

AGENDA ITEM 8d

Authorizing the execution of an amendment to a sub-award agreement, executed October 10, 2018, through the Cape Cod Commission, with Woods Hole Oceanographic Institution, under the Cape Cod Commission's SNEP Watershed Grant project titled "Regional Collection & Analysis of Cape Cod Water Resources Data to Inform Local Decision-Making" in the amount of \$107,289.00, for a period from October 1, 2018 through July 31, 2020, extending the period of performance through February 28, 2021

AMENDMENT TO SUBAWARD AGREEMENT
BETWEEN

Barnstable County through
Cape Cod Commission
3225 Main Street
Barnstable, MA 02630

and

Woods Hole Oceanographic Institution
266 Woods Hole Road
Woods Hole, MA 02543-1536

Federal Award Identification Number: 00A00370
Federal Award Date: October 1, 2017
Federal Awarding Agency: U.S. Environmental Protection Agency through Restore America's Estuaries
Subaward Date: September 1, 2018
Subaward to the Cape Cod Commission: \$399,998
Subaward Number: SNEPWG18-9-CCC
CFDA Number/Name: 66.129 – Southeast New England Coastal Watershed Restoration
FFATA Reportable: yes
Research & Development: no

Subaward Start Date: October 1, 2018
Subaward Amount: \$107,289
Subrecipient NICRA: 61.50% (for year 2020)
Subrecipient Match: \$35,405
Subrecipient DUNS: 001766682
Original Subaward Expiration Date: July 31, 2020
Amended Subaward Expiration Date: February 28, 2021

Project Contacts:

Erin Perry, Special Project Manager
eperry@capecodcommission.org
508-744-1236

Gail Coyne, Chief Fiscal Officer
gcoyne@capecodcommission.org
508-744-1202

Subrecipient Project Contacts:

Jennie Rheuban, Research Associate III
jrheuban@whoi.edu
508-289-3782

THIS SUBAWARD AGREEMENT (the "Agreement") made the 10th of October, 2018 by and between Barnstable County, acting by and through the Cape Cod Commission (the "Recipient") and Woods Hole Oceanographic Institution (the "Subrecipient") so that the Subrecipient may partner with the Recipient in a project titled "Regional Collection & Analysis of Cape Cod Water Resources Data to Inform Local Decision-Making" (the "Project") funded through the Southeast New England Program (SNEP) Watershed Grants, is hereby amendment as follows:

All work in connection with the subaward agreement shall continue until February 28, 2021.

This Amendment does not change any stipulation of the original, previously defined Subaward Agreement.

IN WITNESS WHEREOF, Recipient and Subrecipient have executed this Amendment this 5th day of February in the year two thousand and twenty.

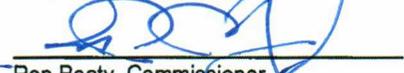
FOR BARNSTABLE COUNTY COMMISSIONERS:



Ron Bergstrom, Chair



Mary Pat Flynn, Vice-Chair



Ron Beaty, Commissioner

02/05/20
Date

FOR WOODS HOLE OCEANOGRAPHIC INSTITUTION:



2/03/2020
Date

Susan P. Ferreira
Post-Award Manager
Grant & Contract Services

FOR THE COMMISSION:



Kristy Senatori, Executive Director

2/3/20
Date

COMMONWEALTH OF MASSACHUSETTS

BARNSTABLE, SS.

At a regular meeting of the Barnstable County Board of Regional Commissioners, in the Commissioners' Conference Room, in the Superior Courthouse, on the fifth day of February, A.D. 2020, motion by Commissioner Beaty to authorize the execution of an amendment to a sub-award agreement, executed October 10, 2018, through the Cape Cod Commission, with Woods Hole Oceanographic Institution, under the Cape Cod Commission's SNEP Watershed Grant project titled "Regional Collection & Analysis of Cape Cod Water Resources Data to Inform Local Decision-Making" in the amount of \$107,289.00, for a period from October 1, 2018 through July 31, 2020, extending the period of performance through February 28, 2021, as presented, 2nd by Commissioner Flynn, approved 0-0-0

Ronald Bergstrom, Chair: Y
Mary Pat Flynn, Vice-Chair: Y
Ronald R. Beaty, Commissioner: Y

A true copy, attest, February 5, 2020


Janice O'Connell, Regional Clerk



SUBAWARD AGREEMENT
BETWEEN

Barnstable County through
Cape Cod Commission
3225 Main Street
Barnstable, MA 02630

and

Woods Hole Oceanographic Institution
266 Woods Hole Road
Woods Hole, MA 02543-1536

Federal Award Identification Number: 00A00370
Federal Award Date: October 1, 2017
Federal Award Amount: \$7,361,002
Federal Awarding Agency: U.S. Environmental Protection Agency through Restore America's Estuaries
Subaward Date: September 1, 2018
Subaward to the Cape Cod Commission: \$399,998
Subaward Number: SNEPWG18-9-CCC
CFDA Number/Name: 66.129 – Southeast New England Coastal Watershed Restoration
FFATA Reportable: yes
Research & Development: no

Subaward Start Date: October 1, 2018
Subaward Amount: \$107,289
Subrecipient NICRA: 62%
Subrecipient Match: \$35,405
Subrecipient DUNS: 001766682
Subaward Expiration Date: July 31, 2020

Project Contacts:

Erin Perry, Special Projects Manager
eperry@capecodcommission.org
508-744-1236

Gail Coyne, Chief Fiscal Officer
gcoyne@capecodcommission.org
508-744-1202

Subrecipient Project Contacts:

Jennie Rheuban, Research Associate III
jrheuban@whoi.edu
508-289-3782

THIS SUBAWARD AGREEMENT (the "Agreement") is being entered into by and between Barnstable County, acting by and through the Cape Cod Commission (the "Recipient") and Woods Hole Oceanographic Institution (the "Subrecipient") so that the Subrecipient may partner with the Recipient in a project titled "Regional Collection & Analysis of Cape Cod Water Resources Data to Inform Local Decision-Making" (the "Project") funded through the Southeast New England Program (SNEP) Watershed Grants.

1. Background and Prime Award. U.S. Environmental Protection Agency and Restore America's Estuaries entered into Cooperative Agreement #00A00370 to fund the Southeast New England Watershed Grants Projects. Restore America's Estuaries and the Cape Cod Commission entered into a subrecipient agreement #SNEPWG18-9-CCC to fund the Project (hereafter referred to as Prime Award). Under the terms of this Agreement, the Recipient awards funds to the Subrecipient for its participation in the Project. Although funds to be provided to the Subrecipient under this Agreement will come ultimately from the U.S. Environmental Protection Agency and Restore America's Estuaries, Subrecipient acknowledges that U.S. Environmental Agency and Restore America's Estuaries are not Parties to this Agreement and have no obligations directly to Subrecipient under this Agreement. Notwithstanding the above, Subrecipient will be subject to and will comply with the terms and conditions contained in the Prime Award which are applicable to the Subrecipient, which are attached hereto as Attachment B and incorporated herein by reference.

2. Scope of Services/Budget. The Subrecipient will perform the scope of services for a maximum subaward of \$107,289 as set forth in Attachment A. The Subrecipient agrees to provide a non-federal match of \$35,405 in project-related costs as described in the budget.

3. Disbursements and Accounting. The Subrecipient will separately account for expenditures made and payments received under this Subaward in its accounting records. The Recipient will not be obligated to pay Subrecipient for any costs not detailed in Attachment A and will be under no obligation to disburse funds to the Subrecipient under the Agreement, except to the extent that funds are disbursed to the Recipient under the Prime Award. Disbursements will be made to Subrecipient on a reimbursement basis no more frequently than quarterly, based upon receipt of a complete and accurate Financial Report for the applicable period. Payments will be sent to Subrecipient via check.

