



The State of New Hampshire
Department of Environmental Services



Robert R. Scott, Commissioner

December 5, 2019

His Excellency, Governor Christopher T. Sununu
and the Honorable Council
State House
Concord, NH 03301

REQUESTED ACTION

Authorize the New Hampshire Department of Environmental Services (NHDES) to enter into a contract with Weston & Sampson Engineers, Inc. (VC #161546-B001), Portsmouth, NH, in the amount of \$30,000 to develop a vulnerability assessment and conceptual options for resiliency at the Town of Seabrook wastewater treatment facility, effective upon Governor and Council approval through June 30, 2021. 100% Federal Funds.

Funding is available in the account as follows:

	<u>FY 2020</u>
03-44-44-442010-3642-102-500731	\$30,000
Dept. Environmental Services, Coastal Zone Management, Contracts for Program Services	

EXPLANATION

The New Hampshire Coastal Program (NHCP) issued a Request for Proposals (RFP) on May 9, 2019 for municipal projects that plan for resilience to coastal hazards and build sustained capacity to implement resilience plans. The projects that were eligible to receive funding from NHCP's competitive Coastal Resilience Municipal Grant funding opportunity included either the development of a municipal master plan chapter which was focused on coastal hazards and adaptation, or they included the creation of a sustained municipal initiative to implement an existing coastal hazards and adaptation master plan chapter. Five eligible proposals were received and ranked according to selection criteria and selection committee discussion. All five proposals were selected to receive funding, including the proposal submitted by Weston & Sampson Engineers Inc. in partnership with the Town of Seabrook to conduct a wastewater treatment facility vulnerability assessment and develop conceptual options for increasing resiliency. Attachment B includes the scoring matrix and a list of the staff who participated in proposal review, along with their titles and levels of experience.

The goal of this project is to better understand the specific impacts of sea level rise and storm frequency to the Seabrook Wastewater Treatment Facility (WWTF), identify potential climate adaptation solutions for increasing resilience of the WWTF, and develop and implement an equitable public engagement strategy that is both project specific and broad to meet the actions outlined in the town of Seabrook Coastal Hazards and Adaptation Master Plan Chapter.

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Total project costs are budgeted at \$45,000. NHDES will provide \$30,000 of the project costs through this Federal grant. Weston & Sampson Engineers Inc. will provide \$15,000 in matching funds. A budget breakdown is provided in Attachment A. In the event that Federal funds become no longer available, General funds will not be requested to support the project.

The agreement has been approved by the Office of the Attorney General as to form, execution, and content.

We respectfully request your approval of this item.



Robert R. Scott, Commissioner

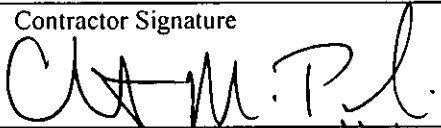
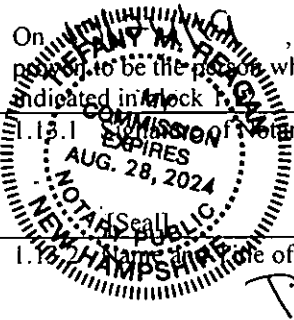

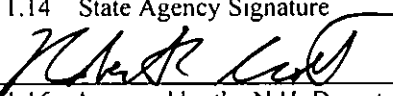
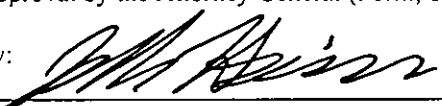
Notice: This agreement and all of its attachments shall become public upon submission to Governor and Executive Council for approval. Any information that is private, confidential or proprietary must be clearly identified to the agency and agreed to in writing prior to signing the contract.

AGREEMENT

The State of New Hampshire and the Contractor hereby mutually agree as follows:

GENERAL PROVISIONS

I. IDENTIFICATION.

1.1 State Agency Name New Hampshire Department of Environmental Services		1.2 State Agency Address 29 Hazen Drive Concord, NH 03302-0095	
1.3 Contractor Name Weston & Sampson Engineers, Inc.		1.4 Contractor Address 100 International Drive, Suite 152 Portsmouth, NH 03801	
1.5 Contractor Phone Number (603) 431-3937	1.6 Account Number 03-44-44-442010-3642-102-500731	1.7 Completion Date June 30, 2021	1.8 Price Limitation \$30,000.00
1.9 Contracting Officer for State Agency Kirsten Howard, Coastal Program		1.10 State Agency Telephone Number 603-559-0020	
1.11 Contractor Signature 		1.12 Name and Title of Contractor Signatory Christopher M. Perkins, PE, Vice President	
1.13 Acknowledgement: State of <u>NH</u> , County of <u>Rockingham</u> On _____, before the undersigned officer, personally appeared the person identified in block 1.12, or satisfactorily proved to be the person whose name is signed in block 1.11, and acknowledged that s/he executed this document in the capacity indicated in block 1.13.1			
1.13.1 Notary Public or Justice of the Peace  			
1.13.2 Name of Notary or Justice of the Peace TIFFANY REAGAN SUPERVISOR			
1.14 State Agency Signature 		1.15 Name and Title of State Agency Signatory Robert R. Scott, Commissioner, NHDES	
1.16 Approval by the N.H. Department of Administration, Division of Personnel (if applicable) By: _____ Director, On: _____			
1.17 Approval by the Attorney General (Form, Substance and Execution) (if applicable) By:  On: 12/11/2019			
1.18 Approval by the Governor and Executive Council (if applicable) By: _____ On: _____			

2. EMPLOYMENT OF CONTRACTOR/SERVICES TO BE PERFORMED. The State of New Hampshire, acting through the agency identified in block 1.1 ("State"), engages contractor identified in block 1.3 ("Contractor") to perform, and the Contractor shall perform, the work or sale of goods, or both, identified and more particularly described in the attached EXHIBIT A which is incorporated herein by reference ("Services").

3. EFFECTIVE DATE/COMPLETION OF SERVICES.

3.1 Notwithstanding any provision of this Agreement to the contrary, and subject to the approval of the Governor and Executive Council of the State of New Hampshire, if applicable, this Agreement, and all obligations of the parties hereunder, shall become effective on the date the Governor and Executive Council approve this Agreement as indicated in block 1.18, unless no such approval is required, in which case the Agreement shall become effective on the date the Agreement is signed by the State Agency as shown in block 1.14 ("Effective Date").

3.2 If the Contractor commences the Services prior to the Effective Date, all Services performed by the Contractor prior to the Effective Date shall be performed at the sole risk of the Contractor, and in the event that this Agreement does not become effective, the State shall have no liability to the Contractor, including without limitation, any obligation to pay the Contractor for any costs incurred or Services performed. Contractor must complete all Services by the Completion Date specified in block 1.7.

4. CONDITIONAL NATURE OF AGREEMENT.

Notwithstanding any provision of this Agreement to the contrary, all obligations of the State hereunder, including, without limitation, the continuance of payments hereunder, are contingent upon the availability and continued appropriation of funds, and in no event shall the State be liable for any payments hereunder in excess of such available appropriated funds. In the event of a reduction or termination of appropriated funds, the State shall have the right to withhold payment until such funds become available, if ever, and shall have the right to terminate this Agreement immediately upon giving the Contractor notice of such termination. The State shall not be required to transfer funds from any other account to the Account identified in block 1.6 in the event funds in that Account are reduced or unavailable.

5. CONTRACT PRICE/PRICE LIMITATION/PAYMENT.

5.1 The contract price, method of payment, and terms of payment are identified and more particularly described in EXHIBIT B which is incorporated herein by reference.

5.2 The payment by the State of the contract price shall be the only and the complete reimbursement to the Contractor for all expenses, of whatever nature incurred by the Contractor in the performance hereof, and shall be the only and the complete compensation to the Contractor for the Services. The State shall have no liability to the Contractor other than the contract price.

