Telos Dam continuing to Allagash checkpoint at Eliza Hole Rapids, approximately 3 miles upstream of the confluence with the St. John River (length = 92 miles); and 11.25 miles of the York River, in the State of Maine, from its headwaters at York Pond to the mouth of the river at York Harbor, plus its tributaries (currently under study).

10. Navigation

- a. Any structure or work that extends closer to the horizontal limits of any Corps Federal Navigation Project (see Appendix H) than a distance of three times the project's authorized depth shall be subject to removal at the owner's expense prior to any future Corps dredging or the performance of periodic hydrographic surveys. This is applicable to Category 1 and 2. Reference Appendix A, Page 28 (Moorings) and Page 29 (Structures, Floats & Lifts).
- b. There shall be no unreasonable interference with navigation by the existence or use of the activity authorized herein, and no attempt shall be made by the permittee to prevent the full and free use by the public of all navigable waters at or adjacent to the activity authorized herein.
- c. The permittee understands and agrees that if future U.S. operations require the removal, relocation, or other alteration of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the U.S. No claim shall be made against the U.S. on account of any such removal or alteration.
- d. A PCN is required for all work in, over or under an FNP or its buffer zone unless otherwise indicated in Appendix A. (Reference Appendix A, Endnote 13, Page 36)
- 11. Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following: (a) damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes; (b) damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the U.S. in the public interest;
- (c) damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit; (d) design or construction deficiencies associated with the permitted work; (e) damage claims associated with any future modification, suspension, or revocation of this permit.

12. Utility Line Installation and Removal

a. Subsurface utility lines shall remain subsurface. If it is necessary to discharge dredged or filled material not previously authorized in order to keep such utility lines buried or restore them to their original subsurface condition, a PCN and written verification from the Corps may be required (e.g., in the case of side

¹¹ 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]."

¹² Additional information can be found at: http://www.rivers.gov.

casting into wetlands from utility trenches). Certain repair, replacement or maintenance activities may be eligible for Category 1 – refer to Appendix A.

- b. Subsurface utility lines must be installed at a sufficient depth to avoid damage from anchors, dredging, etc., and to prevent exposure from erosion and stream adjustment. In accordance with Corps New England District Regulation NEDER 1110-1-9 (www.nae.usace.army.mil/missions/regulatory >> <u>Useful Links and Documents</u>), as an absolute minimum, the bottom cover associated with the initial installation of utility lines under navigable waters and navigation channels shall be 48 inches in soil or 24 inches in rock excavation in competent rock unless specified in a written determination. These minimum bottom cover requirements for pipelines and cables shall be measured from the maximum depth of dredging to the top of the utility. The maximum depth of dredging, in waterways having existing FNPs, is generally considered to be the authorized project depth plus any allowance for advanced maintenance and the allowable overdepth for dredging tolerances. In waterways that do not have existing FNPs, this depth should be taken as two feet below the existing bottom or maximum depth of proposed dredging, as applicable.
 - c. Aerial utility lines that cross navigable waters must meet minimum clearances. See 33CFR322.5(i).
- d. For horizontal directional drilling work, returns of drilling fluids to the surface (i.e., frac-outs) are not authorized and require restoration to the maximum extent practicable in accordance with the terms and conditions of this GP. The permittee and its contractor shall have onsite and shall implement the procedures detailed in a frac-out contingency plan for monitoring drilling operations and for the immediate containment, control and recovery/removal of drilling fluids released into the environment should a discharge of material occur during drilling operations.
- e. Within the context of any new installations, any abandoned or inactive utility lines should be removed and faulty lines (e.g., leaking hazardous substances, petroleum products, etc.) should be removed or repaired to the extent practicable. A PCN and written verification from the Corps is required if they are to remain in place, e.g., to protect sensitive areas or ensure safety.
- f. No work shall drain a water of the U.S. by providing a conduit for water on or below the surface. Trench plugs installed along pipelines may be effective.
- 13. Heavy Equipment in Wetlands or Mudflats. Operating heavy equipment other than fixed equipment (drill rigs, fixed cranes, etc.) within wetlands shall be minimized, and such equipment shall not be stored, maintained or repaired in wetlands, to the maximum extent practicable. Where construction requires heavy equipment operation in wetlands, the equipment shall either have low ground pressure (typically <3 psi), or it shall be placed on swamp/construction/timber mats (herein referred to as "construction mats" and defined at Appendix A, Endnote 4) that are adequate to support the equipment in such a way as to minimize disturbance of wetland soil and vegetation. Construction mats are to be placed in the wetland from the upland or from equipment positioned on swamp mats if working within a wetland. Dragging construction mats into position is prohibited. Other support structures that are capable of safely supporting equipment may be used with written Corps authorization (Category 2 authorization or Individual Permit). Similarly, the permittee may request written authorization from the Corps to waive use of mats during frozen, dry or other conditions. An adequate supply of spill containment equipment shall be maintained on site. Construction mats should be managed in accordance with the Construction Mat BMPs at www.nae.usace.army.mil/missions/regulatory State General Permits >> Permit Resources.
- **14. Temporary Fill.** Temporary fill that qualifies for Category 1 (e.g., <15,000 SF of combined temporary and permanent fill associated with the single and complete project) or is authorized in writing under Category 2, shall adhere to the following:
- a. All temporary fill and disturbed soils shall be stabilized to prevent its eroding into waters of the U.S. where it is not authorized. Work shall include phased or staged development to ensure only areas under active development are exposed and to allow for stabilization practices as soon as practicable, typically within three calendar days after disturbance. Accelerated stabilization (the providing of temporary or permanent cover by the end of the work day to prevent erosion) shall be employed as necessary. Temporary fill must be placed in a manner that will prevent it from being eroded by expected high flows.
- b. Unconfined temporary fill authorized for discharge into waters of the U.S. (e.g., temporary stream crossings) shall consist of material that minimizes impacts to water quality (e.g. washed stone, stone, etc.).

- c. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable when temporary structures, work, and discharges of dredged or fill material, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Place materials in a location and manner that does not adversely impact surface or subsurface water flow into or out of the wetland. Temporary fill authorized for discharge into wetlands shall be placed on geotextile fabric or other appropriate material laid on the pre-construction wetland grade where practicable to minimize impacts and to facilitate restoration to the original grade. Construction mats are excluded from this requirement.
- d. Temporary fill, construction mats and corduroy roads shall be entirely removed as soon as they are no longer needed to construct the authorized work. Temporary fill shall be placed in its original location or disposed of at an upland site and suitably contained to prevent its subsequent erosion into waters of the U.S. To qualify for Category 1, temporary fill placed during the: i.) growing season must be removed before the beginning of the next growing season; and ii.) non-growing season may remain throughout the following growing season, but must be removed before the beginning of the next growing season.
- e. Temporary fill, construction mats and corduroy roads are considered temporary only if they are removed as soon as they are no longer needed to construct the authorized work.
 - f. Construction debris and/or deteriorated materials shall not be located in waters of the U.S.

15. Restoration of Special Aquatic Sites (Including Wetland Areas)

- a. Temporary fills must be removed in their entirety and the affected areas restored to their preconstruction condition, function and elevation. Restoration shall typically commence no later than the completion of construction.
- b. For excavated areas, "restored to pre-construction condition, function and elevation" means careful removal of existing soil and vegetation, separate topsoil and subsoil stockpiling, soil protection, and replacement back to the original location such that the original soil layering and vegetation schemes are approximately the same, unless otherwise authorized. Plan for natural settling that will occur (the initial post-restoration elevation of the backfilled areas should be above the desired final grade as topsoil may settle by 33% to 50%), minimize compaction, and ensure that topsoil is void of gravel and subsoil. A minimum of 4 inches of topsoil should be at the surface after the soil has settled. Wetland areas temporarily disturbed shall be stabilized (e.g., seeded or planted). Seed mixes and vegetation shall include only plant species native to New England and shall not include any species listed as "Invasive and Other Unacceptable Plant Species" in the "New England District Compensatory Mitigation Guidance" (see GC 24 and refer to Appendix G). This list may be updated periodically.
- c. Limit compaction to the minimum needed to promote a successful seedbed; avoid a 'fluffy' seedbed, which is susceptible to erosion until the plants get established, and a compacted topsoil layer, which is counter-productive and will lead to greater erosion susceptibility down the road. Test soils for compaction. A soil probe, auger, or shovel should be able to retrieve samples of post-restoration profile. Equipment refusal shall be considered a failure of restoration, in which case the soil should be restored through deep-ripping and/or de-compaction, or other appropriate methods, and wetland hydrology must be maintained. See the BMPs at www.nae.usace.army.mil/missions/regulatory >> State General Permits >> Permit Resources >> Restoration.
- d. In areas of authorized temporary disturbance, cut woody vegetation (trees, shrubs, etc.) shall be cut at or above ground level and not uprooted in order to prevent disruption to the wetland soil structure and to allow stump sprouts to revegetate the work area, unless otherwise authorized.
- e. Trenches shall be constructed or backfilled so that the trench does not drain waters of the U.S. (e.g., materials or methods that create a French drain effect).

16. Soil Erosion, Sediment and Turbidity Controls

a. Adequate sedimentation and erosion control management measures, practices and devices, such as phased construction, installation of sediment control barriers (i.e. silt fence, vegetated filter strips, geotextile silt fences, erosion control mixes, hay bales or other devices) downhill of all exposed areas, retention of existing vegetated buffers, application of temporary mulching during construction, and permanent seeding and stabilization shall be installed and properly maintained to reduce erosion and retain sediment on-site during and after construction. They shall be capable of preventing erosion; of collecting sediment, suspended and floating materials; and of filtering fine sediment.

- b. Temporary sediment control barriers shall be removed upon completion of work, but not until all disturbed areas are permanently stabilized. The sediment collected by these sediment barriers shall be removed and placed at an upland location and stabilized to prevent its later erosion into a waterway or wetland.
 - c. All exposed soil and other fills shall be permanently stabilized at the earliest practicable date.
- 17. Time of Year Work Windows/Restrictions. For activities where work is authorized in streams and tidal waters that causes turbidity or sediment re-suspension or other construction related disturbances, work must be conducted during the following TOY work windows (not during the TOY restrictions) unless otherwise authorized by the Corps under Category 2 review:

<u>TOY Restriction</u> (no work) <u>TOY Work Window</u> (work allowed)

Non-tidal waters Oct. 01 through Jul. 14 Jul. 15 through Sep. 30 Tidal waters Apr. 10 through Nov. 07 Nov. 08 through Apr. 09

Alternate windows authorized under Category 2 may include species specific windows recommended by the Maine Dept. of Marine Resources and/or Maine Dept. of Inland Fisheries & Wildlife.

18. Aquatic Life Movements & Management of Water Flows

- a. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. Unless otherwise stated, activities impounding water in a stream require a PCN to ensure impacts to aquatic life species are avoided and minimized. All permanent and temporary crossings of waterbodies (e.g., streams, wetlands) shall be:
- i. Suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species; and
- ii. Properly aligned and constructed to prevent bank erosion or streambed scour both adjacent to and inside the culvert. Permanent and temporary crossings of wetlands shall be suitably culverted, spanned or bridged in such a manner as to preserve hydraulic and ecological connectivity between the wetlands on either side of the road.
- b. To avoid adverse impacts on aquatic organisms, the low flow channel/thalweg shall remain unobstructed during periods of low flow, except when it is necessary to perform the authorized work.
- c. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the preconstruction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

19. Water Quality and Coastal Zone Management

- a. Applicants must satisfy any conditions imposed by the state and EPA, where applicable, in their CWA § 401 Water Quality Certifications (WQC) for this GP, or in any Individual § 401 WQC. See Appendix E for state-specific contact information and to determine if any action is required to obtain a 401 WQC. The Corps may require additional water quality management measures to ensure that the authorized activity does not cause or contribute to a violation of water quality standards. All projects authorized by this GP shall be designed, constructed and operated to minimize or eliminate the discharge of pollutants.
- b. Applicants must satisfy any additional conditions imposed by the state in their Coastal Zone Management (CZM) Act consistency concurrences for this GP, or in any Individual CZM consistency concurrences. The Corps may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

20. Floodplains and Floodways

- a. Appropriate measures must be taken to minimize flooding to the maximum extent practicable.
- b. Activities within 100-Year Floodplains must comply with applicable Federal Emergency Management Agency (FEMA)-approved state and/or local floodplain management permitting requirements. Proponents may need to coordinate with FEMA and apply for a formal change to the flood insurance study products or forward a set of project plans and relevant technical documentation in a digital format to the Risk

Analysis Branch Chief, Mitigation Division, FEMA, Region 1, 99 High Street, Boston, Massachusetts 02110. Applicants should provide a copy of any documentation to the Corps along with the PCN.

- c. Proponents may have to obtain a Flood Hazard Development Permit issued by the town. Inquiries may be directed to the municipality or to the Maine Floodplain Management Coordinator at (207) 287-8063. See http://www.maine.gov/dacf/flood/
- **21. Storage of Seasonal Structures.** Seasonal or recreational structures such as pier sections, floats, aquaculture structures, etc. that are removed from the waterway for a portion of the year (often referred to as seasonal structures) shall be stored in an upland location landward of mean high water (MHW) or ordinary high water (OHW) and not in wetlands, tidal wetlands, their substrate or on mudflats. These seasonal structures may be stored on the fixed, pile-supported portion of the structure that is waterward of MHW or OHW. Seasonal storage of structures in navigable waters, e.g., in a protected cove on a mooring, requires Corps approval and local harbormaster approval.

22. Spawning, Breeding, and Migratory Areas

- a. Jurisdictional activities and impacts such as excavations, discharges of dredged or fill material, and/or suspended sediment producing activities in jurisdictional waters that provide value as fish migratory areas, fish and shellfish spawning or nursery areas, or amphibian and migratory bird breeding areas, during spawning or breeding seasons shall be avoided and minimized to the maximum extent practicable.
- b. Jurisdictional activities in waters of the United States that provide value as breeding areas for migratory birds must be avoided to the maximum extent practicable. The permittee is responsible for obtaining any "take" permits required under the USFWS's regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. The permittee should contact the appropriate local office of the USFWS to determine if such "take" permits are required for a particular activity (See Appendix E).

23. Vernal Pools

- a. Only vernal pools that meet the current definition of waters of the U.S. are regulated by the Corps.
- b. Direct and indirect adverse effects to all vernal pools (VPs), including their envelopes and critical terrestrial habitats (VP Management Areas¹³), shall be avoided and minimized to the maximum extent practicable. Site clearing, grading, and construction activities associated with a regulated activity in the VP Management Area may cause these adverse effects to the VP.
 - c. The State of Maine has specific protections for vernal pools.¹⁴
- d. When any regulated activities occur within 750 feet of a vernal pool, the following management practices <u>must be followed</u> for all work within any VP Management Area (750' of a VP's edge) *in order to qualify for Category 1*:
- i. No disturbance within the VP Depression or VP Envelope (area within 100 feet of the VP Depression's edge)¹⁵;
- ii. Maintain a minimum of 75% of the Critical Terrestrial Habitat (area within 100-750 feet of the VP Depression's edge) as unfragmented forest with at least a partly-closed canopy of overstory trees to provide shade, deep litter and woody debris;
 - iii. Maintain or restore forest corridors connecting wetlands and significant vernal pools;
 - iv. Minimize forest floor disturbance; and
 - v. Maintain native understory vegetation and downed woody debris.

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¹³ The Corps VP Management Area, which includes the VP and a 750' radius from the VP's edge, is defined at Appendix A, Endnote 5.

¹⁴ Appendix G, 10(a)-(d) provides links to the state's Significant Wildlife Habitat regulations and references that provide impact minimization measures to reference when designing projects.

¹⁵ The no disturbance requirement in the VP envelope [see (b)(i)(1)], and (b)(i)(2), do not apply to temporary impacts associated with construction mats in previously disturbed areas of existing utility project (e.g., transmission lines, gas pipelines) or linear transportation project (e.g., roads, highways, railways, trails, airport runways and taxiways) right-of-ways provided there is a Vegetation Management Plan that avoids, minimizes and mitigates impacts to aquatic resources.

- vi. Cape Cod style-curbing or no curbing options shall be used on new roads to facilitate amphibian passage. (Reference Appendix G)
- e. A PCN is required for any regulated activity within 750' of a vernal pool when all work within the VP Management Area does not comply with the Category 1 requirements in (d) above. Information on directional buffers in accordance with the VP Directional Buffer Guidance document may be provided in order to demonstrate minimal impact and avoid compensation requirements (Reference Appendix G). Conservation of the un-impacted area within the VP Management Area will often be required.
- f. GC 2 requires applicants to delineate or approximately identify on the project plans all waters of the U.S., which contain vernal pools.
- g. GC 23(b-d) do not apply to projects that are within a municipality and meet the provisions of a Corps-approved VP Special Area Management Plan (VP SAMP) and are otherwise eligible for self-verification.