4. Administration: The Subrecipient agrees to comply with the Prime Award Terms and Conditions detailed in Attachment B and with 2 CFR 200 Uniform Guidance.

5. Reporting:

- Performance/Progress Reports – deliverables and progress reports per Attachment A are due 10 days after the quarters ending March 31, June 30, September 30, and December 31. A final report due within 30 days of Project completion (no later than August 31, 2020). The Subrecipient should refer to the detailed progress report requirements in Attachment B, Prime Award Conditions and its Attachment 1: Progress Report Requirements and Attachment 2: Final Report Requirements.
- Financial Reports – quarterly financial reports are due 10 days after the quarters ending March 31, June 30, September 30, and December 31. A final financial report is due within 30 days of project completion (no later than August 31, 2020). The Subrecipient should refer to the Summary Budget Table reporting requirements also in Attachment B, Prime Award Conditions and its Attachment 1: Progress Report Requirements and Attachment 2: Final Report Requirements.

6. Termination or Suspension of Agreement for Cause. If through any sufficient cause, the Subrecipient or the Recipient fails to fulfill or perform its duties and obligations under this Agreement, or if either party violates or breaches any of the provisions of this Agreement, either party will thereupon have the right to terminate or suspend this Agreement, by giving written notice to the

other party of such termination or suspension and specifying the effective date thereof. Such notice will be given at least fifteen (15) calendar days before such effective date.

7. Termination for Convenience of Recipient. The Recipient will have the right to discontinue the work of the Subrecipient and cancel this Agreement by written notice to the Subrecipient of such termination and specifying the effective date of such termination. In the event of such termination or suspension of this Agreement, the Subrecipient will be entitled to just and equitable compensation for satisfactory work completed, for services performed and for reimbursable expenses necessarily incurred in the performance of this Agreement up to and including the date of termination or suspension.

8. Recordkeeping, Audit, and Inspection of Records. The Subrecipient agrees to maintain books, records, documents and other evidence pertaining to all costs and expenses incurred and revenues acquired under this Subaward (collectively "Records") to the extent and in such detail as will properly reflect all costs and expenses for which reimbursement is claimed. The Records will be maintained in accordance with 2 CFR 200.333. As may be requested, the Subrecipient will provide timely and unrestricted access to its books and accounts, files and other Records with respect to the Project for inspection, review and audit by the Recipient, Restore America's Estuaries, U.S. Environmental Protection Agency and their authorized representatives. Upon inspection, review or audit, if the Recipient, Restore America's Estuaries, or U.S. Environmental Protection Agency disallows any costs claimed by the Subrecipient related to this Agreement, the Subrecipient will be responsible for reimbursing the Commission for any of those costs.

If the Subrecipient has a single audit performed in accordance with Uniform Guidance, the Subrecipient must electronically submit (within the earlier of 30 calendar days after receipt of the auditor's report, or nine months after the end of the audit period) to the Federal Audit Clearinghouse (FAC) the data collection form and the reporting package. The collection form must be obtained from the FAC webpage. The reporting package must include the Financial Statements and Schedule of Expenditures of Federal awards, the summary schedule of prior audit findings, the auditors reports and a corrective action plan. If the Subrecipient does not submit the form and package within the required timeframe, the Recipient may perform additional monitoring of the award.

9. Title to and Use of Work Products and Data. Except to the extent otherwise provided in the Prime Award, all completed work products funded by this Agreement are in the public domain, free of copyright or other intellectual property protections.

10. Announcements and Acknowledgments. All public announcements or news stories concerning the Project will be subject to the prior approval of the Recipient and will indicate the participation of the Recipient, SNEP, Restore America's Estuaries, and U.S. Environmental Protection Agency in the funding of the Project.

11. Liability and Indemnification. The Recipient and Subrecipient mutually agree to hold each other harmless from the negligent acts of their own employees, subcontractors or agents, defend and indemnify the other Party and its subsidiaries, officers, directors, agents, employees, and assigns of each from and against losses, damages, demands, claims, suits and liabilities, including counsel fees and other expenses of litigation, arising out of and related to work on the Project under the Prime Award.

12. Choice of Law. This Agreement will be construed under and governed by the laws of the Commonwealth of Massachusetts. The Subrecipient and the agents thereof, agree to bring any federal or state legal proceedings arising under this Agreement, in which the Commission is a party, in a court of competent jurisdiction within the Commonwealth of Massachusetts. This paragraph will not be construed to limit any rights a party may have to intervene in any action, wherever pending, in which the other is a party.

13. Force Majeure. Neither party will be liable to the other nor be deemed to be in breach of this Agreement for failure or delay in rendering performance arising out of causes factually beyond its control and without its fault or negligence. Such causes may include but are not limited to: acts of God or the public enemy, wars, fires, floods, epidemics, strikes, or unusually severe

13. Force Majeure. Neither party will be liable to the other nor be deemed to be in breach of this Agreement for failure or delay in rendering performance arising out of causes factually beyond its control and without its fault or negligence. Such causes may include but are not limited to: acts of God or the public enemy, wars, fires, floods, epidemics, strikes, or unusually severe weather. Dates or times of performance will be extended to the extent of delays excused by this section, provided that the party whose performance is affected notifies the other promptly of the existence and nature of such delay.

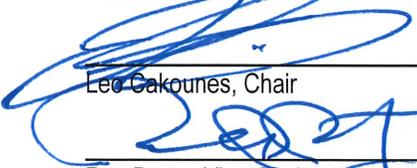
14. Compliance with Laws. The Subrecipient will promptly comply with all applicable laws, rules, regulations, ordinances, orders and requirements of the Commonwealth and any state or federal governmental authority relating to the delivery of the services described in this Agreement.

15. Headings, Interpretation and Severability. The headings used herein are for reference and convenience only and will not be a factor in the interpretation of the Agreement. If any provision of this Agreement is declared or found to be illegal, unenforceable, or void, then both parties will be relieved of all obligations under that provision. The remainder of the Agreement will be enforced to the fullest extent permitted by law.

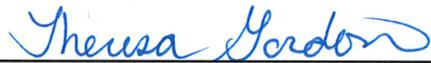
IN WITNESS WHEREOF, Recipient and Subrecipient have executed this Agreement this 10th day of October in the year two thousand and eighteen.

FOR BARNSTABLE COUNTY COMMISSIONERS:

FOR WOODS HOLE OCEANOGRAPHIC INSTITUTION:



Leo Cakounes, Chair



Theresa Gordon



Ron Beaty, Vice-Chair

10/3/2018

Date



Mary Pat Flynn, Commissioner

10-10-18

Date

FOR THE COMMISSION:



Kristy Senatori, Executive Director

10/9/18

Date

ATTACHMENT A SCOPE OF WORK/DELIVERABLES/BUDGET

TASKS

WHOI researchers will work with Cape Cod Commission staff and other project partners to complete tasks associated with the project titled "Regional Collection and Analysis of Cape Cod Water Resources Data to Inform Local Decision-Making". Project tasks include:

- Task 1: Data integration, quality assurance and control
- Task 2: Collaboration with end users and pilot project
- Task 3: Data analysis and development of a processing script
- Task 4: Integration with web-based user interface and other information products
- Task 5: Targeted outreach to inform local action
- Task 6: Final report

WHOI researchers will work with the project team on tasks associated with further refining the regional water quality database to ensure quality assurance and control and completing region-wide data analyses. Data analyses will be completed using water quality monitoring data collected by project partners and others and compiled into a regional and standardized database.