5.3 The State reserves the right to offset from any amounts otherwise payable to the Contractor under this Agreement those liquidated amounts required or permitted by N.H. RSA 80:7 through RSA 80:7-c or any other provision of law.

5.4 Notwithstanding any provision in this Agreement to the contrary, and notwithstanding unexpected circumstances, in no event shall the total of all payments authorized, or actually made hereunder, exceed the Price Limitation set forth in block 1.8.

6. COMPLIANCE BY CONTRACTOR WITH LAWS AND REGULATIONS/ EQUAL EMPLOYMENT OPPORTUNITY.

6.1 In connection with the performance of the Services, the Contractor shall comply with all statutes, laws, regulations, and orders of federal, state, county or municipal authorities which impose any obligation or duty upon the Contractor, including, but not limited to, civil rights and equal opportunity laws. This may include the requirement to utilize auxiliary aids and services to ensure that persons with communication disabilities, including vision, hearing and speech, can communicate with, receive information from, and convey information to the Contractor. In addition, the Contractor shall comply with all applicable copyright laws.

6.2 During the term of this Agreement, the Contractor shall not discriminate against employees or applicants for employment because of race, color, religion, creed, age, sex, handicap, sexual orientation, or national origin and will take affirmative action to prevent such discrimination.

6.3 If this Agreement is funded in any part by monies of the United States, the Contractor shall comply with all the provisions of Executive Order No. 11246 ("Equal Employment Opportunity"), as supplemented by the regulations of the United States Department of Labor (41 C.F.R. Part 60), and with any rules, regulations and guidelines as the State of New Hampshire or the United States issue to implement these regulations. The Contractor further agrees to permit the State or United States access to any of the Contractor's books, records and accounts for the purpose of ascertaining compliance with all rules, regulations and orders, and the covenants, terms and conditions of this Agreement.

7. PERSONNEL.

7.1 The Contractor shall at its own expense provide all personnel necessary to perform the Services. The Contractor warrants that all personnel engaged in the Services shall be qualified to perform the Services, and shall be properly licensed and otherwise authorized to do so under all applicable laws.

7.2 Unless otherwise authorized in writing, during the term of this Agreement, and for a period of six (6) months after the Completion Date in block 1.7, the Contractor shall not hire, and shall not permit any subcontractor or other person, firm or corporation with whom it is engaged in a combined effort to perform the Services to hire, any person who is a State employee or official, who is materially involved in the procurement, administration or performance of this

Contractor Initials CMP
Date 10/24/19

Agreement. This provision shall survive termination of this Agreement.

7.3 The Contracting Officer specified in block 1.9, or his or her successor, shall be the State's representative. In the event of any dispute concerning the interpretation of this Agreement, the Contracting Officer's decision shall be final for the State.

8. EVENT OF DEFAULT/REMEDIES.

8.1 Any one or more of the following acts or omissions of the Contractor shall constitute an event of default hereunder ("Event of Default"):

8.1.1 failure to perform the Services satisfactorily or on schedule;

8.1.2 failure to submit any report required hereunder; and/or

8.1.3 failure to perform any other covenant, term or condition of this Agreement.

8.2 Upon the occurrence of any Event of Default, the State may take any one, or more, or all, of the following actions:

8.2.1 give the Contractor a written notice specifying the Event of Default and requiring it to be remedied within, in the absence of a greater or lesser specification of time, thirty (30) days from the date of the notice; and if the Event of Default is not timely remedied, terminate this Agreement, effective two (2) days after giving the Contractor notice of termination;

8.2.2 give the Contractor a written notice specifying the Event of Default and suspending all payments to be made under this Agreement and ordering that the portion of the contract price which would otherwise accrue to the Contractor during the period from the date of such notice until such time as the State determines that the Contractor has cured the Event of Default shall never be paid to the Contractor;

8.2.3 set off against any other obligations the State may owe to the Contractor any damages the State suffers by reason of any Event of Default; and/or

8.2.4 treat the Agreement as breached and pursue any of its remedies at law or in equity, or both.

9. DATA/ACCESS/CONFIDENTIALITY/PRESERVATION.

9.1 As used in this Agreement, the word "data" shall mean all information and things developed or obtained during the performance of, or acquired or developed by reason of, this Agreement, including, but not limited to, all studies, reports, files, formulae, surveys, maps, charts, sound recordings, video recordings, pictorial reproductions, drawings, analyses, graphic representations, computer programs, computer printouts, notes, letters, memoranda, papers, and documents, all whether finished or unfinished.

9.2 All data and any property which has been received from the State or purchased with funds provided for that purpose under this Agreement, shall be the property of the State, and shall be returned to the State upon demand or upon termination of this Agreement for any reason.

9.3 Confidentiality of data shall be governed by N.H. RSA chapter 91-A or other existing law. Disclosure of data requires prior written approval of the State.

10. **TERMINATION.** In the event of an early termination of this Agreement for any reason other than the completion of the Services, the Contractor shall deliver to the Contracting Officer, not later than fifteen (15) days after the date of termination, a report ("Termination Report") describing in detail all Services performed, and the contract price earned, to and including the date of termination. The form, subject matter, content, and number of copies of the Termination Report shall be identical to those of any Final Report described in the attached EXHIBIT A.

11. **CONTRACTOR'S RELATION TO THE STATE.** In the performance of this Agreement the Contractor is in all respects an independent contractor, and is neither an agent nor an employee of the State. Neither the Contractor nor any of its officers, employees, agents or members shall have authority to bind the State or receive any benefits, workers' compensation or other emoluments provided by the State to its employees.

12. **ASSIGNMENT/DELEGATION/SUBCONTRACTS.** The Contractor shall not assign, or otherwise transfer any interest in this Agreement without the prior written notice and consent of the State. None of the Services shall be subcontracted by the Contractor without the prior written notice and consent of the State.

13. **INDEMNIFICATION.** The Contractor shall defend, indemnify and hold harmless the State, its officers and employees, from and against any and all losses suffered by the State, its officers and employees, and any and all claims, liabilities or penalties asserted against the State, its officers and employees, by or on behalf of any person, on account of, based or resulting from, arising out of (or which may be claimed to arise out of) the acts or omissions of the Contractor. Notwithstanding the foregoing, nothing herein contained shall be deemed to constitute a waiver of the sovereign immunity of the State, which immunity is hereby reserved to the State. This covenant in paragraph 13 shall survive the termination of this Agreement.

14. INSURANCE.

14.1 The Contractor shall, at its sole expense, obtain and maintain in force, and shall require any subcontractor or assignee to obtain and maintain in force, the following insurance:

14.1.1 comprehensive general liability insurance against all claims of bodily injury, death or property damage, in amounts of not less than \$1,000,000 per occurrence and \$2,000,000 aggregate; and

14.1.2 special cause of loss coverage form covering all property subject to subparagraph 9.2 herein, in an amount not less than 80% of the whole replacement value of the property.

14.2 The policies described in subparagraph 14.1 herein shall be on policy forms and endorsements approved for use in the State of New Hampshire by the N.H. Department of Insurance, and issued by insurers licensed in the State of New Hampshire.

14.3 The Contractor shall furnish to the Contracting Officer identified in block 1.9, or his or her successor, a certificate(s) of insurance for all insurance required under this Agreement. Contractor shall also furnish to the Contracting Officer identified in block 1.9, or his or her successor, certificate(s) of insurance for all renewal(s) of insurance required under this Agreement no later than thirty (30) days prior to the expiration date of each of the insurance policies. The certificate(s) of insurance and any renewals thereof shall be attached and are incorporated herein by reference. Each certificate(s) of insurance shall contain a clause requiring the insurer to provide the Contracting Officer identified in block 1.9, or his or her successor, no less than thirty (30) days prior written notice of cancellation or modification of the policy.