24. Invasive and Other Unacceptable Species¹⁶

- a. The introduction or spread of invasive or other unacceptable plant or animal species on the project site or areas adjacent to the project site caused by the site work shall be avoided to the maximum extent practicable. For example, construction mats and equipment shall be thoroughly cleaned and free of vegetation and soil before and after use. The introduction or spread of invasive plant or animal species on the project site caused by the site work shall be controlled.
- b. No cultivars, invasive or other unacceptable plant species may be used for any mitigation, bioengineering, vegetative bank stabilization or any other work authorized by this GP. However, non-native species and cultivars may be used when it is appropriate and specified in a written verification, such as using *Secale cereale* (Annual Rye) to quickly stabilize a site. All PCNs should explain the reason for using non-native species or cultivars.
- **25. Programmatic Consultations or Agreements.** The Corps requirements to comply with Section 106 of the NHPA, Section 7 of the Endangered Species Act or Essential Fish Habitat conservation under the Magnuson-Stevens Act may be satisfied by a Programmatic Agreement with the Corps, New England District or another federal action agency. Any Corps, New England District Programmatic Agreements will be available on our website.
- **26. Permit On Site.** The permittee shall ensure that a copy of this GP and any accompanying authorization letter with attached plans are at the site of the work authorized by this GP whenever work is being performed and that all construction personnel performing work which may affect waters of the U.S. are aware of its terms and conditions. The entire permit authorization shall be made a part of any and all contracts and subcontracts for work that affects areas of Corps jurisdiction at the site of the work authorized by this GP. This shall be achieved by including the entire permit authorization in the specifications for work. The term "entire permit authorization" means this entire GP and the authorization letter (including its drawings, plans, appendices and other attachments) and also includes permit modifications. If the authorization letter is issued after the construction specifications, but before receipt of bids or quotes, the entire permit authorization shall be included as an addendum to the specifications. If the authorization letter is issued after receipt of bids or quotes, the entire permit authorization shall be included in the contract or subcontract. Although the permittee may assign various aspects of the work to different contractors or subcontractors, all contractors and subcontractors shall be obligated by contract to comply with all environmental protection provisions contained within the entire GP authorization, and no contract or subcontract shall require or allow unauthorized work in areas of Corps jurisdiction.

¹⁶ For the purposes of this GP, plant species that are considered invasive and unacceptable are provided in Appendix G "Invasive and other Unacceptable Plant Species" of our document "Compensatory Mitigation Guidance" at www.nae.usace.army.mil/missions/regulatory >> Mitigation. Chapter 4(e) Planting is also particularly relevant. The June 2009 "Corps of Engineers Invasive Species Policy" provides policy, goals and objectives and is located at www.nae.usace.army.mil/missions/regulatory >> Invasive Species. Additional information can be found at: www.eddmaps.org/ipane.

- 27. Self-Verification Notification Form (SVNF). Permitees must complete and submit the SVNF provided at Appendix B to the Corps for work authorized by this GP unless otherwise noted in Appendix A. NOTE: A copy of a state permit application form may be an acceptable surrogate for the SVNF provided either form used also include plans and an Official Species List of federally listed threatened or endangered species.
- **28. Inspections.** The permittee shall allow the Corps to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of this GP and any written verification. The Corps may also require post-construction engineering drawings for completed work, post-dredging survey drawings for any dredging work, or other post-construction reports. To facilitate these inspections, the permittee shall complete and return to the Corps the following forms:
 - For Category 1/Self-Verification: The SVNF (see Appendix B).
 - For Category 2/PCN: The a) Work-Start Notification Form and b) Compliance Certification Form, when either is provided with the authorization letter.

29. Maintenance

- a. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable general conditions and activity-specific conditions to a written verification.
- b. The requirement in (a) above does not include maintenance of dredging projects. Each maintenance dredging event exceeding the self-verification limits requires a new PCN unless an unexpired, written PCN or other Corps authorization specifies that the permittee may "dredge and maintain" an area for a particular time period. Self-verification or PCN maintenance dredging includes only those areas and depths previously authorized and actually dredged. Maintenance dredging with ocean or open water disposal will always require a PCN and at least Category 2 review.
- c. Some maintenance activities may not be subject to regulation under Section 404 in accordance with 33 CFR 323.4(a)(2). Refer to Appendix A, Endnote 7.
- **30. Property Rights.** This GP does not convey any property rights, either in real estate or material, or any exclusive privileges, nor does it authorize any injury to property or invasion of rights or any infringement of federal, state, or local laws or regulations.
- **31. Transfer of GP Verifications**. When the structures or work authorized by this GP are still in existence at the time the property is transferred, the terms and conditions of this GP, including any special conditions, will continue to be binding on the entity or individual who received the GP authorizations, as well as the new owner(s) of the property. If the permittee sells the property associated with a GP verification, the permittee may transfer the GP verification to the new owner by submitting a letter to the Corps (see Appendix E for address) to validate the transfer. A copy of the GP verification must be attached to the letter, and *the letter must contain the new owner's contact information and the following statement and signature:*

| "When the structures or work authorized by this GP are still in existence at the time the property is transferred |
|---|
| the terms and conditions of this GP, including any special conditions, will continue to be binding on the new |
| owner(s) of the property. To validate the transfer of this GP and the associated liabilities associated with |
| compliance with its terms and conditions, have the transferee sign and date below." |

| (Transferee) | | |
|--------------|--|--|
| | | |
| (Date) | | |

32. Modification, Suspension, and Revocation. Any work authorized under this GP by self-verification or PCN may be either modified, suspended, or revoked, in whole or in part, pursuant to the policies and procedures of 33 CFR 325.7. Any such action shall not be the basis for any claim for damages against the U.S.

- **33. Special Conditions.** The Corps may independently, or at the request of the federal resource agencies, impose other special conditions on a project authorized pursuant to this GP that are determined necessary to minimize adverse navigational and/or environmental effects or based on any other factor of the public interest. Failure to comply with all terms and conditions of the authorization, including special conditions, constitutes a permit violation and may subject the permittee to criminal, civil or administrative penalties and/or an ordered restoration.
- **34. False or Incomplete Information.** If the Corps makes a determination regarding the eligibility of a project under this GP and subsequently discovers that it has relied on false, incomplete or inaccurate information provided by the permittee, the Corps may determine that the GP authorization is not valid; modify, suspend or revoke the authorization; and the U.S. Government may institute legal proceedings.
- **35. Abandonment.** If the permittee decides to abandon the activity authorized under this GP, unless such abandonment is merely the transfer of property to a third party, he/she may be required to restore the area to the satisfaction of the Corps.
- **36. Enforcement cases.** This GP does not apply to any existing or proposed activity in Corps jurisdiction associated with an ongoing Corps or EPA enforcement action, until such time as the enforcement action is resolved or the Corps or EPA, as appropriate, determines that the activity may proceed independently without compromising the enforcement action.
- **37. Duration of Authorization.** This GP expires on October 12, 2020. Activities authorized under this GP that have commenced (i.e., are under construction) or are under contract to commence before this GP expires will have until October 12, 2021 to complete the activity under the terms and conditions of the current GP.

38. Previously Authorized Activities.

- a. Projects that have received authorization (Category 1 or 2) from the Corps and that were completed under the previous PGPs, nationwide permits, regional general permits or letters of permission, shall remain authorized.
- b. Activities authorized pursuant to 33 CFR Part 330.3 ("Activities occurring before certain dates") are not affected by this GP.
- c. Any work not commenced nor completed that was authorized in a written letter from the Corps under the GP in effect between October 12, 2010 and October 12, 2015 remains authorized subject to the terms and general conditions of this GP along with any special conditions in the authorizing written letter. Exception if previously authorized work is not commenced and a new federally listed threatened or endangered species could be affected, the Corps must consult with the Service(s) prior to re-authorizing the work under this GP. Requests for re-authorization must include an updated Official Species list. To request an Official Species List, refer to the instructions in Appendix D.
- **39. Discretionary Authority.** Notwithstanding compliance with the terms and conditions of this permit, the Corps retains discretionary authority to require Category 2 or Individual Permit review based on concerns for the aquatic environment or for any other factor of the public interest [33 CFR 320.4(a)]. This authority is invoked on a case-by-case basis whenever the Corps determines that the potential consequences of the proposal warrant a higher level of review based on the concerns stated above. This authority may be invoked for projects that may contribute to cumulative environmental impacts that are more than minimal or if there is a special resource or concern associated with a particular project that is not already covered by the remaining conditions of the GP and that warrants greater review. Whenever the Corps notifies an applicant that an Individual Permit may be required, the project is not authorized under this GP and no work may be conducted until an Individual Permit is obtained or until the Corps notifies the applicant that further review has demonstrated that the work may proceed under this GP.
- **40. St. John/St. Croix Rivers.** Work within the Saint John and Saint Croix River basins that requires approval of the International Joint Commission is not eligible for Category 1 and a PCN to the Corps is required if any temporary or permanent use, obstruction or diversion of international boundary waters could affect the natural

flow or levels of waters on the Canadian side of the line; or if any construction or maintenance of remedial works, protective works, dams, or other obstructions in waters downstream from boundary waters could raise the natural level of water on the Canadian side of the boundary.

- **41. National Lands**. Activities that impinge upon the value of any National Wildlife Refuge, National Forest, National Marine Sanctuary, National Park or any other area administered by the National Park Service, U.S. Fish and Wildlife Service (USFWS) or U.S. Forest Service are not eligible for Category 1 and require a PCN
- **42. Essential Fish Habitat (EFH)**. Any work in the following rivers and streams, including all tributaries to the extent that they are currently or were historically accessible for salmon migration, shall not be authorized under Category 1 of the GP and must be screened for potential impacts to EFH (see Appendix G for more information).

| Androscoggin River | Aroostook River | Boyden River | Dennys River |
|--------------------|--------------------|-----------------|-------------------------|
| Ducktrap River | East Machias River | Hobart Stream | Kennebec River |
| Machias River | Narraguagus River | Orland River | Passagassawaukeag River |
| Patten Stream | Penobscot River | Pleasant River | Presumpscot River |
| Saco River | Sheepscot River | St. Croix River | Tunk Stream |
| | | | Union River |

The above does not apply to the following activities which may qualify for Category 1 work:

- Exploratory drilling and borings for bridges.
- Moorings (see Appendix A, Page 28 for Category 1 thresholds and requirements)
- Structures, floats & lifts (see Appendix A, Page 29 for Category 1 thresholds and requirements)
- Other activities specified in a programmatic agreement with NMFS.

43. Work Site Restoration

- a. Wetland areas where permanent disturbance is not authorized shall be restored to their original condition and elevation, which under no circumstances shall be higher than the pre-construction elevation. Original condition means careful protection and/or removal of existing soil and vegetation, and replacement back to the original location such that the original soil layering and vegetation schemes are approximately the same, unless otherwise authorized.
- b. Upon completion of construction, all disturbed wetland areas (the disturbance of these areas must be authorized) shall be properly stabilized. Any seed mix shall contain only plant species native to New England and shall not contain any species listed in the "Invasive and Other Unacceptable Plant Species" Appendix in the "New England District Compensatory Mitigation Guidance" (see GC 24 and refer to Appendix G). This list may be updated periodically.
- c. In areas of authorized temporary disturbance, if trees are cut they shall be cut at ground level and not uprooted in order to prevent disruption to the wetland soil structure and to allow stump sprouts to revegetate the work area, unless otherwise authorized.

44. Bank Stabilization

- a. Projects involving construction or reconstruction/maintenance of bank stabilization structures within Corps jurisdiction shall be designed to minimize environmental effects, effects to neighboring properties, scour, etc. to the maximum extent practicable.
- b. Project proponents must design and construct bank stabilization projects using this sequential minimization process: avoidance of aquatic resource impacts, diversion of overland flow, vegetative stabilization, stone-sloped surfaces, and walls/bulkheads. Vertical walls/bulkheads shall only be used in situations where reflected wave energy can be tolerated.
- c. Inland Water bank stabilization activities necessary for erosion prevention must meet all of the following criteria: i) No material is placed in excess of the minimum needed for erosion protection; ii) The activity is no more than 500 feet in total length along the bank(s); iii) The activity will not exceed an average of one cubic yard per running foot placed along the bank below the plane of the ordinary high water mark; iv) Structures angled steeper than 1H:1V and any material other than angular or sub-angular stone or fiber roll revetments require at least a Category 2 review; v) The activity does not involve discharges of dredged or fill

material into special aquatic sites; vi) No material is of the type, or is placed in any location, or in any manner, to impair surface water flow into or out of any water of the U.S.; vii) No material is placed in a manner that will be eroded by normal or expected high flows (properly anchored trees and treetops may be used in low energy areas); and viii) The activity is not a stream channelization activity.

d. Bank stabilization activities in tidal waters are provided at Appendix A, Page 30 & 31. Direct impacts in tidal waters from contiguous bank stabilization projects in excess of 200 linear feet (Applicant or Applicant + Abutters combined) must undergo Category 2 review.

45. Stream Work and Crossings & Wetland Crossings Notes:

- a. For *Stream Work and Crossings* below, conditions (a) and (b) apply to Inland Waters and Wetlands (see Appendix A, Page 1 for definition) and Navigable Waters (see Appendix A, Page 27 for definition). Conditions (c)-(l) below only apply to Inland Waters and Wetlands that are streams. All new and replacement crossings in Navigable Waters require an application to the Corps and at least a Category 2 review.
- b. In-stream work in a watershed occupied by listed Atlantic salmon, Atlantic sturgeon, or shortnose sturgeon [see GC 8(b)] and some stream work such as crossings on EFH waters (see GC 42) is not eligible for Category 1.
- c. "High-Quality Stream Segments" are shown at www.maine.gov/dep/gis/datamaps and may be useful in evaluating impacts to fisheries. GIS shape files are under "Other Google Earth Interactive Maps" and PDFs by county are under "DEP GIS Maps." See Appendix E for more state contact information.

Conditions for Stream Work and Crossings:

- a. All permanent crossings of rivers, streams, brooks, etc. (hereon referred to as "streams") shall be suitably culverted, bridged, or otherwise designed to i) withstand and to prevent the restriction of high flows to qualify for Category 1, and ii) not obstruct the movement of or not substantially disrupt the necessary life-cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, beyond the actual duration of construction unless the activity's primary purpose is to impound water to qualify for Category 1 or 2. (NOTE: Areas of fill and/or cofferdams must be included in total waterway/wetlands impacts to determine applicability of this GP).
- b. Any work that temporarily or permanently impacts upstream or downstream flood conditions, or permanently impacts wetlands in excess of Category 1 thresholds, must be reviewed at least under Category 2. See the documents referenced in Appendix G, 8(c) and (d) for guidance.
 - c. New Stream Crossings. For new stream crossings to qualify for Category 1:
 - i. Must ensure compliance with GC 45(a) and GC 45(b) above.
- ii. Shall be designed and constructed in accordance with the Corps General Stream Crossing Standards provided on Page 19 and the stream simulation document listed at Appendix G, 8(a).
 - d. <u>Replacement Stream Crossings.</u> For replacement stream crossings to qualify for Category 1:
 - i. Must ensure compliance with GC 45(a) and GC 45(b) above.
- ii. Shall be designed and constructed in accordance with the Corps General Stream Crossing Standards provided on Page 19 and the stream simulation document listed at Appendix G, 8(a).
- e. <u>Culvert Extensions</u>. Culvert extensions on culverts that do not meet the Corps General Stream Crossing Standards do not qualify for Category 1 and require an application to the Corps and at least Category 2 review.
 - f. Temporary Stream Crossings.

Note: The General Stream Crossing Standards don't apply to temporary stream crossings.

- i. Temporary stream crossings or cofferdams shall be used for equipment access across streams [see Appendix G, 8(e)]. Note: Areas of fill and/or cofferdams must be included in total waterway/wetlands impacts to determine the review category in Appendix A.
 - ii. Temporary stream crossings shall be removed within 180 days to qualify for Category 1.

- iii. Temporary stream crossings that are not spans¹⁷ (typically culverts) must be designed in accordance with 1-6 below to qualify for Category 1. Category 2 applications should include information demonstrating 2-6 below:
 - 1. Installed and removed during the low flow period specified in GC 45(1) below.
- 2. Placed on geotextile fabric or other material where practicable to ensure restoration to the original grade. Soil may not be used to construct or stabilize these structures and rock must be large enough to allow for easy removal without disrupting the streambed.
- 3. Designed and maintained to withstand and pass high flows. Water height should be no higher than the top of the culvert's inlet. A minimum culvert diameter of two feet is required to pass debris. Culverts must be aligned to prevent bank erosion or streambed scour.
- 4. Equipped with energy dissipating devices installed downstream if necessary to prevent scour.
 - 5. Designed and maintained to prevent soil from entering the waterbody.
- 6. Removed upon the completion of work. Impacts to the streambed or banks requires restoration to their original condition using stream simulation methods¹⁸.
- g. <u>Slip Lining</u>. Work using slip lining (retrofitting an existing culvert by inserting a smaller diameter pipe), invert lining, or resulting in decreased diameter, does not qualify for Category 1, either as new work or maintenance activities.
- h. <u>Work in Flowing Waters</u>. To qualify for Category 1, no unconfined fill [see GC 14(b)] or excavation in flowing waters is allowed. To accomplish this:
- i. Bank stabilization work below ordinary high water (OHW) shall utilize erosion controls such as inflatable cofferdams, jersey barrier, silt screen, turbidity curtain, etc. where practicable to prevent sediment input to the stream and to minimize turbidity and sedimentation impacts for sensitive life stages. Bank stabilization above OHW must utilize erosion controls.
- ii. Management techniques such as temporary flume pipes, culverts, cofferdams, etc. must be used to maintain normal flows within the stream boundary's confines, or water diversions may be used immediately up and downstream of the work footprint (see Appendix A, Endnote 6) or work must be performed in the dry under no flow conditions, or under very low flow conditions following the practices in GC 45(a).
- i. <u>Minimization</u>. In order to make the Category 2 review process more efficient and result in a faster decision, new and replacement stream crossings should be designed using the least intrusive and environmentally damaging method following this sequential minimization process: 1) spans with no stream impacts, 2) spans with stream impacts, and 3) embedded culverts with stream simulation or low-slope design.
- j. <u>Maintenance Requirements</u>. The permittee shall maintain the work authorized herein in good condition and in conformance with the terms and general conditions of this permit to facilitate aquatic life passage as stated in GC 45(a). Culverts that develop "hanging" inlets or outlets, result in bed washout, or a stream that doesn't match the characteristics of the substrate in the natural stream channel such as mobility, slope, stability confinement will require maintenance or repair to comply with this GC. This does not apply to GC 45(f) above.
- k. <u>Maintenance and Replacement Information</u>. An existing stream crossing must be authorized and in compliance with all conditions of its authorization(s) to qualify for maintenance not subject to regulation. See Appendix A, Endnote 7. A non-serviceable crossing is not eligible for maintenance and is therefore considered as a replacement crossing [see GC 45(d)].
- l. <u>Work Window</u>. For projects that otherwise meet the terms of Category 1, in-stream construction work shall be conducted during the low flow period July 15 September 30 in any year. Projects that are not to be conducted during that time period are ineligible for Category 1 and shall be screened pursuant to Category 2, regardless of the waterway and wetland fill and/or impact area.