The following work will be completed by WHOI researchers (in parenthesis is the project task each is associated with):

- Coordinating with project partners during regularly scheduled project team meetings (Task 2)
- Attending and participating in End User Group meetings on an approximately quarterly basis (Task 2)
- Attending and participating in up to two workshops with a pilot watershed group (Task 2)
- Working with the project partners and consultants to develop and agree upon quality assurance and control procedures for both historic and future water quality data (Task 1)
- Working with project partners and an End User Group to define the metrics needed to inform local water quality planning (Task 2 and Task 3)
- Analyzing data included in the water quality database, consistent with the metrics identified (Task 3)
- Developing a processing script for data trend analyses designed to generate metrics upon request at user-defined spatial and temporal scales and capable of integrating new data as the database is updated (Task 3)
- Working with Commission staff to translate the processing script to ensure compatibility with a public facing user interface (Task 4)
- Working with project partners to develop a detailed interpretation of historical water quality data for one pilot watershed (Task 2 and Task 3)

DELIVERABLES

- Complete and annotated processing script for data analyses
- Data trend analyses for currently available data sets
- Data interpretation for one pilot watershed

TIMELINE

The project timeline is as follows:

	2018			2019												2020							
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Task 1																							
Data Compilation																							
Database QA/QC																							
WBNERR QAPP Development																							
Ponds and Lakes QAPP Development																							
Task 2																							
End User Group Mtgs																							
Monitoring Group Workshop																							
Identify Data Outputs/Analysis Needs																							
Pilot Watershed Interpretation																							
Identify Monitoring/Research Gaps																							
Task 3																							
Data Analysis/Script Development																							
Pilot Watershed Analysis/Interpretation																							
Task 4																							
Development of Report Card Template																							
Report Cards Released																							
"State of the Waters: Cape Cod" Released																							
Integrate Script with Database/Website																							
Task 5																							
Develop Targeted Outreach Schedule																							
Targeted Outreach/Workshops/Meetings																							
Task 6																							
Final Report																							

To maintain the proposed timeline and achieve associated milestones, WHOI deliverables should be delivered no later than the following:

- Complete and annotated processing script – May 31, 2020
- Data trend analyses for currently available data sets – May 31, 2020
- Data Interpretation for pilot watershed – June 30, 2020

WHOI - SNEP Watershed Grant Budget					
Cost Item or Category	Cost Basis	RAE SNEP Request	Non-Federal Match	Match Source	Total Project Cost
Personnel					
Jennie Rheuban	1216 hrs @ \$42.625	51,832.00	-		51,832.00
					-
					-
Total Personnel		51,832.00	-		51,832.00
Fringe					
Fringe, CCC			-		-
Fringe, APCC					-
Fringe, BBC					
Fringe, PCCS					
Fringe, SMAST					
Fringe, WBNERR					
Fringe, WHOI	45.99%	23,837.00			23,837.00
Total Fringe		23,837.00	-		23,837.00
Travel					
In-state travel	xxx mi @ \$0.545				-
Out-of-state travel (S. Doney)		4,798.00			4,798.00
					-
Total travel		4,798.00	-		4,798.00
Equipment					
					-
					-
Total Equipment		-	-		-
Supplies					
					-
					-
Total Supplies		-	-		-
Contractual					
QAQC Database					-
Dr. Scott Doney			12,339.00	Dr. Scott Doney	12,339.00
Total Contractual		-	12,339.00		12,339.00
Other					
					-
					-
Total Other		-	-		-
TOTAL DIRECT		80,467	12,339		92,806
Total Modified Direct Costs		80,467			
Indirect 62% of TMDC	62%	49,889.54			
Indirect Cost Limit	(25% of award amount)	26,822	23,066		49,889
TOTAL (Total Direct + 10%TMDC)		107,289	35,405		142,694
Match			33.00%		



2018 SNEP WATERSHED GRANTS

Subrecipient Agreement Between Restore America's Estuaries and Cape Cod Commission (Barnstable County)

September 1, 2018 – September 30, 2020

Contract #SNEPWG18-9-CCC

Points of Contact

For Restore America's Estuaries:

Thomas Ardito
401-575-6109
tardito@estuaries.org
P.O. Box 476, Saunderstown, RI 02874

For Cape Cod Commission (Barnstable County):

Erin Perry, Special Projects Manager
3225 Main St., Barnstable, MA 02630
508-744-1236
eperry@capecodcommission.org

This constitutes an agreement between Restore America's Estuaries (RAE or the Recipient) and Cape Cod Commission (Barnstable County) (CCC or the Subrecipient), regarding the responsibilities of each in their roles as Recipient and Subrecipient under the 2018 round of Southeast New England Program (SNEP) Watershed Grants, **EPA FAIN Grant #00A00370**, and its amendments and supplements.

1. Contract Documents: Contract documents shall consist of this agreement and the following attachments, all of which are incorporated by reference into this agreement.

Attachment 1: Progress Report Requirements

Attachment 2: Final Report Requirements

Attachment 3: Project workplan and budget.

2. Services: CCC agrees to perform services as described in the scope and budget provided in Attachment 3 of this agreement (hereinafter the "Project.")

3. Contract Amount: Restore America's Estuaries agrees to make available \$399,998 for use by CCC for the contract period. CCC agrees to expend this money in conformity with the scope and budget in Attachment 3 (the Project.) CCC agrees to provide \$145,665 in Project-related matching costs as described in the budget. Matching funds must be from non-federal sources and must be expended during the period of this agreement.

4. Contract Period: This agreement covers the period **September 1, 2018 through September 30, 2020**. Work shall be completed and all reimbursable expenses incurred by **August 31, 2020**.

5. Alterations: Any alterations in the scope of the work performed shall be submitted by the Subrecipient in writing to RAE, and must be approved in advance in writing by RAE. Cumulative transfers of funds among approved direct cost categories that exceed 10% of the total award must be approved by RAE in writing in advance.

For Subrecipients with a current Negotiated Indirect Cost Rate Agreement (NICRA) on file with a federal agency, amended budgets must maintain consistency with the NICRA and the requirements of the 2018 SNEP Watershed Grants Request for Proposals (RFP). For these Subrecipients, indirect costs may not exceed 25% of the award amount.

For Subrecipients without a current NICRA, amended budgets must maintain consistency with the requirements of the 2018 SNEP Watershed Grants RFP, and may not exceed 10% of Modified Total Direct Costs as described in the RFP.

6. Progress & Final Reports: The Subrecipient agrees to submit progress reports twice yearly, and a final report upon completion of the Project, according to the following schedule:

Report	Period Covered	Due Date
Progress #1	Sep. 1, 2018 – Dec. 31, 2018	Jan. 31, 2019
Progress #2	Jan. 1, 2019 – Jun. 30, 2019	Jul. 31, 2019
Progress #3	Jul. 1, 2019 – Dec. 31, 2019	Jan. 31, 2020
Progress #4	Jan. 1, 2020 – Jun. 30, 2020	Jul. 31, 2020
Final Report	Entire Project period (completion no later than Aug. 31, 2020)	30 days following completion of Project and no later than Sept. 30, 2020.

Progress and final reports will reference the goals and objectives included in Attachment 3 and indicate the progress that has been made toward each during the reporting period. Subrecipient agrees to prepare and submit progress and final reports as described above and in Attachments 1 & 2. RAE reserves the right to withhold payments if the Subrecipient has not submitted the reports on schedule or if reports are unsatisfactory in meeting the requirements of this agreement. See Attachments 1 & 2 for more information on reporting formats.