15. WORKERS' COMPENSATION.

15.1 By signing this agreement, the Contractor agrees, certifies and warrants that the Contractor is in compliance with or exempt from, the requirements of N.H. RSA chapter 281-A ("*Workers' Compensation*").

15.2 To the extent the Contractor is subject to the requirements of N.H. RSA chapter 281-A, Contractor shall maintain, and require any subcontractor or assignee to secure and maintain, payment of Workers' Compensation in connection with activities which the person proposes to undertake pursuant to this Agreement. Contractor shall furnish the Contracting Officer identified in block 1.9, or his or her successor, proof of Workers' Compensation in the manner described in N.H. RSA chapter 281-A and any applicable renewal(s) thereof, which shall be attached and are incorporated herein by reference. The State shall not be responsible for payment of any Workers' Compensation premiums or for any other claim or benefit for Contractor, or any subcontractor or employee of Contractor, which might arise under applicable State of New Hampshire Workers' Compensation laws in connection with the performance of the Services under this Agreement.

16. WAIVER OF BREACH. No failure by the State to enforce any provisions hereof after any Event of Default shall be deemed a waiver of its rights with regard to that Event of Default, or any subsequent Event of Default. No express failure to enforce any Event of Default shall be deemed a waiver of the right of the State to enforce each and all of the provisions hereof upon any further or other Event of Default on the part of the Contractor.

17. NOTICE. Any notice by a party hereto to the other party shall be deemed to have been duly delivered or given at the time of mailing by certified mail, postage prepaid, in a United States Post Office addressed to the parties at the addresses given in blocks 1.2 and 1.4, herein.

18. AMENDMENT. This Agreement may be amended, waived or discharged only by an instrument in writing signed by the parties hereto and only after approval of such amendment, waiver or discharge by the Governor and Executive Council of the State of New Hampshire unless no

such approval is required under the circumstances pursuant to State law, rule or policy.

19. CONSTRUCTION OF AGREEMENT AND TERMS.

This Agreement shall be construed in accordance with the laws of the State of New Hampshire, and is binding upon and inures to the benefit of the parties and their respective successors and assigns. The wording used in this Agreement is the wording chosen by the parties to express their mutual intent, and no rule of construction shall be applied against or in favor of any party.

20. THIRD PARTIES. The parties hereto do not intend to benefit any third parties and this Agreement shall not be construed to confer any such benefit.

21. HEADINGS. The headings throughout the Agreement are for reference purposes only, and the words contained therein shall in no way be held to explain, modify, amplify or aid in the interpretation, construction or meaning of the provisions of this Agreement.

22. SPECIAL PROVISIONS. Additional provisions set forth in the attached EXHIBIT C are incorporated herein by reference.

23. SEVERABILITY. In the event any of the provisions of this Agreement are held by a court of competent jurisdiction to be contrary to any state or federal law, the remaining provisions of this Agreement will remain in full force and effect.

24. ENTIRE AGREEMENT. This Agreement, which may be executed in a number of counterparts, each of which shall be deemed an original, constitutes the entire Agreement and understanding between the parties, and supersedes all prior Agreements and understandings relating hereto.

Contractor Initials CMP
Date 10/24/19

Exhibit A
Scope of Services

Project title: Seabrook Wastewater Treatment Facility Resilience Assessment and Engagement

Project goal: The goal of this task is to better understand the specific impact of climate change to the Seabrook Wastewater Treatment Facility (WWTF), identify potential climate adaptation solutions for increasing resilience of the WWTF, and develop and implement an equitable public engagement strategy that is both project specific and broad to meet the actions outlined in the town of Seabrook Coastal Hazards and Adaptation Master Plan Chapter.

Project work: Weston & Sampson Engineers, Inc. will complete the following tasks as outlined in their Coastal Resilience proposal, entitled “Revised Seabrook, NH Coastal Resilience Municipal Planning Grants, 2019,” which is incorporated herein by reference:

Task 1. WWTF Climate Vulnerability Assessment and Sea Level Rise Investigation

Several critical components of the WWTF are at risk of inundation from sea level rise. The project team will compile existing sea level rise (SLR), storm surge, and historic extreme events data to produce maps showing the vulnerability of the WWTF, pumping station, and critical components of the WWTF. Readily available climate change data will be evaluated under this task and new site-specific evaluations of climate threats will be conducted.

Deliverable: Technical report and climate change vulnerability assessment of the WWTF and other related infrastructure expected March 31, 2021.

Task 2: Public Engagement

The public engagement strategy described in Section B will be developed in coordination with the NHDES Coastal Program and through a series of meetings and interviews with Town staff, local organizations working on climate change initiatives, and local organizations working with target audiences. The budget allows for two large group meetings and up to eight interviews to collect input for the strategy. The engagement specific to the WWTF project will be somewhat dependent upon results of the public engagement strategy development. With this in mind, we are flexible in scope, but anticipate that a fact sheet, five social media posts, public meeting materials, and promotional material are likely deliverables.

Deliverables: An equitable community engagement strategy approach and narrative, fact sheet, five social media posts, event materials, meeting notes, and promotional materials expected by Dec 31, 2020, or if preferable, as part of the final grant package provided on March 31, 2021.

Task 3: WWTF Climate Resilience Options

We will then identify and develop conceptual designs for several climate adaptation options that will include raising roads, living shorelines, pumping station deployable barriers, permanent barriers, other green infrastructure opportunities and potential relocation and raising of critical infrastructure.

Deliverable: Climate adaptation options completion expected Feb 28, 2021.

Task 4: Project Semi-Annual Progress Reports and Final Report

The project team will submit semi-annual progress reports on June 30, 2020 and December 31, 2020. The final report deliverable will detail the methodology used to complete the previous Tasks and will be a compilation of the previous Tasks' deliverables and all associated information developed as part of the project. The final report will address comments from the town, NHDES, and other stakeholders.

Deliverable: The project team will submit quarterly reports on June 30, 2020 and December 31, 2020. The final report will be submitted upon completion of work on or before June 30, 2021.

Exhibit B
Method of Payment and Contract Price

The State shall pay to the Contractor the total reimbursable program costs in accordance with the following requirements:

Reimbursement requests for program costs shall be made by the Contractor using a payment request form as supplied by the State, which shall be completed and signed by the Contractor. The payment request form shall be accompanied by proper supporting documentation in the amount of each requested disbursement and required matching funds. Documentation of reimbursable and matching costs may include invoices for supplies, equipment, services, contractual services, and a report of personnel, travel and indirect costs. For projects that demonstrate progress solely through the submission of interim progress reports, payments shall be made upon receipt, review and approval of the interim progress report and accompanying payment request form.

The total reimbursement shall not exceed the grant award of \$30,000. Matching funds provided by the Contractor shall total at least \$15,000 of non-federal cash and in-kind services.

Contractor Initials CLMP
Date 10/24/19

Exhibit C Special Provisions

Federal Funds paid under this agreement are from a Contract Agreement to the State from the US Department of Commerce (DOC), National Oceanic and Atmospheric Administration under CFDA # 11.419. All applicable requirements, regulations, provisions, terms and conditions of this Federal Contract Agreement are hereby adopted in full force and effect to the relationship between this Department and the Contractor.

In addition to the General Provisions of Paragraph 1 through 24, the following provisions as required by federal regulations apply to this Agreement:

I) ***Nondiscrimination.*** The Contractor shall comply with 15 CFR part 8 which prohibits discrimination under any program or activity receiving DOC assistance on the basis of race, color, national origin, gender or handicap, and 15 CFR part 20 which prohibits discrimination based on age.

II) ***Financial management.*** The Contractor shall comply with 2 CFR part 200 Subpart D and the specific standards regarding financial reporting, accounting records, internal control, budget control, allowable cost, source documentation, and cash management outlined therein.

III) ***Allowable costs.*** All costs charged to this Agreement shall be eligible, necessary, and reasonable for performing the tasks outlined in the approved project scope of services. The costs, including match, shall be incurred during the period of performance of the project, and shall be allowable, meaning that the costs must conform to specific federal requirements detailed in 2 CFR part 200 Subpart E.