Corps General Stream Crossing Standards (required for Category 1; recommended for Category 2):

a. Culverts must be embedded:

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¹⁷ For the purposes of this GP, spans are bridges, three-sided box culverts, open-bottom culverts or arches that span the stream with footings landward of bankfull width.

¹⁸ Design and construction shall be in accordance with the stream simulation document listed at Appendix G, 8(a).

- $\bullet \ge 2$ feet for box culverts and other culverts with smooth internal walls,
- ≥ 1 foot for corrugated pipe arches
- ≥ 1 foot and at least 25 percent for corrugated round pipe culverts
- b. **For new crossings**, spans¹⁷ are required to avoid or cause minimal disruption to the streambed and to meet the requirements of General Condition 45(a) and 45(b). Footings and abutments must be landward of 1.2 times bankfull width. To the greatest extent practicable, work in the stream shall be minimized, and design and construction shall allow the streambed's natural structure and integrity to remain intact. Any fill or excavation of the streambed below bankfull width other than footings, support pilings, or work specified in 45(h)ii requires Category 2 review and, unless demonstrated otherwise, stream simulation¹⁸ to establish substrate and banks in the span structure and work area as specified in (d) and (e) below.
- c. **For replacement crossings**, spans¹⁷ are required to meet the requirements of General Condition 45(a) and 45(b). Footings and abutments shall be landward of 1.2 times bankfull width. Unless demonstrated otherwise, stream simulation¹⁸ is required to establish substrate and banks in the span structure and work area as specified in (d) and (e) below.
- d. Crossings must have a natural bottom substrate within the structure matching the characteristics of the substrate in the natural stream channel and the banks (mobility, slope, stability, confinement, grain and rock size) at the time of construction and over time as the structure has had the opportunity to pass significant flood events. To allow terrestrial passage for wildlife and prevent undermining the footings, crossings shall have a bank on both sides of the stream matching the horizontal profile of the existing stream and banks¹⁸. Note: Installation of substrate material within smaller culverts may not be safe or practicable. In these cases, it may be necessary to allow for natural deposition and bed development unless alternative methods are identified.
- e. Crossings must be designed and constructed¹⁸ with appropriate bed forms and streambed characteristics so that water depths and velocities are comparable to those found in the natural channel at a variety of flows. In order to provide appropriate water depths and velocities at a variety of flows and especially low flows, it is usually necessary to reconstruct the streambed or preserve the natural channel within the structure. Otherwise, the width of the structure needed to accommodate higher flows will create conditions that are too shallow at low flows. The grain and rock size, and arrangement of streambed materials within the structure should be in accordance with (d) above. Flows could go subsurface within the structure if only large material is used without smaller material filling the voids.

Conditions for Wetland Crossings:

- a. All temporary and permanent crossings of wetlands shall be suitably culverted, bridged, or otherwise designed to: i) Withstand and prevent the restriction of high flows, ii) Not obstruct the movement of or not substantially disrupt the necessary life-cycle movements of those species of aquatic life indigenous to the wetland, including those species that normally migrate through the area, beyond the actual duration of construction unless the activity's primary purpose is to impound water. See Appendix E for the Maine DEP's crossing standards.
- b. To qualify for Category 1, new and replacement wetland crossings that are permanent shall be culverted, spanned or bridged in such a manner as to preserve hydraulic and ecological connectivity, at its present level, between the wetlands on either side of the road. To meet this requirement, we recommend that culverts, spans or bridges be placed at least every 50 feet with an opening at least 2 feet high and 3 feet wide at ground level where practicable. Closed bottom culverts shall be embedded at least 6 inches with a natural bottom.
- c. In the case of non-compliance, the permittee shall take necessary measures to correct wetland damage due to lack of hydraulic and ecological connectivity.
- d. Any work that results in flooding, results in impacts to wetlands on either side of the wetland crossing in excess of Category 1 thresholds, or impacts wetland drainage from the upgradient side of the wetland crossing does not qualify for Category 1.

Robert J. Desista

Deputy Chief, Regulatory Division For DISTRICT ENGINEER

DATE

| | APPENDIX A: DEFINITION OF CATEGORIES | | |
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| A. INLAND WATERS AND WETLANDS | Inland Waters and Wetlands: Waters that are regulated under Section 404 of the Clean Water Act, including rivers, streams, lakes, ponds and wetlands, and <i>excluding Section 10 Navigable Waters of the U.S. (tidal and freshwater)</i> . The jurisdictional limits are the ordinary high water (OHW) mark in the absence of adjacent wetlands, beyond the OHW mark to the limit of adjacent wetlands when adjacent wetlands are present, and the wetland limit when only wetlands are present. For the purposes of this GP and designated activities, fill placed in the area between the mean high water (MHW) and the high tide line (HTL), and in the bordering and contiguous wetlands ¹ to tidal waters are reviewed in the Navigable Waters section. (See B. Navigable Waters on page 27 below.) Projects not meeting Category 1 require an application for review as a Category 2 or Individual Permit project. All Category 1 and 2 projects must comply with all of this GP's applicable terms (Pages 1 – 4) and General Conditions (Pages 5–20). | | |
| ACTIVITY | CATEGORY 1 Self-Verification Eligible (SVNF Required) | CATEGORY 2 (PCN Required) | |
| 1. Repair, Replacement, Expansion, and Maintenance of Authorized Structures and Fills | Repair or maintenance of existing, currently serviceable, authorized fills with no expansion or change in use: • Conditions of the original authorization apply. • Minor deviations in fill design allowed. ⁷ • The repair, rehabilitation, or replacement of those structures or fills destroyed or damaged by storms, floods, fire or other discrete events is authorized, provided the repair, rehabilitation, or replacement is commenced, or is under contract to commence, within two years of the date of their destruction or damage. • No effect on federally listed endangered or threatened species or critical habitat. | Replacement of non-serviceable fills, or repair/maintenance of serviceable fill, with expansion <3 acres, or with a change in use. | |
| 2. Moorings | NA – moorings in non-navigable inland waters are not subject to Corps jurisdiction. Note: Moorings placed in freshwater navigable waters are reviewed in the Navigable Waters section. (See B. Navigable Waters on Page 28 below.) | NA | |
| 3. Structures, Floats & Lifts | For solid fill or crib supported structures on inland waters, <15,000 square feet (SF) of waterway and/or wetland fill, associated secondary impacts², and temporary fills. No effect on federally listed endangered or threatened species or critical habitat. Note: Temporary or permanent structures placed in freshwater navigable waters are reviewed in the Navigable Waters section. (See B. Navigable Waters on page 29 below. | 1. Work not eligible for Category 1 2. ≥15,000 SF to <3 acres of inland waterway and/or wetland fill and associated secondary impacts (e.g., areas drained, flooded, fragmented, or excavated). | |
| 4. Aids to Navigation and Temporary Recreational Structures | NA - this activity in non-navigable inland waters is not subject to Corps jurisdiction. Note: Aids to Navigation and other structures placed in freshwater navigable waters are reviewed in the Navigable Waters section. (See B. Navigable Waters on page 30 below.) | NA | |

| 5. Dredging, Disposal of Dredged Material, Beach Nourishment, and Rock Removal and Relocation 6. Discharges of Dredged or Fill | For regulated discharges associated with excavation, and disposal <15,000 SF inland waterway and/or wetland impacts. The activity does not occur in navigable waters of the U.S. Stream channelization, relocation or loss of streambed including impoundments or discharge of tailings into streams does not occur. No effect on federally listed endangered or threatened species or critical habitat. NA - For discharges incidental to the construction of bridges in inland waters of the U.S. refer to Activity 23 (Stream and Wetland Crossings) and | 1. Work not eligible for Category 1 2. ≥15,000 SF to <3 acres of inland waters. NA |
|---|---|---|
| Material Incidental to the Construction of Bridges | GC 45. Note: Discharges of Dredged or Fill Material Incidental to the Construction of Bridges in freshwater navigable waters are reviewed in the Navigable Waters section. (See B. Navigable Waters on page 30 below.) | |
| 7. Bank and Shoreline Stabilization | Inland bank stabilization <500 FT long and ≤1 CY of fill per linear foot below OHW, provided: ≤1 cubic yard of fill per linear foot placed along the bank waterward of ordinary high water. Work complies with the GCs (GC 44 in particular), including: No structures angled steeper than 1H:1V allowed. Only rough-faced stone or fiber roll revetments allowed. No in-stream work involving fill or excavation in flowing waters (see GC 45(h)). In-water work limited to Jul 15 – Sep 30. No work in vernal pools⁵ or SAS³. No effect on federally listed endangered or threatened species or critical habitat. | Work not eligible for Category 1 |
| 8. Residential, Commercial, Industrial, and Institutional Developments, and Recreational Facilities | 1. <15,000 SF of inland waterway and/or wetland fill and associated secondary impacts² (e.g., areas drained, flooded, fragmented, mechanically cleared or excavated). Fill area includes all temporary and permanent fill, and regulated discharges associated with excavation. Construction mats are considered as fill. [See GC 14] Provided: Historic fill + proposed impact area <15,000 SF complies with GC 5, Single and Complete Projects. No work in special aquatic sites (SAS)⁴ other than wetlands. No effect on federally listed endangered or threatened species or critical habitat. 2. For work in Vernal Pool (VP) Management Areas (includes VPs)⁵: | Work not eligible for Category 1. ≥15,000 SF to <3 acres of inland waterway and/or wetland fill and associated secondary impacts (e.g., areas drained, flooded, fragmented, or excavated). Fill area includes all temporary and permanent fill (including mats), and regulated discharges associated with excavation. Mechanical clearing without grubbing or other soil disturbance >3 acres as a secondary impact may still be eligible for Category 2 at the discretion of the Corps. See GC 2 and Appendix C for wetland delineation |

| | See GC 23 and Appendix C for VP delineation requirements. See GC 23 to determine if work qualifies for Category 1 or 2. | requirements. |
|-------------------------------|--|---|
| | | |
| 9. Utility Line Activities | See Appendix G for VP documents providing mitigation guidance. 1. <15,000 SF of inland waterway and/or wetland fill, associated secondary impacts², and temporary fills. 2. The activity does not occur in, over, or under navigable waters of the U.S. 3. Intake structures that are dry hydrants used exclusively for firefighting activities with no stream impoundments. 4. There is no permanent change in pre-construction contours in waters of the U.S. 5. Material resulting from trench excavation is temporarily side cast into waters of the U.S. for ≤3 months and is placed in such a manner that it is not dispersed by currents or other forces. 6. The utility line is placed within and does not run a) parallel to, or b) along a streambed. 7. Stream channelization, relocation or loss of streambed including impoundments does not occur. | 1. Work not eligible for Category 1 2. ≥15,000 SF to <3 acres of inland waterway and/or wetland fill and associated secondary impacts (e.g., areas drained, flooded, fragmented, or excavated). Fill area includes all temporary and permanent fill (including mats), and regulated discharges associated with excavation. 3. Mechanical clearing without grubbing or other soil disturbance >3 acres as a secondary impact may still be eligible for Category 2 at the discretion of the Corps. |
| | 8. No effect on federally listed endangered or threatened species or critical habitat. 9. There is no discharge in SAS other than non-tidal wetlands. 10. Construction mats ⁴ of any area necessary to conduct activities that were previously authorized, authorized under Category 1, or not subject to regulation (see Endnote 7). Authorized construction mats must be in place for <3 months, removed immediately upon work completion, and the wetlands must be restored (see GC 43). 11. Stream crossings must comply with GC 17. | |
| 10. Linear | 1. <15,000 SF of inland waterway and/or wetland fill associated secondary | 1. ≥15,000 SF to <3 acres of inland waterway and/or |
| Transportation Projects (not | impacts (e.g., areas drained, flooded, fragmented, mechanically cleared or excavated). Fill area includes all temporary and permanent fill, and | wetland fill and associated secondary impacts (e.g., areas drained, flooded, fragmented, or excavated). Fill area |
| including stream | regulated discharges associated with excavation. Construction mats are | includes all temporary and permanent fill (including |
| crossings) | considered fill. (See GC 14.) | mats), and regulated discharges associated with |
| | Provided: | excavation. |
| For stream crossings, | • Historic fill + proposed impact area <15,000 SF and complies with GC 5 | 2. Mechanical clearing without grubbing or other soil |
| refer to Activity 23 | single and complete projects. | disturbance >3 acres as a secondary impact may still be |
| | No work in special aquatic sites (SAS) other than wetlands. 2. Construction mats⁴ of any area necessary to conduct activities that were | eligible for Category 2 at the discretion of the Corps. |
| | previously authorized, authorized under Category 1, or not subject to | |
| | regulation (see Endnote 7). Authorized construction mats must be in place | |
| | for <3 months, removed immediately upon work completion, and the | |
| | wetlands must be restored (see GC 43). 3. No effect on federally listed endangered or threatened species or critical | |
| | habitat. | |

| 11. Mining Activities 12. Boat Ramps | 1. <15,000 SF of inland waterway and/or wetland fill, associated secondary impacts, and temporary impacts. 2. The activity does not occur in navigable waters of the U.S. 3. Stream channelization, relocation or loss of streambed including impoundments or discharge of tailings into streams does not occur. 4. No effect on federally listed endangered or threatened species or critical habitat. 1. <15,000 SF of inland waterway and/or wetland fill, associated secondary impacts, and temporary impacts. 2. No effect on federally listed endangered or threatened species or critical habitat. | Work not eligible for Category 1. ≥15,000 SF to <3 acres of inland waterway and/or wetland fill and associated secondary impacts (e.g., areas drained, flooded, fragmented, or excavated). Fill area includes all temporary and permanent fill (including mats), and regulated discharges associated with excavation. Work not eligible for Category 1 >15,000 SF and < 3 acres of impact. |
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| 13. Land and Water-Based Renewable Energy Generation Facilities and Hydropower Projects 14. Reshaping | For land-based facilities: 1. <15,000 SF of inland waterway and/or wetland fill, associated secondary impacts, and temporary impacts. 2. Stream channelization, relocation or loss of streambed including impoundments does not occur. 3. No effect on federally listed endangered or threatened species or critical habitat. For water-based facilities and hydropower projects: No new facilities are eligible. Not Applicable | For land-based activities: 1. Work not eligible for Category 1. 2. >15,000 SF and < 3 acres impact. 3. Mechanical clearing without grubbing or other soil disturbance >3 acres as a secondary impact may still be eligible for Category 2 at the discretion of the Corps. For water-based facilities and hydropower projects: > 3 acres of impact will require an IP. Not Applicable |
| Existing Drainage Ditches & Mosquito Management 15. Oil Spill and Hazardous Material Cleanup | Jurisdictional activities required for the containment and cleanup of oil and hazardous substances that are subject to the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR 300) provided that the work is done in accordance with the Spill Control and Countermeasure Plan required by 40 CFR 112.3 or any existing state contingency plan and provided that the Regional Response Team (if one exists in the area) concurs with the proposed containment and cleanup action. SAS³ must typically be restored in place at the same elevation. Note: SVNF or a surrogate state reporting form may be submitted after the fact. | Work not eligible for Category 1 |

| 16. Cleanup of Hazardous and toxic waste | Specific jurisdictional activities to effect the containment, stabilization, or removal of hazardous or toxic waste materials, including court ordered remedial action plans or related settlements, which are performed, ordered or sponsored by a government agency with established legal or regulatory authority. SAS should be restored in place at the same elevation. <15,000 SF of inland waterway and/or wetland fill, associated secondary impacts, and temporary impacts. No stream channelization, relocation or loss of streambed occurs. The project does not involve establishing new disposal sites or expanding existing sites used for the disposal of hazardous or toxic waste. No effect on federally listed endangered or threatened species or critical habitat. | Work not eligible for Category 1 |
|--|---|--|
| 17. Scientific Measurements Devices | Scientific measurement devices whose purpose is to measure and record scientific data, such as staff gages, water recording devices, water quality testing and improvement devices, and similar structures. This excludes any biological sampling devices. Structures may not restrict or concentrate movement of aquatic organisms. No effect on federally listed endangered or threatened species or critical habitat. | Work not eligible for Category 1 |
| 18. Survey Activities | 1. Jurisdictional survey activities, such as core sampling, seismic exploratory operations, plugging of seismic shot holes and other exploratory-type bore holes, exploratory trenching, soil surveys, sampling, and historic resources surveys (but not recovery). Exploratory trenches must be restored in accordance with GC 43. The construction of temporary pads is authorized provided the discharge doesn't exceed 25 CY. This doesn't authorize permanent structures or the drilling and the discharge of excavated material from test wells for oil and gas exploration (the plugging of such wells is authorized). 2. No effect on federally listed endangered or threatened species or critical habitat. | Work not eligible for Category 1 |
| 19. Agricultural Activities | For those activities subject to Corps jurisdiction¹⁶, <15,000 SF of inland waterway and/or wetland fill, associated secondary impacts, and temporary impacts. No stream channelization, relocation, loss of streambed, or farm ponds in streams. No effect on federally listed endangered or threatened species or critical habitat. | 1. ≥15,000 SF to <3 acres of inland waterway and/or wetland fill and associated secondary impacts (e.g., areas drained, flooded, fragmented, or excavated). Fill area includes all temporary and permanent fill (including mats), and regulated discharges associated with excavation. 2. > 3 acres of impact will require an IP. |