Final reports should be geared toward an audience broader than simply RAE – in other words, it should be designed to communicate Project outcomes and results in a meaningful way to end users, stakeholders and others who may be able to learn from or take advantage of, or learn from Project outcomes and results. In all cases the final report should include an executive summary providing a brief but complete overview of Project outcomes and results, as specified in Attachment 1. In the event that the final report is intended for a technical audience, the executive summary should be written for a general audience and suitable for such purposes as reporting to funding agencies, elected officials, general-interest media outlets, etc. See Attachment 2 for more information.

Be sure to take plenty of high-resolution photographs throughout the course of the Project for use in progress reporting and, most importantly, the final report and executive summary. See Attachments 1 & 2 for more information.

7. Collaboration and Communication: SNEP Watershed Grants Program supports the Southeast New England Program (SNEP), an initiative of the U.S. Environmental Protection Agency (EPA), Region 1. The mission of SNEP is to:

Foster collaboration among regional partners across southeast New England’s coastal watersheds to protect and restore water quality, ecological health and diverse habitats by sharing knowledge and resources, promoting innovative approaches, and leveraging economic and environmental investments to meet the needs of current and future generations.

More information about SNEP is available at

<https://www.epa.gov/snecwrp>

Strong local and regional partnerships are essential in carrying out the mission of SNEP. Subrecipient agrees to participate in SNEP through at least two workshops or conferences over the course of the Project.

Subrecipient agrees to acknowledge SNEP and RAE in communications with the media, the public, and elected officials about the Project, including all publications, work products, academic and general publications, videos, signage, press releases, etc. Signs, printed reports and similar materials should include the SNEP logo where practicable. Subrecipients may download high-resolution digital files of the SNEP logo at www.snepgrants.org.

Example acknowledgement language:

[Project name] is supported by the Southeast New England Program (SNEP) Watershed Grants. SNEP Watershed Grants are funded by the U.S. Environmental Protection Agency (EPA) through a collaboration with Restore America's Estuaries (RAE). For more on SNEP Watershed Grants, see www.snepgrants.org

Subrecipient will coordinate with RAE on outreach plans, events, products, and media coverage associated with the Project, so that RAE may assist with the development of outreach communications and messaging. Subrecipient should provide drafts of any outreach plans to RAE staff for review and input. In particular, all press releases should be shared with RAE in draft at least one week in advance of release to allow RAE the opportunity to provide comments, and a quote if requested.

Subrecipient agrees to provide copies of final outreach products, website mentions, press materials, photos, etc. via the standard progress reports to RAE, or when available throughout the award period.

Subrecipient will provide RAE with high-resolution before, during, and post-implementation photos of the Project. Photos of Project sites prior to construction and during Project implementation should be submitted with progress reporting or as requested by RAE.

Subrecipient will notify RAE of all significant Project-related meetings and events (Project team meetings, public meetings, public hearings and presentations, press events, commencement of construction, ribbon-cuttings, etc.) at least one week prior to the event.

SNEP Watershed Grants are federal funds. RAE will assume, therefore, that all completed work products funded by SNEP are in the public domain, free of copyright or other intellectual property protections, unless covered by another applicable agreement or requirement (e.g., university intellectual property policies). In the event that Project work

products are subject to other intellectual property requirements, the Subrecipient shall inform RAE of such requirements ***prior to signature*** of this grant.

Project implementation sites (e.g., best management practice (BMP) installations, construction areas, etc.) must display, where appropriate and practicable, a permanent sign indicating that the Project has received funding through the U.S. Environmental Protection Agency, Southeast New England Program, and Restore America's Estuaries, and including the SNEP logo. Signage should also identify other contributing partners.

8. Permits & Compliance: Subrecipient will ensure that implementation of the Project meets all federal, state and local environmental laws and consistency requirements, including EPA Quality Assurance Project Plan (QAPP) requirements.

9. Invoices: Subrecipient will invoice RAE at least quarterly and at most monthly for reimbursable Project expenses. Generally, payment of approved expenses will be by reimbursement by RAE; however, the Subrecipient may request advance payment if necessary.

In the event that advance funds are needed, requests should be made at least one month prior to the anticipated need for the funds.

Invoices must follow the following format:

- The invoice must be on organization letterhead.
- Reference the contract number.
- Include date of invoice and period covered.
- List the total amount of expenses and match incurred during the invoice period by approved grant budget categories, as contained in the line item budget in Attachment 3.
- Indicate the amount of cumulative expenses and match from the beginning of the budget period and the balance still available. This information should also be listed by approved grant budget categories, as contained in the line item budget in Attachment 3.
- Include a general description of work performed or costs incurred.
- List the Project task that the requested amount applies to. If the requested remittance amount applies to two or more Project tasks, the invoice must list the amount that will be applied to each.
- Cash and in-kind matching funds should be listed separately, and the source of all match identified.
- Include organization name, mailing address for payment, and any cost codes that should be included on the check.
- Invoices must be signed by an authorized representative of the organization.

Submit invoices in PDF format to:

snepgrants@estuaries.org

Note: Variances among approved direct cost categories that cumulatively exceed 10% of the total award must be approved by RAE in advance in writing.

10. Financial Records: Subrecipient agrees to maintain accurate records of all costs incurred in the performance of this work, including matching funds, and agrees to allow Restore America’s Estuaries, EPA, and their duly authorized representatives reasonable access to their records to verify the validity of expenses reimbursed under this agreement. Subrecipient agrees to maintain financial records, supporting documents and other records pertaining to this agreement for a period of three (3) years from the termination date of this agreement.

To comply with federal regulations, Subrecipient agrees to maintain a financial management system that provides accurate, current and complete disclosure of the financial status of the subaward. This means the financial system must be capable of generating regular financial status reports which indicate the dollar amount allocated for the award (including any budget revisions), the amount obligated, and the amount expended for each activity. The system must permit the comparison of actual expenditures and revenues against budgeted amounts.

Accounting records must be supported by source documentation. Invoices, bills of lading, purchase vouchers, payrolls and the like must be secured and retained for three (3) years in order to show for what purpose funds were spent. Payments should not be made without invoices and vouchers physically in hand. All vouchers and invoices should be on vendors' letterheads.

All employees paid in whole or in part from funds provided under this agreement must prepare a time sheet indicating the hours worked for each pay period. Personnel activity reports (i.e. timesheets) reflect an after-the-fact determination of the actual activity of each employee charging time to the agreement and must reflect all time spent by an employee and be signed by the employee or a supervisor. “Timesheets” are required only for those employees charging time to the Project, and then must reflect all time spent by the employee.

Subrecipient should keep records, based on these time sheets and the hourly payroll costs for each employee, indicating the distribution of payroll charges.

Subrecipient must maintain in its records documentation of non-federal Project-related matching costs in the amount specified in the budget under Attachment 3. Subrecipient agrees to adhere to federal rules and guidelines governing documentation and acceptability of Project-related matching costs.

Matching Contributions, whether in the form of cash, goods and services, or property, must be:

- 1) Non-federal in nature (Federally appropriated or managed funds are ineligible.);
- 2) Utilized for work in support of the Project;
- 3) Expended within the timeframe of this contract; and,

4) Voluntary in nature (Funds presented for fulfillment of mitigation, restitution, or other permit or court-ordered settlements are not eligible.). Subrecipients must document and maintain all records of matching contributions.

11. Audits: RAE reserves the right to audit some or all of the Project costs, expenses, payments, etc., either formally or informally, as the Project proceeds and/or upon completion.

In the event that the Subrecipient's total expenditures under federal awards exceed \$750,000 in a fiscal year, an audit meeting the requirements of 2 CFR 200 is required. It is the Subrecipient's responsibility to contract for this audit and to submit a copy to RAE no later than thirteen months after the close of the fiscal year to which the audit pertains, for fiscal years that fall in whole or in part within the period of this agreement. If an audit discloses findings or recommendations, Subrecipient agrees to include with the audit report a corrective action plan containing the following:

- The name and number of the person responsible for the corrective action plan.
- Specific steps to be taken to comply with the recommendations.
- A timetable for performance and/or implementation dates for each recommendation.
- Descriptions of monitoring to be conducted to ensure implementation.