IV) ***Matching funds.*** All matching funds contributed by the Contractor shall conform to the same laws, regulations, and Contract conditions as the federal funds in the Agreement and referenced in 2 CFR part 200 Subpart E.

V) ***Property Management.*** The Contractor shall comply with the property management and procedures detailed in 2 CFR Part 200 Subpart D.

VI) ***Debarment and Suspension.*** The Contractor shall comply with 2 CFR Part 200 Subpart C. By signing and submitting the Agreement, the Contractor certifies that they have not been debarred or suspended by a government agency. The Contractor will not make any award or permit any award (subcontract) at any tier to any party which is debarred or suspended or is otherwise excluded from or ineligible for participation in Federal assistance programs under Executive Order 12549, "Debarment and Suspension."

VII) ***Procurement.*** When purchasing goods or services with contract or match funds, the Contractor shall comply with procurement regulations as detailed in 2 CFR Part 200 Subpart D which include procurement standards, competition, methods of procurement, contract cost and price, agency review, bonding requirements, and contract provisions.

- a. Assignment of Subcontracts. The Contractor shall not assign, or otherwise transfer any interest in this contract without the prior written consent of the Contract Owner and the State.
- b. Subcontracts. The Contractor shall:
 - i. Ensure that every subcontract includes provisions for compliance with Federal and State standards applicable to the contract;
 - ii. Ensure that every subcontract includes any clauses required by Federal statute and

executive orders and their implementing regulations; and
iii. Ensure that subcontractors are aware of requirements imposed upon them by State and Federal statutes and regulations.

VIII) **Participation by Disadvantaged Business Enterprises.** The Contractor shall comply with the terms of 2 CFR Part 200 Subpart D, which requires that organizations conduct a competitive procurement process making a good faith effort to utilize goods and services provided by disadvantaged businesses.

IX) **New Restrictions on Lobbying: Interim Final Rule.** The Contractor shall comply with the terms of 15 CFR part 28 and 2 CFR Part 200 Subpart E which prohibit the use of federal Contract funds to influence (or attempt to influence) a federal employee, and requires the submission of Standard Form LLL ("Disclosure of Lobbying Activities") if nonfederal funds have been used to influence (or attempt to influence) a federal employee.

X) **Drug-Free Workplace.** The Contractor shall comply with the terms of 2 CFR part 1329 which require that as a condition of the Agreement, certification that they maintain a drug-free workplace. By signing and submitting the Agreement, the Contractor certifies that he or she will not engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance in conducting any activity associated with the Agreement.

XI) **Bonding requirements.** The Contractor shall comply with 2 CFR Part 200 Subpart D for construction or facility improvement contracts or subcontracts exceeding the simplified acquisition threshold (currently \$150,000), the minimum requirements shall be as follows:

- a. A bid guarantee from each bidder equivalent to five percent of the bid price. The "bid guarantee" shall consist of a firm commitment such as a bid bond, certified check, or other negotiable instrument accompanying a bid as assurance that the bidder will, upon acceptance of his bid, execute such contractual documents as may be required within the time specified.
- b. A performance bond on the part of the contractor for 100 percent of the contract price. A "performance bond" is one executed in connection with a contract to secure fulfillment of all the contractor's obligations under such contract.
- c. A payment bond on the part of the contractor for 100 percent of the contract price. A "payment bond" is one executed in connection with a contract to assure payment as required by law of all persons supplying labor and material in the execution of the work provided for in the contract.

XII) **Federal Funding Accountability and Transparency Act (FFATA).** The Contractor shall comply with the terms of the FFATA by providing NHDES with their Data Universal Numbering System (DUNS) number, and all applicable Executive Compensation Data information as required under the FFATA. The DUNS number is 04-943-3352.

Clerk's Certificate of Vote

The undersigned, Clerk of Weston & Sampson Engineers, Inc. hereby certifies that, at a meeting duly called in accordance with the by-laws, the Board of Directors unanimously passed the following resolution on August 1, 2019.

VOTED: To authorize

Bruce W. Adams	David M. Elmer	Blake A. Martin	Michael J. Scipione
Jeffrey J. Alberti	John A. Figurelli	George D. Naslas	Peter M. Smith
Prasanta K. Bhunia	Donald G. Gallucci	Kent M. Nichols	Leah E. Stanton
John A. Bocchino	Robert A. Goober	Frank E. Occhipinti	Daniel Tenney III
Eugene R. Bolinger	Dean L. Groves	Christopher M. Perkins	Christopher B. Wester
Pompeo Casale	Robert L. Horner	Francis M. Ricciardi	John J. Wright
Barbara K. Cook	Hillary M. Lacirignola	Cheri F. Ruane	Francis W. Yanuskiewicz

acting individually, to execute and deliver on behalf of the Corporation, contracts for Professional Services which are in the ordinary course of the Corporation's business, not including contracts exceeding \$2,000,000, during the fiscal year 2019.

VOTED: To authorize Kenneth J. Bisceglia Richard A. Campbell Jeffrey A. Wilson

acting individually, to execute and deliver on behalf of the Corporation, contracts for Professional Services which are in the ordinary course of the Corporation's business, not including contracts exceeding \$500,000, during the fiscal year 2019.

VOTED: To authorize Peter Kolokithas

acting individually, to execute and deliver on behalf of the Corporation, contracts for Professional Services which are in the ordinary course of the Corporation's business, not including contracts exceeding \$75,000, during the fiscal year 2019.

VOTED: To authorize

Daniel P. Biggs	Margaret A. McCarthy	Daniel E. Sheahan	Gary Thurman
Gordon R. Matson	Jeffrey W. McClure	Patrick A. Terrien	Stephen P. Wiehe

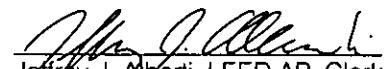
acting individually, to execute and deliver on behalf of the Corporation, contracts for Professional Services which are in the ordinary course of the Corporation's business, not including contracts exceeding \$50,000, during the fiscal year 2019.

VOTED: To authorize

James R. Fair	Lawrence F. Keegan	Michael J. Richard
Kipling R. Gearhart	Brian J. McCormack	Carl W. Stone
Duane C. Himes	Tara E. McManus	John M. Sykora
Thomas S. Hydro	Steven K. Pedersen	Paul V. Uzgiris

acting individually, to execute and deliver on behalf of the Corporation, contracts for Professional Services which are in the ordinary course of the Corporation's business, not including contracts exceeding \$10,000, during the fiscal year 2019.

The undersigned further certifies that the above vote has not been amended or rescinded and remains in full force and effect as of the date set forth below.


Jeffrey J. Alberti, LEED AP, Clerk

10/25/19
Date

State of New Hampshire

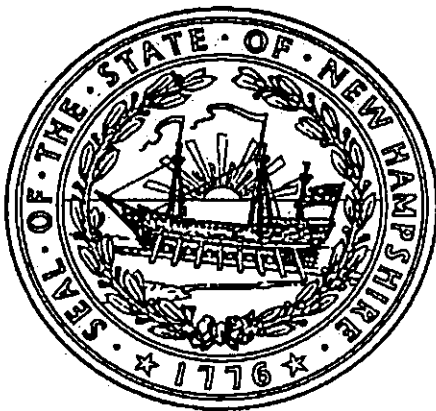
Department of State

CERTIFICATE

I, William M. Gardner, Secretary of State of the State of New Hampshire, do hereby certify that WESTON & SAMPSON ENGINEERS, INC. is a Massachusetts Profit Corporation registered to transact business in New Hampshire on January 29, 1998. I further certify that all fees and documents required by the Secretary of State's office have been received and is in good standing as far as this office is concerned.