| 20. Fish and Wildlife Harvesting, Enhancement and Attraction Devices and Activities | NA - this activity in non-navigable inland waters, if not involving a discharge of dredged or fill material, is not subject to Corps jurisdiction. Note: Related structures placed in freshwater navigable waters (e.g. the upper Penobscot or Kennebec Rivers) are reviewed in the Navigable Waters section. (See B. Navigable Waters on Page 33 below.) | Not Applicable |
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| 21. Habitat Restoration, Establishment and Enhancement Activities | 1. <15,000 SF of inland waterway and/or wetland fill, associated secondary impacts, and temporary impacts. 2. The activity is supported in writing by a local, state, or non-Corps Federal environmental agency. Water impoundments require PCN. 3. No conversion of i) a stream to wetland or vice versa, wetland to a pond or uplands, and ii) one wetland type to another. 4. No dam removal. 5. No effect on federally listed endangered or threatened species or critical habitat. | 1. Work not eligible for Category 1 2. Aquatic habitat restoration, establishment, and enhancement of wetlands and riparian areas and the restoration and enhancement of streams and other open waters with impacts of any area ≥15,000 SF, provided those activities result in net increase in overall aquatic resource functions and services. ⁸ |
| 22. Previously Authorized Activities | Any work not commenced nor completed that was authorized in a written letter from the Corps under the GP in effect between October 12, 2010 and | |
| Authorized Activities | October 12, 2015. The terms and general conditions of this GP apply along with any special conditions in the written authorization. | |
| 23. Stream & | 1. River, stream and brook work and crossings: | Work not eligible for Category 1 |
| Wetland Crossings | Must comply with GC 45 in particular, including: No slip lining [see GC 45 (g)]. No in-stream work involving fill or excavation in flowing waters [see GC 45(h)]. In-stream work limited to Jul 15 – Sep 30 [see GC 45 (l)]. No work in riffles and pools³. No stream relocations. No dams or dikes⁶. No effect on federally listed endangered or threatened species or critical habitat. <15,000 SF of inland waterway and/or wetland fill, associated secondary impacts, and temporary impacts. Wetland crossings must comply with the particularly relevant GC 45. | |
| 24. Aquaculture | For land based installations, <15,000 SF of inland waterway and/or wetland | Work not eligible for Category 1 |
| (freshwater) | fill, associated secondary impacts, and temporary impacts. In-stream/in-water work limited to Jul 15 – Sep 30. No effect on federally listed endangered or threatened species or critical habitat. Note: Related structures placed in freshwater navigable waters are reviewed in the Navigable Waters section. (See B. Navigable Waters, below.) | |

| B. NAVIGABLE WATERS | Navigable Waters of the United States: Waters that are subject to the ebb and flow of the tide and/or the tidal and non-tidal portions of the Federally designated navigable waters (the Penobscot River, Kennebec River, and Lake Umbagog) (Section 10 Rivers and Harbors Act of 1899). The jurisdictional limits are the mean high water (MHW) line in tidal waters and the ordinary high water (OHW) mark in non-tidal portions of the federally designated navigable rivers. For the purposes of this GP, fill placed in the area between the mean high water (MHW) and the high tide line (HTL), and in the bordering and contiguous wetlands ¹ to tidal waters are also reviewed in this Navigable Waters section. Projects not meeting Category 1 require an application for review as a Category 2 or Individual Permit project. All Category 1 and 2 projects must comply with all of this GP's applicable terms (Pages 1 - 4) and General Conditions (Pages 5 - 20). | | |
|--|---|--|--|
| ACTIVITY | CATEGORY 1 Self-Verification Eligible (SVNF Required) | CATEGORY 2 (PCN Required) | |
| 1. Repair, Replacement, Expansion, and Maintenance of Authorized (or grandfathered) Structures and Fills | Repair, replacement in-kind, or maintenance⁷ of existing, currently serviceable⁷, authorized structures or fills: All work is to be conducted in-the-dry, during low water. Conditions of the original authorization apply. No substantial expansion or change in use. No new fill in SAS³. Must be rebuilt in same footprint, however minor deviations in structure design allowed⁷. The repair, rehabilitation, or replacement of those structures or fills destroyed or damaged by storms, floods, fire or other discrete events is authorized, provided the repair, rehabilitation, or replacement is commenced, or is under contract to commence, within two years of the date of their destruction or damage. | Replacement of non-serviceable structures and fills or repair/maintenance of serviceable structures or fills, with fill, replacement or expansion <1 acre, or with a change in use. <2. <1 acre temporary or permanent fill, excavation and/or secondary impacts. Fill area includes all temporary and permanent waterway fills, provided: Temporary or permanent fill in eelgrass¹⁴ <1000 SF. Permanent fill in SAS (excluding eelgrass¹⁴) <4300 SF. Standard Pile Driving Conditions. Work involving piles shall adhere to one of the four methods below: Piles installed in-the-dry during low water or in-water between Nov. 8th - Apr. 9th, or Must be drilled and pinned to ledge, or Vibratory hammers used to install any size and quantity of wood, concrete or steel piles, or Impact hammers limited to one hammer and <50 piles installed/day with the following: wood piles of any size, concrete piles ≤18-inches diameter, steel piles <12-inches diameter if the hammer is ≤3000 lbs and a wood cushion is used between the hammer and steel pile, and For the methods above: In-water noise levels shall not exceed >187dB cSEL re 1µPa or 206dB peak re 1µPa at a distance >10m from the pile being installed, and In-water noise levels >150dB peak re 1µPa shall not exceed 12 consecutive hours on any given day and a 12 hour recovery period (i.e., in-water noise below 150dB peak re 1µPa) must be provided between work days. Existing derelict, degraded or abandoned piles in the project area that are affected by project activities should be removed and properly disposed of in an upland location landward of MHW or OHW and not in wetlands, tidal wetlands, their substrate or mudflats. | |

2. Moorings

- 1. Private, non-commercial, non-rental, single-boat moorings, provided:
 - Authorized by the local harbormaster/town.
 - Not associated with any boating facility. 11
 - Boat or mooring not located in a Federal Navigation Project or buffer zone¹² other than in a Federal Anchorage¹². Moorings in a Federal Anchorage not associated with a boating facility¹¹ and are not for rent.
 - No interference with navigation.
 - No new moorings located in SAS³. Prior to installation of moorings, a site-specific eelgrass survey should be conducted to document that eelgrass is not present.
 - When existing, authorized moorings in SAS³ are going to be replaced, they should be replaced with low impact mooring technology that prevents mooring chains from resting or dragging on the bottom substrate at all tides and helical anchors, or equivalent SAS protection systems where practicable.
- 2. Minor relocation of previously authorized moorings, provided:
 - Authorized by the local harbormaster/town.
 - Not located in SAS³
 - No interference with navigation.
 - Cannot be relocated into a Federal Navigation Project¹² other than a Federal Anchorage¹²

Note: Cat 1 eligible moorings do not require SVNF.

- **3. Structures, Floats and Lifts**
- 1. Reconfiguration of existing authorized structures shall occur in-the-dry during low water.
- 2. Minor relocation of <u>previously authorized</u> floats or moored floats/lobster cars, provided:
 - Authorized by the local harbormaster/town.
 - Not located in SAS³.
 - No interference with navigation.
 - Cannot be relocated into a Federal Navigation Project¹² other than a Federal Anchorage¹².

- 1. Moorings associated with an existing boating facility¹¹. An eelgrass¹⁴ survey may be required.
- 2. Moorings that don't meet the terms in Category 1 and don't require an Individual Permit. This includes private moorings with no harbormaster or means of local approval.
- 3. Moorings located such that they, and/or vessels docked or moored at them, are within the buffer zone of the horizontal limits¹³ of a Federal Channel¹². (See Appendix H.) The buffer zone is equal to 3 times the authorized depth of that channel.
- 4. An IP is required for moorings within the horizontal limits¹¹, or with moored vessels that extend, into the horizontal limits of a Federal Navigation Project¹², except those in Federal Anchorages¹².

For 1-4 above, siting of new individual moorings in SAS³, including eelgrass¹⁴, should be avoided to the maximum extent practicable. If SAS³ cannot be avoided, plans should show elastic mooring systems that prevent mooring chains from resting or dragging on the bottom substrate at all tides and helical anchors, or equivalent SAS protection systems, where practicable. For moorings that appear to impact SAS, the Corps may require an eelgrass survey.

- 1. New structures or floats, including floatways/skidways, built to access waterway (seasonal and permanent). Includes both pile supported and crib supported structures.
- 2. Expansions to existing boating facilities¹¹
 - *Pile-supported structures* <400 SF, with attached floats totaling <200 SF.
- Structures are \leq 4' wide and have at least a 1:1 height:width ratio¹¹.
- Floats supported a minimum of 18" above the substrate during all tides.
- Structures & floats not located within 25' of any eelgrass⁸.
- Moored vessels not positioned over SAS³.

- The Corps may require a letter of no objection from the abutter if structure is to be within 25 feet of the property line.
- No structure extends across >25% of the waterway width at mean low water.
- Not located within the buffer zone of the horizontal limits¹³ of a Corps Federal Navigation Project (FNP) (Appendix F). The buffer zone is equal to three times the authorized depth of that FNP.
- 3. An Individual Permit is required for structures or floats, including floatways/skidways, located such that they and/or vessels docked or moored at them are within the horizontal limits¹³ of a Corps Federal Navigation Project¹² (see Appendix H).
- 4. An Individual Permit is required for structures & floats associated with a new or previously unauthorized boating facility¹¹.
- 5. Standard Pile Driving Conditions. Work involving piles shall adhere to one of the four methods below:
 - Piles installed in-the-dry during low water or in-water between Nov. 8th Apr. 9th, or
 - Must be drilled and pinned to ledge, or
 - Vibratory hammers used to install any size and quantity of wood, concrete or steel piles, or
 - Impact hammers limited to one hammer and <50 piles installed/day with the following: wood piles of any size, concrete piles ≤18-inches diameter, steel piles <12-inches diameter if the hammer is ≤3000 lbs and a wood cushion is used between the hammer and steel pile, and
 - For the methods above:
 - o In-water noise levels shall not exceed >187dB cSEL re 1μ Pa or 206dB peak re 1μ Pa at a distance >10m from the pile being installed, and
 - o In-water noise levels >150dB peak re 1μPa shall not exceed 12 consecutive hours on any given day and a 12 hour recovery period (i.e., in-water noise below 150dB peak re 1μPa) must be provided between work days.
 - Existing derelict, degraded or abandoned piles in the project area that are affected by project activities should be removed and properly disposed of in an upland location landward of MHW or OHW and not in wetlands, tidal wetlands, their substrate or mudflats.

| 4. Aids to Navigation | 1. Temporary buoys, markers, floats, etc. for recreational use | Work not eligible for Category 1 |
|-----------------------|---|--|
| and Temporary | during specific events, provided they are removed within 30 days | |
| Recreational | after use is discontinued. | |
| Structures | 2. The placement of aids to navigation and regulatory markers | |
| | which are approved by and installed in accordance with the | |
| | requirements of the U.S. Coast Guard. (See 33 CFR 66, Chapter I, | |
| | subchapter C)." | |
| | Note: Cat 1 eligible aids to navigation and regulatory markers | |
| | do not require SVNF. | |
| 5. Dredging, Disposal | 1. Maintenance dredging ¹⁰ for navigational purposes <1,000 CY | 1. Maintenance dredging $^{10} \ge 1,000$ CY, new dredging $< 25,000$ CY, |
| of Dredged Material, | with upland disposal. Includes return water from upland contained | or projects not meeting Category 1. Includes return water |
| Beach Nourishment, | disposal area, provided: | from upland contained disposal areas. Disposal includes: |
| and Rock Removal | Proper siltation controls are used. | • Upland. |
| and Relocation | • Dredging & disposal operation limited to Nov. 8 – Apr. 9. | Beach nourishment (above mean high water) of any area |
| | • No impact to SAS ³ . | provided the dredging's primary purpose is navigation or the |
| | No dredging in intertidal areas. | sand is from an upland source. |
| | No dredging within 100' of shellfish beds. | • Open water & confined aquatic disposal, if Corps finds the |
| | No dredging in areas designated as Critical Habitat for | material suitable. |
| | Atlantic salmon [see GC 8(b) & (c)]. | 2. Beach nourishment associated with dredging when the primary |
| | • For dredging in tidal waters outside of Atlantic salmon | purpose is not navigation requires at least a Category 2 review. |
| | critical habitat, applicants must contact NMFS (see GC 8) to | 3. Maintenance or new dredging ¹⁰ and/or disposal in or affecting a |
| | ensure no impacts to listed species such as shortnose | SAS ³ requires an Individual Permit. |
| | sturgeon, Atlantic surgeon, and listed sturgeon critical | * |
| | habitat. | |
| | Project proponents must contact the USFWS for work on | |
| | coastal beaches to ensure no impacts to piping plovers, | |
| | roseate terns, rufa red knot, or their habitat [see GC 8(c)]. | |
| | No underwater blasting. | |
| | 2. Maintenance dredging is not eligible for Category 1 if | |
| | conducted in tidal portions of the Penobscot river upstream of a | |
| | line extending from Turner Point in Castine to Moose Point | |
| | (formerly Squaw Point) on Cape Jellison in Stockton Springs or in | |
| | tidal portions of the Kennebec or Androscoggin Rivers upstream | |
| | of a line extending from Doubling Point in Arrowsic to Hospital | |
| | Point in West Bath. | |
| | Tome in west batil. | |

| 6. Discharges of Dredged or Fill Material Incidental to the Construction of Bridges | 1. Discharges of dredged or fill material incidental to the construction of bridges across navigable waters of the U.S., including cofferdams, abutments, foundation seals, piers, and temporary construction and access fills provided the U.S. Coast Guard authorizes such discharges as part of the bridge permit or appropriate approval. 2. Causeways and approach fills are not included in this category and require Category 2 or Individual Permit authorization. | <1 acre temporary or permanent fill, excavation and/or secondary impacts (e.g., areas drained, flooded, fragmented or mechanically cleared). Fill area includes all temporary and permanent waterway fills, provided: Temporary or permanent fill in eelgrass¹⁴ <1000 SF. Permanent fill in SAS (excluding eelgrass¹⁴) <4300 SF. |
|---|--|--|
| 7. Bank and Shoreline Stabilization | Bank stabilization projects <200 linear feet provided: ≤1 cubic yard of fill per linear foot placed along the bank waterward of high tide line. No fill or equipment will occur in SAS³. Work conducted in the intertidal zone must be conducted in-the-dry during low water. No structures angled steeper than 1H:1V and only rough-faced stone or fiber roll revetments allowed. No driving of piles or sheeting. Bank stabilization projects in excess of 200 linear feet (Applicant or Applicant + Abutters combined) must undergo Category 2 review. | Work not eligible for Category 1. < 1 acre temporary or permanent fill, excavation and/or secondary impacts (e.g., areas drained, flooded, fragmented or mechanically cleared). Fill area includes all temporary and permanent waterway fills, provided: Temporary or permanent fill in eelgrass¹⁴ < 1000 SF. Permanent fill in SAS (excluding eelgrass¹⁴) < 4300 SF. |
| 8. Residential, Commercial, Industrial, and Institutional Developments, and Recreational Facilities | Not Eligible | 1. <1 acre temporary or permanent fill, excavation and/or secondary impacts (e.g., areas drained, flooded, fragmented or mechanically cleared). Fill area includes all temporary and permanent waterway fills, provided: Temporary or permanent fill in eelgrass¹⁴ <1000 SF. Permanent fill in SAS (excluding eelgrass¹⁴) <4300 SF. Conversions of previously authorized pile supported buildings over navigable waters to residences, offices, or other non-water dependent uses require at least a Category 2 review. Floating house boats or businesses on floats require Category 2 review. |
| 9. Utility Line Activities | Repair or maintenance of existing, currently serviceable, authorized utilities with no expansion or change in use: Conditions of the original authorization apply. Trenching or filling is confined to the existing footprint. In water work conducted between Nov 8 and Apr 9. No new impact to SAS. Particularly relevant is GC12. New work in, over, or under navigable waters requires a PCN and Category 2 review. Except for aerial utility lines, work is not eligible for Category 1 if conducted in tidal portions of the Penobscot River upstream of a line extending from Turner Point in Castine to Moose Point (formerly | 1. New or replacement installations or work not otherwise eligible for Category 1. 2. <1 acre temporary or permanent fill, excavation and/or secondary impacts (e.g., areas drained, flooded, fragmented or mechanically cleared). Fill area includes all temporary and permanent waterway fills, provided: • Temporary or permanent fill in eelgrass ¹⁴ <1000 SF. • Permanent fill in SAS (excluding eelgrass ¹⁴) <4300 SF. 3. Particularly relevant is GC12 |