In the event that the Subrecipient completes any other routine or required audits during the period of this grant (for example, an annual independent audit), the Subrecipient will inform RAE of the availability of the audit within 30 days of completion, and will provide RAE with a copy of the audit *if requested by RAE*.

12. Allowable and Unallowable Costs: SNEP Watershed Grants are federal funds. Subrecipient agrees to follow federal regulations as put forth in 2 CFR 200 and applicable OMB Circulars in determining allowable costs under this agreement. Subrecipient agrees not to use funds provided under this agreement for any cost that is unallowable under these regulations. Reimbursement by RAE for any cost that is later determined to be unallowable does not constitute sanction by RAE for the unallowable use of these funds.

13. Indemnification: The Subrecipient agrees to indemnify RAE against all losses for expenses incurred by the Subrecipient that are, or are later held to be, unallowable. Reimbursement by RAE to the Subrecipient for such costs does not negate nor in any way nullify the Subrecipient's responsibility under this provision.

As the direct Recipient of funds under this Award, RAE is responsible for the management of the award and is ultimately responsible for ensuring compliance with all federal requirements. The Subrecipient will cooperate with RAE in achieving compliance with the specific terms and conditions of the award, as well as the other terms and conditions specified in this agreement.

14. Project Data and Results: Sharing of Project data and results, including environmental data and analysis, is a SNEP priority. All information collected and/or created under this grant/cooperative agreement will be made visible, accessible and independently understandable to users in a timely manner (typically no later than one (1) year after the data are collected or created) free of charge or at minimal cost that is no more than the cost of distribution to the user.

Project results will similarly be made available in a timely manner, typically via the final report described above and in Attachment 2.

15. Signatures

For Restore America's Estuaries

By:  _____
Jeff Benoit, President & CEO

Date: 9-4-18

For Cape Cod Commission (Barnstable County):

By:  _____
Name & Title: Leo Cakounes, Ron Beaty, Mary Pat Flynn,
Barnstable County Commissioners

Date: 09/12/18

Attachments

- Attachment 1: Progress Report Requirements
- Attachment 2: Final Report Requirements
- Attachment 3: Project workplan and budget.



2018 SNEP WATERSHED GRANTS Subrecipient Agreement

Attachment 1: Progress Report Requirements

General Instructions

The Progress Report consists of:

1. Cover Information;
2. Project Report Narrative;
3. Project Budget Report;
4. Supporting Materials;
5. Certification.

Progress reports shall be completed and returned within one month of the end of a reporting period, using the following calendar:

Report	Period Covered	Due Date
Progress #1	Sep. 1, 2018 – Dec. 31, 2018	Jan. 31, 2019
Progress #2	Jan. 1, 2019 – Jun. 30, 2019	Jul. 31, 2019
Progress #3	Jul. 1, 2019 – Dec. 31, 2019	Jan. 31, 2020
Progress #4	Jan. 1, 2020 – Jun. 30, 2020	Jul. 31, 2020
Final Report	Entire Project period (completion no later than Aug. 31, 2020)	30 days following completion of Project and no later than Sept. 30, 2020.

If there was no Project activity during the period, a report should still be filed, explaining why there was no activity. Please use the template attached to these instructions to complete the progress report. The report should be submitted via email in PDF format to:

snepgrants@estuaries.org

The form may be signed electronically.

The following pages provide a template and instructions for progress reports. Use this format.

(Attach. 1 Cont'd)

**SNEP Watershed Grants
Progress Report Template**
Annotated with Instructions

1. Cover Information

Date

Project Name

Contract Number (SNEPWG18-###)

Grant Period (for entire Project)

Grantee Organization

Report Contact Person, with telephone & email

Project Leader (if different)

Reporting Period

Report Type and Number (e.g., Progress #2)

2. Project Report Narrative

Summarize the Project activities undertaken during the current reporting period within the following headings, building upon the narrative from previous reports, if any.

2.A. Results & Progress to Date

Describe in sufficient detail the goals of the Project, and the progress and results achieved during the current reporting period, building on the narrative from previous reports, if any.

Report accomplishments or setbacks on specific tasks as described in the scope of work, Attachment 3. This should include information such as:

- problems that the Project is addressing;
- short and long term objectives, and how they are being or have been met;
- relevance of the Project to restoring and protecting coastal and watershed ecosystems in the Southeast New England Region;
- activities carried out in this reporting period, including specific techniques and materials used;
- deliverables or milestones completed or partially completed during the reporting period (if partially completed, describe current status, percentage completion, etc.);
- findings to date or lessons learned during this reporting period;

- challenges or potential roadblocks to future progress (Note: If you have immediate concerns about the Project, please contact RAE to discuss the issue as soon as possible.)

2.B. Work Remaining Under Current Contract

Describe in sufficient detail the activities remaining and next steps to be completed under the current contract. Provide an updated timeline of major Project tasks, as applicable.

2.C. Compliance

Describe the status of Quality Assurance Project Plan (QAPP) completion, submittal and approval. List any permits required for the Project, and their status (e.g., not yet applied for, submitted and under review, approved on [date], etc.).

2.D. Project Partners

List major Project partners, and briefly note their contributions.

2.E. Volunteer and Community Involvement

Describe community support and any public involvement in the Project, including the specific roles of volunteers in Project activities. List the number of volunteers and hours that were contributed during this period. If volunteer time is being used as match, report this in the budget section, described below.

2.F. Outreach & Communications

Describe any outreach or educational activities (e.g. training, brochures, videos, press releases or public events) related to the Project. **Include PDF copies of press releases, outreach documents, newspaper articles, etc. as described under “Supporting Materials,” below.**

3. Project Budget Report

The budget report must provide sufficient information and detail to explain Project expenses, for the reporting period *and* cumulative-to-date, in the context of the objectives, tasks, and categories provided in the Project narrative and budget under Attachment 3. The budget report should be organized so that a reviewer can easily judge whether expenditures to date for the Project are tracking well with progress toward objectives and, if not, to understand why.

3.A. Summary Budget Table

Provide a summary budget table to show overall expenditures and match during the reporting period and cumulative-to-date, using the following format. Be sure to fully document match and match sources.

Summary Budget Table

	Budget Category	Total Budgeted Funds	Total Budgeted Match	Grant Funds Expended this period	Grant Funds Expended Cumulative	Match Funds Expended this period	Match Funds Expended Cumulative	Match Source
a	Personnel							
b	Fringe							
c	Travel							
d	Equipment							
e	Supplies							
f	Contractual							
g	Other							
h	Total Direct							
i	Indirect							
j	Total							

3.B. Detailed Project Budget Table

The centerpiece of the Project budget report is a budget table or tables utilizing the same cost categories and level of detail as the Project budget under Attachment 3. Report expenditures by category and, if applicable, task. Where a category is very broad, provide sufficient breakdown detail – for example, where “personnel” covers a number of individuals, show expenses for each individual; under “subcontracts” show expenses for each subcontract, etc. The table need only describe expenditures during the reporting period, rather than cumulatively. Add additional tables if need be to provide sufficient detail, or to summarize costs by task. **Where additional tables are used, ensure that the reviewer can easily understand how they relate to one another and the summary budget table.**

3.C. Budget Narrative

Use a budget narrative, keyed to the budget tables where necessary, to provide sufficient detail on expenditures and match. The budget narrative in the report may follow the format of the budget narrative in the Project budget under Attachment 3. Be sure to explain any deviations from the approved budget. The Subrecipient Agreement details requirements for prior approval for changes to Project budgets.