Business ID: 286390

Certificate Number: 0004438444



IN TESTIMONY WHEREOF,
I hereto set my hand and cause to be affixed
the Seal of the State of New Hampshire,
this 12th day of March A.D. 2019.

A handwritten signature in black ink, appearing to read "William M. Gardner".

William M. Gardner
Secretary of State



Business Information

Business Details

Business Name: WESTON & SAMPSON ENGINEERS, INC.	Business ID: 286390
Business Type: Foreign Profit Corporation	Business Status: Good Standing
Business Creation Date: 01/29/1998	Name in State of Incorporation: WESTON & SAMPSON ENGINEERS, INC.
Date of Formation in Jurisdiction: 01/29/1998	Mailing Address: 5 Centennial Drive, Peabody, MA, 01960, USA
Principal Office Address: 5 CENTENNIAL DRIVE, PEABODY, MA, 01960, USA	Last Annual Report Year: 2019
Citizenship / State of Incorporation: Foreign/Massachusetts	Next Report Year: 2020
Duration: Perpetual	Phone #: 978-532-1900
Business Email: mcmaстера@wseinc.com	Fiscal Year End Date: NONE
Notification Email: mcmaстера@wseinc.com	

Principal Purpose

S.No	NAICS Code	NAICS Subcode
1	Professional, Scientific, and Technical Services	Architectural Services
2	OTHER / ENVIRONMENTAL CONSULTING	
3	OTHER / Land Surveying Services	

Page 1 of 1, records 1 to 3 of 3

Principals Information

Name/Title	Business Address
Michael Scipione / Chief Executive Officer	55 Walkers Brook Drive, Suite 100, Reading, MA, 01867, USA
Christopher Kennedy Kennedy / Chief Financial Officer	55 Walkers Brook Drive, Suite 100, Reading, MA, 01867, USA
Stephen Johannsen / Chairman of the Board of Directors	55 Walkers Brook Drive, Suite 100, Reading, MA, 01867, USA



WESTAND-01

CMURPHY

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
12/23/2019

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Ames & Gough 859 Willard Street Suite 320 Quincy, MA 02169	CONTACT NAME:		
	PHONE (A/C, No, Ext): (617) 328-6555	FAX (A/C, No): (617) 328-6888	
E-MAIL ADDRESS: boston@amesgough.com			
INSURED Weston & Sampson Engineers, Inc. 55 Walkers Brook Drive, Suite 100 Reading, MA 01867	INSURER(S) AFFORDING COVERAGE		NAIC #
	INSURER A: Continental Insurance Company A+(XV)		35289
	INSURER B: National Fire Insurance Company of Hartford A+(XV)		20478
	INSURER C: Nautilus Insurance Company A+, XV		17370
	INSURER D: Valley Forge Insurance Company A(XV)		20508
	INSURER E: Lexington Insurance Company A, XV		19437
INSURER F:			

COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR	X		6056861029	1/1/2020	1/1/2021	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Per occurrence) \$ 500,000 MED EXP (Any one person) \$ 15,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/PP AGG \$ 2,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input checked="" type="checkbox"/> LOC OTHER:						
B	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY	X		6056860561	1/1/2020	1/1/2021	COMBINED SINGLE LIMIT (Per accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
C	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE	X		FFX2027937-11	1/1/2020	1/1/2021	EACH OCCURRENCE \$ 10,000,000 AGGREGATE \$ 10,000,000
	DED: RETENTION \$						
D	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below		Y/N N	6056861015	1/1/2020	1/1/2021	X: PER STATUTE OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
E	Professional Liab			031710990	7/3/2019	7/3/2020	Per Claim \$ 3,000,000
E				031710990	7/3/2019	7/3/2020	Aggregate \$ 3,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 161, Additional Remarks Schedule, may be attached if more space is required)
Additional Insured GL Endorsement Form #CNA75079X 01/16. All Coverages are in accordance with the policy terms and conditions.

Re: Contract for "Seabrook WWTF Resilience Assessment and Engagement"

New Hampshire Department of Environmental Services shall be listed as additional insured with respect to General, Auto, and Umbrella Liability where required by written contract.

CERTIFICATE HOLDER

CANCELLATION

New Hampshire Department of Environmental Services Attn: Kirsten Howard P.O. Box 95 Concord, NH 03302	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE <i>Michael Wilby</i>

ACORD 25 (2016/03)

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Attachment A

Budget Estimate

Item	Federal (NHCP)	Non-Federal	Match Type	Total
Personnel	\$29,300	\$15,000	Cash, In kind	\$44,300
Fringe	\$0	\$0		\$0
Equipment	\$0	\$0		\$0
Travel	\$500	\$0		\$500
Supplies	\$200	\$0		\$200
Sub-Contractual	\$0	\$0		\$0
Construction	\$0	\$0		\$0
Other	\$0	\$0		\$0
Indirect	\$0	\$0		\$0
Totals	\$30,000	\$15,000		\$45,000

Attachment B

Grant Scoring Matrix

	Weston & Sampson with Seabrook	Stafford Regional Planning Commission with Durham	Rockingham Planning Commission with North Hampton	Rockingham Planning Commission with Exeter	Stafford Regional Planning Commission with Dover
Reviewer "A"	55	94	87	77	83
Reviewer "B"	62	77	81	60	71
Reviewer "C"	75	100	90	72	81
Reviewer "D"	58	89	94	68	71
Reviewer "E"	56	98	89	18	98
AVERAGE	61	92	88	59	81
RANK	4	1	2	5	3

Review Team Members:

- Steve Couture, Coastal Program Administrator, 20 years of environmental planning and grants management experience.
- Chris Williams, Federal Consistency Coordinator, 20 years of regulatory and coastal management experience.
- Kevin Lucey, Habitat Coordinator, 17 years of environmental assessment, project management, and watershed restoration experience.
- Kirsten Howard, Coastal Resilience Coordinator, 10 years of coastal policy, management, and resiliency experience.
- Nathalie Morison, Coastal Resilience Specialist, 9 years of coastal policy, management, and resiliency experience.

September 16, 2019

Kirsten Howard
Coastal Resilience Coordinator
NH Department of Environmental Services, Coastal Program
222 International Drive, Suite 175
Portsmouth, NH 03801

Re: **REVISED SEABROOK, NH COASTAL RESILIENCE MUNICIPAL PLANNING GRANTS 2019**

Dear Ms. Howard:

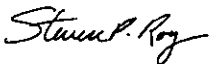
It was a pleasure to meet with you, Natalie and Kevin to obtain your input on our grant proposal to assess climate and sea level rise impacts on the Town of Seabrook's Wastewater Treatment Facility (WWTF) and develop design options to improve resiliency and adapt to climate change. We appreciated your comments, suggestions and information that has allowed us to revise the attached grant proposal.

We have prepared a revised scope of work to respond to your comments and improve the project and expected deliverables. The revision is packaged as a new submittal with a more detailed technical approach and scope of work. Specifically, in this transmittal letter I would like to briefly address each of your comments.

1. **Project Schedule.** We have revised the schedule to cover approximately a 12 -14 month schedule to better match with contract timing and Town Meeting schedules. We still would like to front load the technical evaluation and climate resilience options and concept designs such that the Town can be informed of options and costs and they can potentially take advantage of available implementation funds if they become available.
2. **Semi-Annual reporting** has been included in the scope of work.
3. We have expanded on how this project meets the goals of CHAMP.
4. More detail is provided on our technical approach to further evaluate and model SLR and storm surge impacts on the WWTF and we have clarified the expected design concepts as deliverables.
5. The public engagement strategy has been modified to include coordination with local organizations who may become champions of its implementation and to target a wider range of residents in both broad climate education and engagement specific to the project.
6. Weston & Sampson will be contracting with NHDES on the funding as originally proposed.
7. Tom Morgan from Seabrook will be specifically involved and invited to participate in project meetings and all outreach activities.
8. Weston & Sampson has signed up for CAW announcements and we look forward to engaging with other climate professionals in New Hampshire to stay involved and share our examples and experiences from projects in other states.