| | Squaw Point) on Cape Jellison in Stockton Springs or in tidal | |
|--|---|---|
| 10. Linear Transportation Projects (Not Including Stream Crossings) | Not eligible | <1 acre temporary or permanent fill, excavation and/or secondary impacts (e.g., areas drained, flooded, fragmented or mechanically cleared). Fill area includes all temporary and permanent waterway fills, provided: Temporary or permanent fill in eelgrass¹⁴ < 1000 SF. Provided: Temporary or permanent fill in eelgrass¹⁴ < 1000 SF. |
| 11. Mining Activities | Not Eligible | • Permanent fill in SAS (excluding eelgrass ¹⁴) <4300 SF. Not Eligible |
| 12. Boat Ramps and Marine Railways | No new impact to SAS Marine railway and boat ramp work not eligible for maintenance⁷ (i.e. not currently serviceable⁷) may be replaced "in-kind" with minor deviations⁷ provided: Work is in the intertidal zone. No fill expansion below high tide line. Work conducted in-the-dry during low water. No new boat ramps or marine railways. | 1. Work not eligible for Category 1 2. <1 acre temporary or permanent fill, excavation and/or secondary impacts (e.g., areas drained, flooded, fragmented or mechanically cleared). Fill area includes all temporary and permanent waterway fills, provided: • Temporary or permanent fill in eelgrass ¹⁴ <1000 SF. • Permanent fill in SAS (excluding eelgrass ¹⁴) <4300 SF. |
| 13. Land and Water- Based Renewable Energy Generation Facilities and Hydropower Projects | Not Eligible | 1. <1 acre temporary or permanent fill, excavation and/or secondary impacts (e.g., areas drained, flooded, fragmented or mechanically cleared). Fill area includes all temporary and permanent waterway fills, provided: • Temporary or permanent fill in eelgrass ¹⁴ <1000 SF. • Permanent fill in SAS (excluding eelgrass ¹⁴) <4300 SF. 2. No new impoundments. |
| 14. Reshaping Existing Drainage Ditches and Mosquito Management | 1. ≤500 linear feet of drainage ditch will be modified. The reshaping of the ditch cannot increase drainage capacity beyond the original asbuilt capacity nor can it expand the area drained by the ditch as originally constructed (i.e., the capacity of the ditch must be the same as originally constructed and it cannot drain additional wetlands or other waters of the U.S.). No new ditches or relocation of drainage ditches constructed in waters of the U.S.; the location of the centerline of the reshaped drainage ditch must be approximately the same as the location of the centerline of the original drainage ditch. No effect on federally listed endangered or threatened species or critical habitat | Work not eligible for Category 1 <1 acre temporary or permanent fill, excavation and/or secondary impacts (e.g., areas drained, flooded, fragmented or mechanically cleared). Fill area includes all temporary and permanent waterway fills, provided: Temporary or permanent fill in eelgrass¹⁴ <1000 SF. Permanent fill in SAS (excluding eelgrass¹⁴) <4300 SF. |

| 15. Oil Spill and Hazardous Material Cleanup | Jurisdictional activities required for the containment and cleanup of oil and hazardous substances that are subject to the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR 300) provided that the work is done in accordance with the Spill Control and Countermeasure Plan required by 40 CFR 112.3 and any existing state contingency plan and provided that the Regional Response Team (if one exists in the area) concurs with the proposed containment and cleanup action. SAS³ must typically be restored in place at the same elevation. | Work not eligible for Category 1 |
|--|--|---|
| | Note: SVNF or a surrogate state reporting form may be submitted after the fact. No SVNF is required for Category Ieligible containment booms. | |
| 16. Cleanup of Hazardous and Toxic Waste | Not eligible - except for booms placed for hazardous and toxic waste containment and absorption and prevention which are eligible for SV. | Specific jurisdictional activities with impacts of any area required to affect the containment, stabilization, or removal of hazardous or toxic waste materials that are performed, ordered, or sponsored |
| Wase | Note: No SVNF is required for Category 1 eligible containment booms. | by a government agency with established legal or regulatory authority. Wetlands and other SAS must typically be restored in place at the same elevation to qualify. |
| 17. Scientific | Scientific measurement devices whose purpose is to measure and | 1. Work not eligible for Category 1 |
| Measurement | record scientific data, such as staff gages, water recording devices, | 2. <1 acre temporary or permanent fill, excavation and/or |
| Devices | water quality testing and improvement devices, and similar structures. | secondary impacts (e.g., areas drained, flooded, fragmented or |
| | Structures may not restrict or concentrate movement of aquatic | mechanically cleared). Fill area includes all temporary and |
| | organisms; no activity results in a hazard to navigation; and no | permanent waterway fills, provided: |
| | activity requiring underwater blasting. | • Temporary or permanent fill in eelgrass ¹⁴ <1000 SF. |
| 10 C A 4 * * * * | | • Permanent fill in SAS (excluding eelgrass ¹⁴) <4300 SF. |
| 18. Survey Activities | Jurisdictional survey activities such as exploratory drilling, surveying and sampling activities, excluding any biological sampling devices. | 1. Work not eligible for Category 1 2. <1 acre temporary or permanent fill, excavation and/or |
| | Does not include any activity requiring underwater blasting, seismic | secondary impacts (e.g., areas drained, flooded, fragmented or |
| | exploratory operations, or oil and gas exploration and fill for roads or | mechanically cleared). Fill area includes all temporary and |
| | construction pads. No activity may result in a hazard to navigation. | permanent waterway fills, provided: |
| | | • Temporary or permanent fill in eelgrass ¹⁴ <1000 SF. |
| | | • Permanent fill in SAS (excluding eelgrass ¹⁴) <4300 SF. |
| 19. Agricultural | Not Eligible | Not Eligible |
| Activities | | |

| 20. Fish & Wildlife Harvesting, Enhancement and Attraction Devices and Activities (Not Aquaculture) | Fish and wildlife harvesting, enhancement, and attraction devices and activities such as pound nets, crab traps, crab dredging, eel pots, lobster traps, and clam and oyster digging, and small fish attraction devices such as open water fish concentrators (sea kites, etc.). This does not authorize artificial reefs or impoundments and semi-impoundments of waters of the U.S. for the culture or holding of motile species such as lobster, or the use of covered oyster trays or clam racks. No activity that may result in a hazard to navigation. Note: A SVNF is not required for these Category 1 eligible devices and activities. | Work not eligible for Category 1. 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 < ½ acre. For Aquaculture operations, refer to Activity 24. |
|---|--|---|
| 21. Habitat Restoration, Establishment and Enhancement Activities | Cultch placement in tidal waters is eligible for SV provided there are no salt marsh or vegetated shallow impacts. SAS planting and transplanting ≤ 100 SF in tidal waters; No artificial or living reefs. The activity is authorized in writing by a local, state, or non-Corps federal environmental agency. Water impoundments require PCN. No conversion of i) a stream to wetland or vice versa, wetland to a pond or uplands, and ii) one wetland type to another. No dam removal. Shellfish habitat enhancement such as brushing the flats is eligible for Category 1, but not the use of netting which requires Category 2 review. | Work not eligible for Category 1. Aquatic habitat restoration, establishment and enhancement provided those activities are proactive and result in net increases in aquatic resource functions and services. 8 |
| 22. Previously Authorized Activities | Any work not commenced nor completed that was authorized in a written letter from the Corps under the GP in effect between October 12, 2010 and October 12, 2015. The terms and general conditions of this GP apply along with any special conditions in the written authorization. | |
| 23. Stream & Wetland Crossings | Not Eligible | All temporary or permanent crossings of tidal navigable waters or adjacent tidal wetlands not eligible as maintenance require a PCN. GC 45 applies |
| 24. Aquaculture | Not Eligible | Shellfish & finfish aquaculture (with the exception of Atlantic salmon and any other salmonid, or other federally listed endangered or threatened species), or other aquaculture facilities with no more than minimal individual and cumulative impacts to environmental resources or navigation. This is inclusive but not limited to cages, nets, bags, racks, long lines, fences, posts, poles, predator screening, etc. Aquaculture guidelines are provided at: www.maine.gov/dmr/aquaculture/index.htm. |

Endnotes/Definitions

¹Bordering and Contiguous Wetlands: A bordering wetland is immediately next to its adjacent waterbody and may lie at, or below, the ordinary high water mark (mean high water in navigable waters) of that waterbody and is directly influenced by its hydrologic regime. Contiguous wetlands extend landward from their adjacent waterbody to a point where a natural or manmade discontinuity exists. Contiguous wetlands include bordering wetlands as well as wetlands that are situated immediately above the ordinary high water mark and above the normal hydrologic influence of their adjacent waterbody. Note, with respect to the federally designated navigable rivers, the wetlands bordering and contiguous to the tidally influenced portions of those rivers are reviewed under "II. Navigable Waters."

² Direct, Secondary, and Cumulative Impacts/Effects:

<u>Direct Impacts</u>: The immediate loss of aquatic ecosystem within the footprint of the fill.

Secondary Impacts: These are effects on an aquatic ecosystem that are associated with a discharge of dredged or fill materials, but do not result from the actual placement of the dredged or fill material. Information about secondary effects on aquatic ecosystems shall be considered prior to the time final section 404 action is taken by permitting authorities. Some examples of secondary effects on an aquatic ecosystem are a) fluctuating water levels in all impoundment and downstream associated with the operation of a dam, b) septic tank leaching and surface runoff from residential or commercial developments on fill, and c) leachate and runoff from a sanitary landfill located in waters of the U.S. Put another way, secondary effects are those impacts outside the footprint of the fill that arise from and are associated with the discharge of dredged or fill material, including the operation of an activity or facility associated with the discharge. Examples may include habitat fragmentation; interruption of travel corridors for wildlife (for example, for amphibians that migrate to and from seasonal or vernal pools used as breeding habitat); hydrologic regime changes; and impacts from operation and maintenance activities for constructed facilities; such as noise/lighting, storm water runoff, and road kill of wetland dependent wildlife. Using the directions contained in the guidelines, we consider the circumstances of a proposed discharge and the project of which it is a part to evaluate the scope, extent, severity, and permanence of direct, secondary, and cumulative adverse effects upon the aquatic ecosystem.

<u>Cumulative Impacts</u>: The extent of past, present, and foreseeable developments in the area may be an important consideration in evaluating the significance of a particular project's impacts. Although the impacts associated with a particular discharge may be minor, the cumulative effect of numerous similar discharges can result in a large impact. Cumulative impacts should be estimated only to the extent that they are reasonable and practical.

³ Special Aquatic Sites: Includes wetlands and saltmarsh, mudflats, riffles and pools, and vegetated shallows (predominantly comprised of eelgrass in Maine). ⁴ Construction Mats: Constructions, swamp and timber mats (herein referred to as "construction mats") are generic terms used to describe structures that distribute equipment weight to prevent wetland damage while facilitating passage and providing work platforms for workers and equipment. They are comprised of sheets or mats made from a variety of materials in various sizes. A timber mat consists of large timbers bolted or cabled together. Corduroy roads, which are not considered to be construction mats, are cut trees and/or saplings with the crowns and branches removed, and the trunks lined up next to one another. Corduroy roads are typically installed as permanent structures. Like construction mats, they are considered as fill whether they're installed temporarily or permanently. ⁵ Vernal Pools: A vernal pool, also referred to as a seasonal forest pool, is a temporary to semi-permanent body of water occurring in a shallow depression that typically fills during the spring or fall and may dry during the summer. Vernal pools have no permanent inlet or outlet and no viable populations of predatory fish. A vernal pool may provide the primary breeding habitat for wood frogs (*Rana sylvatica*), spotted salamanders (*Ambystoma maculatum*), blue-spotted salamanders (Ambystoma laterale), and fairy shrimp (Eubranchipus sp.), as well as valuable habitat for other plants and wildlife, including several rare, threatened, and endangered species. A vernal pool intentionally created for the purposes of compensatory mitigation is included in this definition. For the purposes of this GP, the presence of any of the following species in any life stage in any abundance level/quantity would designate the waterbody as a vernal pool: fairy shrimp, blue spotted salamanders, spotted salamanders or wood frogs. The Corps may determine during a Category 2 review that a waterbody should not be regulated as a VP based on available evidence. For the purposes of this GP, the VP Management Areas are the: Vernal Pool Depression (includes the vernal pool depression up to the spring or fall high water mark, and includes any vegetation growing within the depression), Vernal Pool Envelope (area within 100 FT of the VP Depression's edge) and Critical Terrestrial Habitat (area within 100-750 FT of the Vernal Pool Depression's edge). [*Note: Critical Terrestrial Habitat is defined as 100 -750 FT on page 243 of the document "Science and Conservation of Vernal Pools in Northeastern North America," Calhoun and deMaynadier, 2008, which is referenced in Appendix G, page 3, Paragraph 10(b).

- ⁶ Water Diversions: Water diversions are activities such as bypass pumping or water withdrawals. Temporary flume pipes, culverts or cofferdams where normal flows are maintained within the stream boundary's confines aren't water diversions. "Normal flows" are defined as no change in flow from pre-project conditions.

 ⁷ Maintenance: a) The repair, rehabilitation, or replacement of any previously authorized, currently serviceable structure or fill, or of any currently serviceable structure or fill authorized by 33 CFR 330.3 "Activities occurring before certain dates," provided that the structure or fill is not to be put to uses differing from those uses specified or contemplated for it in the original permit or the most recently authorized modification.
 - Minor deviations in the structure's configuration or filled area, including those due to changes in materials, construction techniques, or current construction codes or safety standards that are necessary to make repair, rehabilitation, or replacement are authorized.
 - Currently serviceable means useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.
 - No seaward expansion for bulkheads or any other fill activity is considered Category 1 maintenance.
 - Only structures or fills that were previously authorized and are in compliance with the terms and condition of the original authorization can be maintained as a non-regulated activity under 33 CFR 323.4(a)(2), or in accordance with the Category 1 or 2 thresholds in Appendix A.
- **b**) The state's maintenance provisions may differ from the Corps and may require reporting and written authorization from the state.
- c) Contact the Corps to determine whether stream crossing replacements require a written application to the Corps for at least a Category 2 review.
- d) Exempted Maintenance. In accordance with 33 CFR 323.4(a)(2), any discharge of dredged or fill material that may result from any of the following activities is not prohibited by or otherwise subject to regulation under Section 404 of the CWA: "Maintenance, including emergency reconstruction of recently damaged parts, of currently serviceable structures such as dikes, dams, levees, groins, riprap, breakwaters, causeways, bridge abutments or approaches, and transportation structures. Maintenance does not include any modification that changes the character, scope, or size of the original fill design."
- Aquatic Habitat Restoration, Establishment and Enhancement: The Corps will decide if a project qualifies and must determine in consultation with federal and state agencies that the net effects are beneficial. The Corps may refer to Nationwide Permit 27 published in the 3/12/07 Federal Register. Activities authorized here may include, but are not limited to: the removal of accumulated sediments; the installation, removal, and maintenance of small water control structures, dikes, and berms; the installation of current deflectors; the enhancement, restoration, or establishment of riffle and pool stream structure; the placement of in-stream habitat structures; modifications of the stream bed and/or banks to restore or establish stream meanders; the backfilling of artificial channels and drainage ditches; the removal of existing drainage structures; the construction of small nesting islands in inland waters; the construction of open water areas; the construction of native shellfish species habitat over unvegetated bottom for the purpose of habitat protection or restoration in tidal waters; shellfish seeding; activities needed to reestablish vegetation, including plowing or discing for seed bed preparation and the planting of appropriate wetland species; mechanized land clearing to remove non-native invasive, exotic, or nuisance vegetation; and other related activities. Only native plant species should be planted at the site.

 9 Brushing the Flats: The placement of tree boughs, wooden lath structure, or small-mesh fencing on mudflats to enhance recruitment of soft-shell clams (Mya arenaria).
- ¹⁰ **Maintenance Dredging:** This includes only those areas and depths previously authorized by the Corps and dredged. The Corps may require proof of authorization. Maintenance dredging typically refers to the routine removal of sediment to maintain the design depths of serviceable navigation channels, harbors, basins, marinas, boat launches, and port facilities. Maintenance dredging is conducted for navigational purposes and does not include any expansion of the previously dredged area or depth. The Corps may review a maintenance dredging activity as new dredging if sufficient time has elapsed to allow for the colonization of SAS, shellfish, etc.
- ¹¹ **Boating Facilities:** Facilities that provide for a fee, rent, or sell mooring space, such as marinas, yacht clubs, boat clubs, boat yards, town facilities, dockominiums, etc.
- ¹² **Federal Navigation Projects (FNPs):** FNPs are comprised of Federal Channels and Federal Anchorages. See Appendix F for their location and contact the Corps for more information. "Horizontal Limits" is the outer edge of an FNP. "Buffer Zone" is equal to three times the authorized depth of that channel.
- ¹³ Horizontal Limits: The outer edge of a Federal Navigation Project (FNP). See Appendix F and contact the Corps for information on FNP's.
- ¹⁴ **Eelgrass (Zostera marina):** A type of rooted aquatic vegetation that exists in intertidal and shallow subtidal areas known as vegetated shallows. See www.nero.noaa.gov/hcd/ for eelgrass survey guidance. Note: Eelgrass surveys should be conducted between May and October unless otherwise directed.

¹⁵ **Structures:** The height of structures shall at all points be equal to or exceed the width of the deck. For the purpose of this definition, height shall be measured from the marsh substrate to the bottom of the longitudinal support beam.

¹⁶**Agricultural Activities:** The Clean Water Act exempts certain discharges associated with normal farming, ranching, and forestry activities such as plowing, cultivating, minor drainage, and harvesting for the production of food, fiber, and forest products, or upland soil and water conservation practices (Section 404(f)(1)(A)). Applicants are strongly advised to contact the Corps for a determination of whether their activity is exempt or requires a permit.