4. Supporting Materials

Include high-resolution digital copies, using PDF format for documents and JPG or TIFF format for images, of supporting materials related to the Project, including:

- Project maps and drawings;
- Technical memoranda, data analyses and modeling reports;
- Project photographs, including photos depicting implementation sites before, during, and after implementation; photos of Project signs, etc.;
- Press releases, news articles, brochures, educational curricula, etc.

In the event that file sizes for supporting materials are too large to attach, contact RAE to set up a shared cloud file.

5. Certification

Include this language: *The undersigned verifies that the descriptions of activities and expenditures in this progress report are accurate to the best of my knowledge; and that the activities were conducted in agreement with the grant contract. I also understand that matching fund levels established in the grant contract must be met.*

Grantee Signature:

Name:

Job Title

Date:

Organization:



2018 SNEP WATERSHED GRANTS Subrecipient Agreement

Attachment 2: Final Report Requirements

General Instructions

The Project final report follows the same format as interim progress reports, with several important differences:

- The final report covers the Project from beginning to end, describing the entire course of the Project, and presenting all expenditures and results;
- It includes lessons learned from the vantage point of the completed Project;
- It provides greater detail on both process and outcomes; and
- It includes an executive summary written for a general or general professional audience (more on this below).

The Final Report consists of:

0. Executive Summary;
1. Cover Information;
2. Project Report Narrative;
3. Project Budget Report;
4. Supporting Materials;
5. Certification.

The Final Report covers the entire Project period (completion no later than Aug. 31, 2020) and must be submitted within 30 days following completion of the Project (no later than Sept. 30, 2020.)

The report should be submitted via email in PDF format to:

snepgrants@estuaries.org

The form may be signed electronically.

The following pages provide a template and instructions for final reports. Use this format.

(Attach. 2 Cont'd)

**SNEP Watershed Grants
Final Report Template**
Annotated with Instructions

O. Executive Summary

The executive summary (ES) is most easily completed after the rest of the final report has been written; however, it is an essential component of the report and should not be treated as an afterthought. Communication, collaboration, learning and technology transfer are fundamental to the mission of the Southeast New England Program (SNEP). The executive summary will be a principal means by which outcomes of the Project are communicated; therefore, it should adhere to the following guidelines:

- The executive summary should be written and formatted so it can be used as a stand-alone report. It should make sense to a reader with no prior knowledge of the Project, and should be fully understandable independent of the rest of the final report or any other Project information or documentation.
- Follow the format and utilize the headings for the full final report (listed below), providing complete information on the Project, including a summary of costs and match.
- The ES should include its own title or cover page so that it can be easily separated from the rest of the report. This may be a general, illustrated cover for the entire report that doubles as a cover for the ES.
- Consider your audience. You may choose to write for a general audience – for example, all adult residents of a particular municipality. Or, you may gear the ES toward a more professional audience – for example, water resources managers throughout the SNEP region. In every case, however, it should be written for a broader audience than simply the Project team and grant managers. If it is written for a more technical audience, it should still be written in such a way that an informed general reader – for example, a newspaper reporter – can make sense of it. If you use acronyms or technical terms, for example, provide a glossary if need be to define them.
- Communicate the story of the Project. The reader should understand, not just what you did, but why you did it – why it is important, and how it will positively affect ecosystems and communities in Southeast New England. If it pertains to a specific resource, thoroughly describe its impact on that resource, and also explain its broader impact. For example, for a Project that restores water quality, the ES should describe the specific parameters of that restoration, but should also discuss the importance of the improvement to the community, such as beach use, shellfishing or the local tourism economy, and describe the area (watershed, estuary, community, etc.) affected by the work.

- Use images to help tell that story. The ES should include the best and most informative maps, photos or other images from among the supplemental materials (Section 4, below). At the very least, the ES should include a map of the Project area and some high-resolution photos of the Project area, community meetings, construction work if any, researchers performing sampling, etc. The ES should include enough images to convey the outcomes of the Project while maintaining an easily readable summary and convenient digital file size.
- Include an overview of Project costs and match. Describe volunteer participation.
- In general, the ES should be about 3-5 pages of text, and 5-10 pages complete with images.
- The ES must prominently acknowledge SNEP support of the Project. Suggested language for this acknowledgement is provided in the subrecipient agreement.

1. Cover Information

The cover information for the final report is identical to that for a progress report, except that the reporting period is the entire (actual) grant period, as follows:

Project Name
 Contract Number (SNEPWG18-###)
 Grant and Reporting Period (actual, completed)

Grantee Organization
 Report Contact Person, with telephone & email
 Project Leader (if different)

Report Type: Final

2. Project Report Narrative

Summarize the Project activities undertaken during the course of the Project. Unlike progress reports, the final report *does not* build upon the narrative from previous reports, but should be a stand-alone report, describing the Project from beginning to end.

2.A. Project Results

Describe in sufficient detail the goals of the Project, and the progress and results achieved over the course of the Project. Report accomplishments or setbacks on specific tasks as described in the scope of work, Attachment 3. This should include information such as:

- problems that the Project addressed;
- short and long term objectives, and how they are being or have been met;
- relevance of the Project to restoring and protecting coastal and watershed ecosystems in the Southeast New England Region;
- geographic area(s) affected by the Project;

- activities carried out to complete the Project, including specific techniques and materials used;
- deliverables or milestones completed;
- findings to date or lessons learned during this reporting period;
- changes made to the Project plan over the course of the Project, why they were made and how they worked out;
- next steps for future progress;
- challenges for future progress.

2.C. Compliance

List or summarize any compliance activities completed – Quality Assurance Project Plan (QAPP), permits, etc.

2.D. Project Partners

List major Project partners, and note their contributions in detail.

2.E. Volunteer and Community Involvement

Describe community support and any public involvement in the Project, including the specific roles of volunteers in Project activities. List the number of volunteers and hours that were contributed during the Project. If used as match, report the match figures under the budget section described below.

2.F. Outreach & Communications

Describe any outreach or educational activities (e.g. training, brochures, videos, press releases or public events) related to the Project. **Include PDF copies of press releases, outreach documents, newspaper articles, etc. as described under “Supporting Materials,” below.**

3. Project Budget Report

The budget report must provide sufficient information and detail to explain Project expenses for the entire Project, in the context of the objectives, tasks, and categories provided in the Project narrative and budget under Attachment 3. The budget report should be organized so that a reviewer can easily judge whether expenditures tracked the original Project budget and, if not, to understand why.

3.A. Summary Budget Table

Provide a summary budget table to show overall expenditures and match over the course of the entire Project, using the following format. Be sure to fully document match and match sources.

Summary Budget Table

	Budget Category	Total Budgeted Funds	Total Budgeted Match	Total Budgeted Grant + Match	Actual Grant Funds Expended	Actual Match Funds Expended	Actual Expended Grant + Match	Match Source
a	Personnel							
b	Fringe							
c	Travel							
d	Equipment							
e	Supplies							
f	Contractual							
g	Other							
h	Total Direct							
i	Indirect							
j	Total							

3.B. Detailed Project Budget Table

As with progress reports, the centerpiece of the final budget report is a budget table or tables utilizing the same cost categories and level of detail as the Project budget under Attachment 3. Report expenditures by category and, if applicable, task. Where a category is very broad, provide sufficient breakdown detail – for example, where “personnel” covers a number of individuals, show expenses for each individual; under “subcontracts” show expenses for each subcontract, etc. This table will report expenditures over the course of the entire Project. Add additional tables if need be to provide sufficient detail, or to summarize costs by task. **Where additional tables are used, ensure that the reviewer can easily understand how they relate to one another and the summary budget table.**

3.C. Budget Narrative

Use a budget narrative, keyed to the budget tables where necessary, to provide sufficient detail on expenditures and match. The budget narrative in the report may follow the format of the budget narrative in the Project budget under Attachment 3. Be sure to explain any deviations from the approved budget. The Subrecipient Agreement details requirements for prior approval for changes to Project budgets.