We believe that through your engagement we have developed a more effective grant application that will provide the Town of Seabrook with very specific actions to adapt to the expected climate impacts. We welcome any additional thoughts and input, and we look forward to working closely with the Coastal Program on this project.

Sincerely,



Steven Roy, WESTON & SAMPSON ENGINEERS, INC.

cc. Curtis Slayton, Town of Seabrook

A. PROJECT TITLE

Seabrook, New Hampshire Wastewater Treatment Facility Climate Resilience Assessment and Targeted Engagement and Climate Communication

B. APPLICANT INFORMATION

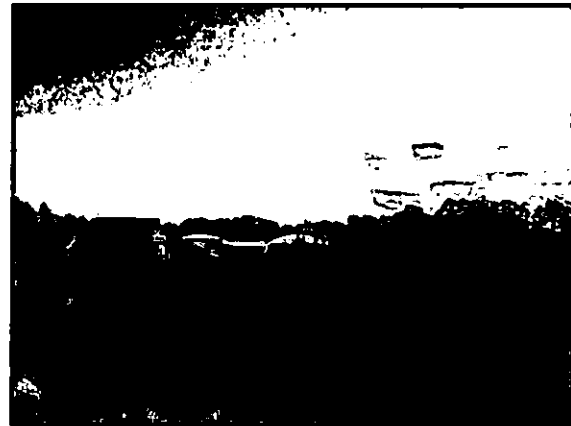
	APPLICANT	TOWN OF SEABROOK
Name:	Steven Roy	Curtis Slayton, Superintendent
Org./Dept	Weston & Sampson	Sewer Department
Address:	100 International Drive, Suite #152 Portsmouth, NH 03801	550 Rt 107, Seabrook, NH 03874
Contact Information:	603-570-6305 roys@wseinc.com	603-474-992 cslayton@seabrooknh.org

C. PROJECT TYPE, GOALS, OBJECTIVES

- i. **Project Type:** Sustained Municipal Initiative to Implement Coastal Hazards and Adaptation Master Plan Chapter (CHAMP)
- ii. **Goal Statement:** To better understand the specific impact of climate change to the Wastewater Treatment Facility (WWTF), identify potential climate adaptation solutions for increasing resilience of the WWTF, and develop and implement an equitable public engagement strategy that is both project specific and broad to meet the actions outlined in the CHAMP.
- iii. **Measurable Objectives:**
 - Identify current and projected flooding from sea level rise/storm surge and impacts on site
 - Include new site-specific sea-level rise (SLR) and storm surge evaluations for site
 - Incorporate new science on groundwater rise projections for the site
 - Identify and create design concepts, permit strategy and costing for four options for improving the climate resiliency of the WWTF
 - Engage over 50 residents through the developed public engagement strategy on climate threats and emergency procedures

D. PROJECT DESCRIPTION**i. Proposed Work**

The Town of Seabrook identified several critical wastewater treatment components vulnerable to the anticipated changes in sea level rise under projected future climate scenarios in the Town Master Plan Chapter on Coastal Hazards and Adaptation. The focus of our proposed project is the town's most critically important WWTF, which collects and treats domestic, commercial, and industrial wastewater from most of the town. The WWTF and other system treatment components are all located on Wright's Island, a small upland area within the salt marsh that straddles the New Hampshire/ Massachusetts border south of Route 286. Vehicular access to Wright's Island is via a man-made, single-lane causeway from Route 286. The isolated nature of the WWTF makes it particularly susceptible to sea level rise and coastal surge, and any disruptions to WWTF operation quickly becomes a public health risk. The proposed project will assess the specific vulnerabilities at the site and assess up to four options for improving resiliency. The project will also identify effective communication and outreach methods building upon successful efforts of regional organizations to continue the conversation about climate change in Seabrook and to engage the public in the results of the WWTF assessment. It is expected that our outreach process will be easily replicated by other NH coastal communities. See attached Site Map.



Left: Single lane roadway leading to WWTF. Right: WWTF including operational offices and pump station

ii. Advance Coastal Resilience Goals

The Seabrook Master Plan 2016, Chapter 9 Coastal Hazards and Adaptation Seabrook identifies the following underlined goals to improve coastal resilience and climate adaptation and the text provides a summary of how this project will address each goal:

- 1) Critical facilities are protected against impacts from flooding and other coastal hazards.
Nearly all homes and businesses in Seabrook are served by municipal wastewater services. For this reason, maintaining wastewater service is critical to the health and safety of the community. Over time, improvements to the WWTF system will be necessary to adapt to rising seas, and storm-related flooding and power outages.
- 2) Coastal sand dunes are maintained to reduce flood and storm damage.
Not Applicable to this project.
- 3) Emergency access and evacuation routes are maintained or enhanced if necessary.
Not Applicable to this project.
- 4) Private property owners are allowed to take protective measures to reduce flood risks.
The outreach and engagement components of this project will provide information to residents on awareness and methods of protecting personal property from SLR and future projected groundwater rise.
- 5) Residents and businesses are aware of and better prepared to respond and adapt to coastal hazards.
Residents need to be engaged and informed about how to protect themselves and their homes in the face of rising seas, coastal storms, and increased precipitation during extreme weather events. Being proactive about planning to respond to these changing conditions is the best course of action but one that needs more attention.

iii. Climate Science Integration

The project team from Weston & Sampson will use readily available information on sea level rise, extreme precipitation, and coastal storms to develop future climate scenarios that will be used to conduct a vulnerability and risk assessment. We will actively incorporate the recently released New Hampshire Coastal Flood Risk Summary, Part I Science and Part II, Guidance for Using Scientific Projections. The available data will be applied to the WWTF and the Seabrook beach area. Weston & Sampson has conducted similar projects and developed maps and visualization for 12 communities in Massachusetts under the Commonwealth's Municipal Vulnerability Preparedness (MVP) Program.

We will use current and best available data such as model results from the storm surge modeling conducted for coastal New Hampshire as part of the North Atlantic Coastal Comprehensive Study (NACCS) by the USACE, readily available SLOSH (Sea, Lake and Overland Surge from Hurricanes) and FEMA data, and using the Town of Seabrook Vulnerability Assessment Report, 2015 prepared by Rockingham Planning Commission and the sea level rise data developed by UNH. (*Wake CP, Kirshen P, Huber M, Knuuti K, and Stampone M (2014) Sea-level Rise, Storm Surges, and Extreme Precipitation in Coastal New Hampshire: Analysis of Past and Projected Future Trends, prepared by the Science and Technical Advisory Panel for the New Hampshire Coastal Risks and Hazards Commission.*) Data layers from GRANIT, including the Coastal Viewer and LiDAR data layers, will be evaluated and used in the scenario mapping and assessment tasks. Living shoreline site suitability will also be evaluated.

iv. Project Stakeholders

The project scope includes the creation and implementation of an equitable community engagement strategy. The engagement strategy will resemble a manual or a guidebook, which will identify target audiences, key messages, typical communication channels, and steps to implementing or utilizing these communication channels. The engagement strategy will be developed in conjunction with ongoing climate resilience initiatives in the Town, including the work being completed by the New Hampshire Coastal Adaptation Workgroup and the Seabrook-Hamptons Estuary Alliance. By coordinating with local groups, the project team hopes to capture lessons learned from previous projects and to incorporate results from other initiatives, such as the Hampton-Seabrook Estuary Sand Dune Social Network Analysis. The engagement strategy will not be project specific, but rather a resource that can be used again and again. Therefore, the project also wishes to engage local groups in order to create a strategic plan that meets their needs and increases ownership of the implementation.