Appendix B: Self-Verification Notification Form

(for all tidal and non-tidal projects in Maine subject to Corps jurisdiction)

US Army Corps of Engineers ®

New England District

At least two weeks before work commences, complete **all** fields (write "none" if applicable) below or use the fillable form at www.nae.usace.army.mil/missions/regulatory.aspx. Send this form, a location map, any project plans, and an Official Species List (See GC 8) to the address noted below; fax to (207) 623-8206; or email to jay.l.clement@usace.army.mil. The two-week lead time is not required for emergency situations (see page 4 for definition). Please call (207) 623-8367 with questions.

| Maine Project Office U.S. Army Corps of Engineers New England District 675 Western Avenue #3 Manchester, Maine 04351 | State Permit Number: Date of State Permit: State Project Manager: |
|--|---|
| Permittee:Address, City, State & Zip:Phone(s) and Email: | |
| Address, City, State & Zip: | |
| Waterway Name: | Tax Map/Lot: |
| Provide any prior Corps permit numbers | : |
| Proposed Work Dates: Start: | Finish: |
| Area of wetland impact: Area of waterway impact: Area of compensatory mitigation provid | SF (leave blank if work involves structures & no fill in Navigable Waters) SF (leave blank if work involves structures & no fill in Navigable Waters) ed:SF |
| I. Inland Waters and wetlands:II. Navigable Waters: | Appendix A categories (circle all that apply): 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 e, indicates that you accept and agree to comply with the terms, eligibility criteria, the Maine General Permit. |
| Permittee Printed Name: | |
| Permittee Signature: | Date: |

Appendix B 1



Appendix C: Content of Pre-Construction Notification

In addition to the following required information, the applicant must provide additional information as the Corps deems essential to make a public interest determination including, where applicable, a determination of compliance with the Section 404(b)(1) guidelines or ocean dumping criteria. Such additional information may include environmental data and information on alternate methods and sites as may be necessary for the preparation of the required environmental documentation. For a more comprehensive checklist, go to www.nae.usace.army.mil/missions/regulatory >> Forms >> Application and Plan Guideline Checklist. Please check with the Corps for project-specific requirements.

Information required for all projects:

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|--|
| Corps application form (ENG Form 4345) or appropriate state application form (see Appendix E). |
| Forms may need to be supplemented to include the information noted below. |
| Proof of notification to the SHPO and the appropriate THPOs (see Appendix E). |
| |
| Appendix D) |
| Drawings, sketches, or plans (detailed engineering plans and specifications are not required) that are legible, reproducible (color is encouraged, but features must be distinguishable in black and white), no larger than 11"x17", with bar scale. Wetland area impact sheets should have the highest resolution possible to show work within Corps jurisdiction (do not just reduce project overview or cut large-scale plan into quadrant sheets). Provide locus map and a plan overview of the entire property with a key index to the individual impact sheets. A locus map be on a section of color |
| |
| USGS topographic map is encouraged. Digital submissions are encouraged. Include: |
| □ All direct, secondary, permanent and temporary effects the project would cause, including the anticipated amount of impacts to waters of the U.S. expected to result from the activity, in acres, linear feet, or other appropriate unit of measure. |
| ☐ Any historic permanent fill associated with each single and complete project. |
| □ Cross-section views of all wetland and waterway fill areas and wetland replication areas. □ Delineation of all wetlands, other special aquatic sites (vegetated shallows, saltmarsh, mudflats, riffles and pools, coral reefs, and sanctuaries and refuges), and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Use |
| Federal delineation methods and include Corps wetland delineation data sheets (see GC 2). |
| ☐ MLW and MHW elevations in tidal waters. Show the HTL elevations when fill is involved. Show OHW elevation in lakes and non-tidal streams. |
| Existing and proposed conditions. □ Existing and proposed conditions. |
| ☐ For vegetated shallow and eelgrass survey guidance, see www.nae.usace.army.mil/missions/ |
| regulatory >> Jurisdictional Limits and Wetlands >> Submerged Aquatic Vegetation Survey Guidance for the New England Region. |
| ☐ Show all known VPs on the project site. See GC 23 for vernal pool identification requirements. |
| Volume, type, and source of fill material to be discharged into waters and wetlands, including the |
| area(s) (in square feet or acres) of fill in wetlands, below OHW in inland waters and below the HTL |
| in coastal waters. |

| | An Official Species List of federally "listed species or critical habitat" present in the action area (see GC 8). |
|----|--|
| | A restoration plan showing how all temporary fills and structures will be removed and the area restored to pre-project conditions (see GC 43). |
| | formation that may be required: |
| | Photographs of wetland/waterway to be impacted. Photos at low tide are preferred for work in tidal |
| | waters. |
| | For drawings, sketches, or plans: □ The vertical datum for all coastal projects must be in U.S. survey feet and referenced to MLLW and current tidal epochs, with a reference chart showing conversion factor to NAVD88; do not use local datum. See www.nae.usace.army.mil/missions/regulatory >> Forms and Publications >> Vertical Datum - FEMA (Jul 2007); |
| | ☐ The horizontal state plane coordinates shall be in U.S. survey feet and based on the appropriate |
| _ | state plane coordinate system. |
| П | 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. |
| П | For the discharge of dredged or fill material into waters of the U.S. or the transportation of dredged |
| | material for the purpose of disposing of it in ocean waters, the source of the material; the purpose of the discharge, a description of the type, composition and quantity of the material; the method of |
| | transportation and disposal of the material; and the location of the disposal site. For the discharge of dredged or fill material into waters of the U.S., include a statement describing how impacts to waters of the U.S. are to be avoided and minimized. Include either a statement describing how impacts to waters of the U.S. are to be compensated for or a statement explaining |
| | why compensatory mitigation should not be required for the proposed impacts. |
| | Purpose and need for the proposed activity; Limits and coordinates of any Federal Navigation Project in the vicinity of the project area. |
| | Limits and coordinates of any proposed mooring field, reconfiguration zone or aquaculture activity. |
| _ | Provide coordinates for all corners; |
| | Schedule of construction/activity; |
| | Names and addresses of adjoining property owners; |
| | Location and dimensions of adjacent structures; |
| | List of authorizations required by other Federal, interstate, state, or local agencies for the work, including all approvals received or denials already made. |
| | Identification and description of potential impacts to Essential Fish Habitat (defined at VI. |
| | Definitions and Acronyms. |
| Ш | Identification of potential discharges of pollutants to waters, including potential impacts to impaired |
| | waters, in the project area (see GC 19). |
| Ш | Invasive Species Control Plan (see GC 24). For sample control plans, see |
| | <u>www.nae.usace.army.mil/missions/regulatory</u> >> Invasive Species. Wildlife Action Plan (WAP) maps. Contact Maine Inland Fisheries & Wildlife (Appendix E) or on |
| | line at http://www.maine.gov/ifw/wildlife/conservation/action_plan.html |
| In | formation for dredging projects that may be required: |
| | Sediment testing, including physical (e.g., grain-size analysis), chemical and biological testing. For projects proposing open water disposal, applicants are encouraged to contact the Corps as early as possible regarding sampling and testing protocols. Sampling and testing of sediments without such |
| П | 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). |
| <u>In</u> | formation 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 must also include: |
| _ | □ Whether canopy predator nets are being used. |

Appendix C 3

Appendix D: Instruction for USFWS IPaC Project Builder/Official Species List

NOTE: These instructions are subject to change by the USFWS. Users should check this GP's Corps webpage for the latest instructions or click here.

In your internet browser go to http://ecos.fws.gov/ipac/

- 1. Click on get started.
- 2. Click on enter project location.
- 3. Search or zoom to your project location. (You can enter an address and then zoom in with your mouse).
- 4. Define your area. (Select the polygon tool and click around the boundary of your project.) or (Use the draw a line tool for linear projects)

Note: You can change/select the map from Streets to Satellite or Topo in the lower left corner of the map.

- 5. Click finished drawing then click confirm and select continue.
- 6. On the next page under Tasks (lower left), select Request an official species list. The pane will open. Select "request official species list" again.
- 7. A new page will open. Fill in the project information blanks with the project name, brief description, project type, lead agency, and contact information. Be sure to check the box to verify this is a legitimate project. Click on Submit Official Species List Request.
- 8. You will be sent an e-mail with instructions to complete the request by clicking on the link provided.
- 9. The site will open Official Species List Request Completed. Under the Maine Ecological Services Field Office address you will see "Official Species List Document". Click on that link and your document will open. Save and or print a copy and **include the entire report with your application**.

Note, you will receive a second e-mail with the same information. You can save the link in the event you need to return to the IPaC site for an updated list.

If a period of time has passed since your initial "Official Species List" identifier number was generated, you may choose to generate an "UPDATED SPECIES LIST". To do this, return to the IPaC homepage at http://ecos.fws.gov/ipac site. In the middle of the page, click the purple "Need an updated species list" link.

On the request an "Updated Official Species List" page, complete the information in the boxes provided. You will need the project specific official consultation code generated and stated on the original official list as well as the email address entered with the original submission.

Click "Request Updated Species List". Print, or save.

Appendix E: Contacts and Tribal Areas of Interest

1. Federal

U.S. Army Corps of Engineers Maine Project Office 675 Western Avenue #3 Manchester, ME 04351 (207) 623-8367 (phone); (207) 623-8206 (fax)

U.S. Environmental Protection Agency 5 Post Office Square Suite 100 (OEP05–2) Boston, MA 02109-3912 (617) 918-1589 (phone)

U.S. Fish and Wildlife Service Maine Field Office 17 Godfrey Drive, Suite 2 Orono, ME 04473 (207) 866-3344 (phone); (207) 866-3351 (fax) (Federal endangered species)

National Marine Fisheries Service Maine Field Office 17 Godfrey Drive Suite 1 Orono, ME 04473 (207) 866-7379 (phone); (207) 866-7342 (fax) (Federal endangered species) Federal Emergency Management Agency 99 High St.
Boston, MA 02110
(877) 336-2734 (phone)
(Flood Plain Management)

National Marine Fisheries Service 55 Great Republic Drive Gloucester, MA 01930 (978) 281-9102 (phone); (978) 281-9301 (fax) (Federal endangered species & EFH)

National Park Service North Atlantic Region 15 State Street Boston, MA 02109 (617) 223-5203 (phone) (Wild and Scenic Rivers)

Commander (dpb)
First Coast Guard District
One South Street - Battery Bldg
New York, NY 10004-1466
(212) 668-7021 (phone); (212) 668-7967 (fax)
(bridge permits)

2. State of Maine

a. <u>Department of Environmental Protection</u> (State permits & Water Quality Certifications)

Division of Land Resource Regulation Bureau of Land and Water Quality 17 State House Station Augusta, Maine 04333 (207) 287-7688 (phone)

Southern Maine Regional Office 312 Canco Road Portland, Maine 04103 (201) 822-6300 (phone) Eastern Maine Regional Office 106 Hogan Road Bangor, Maine 04401 (207) 941-4570 (phone)

Northern Maine Regional Office 1235 Central Drive - Skyway Park Presque Isle, Maine 04769 (207) 764-0477 (phone)

b. Department of Agriculture, Conservation and Forestry

i. <u>Maine Land Use Planning Commission (LUPC)</u> (State permits & Water Quality Certifications in the unorganized areas of the State)

Augusta Office 22 State House Station Augusta, Maine 04333-0022 (207) 287-2631 (phone); (207) 287-7439 (fax)

Greenville Regional Office 43 Lakeview Drive P.O. Box 1107 Greenville, Maine 04441 (207) 695-2466 (phone); (207) 695-2380 (fax)

Rangeley Regional Office 133 Fyfe Road PO Box 307 West Farmington, ME 04992 (207) 670-7493 (phone); (207) 287-7439 (fax) Downeast Regional Office 106 Hogan Rd, Suite 8 Dorothea Dix Complex Bangor, Maine 04401 (207) 941-4052 (phone); (207) 941-4222 (fax)

Ashland Regional Office 45 Radar Road Ashland, ME 04732-3600 (207) 435-7963 (phone); (207) 435-7184 (fax)

East Millinocket Regional Office 191 Main Street East Millinocket, ME 04430 (207) 746-2244 (phone); (207) 746-2243 (fax)

ii. Maine Coastal Program

Department of Agriculture, Conservation and Forestry Bureau of Resource Information and Land Use Planning 17 Elkins Lane {physical address} State House Station 93 Augusta, Maine 04333-0038 (207) 287-2801 (phone); (207) 287-2353 (fax) (CZM consistency determinations)

iii. Division of Parks and Public Lands

22 State House Station Augusta, Maine 04333 (207) 287-3061 (phone); (207) 287-6170 (fax) (submerged lands leases)

c. <u>Department of Marine Resources</u>

P.O. Box 8 West Boothbay Harbor, Maine 04575 (207) 633-9500 (phone); (207) 624-6024 (fax) (aquaculture leases)

3. Historic Properties

a. State Historic Preservation Officer (SHPO)

Mr. Kirk F. Mohney, Director

Maine Historic Preservation Commission (MHPC)

65 State House Station

Augusta, Maine 04333-0065

(207) 287-2132 (phone); (207) 287-2335 (fax)

Area of concern: The entire State of Maine

b. Tribal Historic Preservation Officers (THPOs)

Note: The area of concern for each tribe is the entire State of Maine

THPO & Environmental Planner

Houlton Band of Maliseet Indians

88 Bell Road

Littleton, Maine 04730

(207) 532-4273, x215 (phone)

(207) 532-6883 (fax)

envplanner@maliseets.com

ogs1@maliseets.com

THPO

Passamaquoddy Tribe of Indians

Pleasant Point Reservation

P.O. Box 343

Perry, Maine 04667

(207) 853-2600 (phone); (207) 853-6039 (fax)

soctomah@gmail.com

THPO

Passamaquoddy Tribe of Indians

Indian Township Reservation

P.O. Box 301

Princeton, Maine 04668

(207) 796-2301 (phone)

(207) 796-5256 (fax); soctomah@gmail.com

THPO

Aroostook Band of Micmacs

7 Northern Road

Presque Isle, Maine 04769

(207) 764-1972 (phone); (207) 764-7667 (fax)

jpictou@mimca-nsn.gov

THPO

Penobscot Nation

Cultural and Historic Preservation Dept.

12 Wabanaki Way

Indian Island, Maine 04468

(207) 817-7471 (phone)

chris.sockalexis@penobscotnation.org

4. Organizational Websites (Note – Subject to Change):

U.S. Army Corps of Engineers, N.E. District

U.S. Army Corps of Engineers, Headquarters

U.S. Environmental Protection Agency

National Marine Fisheries Service

U.S. Fish and Wildlife Service

National Park Service

Maine Department of Environmental Protection

Maine Department of Agriculture,

Conservation and Forestry

Maine Land Use Planning Commission

Maine Department of Marine Resources

State of Maine - Aquaculture Guidelines

www.nae.usace.army.mil/missions/regulatory.aspx

See above link>>Useful Links>>Federal Agency Links

www.epa.gov/owow/wetlands

www.nmfs.noaa.gov

www.fws.gov/mainefieldoffice

www.nps.gov/rivers/index.html

www.maine.gov/dep

www.maine.gov/acf/index.shtml

www.maine.gov/doc/lupc/commission/offices.shtml

www.maine.gov/dmr/index.htm

www.maine.gov/dmr/aquaculture/index.htm

Appendix F: Definitions

Definitions

Attendant Features: Occurring with or as a result of; accompanying.

Biodegradable: A material that decomposes into elements found in nature within a reasonably short period of time and will not leave a residue of plastic or a petroleum derivative in the environment after degradation. Examples of biodegradable materials include jute, sisal, cotton, straw, burlap, coconut husk fiber (coir) or excelsior. In contrast, degradable plastics break down into plastic fragments that remain in the environment after degradation.

Boating facilities: These provide, rent or sell mooring space, such as marinas, yacht clubs, boat yards, 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.

Brushing the Flats: The placement of tree boughs, wooden lath structure, or small-mesh fencing on mudflats, or any bottom disturbance (e.g., discing, plowing, raking, etc.), to enhance recruitment of shellfish

Buffer Zone: The buffer zone of an FNP is equal to three times the authorized depth of the FNP. **Construction mats:** Constructions, swamp and timber mats (herein referred to as "construction" mats") are generic terms used to describe structures that distribute equipment weight to prevent wetland damage while facilitating passage and providing work platforms for workers and equipment. They are comprised of sheets or mats made from a variety of materials in various sizes. A timber mat consists of large timbers bolted or cabled together. Corduroy roads, which are not considered to be construction mats, are cut trees and/or saplings with the crowns and branches removed, and the trunks lined up next to one another. Corduroy roads are typically installed as permanent structures. Like construction mats, they are considered as fill whether they are installed temporarily or permanently **Cumulative effects:** See "Direct, secondary, and cumulative effects."

Direct, secondary, and cumulative effects:

Direct Effects: The loss of aquatic ecosystem within the footprint of the discharge of dredged or fill material. Direct effects are caused by the action and occur at the same time and place. Secondary Effects: These are effects on an aquatic ecosystem that are associated with a discharge of dredged or fill materials, but do not result from the actual placement of the dredged or fill material. Information about secondary effects on aquatic ecosystems shall be considered prior to the time final Section 404 action is taken by permitting authorities. Some examples of secondary effects on an aquatic ecosystem are a) aquatic areas drained, flooded, fragmented, or mechanically cleared, b) fluctuating water levels in all impoundment and downstream associated with the operation of a dam, c) septic tank leaching and surface runoff from residential or commercial developments on fill, and d) leachate and runoff from a sanitary landfill located in waters of the U.S. See 40 CFR 230.11(h). Cumulative Effects: The changes in an aquatic ecosystem that are attributable to the collective effect of a number of individual 1) discharges of dredged or fill material, or 2) structures. Although the impact of a particular discharge may constitute a minor change in itself, the cumulative effect of numerous such piecemeal changes can result in a major impairment of the water resources and interfere with the productivity and water quality of existing aquatic ecosystems. See 40 CFR 230(g).