4. Supporting Materials

Include high-resolution digital copies, using PDF format for documents and JPG or TIFF format for images, of supporting materials related to the Project, including:

- Project maps and drawings;
- Maps of Project results or outcomes if applicable;
- Technical memoranda, data analyses and modeling reports;
- Project photographs, including photos depicting implementation sites before, during, and after implementation; photos of Project signs, etc.;
- Press releases, news articles, brochures, educational curricula, etc.

In the event that file sizes for supporting materials are too large to attach, contact RAE to set up a shared cloud file.

5. Certification

Include this language: *The undersigned verifies that the descriptions of activities and expenditures in this final report are accurate to the best of my knowledge; and that the activities were conducted in agreement with the grant contract. I also understand that matching fund levels established in the grant contract must be met.*

Grantee Signature:

Name:

Job Title

Date:

Organization:

Attach. 3

3225 MAIN STREET • P.O. BOX 226
BARNSTABLE, MASSACHUSETTS 02630



CAPE COD
COMMISSION

(508) 362-3828 • Fax (508) 362-3136 • www.capecodcommission.org

August 29, 2018

The following details our proposed project, partner organizations, and project costs.

Project Title: Regional Collection and Analysis of Cape Cod Water Resources Data to Inform Local Decision-Making

Location of Project: Cape Cod, Massachusetts

Applicant: Cape Cod Commission (Barnstable County)
3225 Main Street
Barnstable, MA 02630

Nature of Organization: Regional Planning Agency, Department of Barnstable County

Project Lead/Point of Contact: Erin Perry, Special Projects Manager
eperry@capecodcommission.org
508-744-1236

Partner Organizations: Association to Preserve Cape Cod
Center for Coastal Studies
UMass Dartmouth School for Marine Science and Technology
Waquoit Bay National Estuarine Research Reserve
Woods Hole Oceanographic Institution

Total Request: \$399,998
Total Non-Federal Match: \$145,665
Total Project Cost: \$545,663
Match Percentage: 36.42%

We look forward to the opportunity to complete the proposed work.

Sincerely,

Kristy Senatori
Executive Director

PROJECT NARRATIVE

Problem Statement: Cape Cod's 53 coastal embayments, nearly 1,000 ponds, and sole source aquifer are ecologically rich and extremely fragile (see project area map in attachment A). Human activity and land use – primarily nutrient pollution from septic systems – have significantly degraded estuarine and freshwater quality. Cape Cod communities struggling to find cost-effective strategies to reduce nitrogen can turn to the Area Wide Water Quality Management Plan for Cape Cod (208 Plan), recently updated by the Cape Cod Commission (Commission). Although the 208 Plan focuses on nitrogen as the major target for improving water quality in estuaries, phosphorus loading to freshwater ponds and streams must be targeted for pollution control measures. The 208 Plan provides a framework of traditional and non-traditional strategies for estuarine and freshwater quality improvement.

Towns are responsible for implementing strategies to reduce nutrients. In many areas across the region development density is not adequate to support cost-effective traditional collection and treatment of wastewater; therefore, towns are relying on the 208 Plan framework as a pathway for non-traditional strategies. Performance of these strategies is less certain, and implementation relies heavily on adaptive management. In addition to nutrients from septic systems, stormwater runoff is also a concern – one that all Cape Cod communities within the Southeast New England Program region are required to address through Municipal Separate Storm Sewer System (MS4) permits.

The 208 Plan's efficacy as a framework for local water quality management depends on the ability to ground-truth and record if strategies enacted in the field are effective and if the environment is responding with water quality improvements. Towns must revisit implementation plans periodically, as required as a condition of consistency with the 208 Plan and MS4 permits, and to maintain compliance with Watershed Permits issued by the Massachusetts Department of Environmental Protection. In most cases, towns must revisit plans at least every five years, and adjust their approaches as necessary. Towns, Barnstable County and partner organizations are collecting data annually and as nutrient management alternatives are implemented. Data analyses are needed to evaluate and determine success – or failure – of approaches.

This proposal seeks support to improve recording, management and translation of monitoring data, so towns better understand if management strategies are successful. It includes new methods for data analysis, evaluation, reporting, and translation to improve understanding of water quality trends and better integrate results into local planning and policy development, creating a path forward for the provision of data and information that will serve the 15 Cape Cod communities and the region well into the future.

Project Description: The Commission has developed a regional water quality database to centralize water quality data historically collected by multiple organizations and agencies. The project team proposes to enhance this framework by integrating additional data and adding tools to ensure data accuracy and assess nutrient mitigation strategies. Funding will help develop a user-friendly interface that analyzes estuarine monitoring data for each estuary with an existing long-term dataset. One watershed will be selected to pilot the interface in order to demonstrate and assess its effectiveness as a decision-support tool. In addition, the project team will compile and analyze existing data associated with freshwater resources, including ponds, lakes, and drinking water; and develop information products to improve understanding of the interconnection of all water resources to Cape Cod's Sole Source Aquifer. Together, these improvements will create a feedback-loop so that the effect of nutrient reduction strategies on a resource can be understood, captured, and used in real-time strategic decisions for nutrient reduction. Recognizing the importance of clean water and supporting all aspects of the environment on Cape Cod, information compiled and analyzed as part of this project will also be made more widely available through a variety of outreach initiatives.

A key feature of this program is that data analysis will provide a measure of the health of the water body and watershed to guide investment in nutrient reduction strategies. Another feature of this program is its

collaborative approach to water resources data aggregation, providing a platform that makes it possible for towns to have a comprehensive picture of the benefits of their investments across all gradients of the watershed. End user engagement is woven into each proposed task ensuring that the products provided at the end of the project will be easily applied and readily utilized by the research and management communities on Cape Cod. The goal is to provide towns with the best available science-based information, so investments in nutrient reduction and groundwater protection have the best possible effect on resources. This goal will be reached through the expertise of the project team, End User Group established as part of the project, and the State of the Waters: Cape Cod Advisory Committee established by the Association to Preserve Cape Cod (APCC). The project team includes experts in water resources, database management, data collection and analysis, collaboration and outreach and project management. The proposed work will be achieved through the following project tasks:

- Task 1: Data integration, quality assurance and control
- Task 2: Collaboration with end users and pilot project
- Task 3: Data analysis and development of a processing script
- Task 4: Integration with web-based user interface and other information products
- Task 5: Targeted outreach to inform local action
- Task 6: Final report

Task 1: Data integration, quality assurance and control

Water quality data as available through project partners and collaborators from all regions of Cape Cod, including estuarine and freshwater environments, will be inventoried and entered into the regional database. The Commission maintains data in an SQL database and will work with project partners to expand the existing database, as needed.

Estuarine Data: Commission staff will work with partner monitoring organizations to compile estuarine water quality data not currently in the regional database. The original effort to compile and integrate data into the database occurred in 2016 and included development of the database infrastructure, identification of data fields and compilation of historical data through 2015. The database will be updated to include all available data through to the present time. The monitoring organizations contributing data include the Center for Coastal Studies (CCS), Buzzards Bay Coalition (BBC), University of Massachusetts Dartmouth School for Marine Science and Technology (SMAST), and the Waquoit Bay National Estuarine Research Reserve (WBNERR). Data collection for these water quality monitoring programs began in 2006, 1992, 1987, and 1993, respectively.