The project will apply the equitable community engagement strategy to the WWTF project. The equitable component of the engagement strategy will ensure there is a plan to reach traditionally underrepresented populations about climate resilience in Seabrook and the WWTF project. The target stakeholders usually include vulnerable populations, like youth, seniors, non-English speaking, and low-income residents. These population groups are often most at-risk to winter storm, power outages, wind, and flooding impacts in a community. Typically, equitable engagement strategies utilize existing networks to reach people where they are at. In order to do this, the project team will coordinate with local groups who serve target subpopulations in the area. For example, we will communicate with Southern New Hampshire Services, which has a location in Seabrook, to discuss the overlap of climate resilience and their mission and how to best engage the people they serve.

The outreach about the WWTF will be informational in nature but will also include opportunities to receive feedback from the community on the options to improve resilience at the WWTF. We will quantitatively measure engagement success through event attendance and will qualitatively measure success through the depth and volume of the information volume gathered. For more information about the public engagement process, see Task 2.

v. Nature-based Solutions

Nature-based solutions will include evaluating living shorelines and site-specific green infrastructure options to protect the causeway to the WWTF and the facility itself. We will evaluate these solutions for adapting to coastal and inland flooding along with traditional infrastructure, road raising, and other nature-based solutions. For more information about both nature-based solutions and other design/climate adaptation options for consideration and concept design, see Task 3.

E. PROJECT PERSONNEL AND PARTNERS

i. Town of Seabrook

Curtis Slayton, Town of Seabrook Project Manager

Curtis Slayton, Interim Sewer Superintendent. Mr. Slayton is well equipped/has previous experience managing projects of this scale. He has over 30 years' experience in WWTF operation and he has successfully managed

two homeland security grants and a wellhead protection grant. We will also engage other key municipal boards and the broader community in this process.

ii. Weston & Sampson

Weston & Sampson has made a professional commitment to planning and designing resilient, sustainable communities. Our resiliency workgroup has been actively designing resilient and low-impact components for our infrastructure and building projects. Recently, we have been working on the development of resiliency design standards for the City of Boston, a Statewide Resilience Master Plan for the Division of Capital Asset Management and Maintenance (DCAMM), and climate change vulnerability assessments and adaptation plans for several coastal communities. Our team has considerable experience assisting municipalities with climate change adaptation planning including Boston, Lynn, and 14 communities in the Metro Boston area. We have completed the following relevant projects:

- 14 Massachusetts Vulnerability Preparedness Planning Grants (6 included Hazard Mitigation Plans and several extended scopes for additional vulnerability assessments and public engagement)
- 1 Massachusetts Coastal Resilience Grant for Resilient Design
- 8 Massachusetts Vulnerability Preparedness Action Grants, including resilient regulatory assessments, flood mitigation, park design, green infrastructure design and construction, stream improvements
- 4 Northeast projects, including Shoreline Climate Resilience and Erosion Control Designs, Boston Climate Design Standards, and Climate Stormwater Solutions

Weston & Sampson was just selected to support the Resilient Massachusetts Action Team to provide technical support to the state on integrating new climate science data into state agency hazard mitigation plans and technical support to the Municipal Vulnerability Program.

Chris Perkins, PE, principal in charge, leads the firm's business operations in New Hampshire and Maine. He has extensive experience with all facets of environmental engineering, including the planning, design, and construction of water distribution, and wastewater and stormwater collection, treatment, and disposal facilities. Chris currently serves as the principal-in-charge of multiple infrastructure and planning projects in New Hampshire and Maine.



Steven Roy, LEED® AP, MVP Certified, project manager, has more than 40 years of professional experience in the field of environmental program management and administration, specializing in water resources management, climate, adaptation, green infrastructure stormwater management, water conservation, and environmental impact assessment. For over 20 years, Steve has served on the Board of Directors of the Low Impact Development Center, an organization that pioneered the development of LID techniques, management, and policy. Steve served as technical lead responsible for assisting the Boston Public Works Department in its efforts to establish climate-resilient guidelines for design standards to manage segmental adaptation projects to achieve approximately four feet of flood protection by 2070. He is Massachusetts Municipal Vulnerability Planning certified by the State of Massachusetts and has conducted many MVP projects.



Indrani Ghosh, Ph.D., MVP Certified, climate resilience technical lead, has over 15 years of experience as a water resources engineer and as technical lead in climate change resiliency projects. She has industry-leading experience in translating climate change projections to engineering design criteria for new and existing infrastructure and modeling climate impacts for the purposes of assessing vulnerabilities and adaptation planning. She has worked with numerous municipalities and public agencies in the Northeast to model their exposure to coastal and stormwater flooding using the best available and most appropriate sea-level rise, storm surge, and rainfall projections. She has extensive experience integrating climate projections in hydrologic/hydraulic models of urban storm and sanitary sewer systems.



John Sykora, the wastewater treatment facility design lead, is a civil engineer with more than 20 years of experience providing project management, design, construction administration and inspection, resident engineering, and survey for water and wastewater projects. John has extensive experience working in the Town of Seabrook and on Wastewater Treatment Facility designs throughout New Hampshire. John is currently the project manager for the Town of Seabrook's Wastewater Treatment Plant and Pump Station Evaluation Project.



Amanda Kohn, MVP Certified, public engagement lead, is an urban planner and climate resiliency specialist with a background in equitable public engagement, environmental biology, and data visualization. Amanda recently completed several climate resiliency efforts with extensive public engagement as part of the Massachusetts Municipal Vulnerability Preparedness Planning and Action Grant program. On each project, she works with each community to develop an engagement strategy to meet the needs of the project and to reach specific target audiences. Amanda assists municipalities expand their outreach beyond those who are traditionally represented by using innovative techniques and partnerships within the community.



PROJECT WORK PLAN

Task 1: WWTF Climate Vulnerability Assessment and Sea Level Rise Investigation

Several critical components of the WWTF are at risk of inundation from sea level rise. The project team will compile existing sea level rise (SLR), storm surge and historic extreme events data to produce maps showing the vulnerability of the WWTF, pumping station, and critical components of the WWTF. Readily available climate change data will be evaluated under this task and new site-specific evaluations of climate threats will be conducted.

For the climate vulnerability assessment of the WWTF, we propose to use the planning horizon as 2050, since approximately 25 years from now can be considered to be within the design useful life of the WWTF infrastructure. We propose to use the latest sea level rise projections and guidance documents that have been recently published by NHDES in collaboration with researchers at University of New Hampshire in the reports titled "The New Hampshire Coastal Flood Risk Summary – Part 1: Science" and "New Hampshire Coastal Flood Risk Summary Part II: Guidance for Using Scientific Projections". In this report, relative SLR projections have been developed for coastal New Hampshire up to 2150. These relative SLR projections are based on a probabilistic approach that was developed by Kopp et al. (2014) as part of the Fourth National Climate Assessment (Sweet et al. 2017) and has been used by several recent state and local sea level rise assessments across the country. The SLR projections have been developed for several Representative Concentration Pathways (RCP) scenarios, including RCP 4.5, which is a low greenhouse gas emission stability scenario and RCP 8.5, which is a very high greenhouse gas emissions scenario.