Dredging:

Maintenance Dredging: Includes areas and depths previously authorized by the Corps and dredged. The Corps may require proof of authorization. Maintenance dredging typically refers to the routine removal of accumulated sediment from channel beds to maintain the design depths of navigation channels, harbors, marinas, boat launches and port facilities. Routine maintenance dredging is conducted regularly for navigational purposes (typically at least once every ten years) and does not include any expansion of the previously dredged area or depth. The Corps may review a maintenance dredging activity as new dredging if sufficient time has elapsed to allow for the colonization of SAS, 1

Appendix F

shellfish, etc. The main characteristics of maintenance dredging projects are variable quantities of material; soft, uncompacted soil; contaminant content possible; thin layers of material; occurring in navigation channels and harbors; repetitive activity

New Dredging: Dredging of an area or to a depth that has never been authorized by the Corps or dredged.

Dredged material & discharge of dredged material: These are defined at 323.2(c) and (d). The term dredged material means material that is excavated or dredged from waters of the U.S.

Essential Fish Habitat (EFH): This is broadly defined to include those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity.

Fill material & discharge of fill material: These are defined at 323.2(e) and (f). The term fill material is defined as material placed in waters of the U.S. where the material has the effect of either replacing any portion of a water of the U.S. with dry land or changing the bottom elevation of any portion of a water of the U.S.

Federal anchorages, Federal channels and Federal turning basin: Refer to Appendix H for those in Maine

Federal navigation projects (FNPs): These areas are maintained by the Corps; authorized, constructed and maintained on the premise that they will be accessible and available to all on equal terms; and are comprised of Federal Anchorages, Federal Channels and Federal Turning Basins. The buffer zone is equal to three times the authorized depth of a FNP. More information on the following FNPs is provided at www.nae.usace.army.mil/missions/navigation.aspx Navigation Projects.

Flume: An open artificial water channel, in the form of a gravity chute, that leads water from a diversion dam or weir completely aside a natural flow. A flume can be used to measure the rate of flow

Frac out: During normal drilling operations, drilling fluid travels up the borehole into a pit. When the borehole becomes obstructed or the pressure becomes too great inside the borehole, the ground fractures and fluid escapes to the surface.

Independent utility: A test to determine what constitutes a single and complete non-linear project in the Corps regulatory program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

Individual Permit: A Department of the Army authorization that is issued following a case-by-case evaluation of a specific structure or work in accordance with the procedures of 33 CFR 322, or a specific project involving the proposed discharge(s) in accordance with the procedures of 33 CFR 323, and in accordance with the procedures of 33 CFR 325 and a determination that the proposed discharge is in the public interest pursuant to 33 CFR 320.

Maintenance: Regulations on maintenance are provided at 33 CFR 323.4. The following definitions are applicable:

Minor deviations: Deviations in the structure's configuration or filled area, including those due to changes in materials, construction techniques, or current construction codes or safety standards, which are necessary to make repair, rehabilitation, or replacement are permitted, provided the adverse environ-mental effects resulting from such repair, rehabilitation, or replacement are minimal.

Currently serviceable: Useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

Marina reconfiguration zone: A Corps-authorized area in which permittees may rearrange pile-supported structures and floats without additional authorizations. A reconfiguration zone does not grant exclusive privileges to an area or an increase in structure or float area.

Navigable waters of the U.S.: See Waters of the U.S. below.

Overall project: See "single and complete linear project" below.

Practicable: Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

Permanent impacts: Permanent impacts means waters of the U.S. that are permanently affected by filling, flooding, excavation, or drainage because of the regulated activity. Permanent impacts include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. Temporary impacts include waters of the U.S. that are temporarily filled, flooded, excavated, drained or mechanically cleared because of the regulated activity.

Pre-construction notification (PCN): A request submitted by the project proponent to the Corps for confirmation that a particular activity is authorized by this GP. The request may be a permit application, letter, or similar document that includes information about the proposed work and its anticipated environmental effects. Pre-construction notification may be required by the terms and conditions of these GPs. A PCN may be voluntarily submitted in cases where PCN is not required and the project proponent wants confirmation that the activity is authorized under this GP.

Secondary effects: See "Direct, secondary, and cumulative effects."

Single and complete linear project: A linear project is a project constructed for the purpose of getting people, goods, or services from a point of origin to a terminal point, which often involves multiple crossings of one or more waterbodies at separate and distant locations. The term "single and complete project" is defined as that portion of the total linear project proposed or accomplished by one owner/developer or partnership or other association of owners/developers that includes all crossings of a single water of the U.S. (i.e., a single waterbody) at a specific location. For linear projects crossing a single or multiple waterbodies several times at separate and distant locations, each crossing is considered a single and complete project for the purposes of this GP. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately.

The overall project, for purposes of this GP, includes all regulated activities that are reasonably related and necessary to accomplish the project purpose.

Single and complete non-linear project: For non-linear projects, the term "single and complete project" is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. For non-linear projects, the single and complete project must have independent utility (see definition).

Special aquatic sites: These include inland and saltmarsh wetlands, mud flats, vegetated shallows, sanctuaries and refuges, coral reefs, and riffle and pool complexes. These are defined at 40 CFR 230 Subpart E.

Stream channelization: The manipulation of a stream's course, condition, capacity, or location that causes more than minimal interruption of normal stream processes. A channelized stream remains a water of the United States.

Temporary impacts: See permanent impacts above.

Utility line: Any pipe or pipeline for the transportation of any gaseous, liquid, liquescent, or slurry substance, for any purpose, and any cable, line, or wire for the transmission for any purpose of electrical energy, telephone, and telegraph messages, and radio and television communication. The term 'utility line' does not include activities that drain a water of the U.S., such as drainage tile or French drains, but it does apply to pipes conveying drainage from another area.

Vegetated shallows: Permanently inundated areas that under normal circumstances support communities of rooted aquatic vegetation, such as eelgrass and widgeon grass (*Rupiamaritima*) in marine systems (doesn't include salt marsh) as well as a number of freshwater species in rivers and lakes. Note: These areas are also commonly referred to as submerged aquatic vegetation (SAV). **Vernal pools (VPs):** For the purposes of this GP, VPs are depressional wetland basins that typically go dry in most years and may contain inlets or outlets, typically of intermittent flow. Vernal pools range in both size and depth depending upon landscape position and parent material(s). Pools usually

support one or more of the following obligate indicator species: wood frog, spotted salamander, blue-spotted salamander, marbled salamander, Jefferson's salamander and fairy shrimp. However, they should preclude sustainable populations of predatory fish.

VP areas are:

- Depression (includes the VP depression up to the spring or fall high water mark, and includes any vegetation growing within the depression),
- Envelope (area within 100 feet of the VP depression's edge), and
- Critical terrestrial habitat (area within 100-750 feet of the VP depression's edge).

Note: See footnote to GC 23. The Corps may determine during the PCN review that a waterbody should not be designated as a VP based on available evidence.

Water diversions: Water diversions are activities such as bypass pumping (e.g., "dam and pump") or water withdrawals. Temporary flume pipes, culverts or cofferdams where normal flows are maintained within the stream boundary's confines aren't water diversions. "Normal flows" are defined as no change in flow from pre-project conditions.

Weir: A barrier across a river designed to alter the flow characteristics. In most cases, weirs take the form of a barrier, smaller than most conventional dams, across a river that causes water to pool behind the structure (not unlike a dam) and allows water to flow over the top. Weirs are commonly used to alter the flow regime of the river, prevent flooding, measure discharge and help render a river navigable.

Waters of the U.S. & Waters of the United States (U.S.): The term waters of the U.S. and all other terms relating to the geographic scope of jurisdiction are defined at 33 CFR 328. Also see Section 502(7) of the Federal CWA [33 USC 1352(7)]. Waters of the U.S. include jurisdictional wetlands. Not all waters and wetlands are jurisdictional. Contact the Corps with any questions regarding jurisdiction.

Navigable waters: Refer to 33 CFR 329. These waters include the following federally designated navigable waters in New England. This list represents only those waterbodies for which affirmative determinations have been made; absence from this list should not be taken as an indication that the waterbody is not navigable:

<u>ME</u>: All tidal waters; Kennebec River to Moosehead Lake; Penobscot River to the confluence of the East and West Branch at Medway, Maine; Lake Umbagog within the State of Maine.

Appendix G: Additional References

1. GC 2: Federal Jurisdictional Boundaries.

- (a) Corps Wetlands Delineation Manual, regional supplements, and Corps Wetland Delineation Data Sheets: www.nae.usace.army.mil/missions/regulatory and then "Wetlands and Jurisdictional Limits."
- (b) The USFWS publishes the 1988 National List of Plant Species that Occur in Wetlands (www.nwi.fws.gov).

The Natural Resources Conservation Service (NRCS) publishes the current hydric soil definition, criteria and lists: http://soils.usda.gov/use/hydric. For the Field Indicators for Identifying Hydric Soils in N.E., see www.neiwpcc.org/hydricsoils.asp.

2. GC 5: Single and Complete Project.

Single and complete project means the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. For example, if construction of a residential development affects several different areas of a headwater or isolated water, or several different headwaters or isolated waters, the cumulative total of all filled areas should be the basis for deciding whether or not the project will be covered by Category 1 or 2. The *Independent utility* test is used to determine what constitutes a single and complete project in the Corps regulatory program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

3. GC 8: Threatened and Endangered Species.

(a) The following NMFS site must be referenced to ensure that listed species or critical habitat are not present in the action area [GC 8(b)] or to provide information on federally-listed species or habitat [GC 8(e)]: www.nero.noaa.gov/prot_res/esp/ListE&Tspec.pdf. Contact the USFWS for information to check for the presence of listed species (see Appendix D for contact information & procedures).

(b) The Endangered Species Act Consultation Handbook – Procedures for Conducting Section 7 Consultations and Conferences, defines action area as "all areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action. [50 CFR 402.02]."

4. GC 42: Essential Fish Habitat.

As part of the GP screening process, the Corps may coordinate with NMFS in accordance with the 1996 amendments to the Magnuson-Stevens Fishery Conservation and Management Act to protect and conserve the habitat of marine, estuarine and anadromous finfish, mollusks, and crustaceans. This habitat is termed "Essential Fish Habitat (EFH)", and is broadly defined to include "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." There are EFH waters throughout inland and coastal waters in Maine. For additional information, see the EFH regulations 50 CFR 600 at www.nero.noaa.gov/hcd including the "Guide for EFH Descriptions" at www.nero.noaa.gov/hcd/list.htm. Additional information on the location of EFH can be obtained from NMFS (see Appendix D for contact information).

5. GC 4: Avoidance, Minimization and Compensatory Mitigation.

(a) See www.nae.usace.army.mil/missions/regulatory and then "Mitigation" to view the April 10, 2008 "Final Compensatory Mitigation Rule" (33 CFR 332) and related documents. The Q&A document states: "In order to reduce risk and uncertainty and help ensure that the required compensation is provided, the rule establishes a preference hierarchy for mitigation options. The most preferred option

is mitigation bank credits, which are usually in place before the activity is permitted. In-lieu fee program credits are second in the preference hierarchy, because they may involve larger, more ecologically valuable compensatory mitigation projects as compared to permittee-responsible mitigation. Permittee-responsible mitigation is the third option, with three possible circumstances: (1) conducted under a watershed approach, (2) on-site and in kind, and (3) off-site/out-of-kind.

(b) Compensatory mitigation may take the form of wetland preservation, restoration, enhancement, creation, and/or in lieu fee (ILF) for inclusion into the Natural Resources Mitigation Fund for projects in DEP and LURC territories. Avoidance of wetland impacts will reduce the ILF dollar total for applicants. The ILF compensation program was established to provide applicants with a flexible compensation option over and above traditional permittee responsible compensation projects. See the Maine ILF Agreement at www.nae.usace.army.mil/missions/regulatory, "Mitigation" and then "Maine," or www.nae.usace.army.mil/missions/regulatory, "Mitigation" and then "Maine," or www.maine.gov/dep/blwq/docstand/nrpa/ILF and NRCP/index.htm.

6. GCs 24, 15, and 43: Invasive Species.

- (a) Information on what are considered "invasive species" is provided in our "Compensatory Mitigation Guidance" document at www.nae.usace.army.mil/missions/regulatory under "Mitigation." The "Invasive Species" section has a reference to our "Invasive Species Control Plan (ISCP) Guidance" document, located at www.nae.usace.army.mil/missions/regulatory under "Invasive Species," which provides information on preparing an ISCP.
- **(b)** The June 2009 "Corps of Engineers Invasive Species Policy" is at www.nae.usace.army.mil/missions/regulatory under "Invasive Species" and provides policy, goals and objectives.

7. GC 44: Bank Stabilization.

This generally eliminates bodies of water where the reflected wave energy may interfere with or impact on harbors, marinas, or other developed shore areas. A revetment is sloped and is typically employed to absorb the direct impact of waves more effectively than a vertical seawall. It typically has a less adverse effect on the beach in front of it, abutting properties and wildlife. See the Corps Coastal Engineering Manual EM 1110-2-1100 at www.nae.usace.army.mil/missions/regulatory under "Useful Links and Documents" for design and construction guidance.

8. GC 45: Stream and Wetland Crossings.

- (a) Projects should be designed and constructed to ensure long-term success using the most recent manual located at www.nae.usace.army.mil/missions/regulatory under "Stream and River Continuity," currently "Stream Simulation: An Ecological Approach to Providing Passage for Aquatic Organisms at Road-Stream Crossings, by the U.S. Forest Service." Section 5.3.3 is of particular importance. Sections 7.5.2.3 Construction Methods and 8.2.11 Stream-Simulation Bed Material Placement both show important steps in the project construction.
- (b) For more information on High-Quality Stream Segments and their components see:
 - i. High-Quality Stream Segments are shown at www.maine.gov/dep/gis/datamaps.
 - ii. Class A Waters or Class AA Waters:

www.mainelegislature.org/legis/statutes/38/title38sec465.html, and www.mainelegislature.org/legis/statutes/38/title38sec467.html.

- iii. Outstanding river segments www.mainelegislature.org/legis/statutes/38/title38sec480-P.html.
- (c) The Massachusetts Dam Removal and the Wetland Regulations offer guidance to evaluate the positive and negative impacts of culvert replacement, including the loss of upstream wetlands, which may be offset by the overall benefits of the river restoration. See www.nae.usace.army.mil/missions/regulatory and then "Stream and River Continuity."

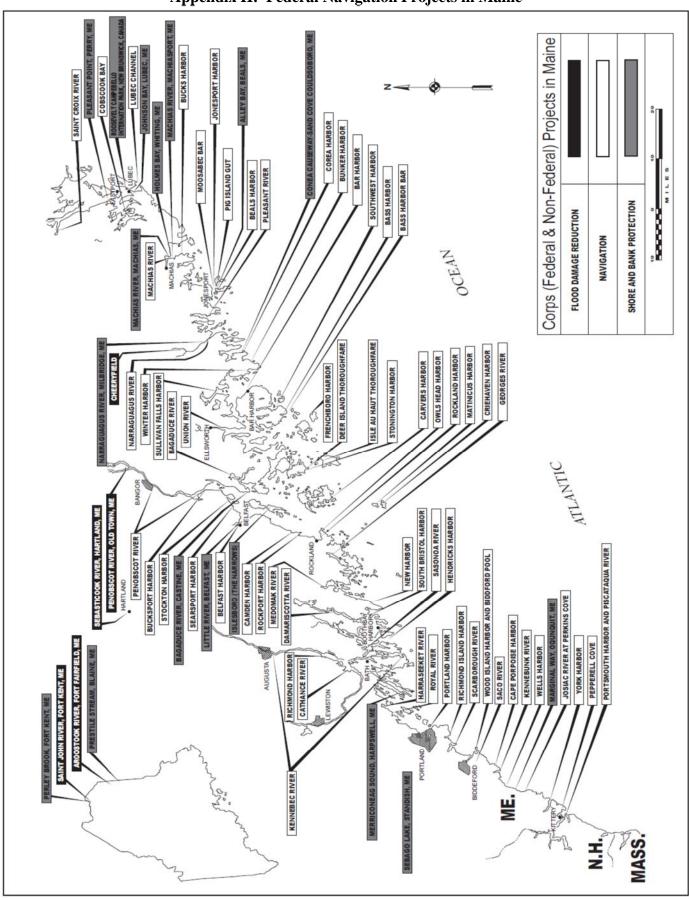
- (d) The ME DOT's document "Waterway and Wildlife Crossing Policy and Design Guide for Aquatic Organism, Wildlife Habitat, and Hydrologic Connectivity," 3rd Edition, July 2008, may be used as guidance to evaluate impacts to aquatic, wildlife and surface water resources when designing, constructing, repairing and maintaining stream crossings. Note: Adherence to this DOT document does not ensure compliance with this GP. Projects must comply with the requirements of this GP including GC 45 and the Corps General Stream Crossing Standards contained therein.

 www.maine.gov/mdot/environmental-office-homepage/fishpassage/3rd%20edition%20-%20merged%20final%20version%207-01-08a1.pdf.
- **(e)** GC 45(f): The Skidder Bridge Fact Sheet at www.nae.usace.army.mil/missions/regulatory under "Stream and River Continuity" may be a useful temporary span construction method.
- **9. GC 45: Wetland Crossings.** The Maine DEP's crossing standards are at 06-096 DEP, Chapter 305: Permits by Rule, 9 & 10) Crossings (utility lines, pipes and cables). www.maine.gov/dep/blwq/rules/NRPA/2009/305/305 effective 2009.pdf

10. GC 23: Protection of Vernal Pools.

- (a) The state's Significant Wildlife Habitat rules (<u>Chapter 335</u>, Section 9(C) "Habitat management standards for significant vernal pool habitat") are located at www.maine.gov/dep/blwq/docstand/nrpapage.htm#rule under "Rules."
- **(b)** The following documents provide conservation recommendations:
- i. Best Development Practices: Conserving pool-breeding amphibians in residential and commercial development in the northeastern U.S., Calhoun and Klemens, 2002. Chapter III, Management Goals and Recommendations, Pages 15 26, is particularly relevant. (Available for purchase at www.maineaudubon.org/resource/index.shtml and on Corps website*.)
- **ii.** Science and Conservation of Vernal Pools in Northeastern North America, Calhoun and deMaynadier, 2008. Chapter 12, Conservation Recommendations section, Page 241, is particularly relevant. (Available for purchase via the internet. Chapter 12 is available on Corps website*.) * www.nae.usace.army.mil/reg under "Vernal Pools."
- (c) Cape Cod Curbing: For smaller roads and driveways, the most important design feature to consider is curbing. Granite curbs and some traditional curbing can act as a barrier to amphibian and hatchling turtle movements. Large numbers of salamanders have been intercepted in their migrations by curbs and catch basins. Use of Cape Cod curbs rather than traditional curbing may be one solution. Alternatively, where storm water management systems require more traditional curbing, it may be possible to design in escape ramps on either side of each catch basin. Cape Cod curbing is shown on Page 35 of the document cited in 10.b.i above. Bituminous material is not required; other materials such as granite are acceptable.
- (d) The VP Directional Buffer Guidance document is located at www.nae.usace.army.mil/missions/regulatory under: 1) "State General Permits" and then "Maine," and 2) "Vernal Pools."
- **11. GC 29: Maintenance.** River restoration projects that are designed to accommodate the natural dynamic tendencies of the fluvial system are maintained in accordance with the project's design objectives (Category 1) or the Corps authorization letter (Category 2). These projects are generally designed to support and implement channel assessment and management practices that recognize a stream's natural dynamic tendencies.