Based on the projections and guidance published in the recent reports, we propose to use the relative SLR projections based on the RCP 4.5 scenario for 2050. Considering the risk tolerance level of the WWTF and the surrounding areas is low, we propose to use the RCP 4.5 2050 relative SLR projections corresponding to 2.0 ft. This scenario is also similar to the "intermediate high" scenario based on Parris et al. (2012) that was used in the 2014 STAP report (Kirshen et al., 2014). The STAP report modeled tidal and storm surge flooding using a dynamic storm surge model known as FVCOM (<http://fvcom.smast.umassd.edu/FVCOM/>) under present and plausible sea level conditions. Since the STAP report, statistical analysis of storm surge has been conducted by UASCE using ensembles of synthetic tropical and actual extra-tropical storms modeled over the North Atlantic as part of the North Atlantic Coastal Comprehensive Study (NACCS, 2015). Storm surge estimates will be conducted at the WWTF will consider surge heights based on annual exceedance probabilities used in the NACCS model (e.g. 25%, 10%, 1%, 0.2% annual probabilities). These estimates will be coupled with the relative SLR projections to determine future flood elevations at the WWTF by 2050 under different storm probabilities. We will then use these probabilistic flood elevations, compare with the latest ground elevation data based on LiDAR and map the flood depths and flood extents in the area around the

WWTF including the access roads to illustrate the overall flood risk at the WWTF at different probability levels. In addition to using NACCS data, we also propose to use a quasi-dynamic modeling approach using the SLOSH (Sea, Lake, Overland Surge from Hurricanes) model to determine the projected maximum plausible flood elevations under different hurricane scenarios, such as Category 1, Category 2 hurricane. Finally, the FEMA present-day 1% annual (100-year) and 0.2% annual chance (500-year) flood elevations determined from the FEMA Map Service Center will also be compared and assessed.

Two other factors that will be considered for the vulnerability assessment of the WWTF includes the relative SLR-induced groundwater rise and the changes in extreme precipitation that are projected to occur at the project location. For the projected changes in extreme precipitation, design storm projections that are being developed by Weston & Sampson and our team for Portsmouth as part of the Prescott Park project, can be used. We have already sought the input from Dr. Paul Kirshen, UMass and Dr. Jennifer Jacobs, UNH. We think that our proposed approach for vulnerability assessment using best current available modeling, comparison across available model results and consideration of multiple hazards (sea level rise, storm surge, groundwater rise and extreme precipitation) will enable Seabrook to best assess the future vulnerability and risk at the WWTF infrastructure and its operations, as well as in the surrounding areas, and to take appropriate adaptation actions.

Deliverable: Technical report and climate change vulnerability assessment of the WWTF and other related infrastructure expected March 31, 2021.

Task 2: Public Engagement

The public engagement strategy described in Section B will be developed through a series of meetings and interviews with Town staff, local organizations working on climate change initiatives, and local organizations working with target audiences. The budget allows for two large group meetings and up to eight interviews to collect input for the strategy. The engagement specific to the WWTF project will be somewhat dependent upon results of the public engagement strategy development. With this in mind, we are flexible in scope, but anticipate that a fact sheet, five social media posts, public meeting materials, and promotional material are likely deliverables.

We recognize that further community outreach and engagement was identified in both the Seabrook's CHAMP (2016) and Tides to Storms Vulnerability Assessment (2015). The CHAMP recommended to 1) Provide informational materials about flood risk reduction at public and community events, and 2) Schedule events at the library or other public venues featuring topics relating to coastal hazards and preparedness, and climate adaptation. The Vulnerability Assessment recommended utilizing the Seabrook-Hamptons Estuaries Alliance (SHEA) as a partner and to use the Coastal Flood Hazard Overlay Map as a tool to inform property owners of existing and future risks and hazards based on projected sea-level rise and coastal storm surge flooding. We will confirm the status of these initiatives and incorporate them where possible including direct outreach and engagement to these groups. In addition, we will promote the recently released New Hampshire Coastal Flood Risk Summary, Part I: Science and Part II: Guidance for Using Scientific Projections. Informational material will include the threat of rising groundwater levels that were investigated in the Part I Science document.

Deliverables: An equitable community engagement strategy approach and narrative, fact sheet, five social media posts, event materials, meeting notes, and promotional materials expected by Dec 31, 2020, or if preferable, as part of the final grant package provided on March 31, 2021.

Task 3: WWTF Climate Resilience Options

We will then identify climate adaptation options that will include raising roads, living shorelines, pumping station deployable barriers, permanent barriers, other green infrastructure opportunities and potential relocation and raising of critical infrastructure. Specifically, we will focus on several design concepts including:

- **Culvert widening and raising for the access road.** This will include existing conditions evaluation of the two culverts for the causeway and concept design drawings for replacement.
- **Road Raising.** Using the latest RSLR information and enhanced analysis we will provide a concept plan for raising the causeway to the appropriate elevations to take into consideration RSLR and raising groundwater. The design will include considerations for the road, utilities and potential impacts on the existing salt marsh.
- **Living Shorelines.** We will assess site conditions to potentially employ a living shoreline concept that could accommodate RSLR yet provide protection to certain infrastructure. The concept will build on recent living shoreline designs and experiences on the Great Bay
- **Vegetated Berm.** This option will be explored as a green solution to protect the WWTF infrastructure without going to extreme hard structure barriers. The concept will include drawings and schematics of a protective earthen berm for the WWTF.
- **Deployable Flood Barriers.** We will evaluate spot elevations at the WWTF and the pumping station on Route 286 and select options to protect vulnerable flooding points of entry that could damage or disrupt services at the WWTF and pump station. For each identified vulnerable location, we will develop concepts to use deployable flood barriers including identifying brand options, operational issues, and costs.
- **Permanent flood barriers.** This option could include permanent walls and other structures to protect critical infrastructure such as electrical panels, pumps and low elevation flood entries to the WWTF. Flooding risks, costs, and operational issues will be identified, and concept drawings will be developed.
- **Raising Critical Infrastructure.** Specifically, we will explore the option of elevating identified critical infrastructure primarily focuses on electrical panels and pump. The output will be a technical memo on the identification of critical facilities and options and costs for raising the features.
- **Retreat.** We will explore the long-term option of eventually finding an alternative upland location to site a future WWTF for Seabrook. This analysis will be at a very high level of early thoughts regarding locations, costs, and permitting.

For each concept design identified above, we will identify permit requirements, design and construction issues and provide an engineering level cost estimate for design, permitting and construction. Design concepts will include site schematics and drawings.

The results will be compiled into site-specific climate resilience and adaptation options. The options will be evaluated based on cost, overall benefits, and feasibility of implementation. A PowerPoint Presentation on the range of WWTF Climate Resilience Options will be prepared based on the identified options, schematics, considerations, and costs.

Deliverable: Climate adaptation options completion expected Feb 28, 2021.

Task 4: Project Report and Semi-Annual Progress Reports

The project team will submit semi-annual progress reports on June 30, 2020 and December 31, 2020. The final report deliverable will detail the methodology used to complete the previous Tasks and will be a compilation of the previous Tasks' deliverables. The final report will address comments from the town, NHDES, and other stakeholders.

Deliverable: The project team will submit quarterly reports on June 30, 2020 and December 31, 2020. The final report is expected to be finalized by Feb 28, 2021.

REVISED GRANT APPLICATION

2020- 2021 PROJECT SCHEDULE													
TASK DESCRIPTION	2020							2021					
	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
Task 1: Vulnerability Assessment													
Review and Compile Existing SLR Data Sources													
Conduct modeling and produce revised threat maps													
Task 2: Public Engagement													
Engagement Strategy Development and Coordination with Local Groups													
Content Development of WWTF Project													
Online Outreach and Event Promotion													
Events													
Task 3: Climate Resilient Options													
Concepts and Considerations													
Task 4: Reporting													
Semi-Annual Report													
Final Report													

F. PROJECT BUDGET AND MATCH

Seabrook is committing to \$15,000 of cash match plus 100 hours of in-kind. See letter of commitment.

Task Description	Budget
Task 1: Vulnerability Assessment	\$10,000
Task 2: Public Engagement	\$15,000
Task 3: Climate Resilience Options	\$17,000
Task 4: Final Report	\$3,000
Total	\$45,000

Item	Federal (NHCP)	Non-federal (Match)	Match Type (cash, in-kind, or both)	Total
Personnel	\$29,300	\$15,000	Cash and in-kind	\$44,300
Fringe				\$0
Equipment				\$0
Travel	\$500			\$500
Supplies	\$200			\$200
Sub-Contractual				\$0
Construction				\$0
Other				\$0
Indirect				\$0
Totals	\$30,000	\$15,000		\$45,000