Appendix H: Federal Navigation Projects in Maine



Appendix H 1

APPENDIX C

MS4 Stormwater Awareness Plan and MS4 Targeted BMP Adoption Plan

Maine Turnpike Authority MS4 Stormwater Awareness Plan

Developing and implementing a Best Management Plan (BMP) Adoption Plan is a requirement of the Maine Department of Environmental Protection's (DEP's) General Permit for the Discharge of Stormwater from Maine Department of Transportation (MaineDOT) and Maine Turnpike Authority (MTA) Municipal Separate Storm Sewer Systems (MS4s). Since MTA is subject to this MS4 permit and its six Minimum Control Measures (MCMs), Part IV(H)(1)(a)(ii) requires MTA to conduct Public Education and Outreach (MCM #1) efforts that encourage "employees and contractors to utilize BMPs that minimize stormwater pollution."

1.0 PERMIT LANGUAGE

Part IV(H)(1) of the MS4 Permit establishes three goals for MCM # 1 - Public Education and Outreach on Stormwater Impacts. These include the following:

- 1. To raise awareness that polluted stormwater runoff is one of the most significant sources of water quality problems for Maine's waters;
- 2. To motivate staff and contractors to use Best Management Practices (BMPs) which reduce polluted stormwater runoff; and
- 3. To reduce polluted stormwater runoff as a result of increased awareness and utilization of BMPs.

In addition to continuing outreach efforts from the previous MS4 Permit (e.g., 5-year cycle)¹, MTA must satisfy these three goals by encouraging employees and contractors to use BMPs that minimize stormwater pollution as part of this Targeted BMP Adoption Plan. The progress and effectiveness of the Plan and associated efforts must then be evaluated and included in each annual report submitted to Maine DEP in accordance with $Part\ IV(J)$ of the MS4 Permit. As part of this evaluation, MTA must include an assessment of process indicators and impact indicators to evaluate efforts in meeting these goals. In the fifth annual report, the BMP Adoption Plan shall be reviewed fully and include analysis of the process and impact indicators.

2.0 COVERAGE AREA

This plan has been developed for implementation by MTA to meet MS4 Permit requirements for Urbanized Areas (UAs) within MTA's right-of-way (ROW).

Process indicators are related to the execution of the program, such as (1) percent or number of employees who attend a training session; or (2) completion of a particular action item (e.g., distributing posters to employee work place and/or contractor job site).

Impact indicators are related to the achievement of the goals and objectives of the program, such as (1) observable/measurable effects on behavior; or (2) percent or number of employees to describe sources of storm water pollution, proper spill response, or maintenance of a BMP.

¹ Public education and outreach efforts continued from the previous MS4 permit cycle include (but are not limited to) conducting annual stormwater pollution prevention/spill prevention control and countermeasures (SPCC) training to MTA maintenance and engineering employees, as well as other Measurable Goals that can be found in MTA's Stormwater Program Management Plan (SPMP) dated December 2013.

3.0 OBJECTIVE

The objective of this Stormwater Awareness Plan is to raise awareness among MTA employees and contractors regarding stormwater issues. For example, stormwater runoff is one of the most significant sources of water quality problems for Maine's waters.

The goal of the Stormwater Awareness Plan is to provide information relative to stormwater impacts in an effort to raise awareness of MTA employees. For example, 100% of Highway Maintenance employees and Engineering Inspectors will attend training sessions at which stormwater issues and impacts will be addressed. Additionally, MTA will also work to raise awareness among MTA employees in other departments, such as Fare Collections by providing abbreviated Stormwater/Spill Prevention and Response training to supervisors and managers who will in turn inform additional employees regarding stormwater issues relative to MTA operations.

The goal of this Plan is to also raise awareness of contractors by providing this Plan, as well as the Targeted BMP Adoption Plan (which is designed to motivate employees and contractors to use BMPs to reduce polluted stormwater runoff), prior to starting work on MTA projects.

4.0 MESSAGE

The message MTA will strive to impart on employees and contractors will relate to the potential impacts their activities may have on stormwater runoff and water quality in Maine. The message statement is:

"The effect stormwater runoff has on the water quality of Maine waters is impacted by the level of effort put into the construction, operation, and maintenance of MTA's stormwater infrastructure. Polluted water entering the storm drain system and discharged untreated directly to waterbodies is used for drinking, fishing, and swimming, which impacts everyone in Maine."

In addition to the Stormwater Awareness Plan message, the target audience will be informed of authorized non-stormwater discharges allowed by the permit provided they do not contribute to a violation of water quality standards, as determined by the DEP. These include the following:

- Landscape irrigation
- · Diverted stream flows
- · Rising ground waters
- Uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20))
- Uncontaminated pumped ground water
- Uncontaminated flows from foundation drains
- Air conditioning and compressor condensate
- Irrigation water
- Flows from uncontaminated springs
- Uncontaminated water from crawl space pumps
- Uncontaminated flows from footing drains
- Lawn watering runoff
- Flows from riparian habitats and wetlands
- Residual street wash water (where spills/leaks of toxic or hazardous materials have not occurred, unless all spilled material has been removed and detergents are not used)
- · Hydrant flushing and fire fighting activity runoff
- Water line flushing and discharges from potable water sources

4.1 OUTREACH TOOL(S) AND DISTRIBUTION

This Stormwater Awareness Plan and message will be provided to each MTA employee at annual training sessions and also to each contractor before commencement of work, in addition to the Targeted BMP Adoption Plan.

MTA has established or will rely on a number of outreach tools including the following:

- Existing stormwater training programs
 - For MTA employees, the internal training program will be evaluated annually (and updated, as needed) to include storm water topics in order to assess process and impact indicators; and
 - o For contractors, MTA continues to require an On-Site Responsible Party (OSRP) certified by DEP's NPS Training Program to be knowledgeable of stormwater, specifically erosion prevention, sedimentation control and other potential impacts to water quality in Maine.
- Stormwater information packages to raise awareness and encourage utilization of targeted BMPs
 - o For MTA employees, information will be provided during annual and supplemental training sessions. Informational packages may also be provided via MTA's newsletters and memos posted to employee bulletin boards, as well as through employee meetings, including quarterly Environmental Health & Safety Committee meetings.
 - For contractors, MTA will continue to include contractual requirements provided in the standard contract language that establishes the anticipated expectations for performance and payment. Stormwater information will be discussed or provided to contractors prior to starting work (e.g., at Pre-Construction meetings).

4.2 TIMELINE AND IMPLEMENTATION SCHEDULE

The timeline and implementation schedule is determined by:

- The training schedule established each year for MTA employees; and
- The solicitation and project award notices each year.

MTA has established a representative training schedule for each year and is similar to the table below:

| Date | Training Type | |
|------------|--|--|
| April | Erosion and Sediment Control (ESC) and Stormwater Pollution Prevention for highway | |
| | maintenance Supervisors and Foremen | |
| May - June | Spill Prevention Control and Countermeasures Plan (SPCC), Stormwater and Erosion | |
| | and Sediment Control (ESC) for MTA maintenance and engineering employees. | |
| October | Spill Prevention Control and Countermeasures Plan (SPCC) and Stormwater for Fare | |
| | Collections | |

The training sessions are designed to meet the goal of increasing awareness, as well as encouraging utilization of targeted BMPs to reduce stormwater runoff and potential impacts. In addition to these training sessions, there may be supplemental training sessions as needed and/or new information posters about stormwater BMPs posted at MTA facilities. Newsletters including stormwater information may also be sent each year to employees.

For contractors, MTA's requirement to have an OSRP certified by DEP's NPS Program ensures that the contractor is aware of stormwater related issues. In addition, MTA distributes this Stormwater Awareness Plan to contractors.

4.3 RESPONSIBLE PARTY

The primary responsible party at MTA is the Environmental Services Coordinator, John Branscom. The Environmental Services Coordinator may also rely on the following:

- MTA Supervisors, Foremen, Inspectors and/or other personnel to inform MTA employees and contractors of the targeted BMPs to be utilized;
- An environmental consulting firm, such as GZA GeoEnvironmental, Inc, to ensure MTA's employees are trained as defined by the Plan; and
- A design engineering firm, such as HNTB, who administer construction contracts, to ensure the Plan is properly implemented by the contractors.

4.4 EVALUATION PROTOCOL

MTA training is documented with attendance sign-in sheets, exam scores, in-class workshops and evaluation forms. A training database is maintained with information gathered from employees during each training session.

<u>Process Indicators:</u> Assessment of the program execution will be included in the annual report. The following topics will be reported for MTA employees:

- 1. Number of employees that attended training; and
- 2. Average exam scores for attendees.

<u>Impact Indicators:</u> Gauging the achievement of goals and objectives of the program will be included in the annual report. These will be addressed by the following behavioral change questions:

- 1. Number or percentage of employees to identify the goals of MCM #1 correctly;
- 2. Number or percentage of employees to identify source(s) of storm water pollution;
- 3. Number or percentage of employees to identify and differentiate between structural and non-structural BMPs; and
- 4. Number or percentage of employees to demonstrate an applied knowledge of BMP-specific information.

Process and impact indicators for contractors will be tracked by documenting the pre-construction meetings when this Plan and the Targeted BMP Adoption Plan are provided to each contractor and the contractor, in turn, provides MTA with the certification for their OSRP for the project.

4.5 PLAN MODIFICATION

This Stormwater Awareness Plan may require modification if evaluation data shows that efforts are not effective. Should modifications be needed, the plan will be revised or a new plan will be developed.

| I have read and accept the policies outlined in this Storr Permit. | nwate Awareness Plan as required by MTA's MS4 |
|---|---|
| Contractor Signature of Acknowledgement | Date |
| Printed Name | Project Number |
| | |

Maine Turnpike Authority MS4 Targeted BMP Adoption Plan

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- 3. To reduce polluted stormwater runoff as a result of increased awareness and utilization of BMPs.

In addition to continuing outreach efforts from the previous MS4 Permit (e.g., 5-year cycle)¹, MTA must satisfy these three goals by encouraging employees and contractors to use BMPs that minimize stormwater pollution as part of this Targeted BMP Adoption Plan. The progress and effectiveness of the Plan and associated efforts must then be evaluated and included in each annual report submitted to Maine DEP in accordance with $Part\ IV(J)$ of the MS4 Permit. As part of this evaluation, MTA must include an assessment of process indicators and impact indicators to evaluate efforts in meeting these goals. In the fifth annual report, the BMP Adoption Plan shall be reviewed fully and include analysis of the process and impact indicators.

2.0 COVERAGE AREA

This plan has been developed for implementation by MTA to meet MS4 Permit requirements for Urbanized Areas (UAs) within MTA's right-of-way (ROW).

Process indicators are related to the execution of the program, such as (1) percent or number of employees who attend a training session; or (2) completion of a particular action item (e.g., distributing posters to employee work place and/or contractor job site).

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¹ Public education and outreach efforts continued from the previous MS4 permit cycle include (but are not limited to) conducting annual stormwater pollution prevention/spill prevention control and countermeasures (SPCC) training to MTA maintenance and engineering employees, as well as other Measurable Goals that can be found in MTA's Stormwater Program Management Plan (SPMP) dated December 2013.

3.0 OBJECTIVE

The objective of this Targeted BMP Adoption Plan is to educate MTA's employees and contractors to use BMPs which reduce polluted stormwater runoff within UA.

The goal of the BMP Adoption Plan is to target BMPs in the MaineDOT BMP Manual to be utilized by employees and contractors that minimize stormwater pollution during construction activities, such as:

- (1) Installing silt fence prior to land disturbance; and
- (2) Ensuring that hay mulch is applied to soil at the end of each work day.

For MTA employees, focus will also be given to targeting BMPs relevant to transportation-related maintenance and good housekeeping activities, such as:

- (1) Regular sweeping of the mainline and peripheral facilities;
- (2) Annual catch basin clean-outs and sediment removal;
- (3) As needed ditch cleaning and repair;
- (4) On-going culvert maintenance and litter removal.

Contractors are also encouraged to utilize BMPs in accordance with standard construction contract language (e.g., Special Provision 656), as well as the MaineDOT BMP Manual.

4.0 MESSAGE

The message MTA will strive to impart on employees and contractors will relate to the impacts their activities have on stormwater runoff and the importance of BMPs. The message statement is:

"Implementing appropriate BMPs, as described in MaineDOT's Stormwater BMPs Manual, to all MTA related activities will help to minimize stormwater pollutants introduced to Maine's waterbodies."

4.1 OUTREACH TOOL(S) AND DISTRIBUTION

Targeted BMPs are included in the MaineDOT BMP Manual that is available at each MTA maintenance facility and referenced in standard contract language for contractors.

MTA has established or will rely on a number of outreach tools including the following:

- Existing stormwater training programs
 - For MTA employees, the internal training program will be evaluated annually (and updated, as needed) to include storm water topics in order to assess process and impact indicators; and
 - For contractors, MTA continues to require an On-Site Responsible Party (OSRP) certified by DEP's NPS Training Program to be knowledgeable in erosion prevention and sedimentation control.
- Existing standard contract language
 - o Requires contractors to maintain a certified OSRP on-site who has authority to implement BMPs appropriately; and
 - O Specifies that contractors must utilize MaineDOT's BMP Manual, as well as other BMPs, to ensure construction site runoff is minimized.
- Stormwater information packages to raise awareness and encourage utilization of targeted BMPs
 - o For MTA employees, information will be provided during annual and supplemental training sessions. Informational packages may also be provided via MTA's newsletters

- and memos posted to employee bulletin boards, as well as through employee meetings, including quarterly Environmental Health & Safety Committee meetings.
- o For contractors, MTA will continue to include contractual requirements provided in the standard contract language that establishes the anticipated expectations for performance and payment. This Target BMP Adoption Plan will also be provided to contractors prior to starting work (e.g., at Pre-Construction meetings).

4.2 TIMELINE AND IMPLEMENTATION SCHEDULE

The timeline and implementation schedule is determined by:

- The training schedule established each year for MTA employees; and
- The solicitation and project award notices each year.

MTA has established a representative training schedule for each year and is similar to the table below.

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| _ | and Sediment Control (ESC) for MTA maintenance and engineering employees. | |

In addition to the training sessions above, there may be supplemental training sessions as needed and/or new information posters about stormwater BMPs posted at MTA facilities. Newsletters including stormwater information may also be sent each year to employees.

For contractors, targeted BMPs are already being implemented in accordance with contract language and the MaineDOT BMP Manual. In addition, MTA distributes this Targeted BMP Adoption Plan to contractors.

4.3 RESPONSIBLE PARTY

The primary responsible party at MTA is the Environmental Services Coordinator, John Branscom. The Environmental Services Coordinator may also rely on the following:

- MTA Supervisors, Foremen, Inspectors and/or other personnel to inform MTA employees and contractors of the targeted BMPs to be utilized;
- An environmental consulting firm, such as GZA GeoEnvironmental, Inc, to ensure MTA's employees are trained as defined by the Plan; and
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5.0 EVALUATION PROTOCOL

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- 3. Number or percentage of employees to identify and differentiate between structural and non-structural BMPs; and
- 4. Number or percentage of employees to demonstrate an applied knowledge of BMP-specific information.

Process and impact indicators for contractors will be tracked and evaluated based on daily and/or weekly inspections conducted on-site.

6.0 PLAN MODIFICATION

This Targeted BMP Adoption Plan may require modification if evaluation data shows that efforts are not effective. Should modifications be needed, the plan will be revised or a new plan will be developed.

| I have read and accept the policies outlined in this Stormwater Awareness Plan as required by MTA's Permit. | | | | |
|---|----------------|--|--|--|
| Contractor Signature of Acknowledgement | Date | | | |
| Printed Name | Project Number | | | |