To take advantage of all available long-term monitoring data, while also establishing quality control standards, any historic data generated before or without an approved Quality Assurance Project Plan (QAPP) will be flagged accordingly in the database as part of the quality assurance and quality control (QA/QC) process. Metadata will accompany the database, as well as any final reports acknowledging the use and confidence level of non-QAPP approved data. Three of the four contributing monitoring organizations (CCS, BBC, SMAST) hold current EPA-approved QAPPs. While BBC is not an official partner on this project, they have provided data for use in the database and agree to continue doing so. WBNERR will develop a QAPP in the first year of this proposed project. WBNERR currently sends samples to CCS and SMAST for nutrient analyses under two different water quality monitoring programs; therefore, those nutrient data are covered under approved QAPPs. WBNERR also maintains long-term data (1998 – present) collected using automatic YSI loggers (i.e., sondes) as part of the NOAA National Estuarine Research Reserve System-Wide Monitoring Program (SWMP), but the standard operating procedures for this program are not covered under previously approved QAPPs.

By developing a comprehensive QAPP for WBNERR, records with high (15-minute) temporal resolution of temperature, salinity, pH, dissolved oxygen, turbidity, and chlorophyll *a* fluorescence can be incorporated into the regional database and used in correlation with nutrient dynamics to model changes. The QAPP will strengthen WBNERR's data collection process and enhance its ability to share

and integrate data across private and academic institutions and state and federal agencies. This increased capacity for standardized data sharing is significant for this project but also for future collaborations.

Freshwater Data: Extensive data is available on the quality of Cape Cod's freshwater resources. APCC staff, working with the project team and trained volunteers, will identify and compile freshwater quality data to suitable standards, including state and federal Clean Water Act standards for surface waters and drinking water. An inventory of data will be developed to ensure data sources can be tracked and recorded. Data will be maintained in the regional database.

Data sources will be identified by the project team, guided by standards set by the State of the Waters Advisory Committee to ensure evaluation of all important and credible sources. Data will be compiled for lakes, rivers, public drinking water supplies, and groundwater. This effort will leverage the existing water resources data compiled and maintained by each project partner and will evaluate and compile appropriate data from other sources as an initial step in the project. Data utilized will include, but not be limited to, the 17 years of data collected by the Pond and Lake Stewardship (PALS) Program, as well as data collected from detailed pond assessments and water use and drinking water quality data from the 17 individual water purveyors on Cape Cod, all of which has been compiled by Commission staff.

The Commission and project partners will work with a consultant to develop a QAPP for pond and lake data. In the past, the Massachusetts Department of Environmental Protection (DEP) has declined to accept the existing PALS data for use in identifying and listing impaired waters. As with estuarine data, any historic data generated before or without an approved QAPP will be flagged accordingly and metadata will accompany the database.

Database Quality Assurance and Quality Control (QA/QC): A system for identifying potential errors in source data and/or inconsistencies in database formatting will be established.

The Commission and project partners will work with a consultant to complete the following tasks: 1) develop and agree upon a set of "filter rules" for both historic and future water quality data sets to identify potential errors in the source data; 2) implement a system for performing QA/QC on historical data sets and new data sets, as provided; 3) identify and address database formatting inconsistencies, such as inconsistent station IDs, that impact importing data sets and searchability of the database

As previously described, data not covered by a previously approved QAPP will be flagged accordingly and metadata accompanying the database, as well as final reports, will acknowledge the confidence level of non-QAPP approved data.

Task 1 Outputs: 1) Inventory of water quality data, including sources, parameters and dates; 2) Identification of data gaps; 3) Complete, up-to-date regional estuarine and freshwater quality databases; 4) WBNERR QAPP; 5) Ponds QAPP

Task 2: Collaboration with end users

The goal of this project is to make information more accessible and useable by towns and the region, all of whom are working to meet a regional goal of improving the quality of water resources. Social science research shows that to increase the likelihood of science and data being applied, managers and decision-makers must understand the science and find it to be legitimate and credible (Cash et al. 2003). To enhance the likelihood that data and products from this project are used and trusted, the project team intends to create deliberate processes that engage end users (those in a position to apply the project deliverables), ensuring they understand the data and that data products and analyses meet their information needs.

To this end we have designed a collaborative end user engagement process to enable this project to bridge the science to management divide and achieve desired outcomes. The project approach includes

integrating defined steps that will link the technical aspects of data collection and analysis to development of decision-support tools that meet end user needs and are able to help guide management decisions. The collaborative process is designed to be iterative and end user driven and builds in meaningful and deliberate opportunities for regional and local decision-makers to contribute to project outcomes. End user collaboration will be integrated in every aspect of the project, initiated at the beginning and sustained to the end. Utilizing this collaborative approach will set up the project for greater success by strengthening partner relationships as well as data sharing mechanisms that will continue beyond the life of the project. The impact of the collaboration process will also be evaluated as part of our project activities.

Key end users fall into four main groups: 1) water quality managers, regulators and policymakers who will draw on information and decision-support tools created from this effort to inform their work and management decisions, 2) water quality monitoring organizations who collect, analyze and contribute data to the regional database, 3) decision-makers from one watershed who will work with the project team to pilot test applying information to their local management needs and interests, and 4) researchers who can use information from the regional database as a platform for supporting local studies on the effectiveness of water quality approaches applied in the Cape Cod setting.

The seven groups of end users identified include: 1) The Cape Cod Water Protection Collaborative (CCWPC), which includes representatives from all fifteen Cape Cod towns and two County representatives. The mission of this body is to protect Cape Cod's shared water resources by promoting and supporting the coordinated, cost-effective and environmentally sound development and implementation of local water quality initiatives; 2) The Cape Cod Commission; 3) DEP; 4) The Environmental Protection Agency (EPA); 5) Monitoring organizations – CCS, APCC, WBNERR, BBC, pond associations; 6) Water quality committees, water resource managers and local officials from one pilot watershed; 7) Researchers (SMASST).

Engagement with end users will be structured and facilitated by a trained engagement specialist from WBNERR. Facilitators will ensure that open and regular communication is established and sustained with end users over the course of the project. The collaborative process has been broken into five objectives:

Collaboration Objective 1: Establish an End User Group to provide guidance to the project team and help make key decisions on different aspects of work products.

Process: The End User Group will be established at the beginning of the project and will be comprised of the membership of the Cape Cod Water Protection Collaborative and one designated representative from each of the other end user groups, including the project team organizations. The End User Group will meet on a quarterly basis. Meeting will be structured and professionally facilitated.

Anticipated Outcomes: Strengthened relationships among project partners, monitoring organizations, and end users, which is essential for increasing project impact and achievement of objectives.

Collaboration Objective 2: Work with water quality monitoring organizations to discuss database interface, data needs, reporting procedures, data QA/QC protocols, and all related processes necessary to establish a database that is as complete as possible and trusted by partners.

Process: The project team will hold a workshop soon after project start-up to bring key monitoring groups together to discuss all aspects of database set-up and use including data access, delivery, archiving, and quality control, as well as individual agency roles necessary to sustain the effort beyond the life of the project.

Anticipated Outcomes: Clear list of action items and responsible parties to strengthen database refinement and roll-out.

Collaboration Objective 3: Work with the End User Group to identify priority water quality information needs that can be addressed by accessing data from the regional database, as well as desired data outputs.

Process: Through facilitated meetings, WBNERR will work with end users to identify the key types of information and data outputs decision-makers need. Feedback will be summarized and shared with the project team. This feedback will be used to guide Task 3 and development of a data analysis processing script.

Anticipated Outcomes: Prioritized list of data analyses and desired outputs, as well as a list of data gaps.

Collaboration Objective 4: Work with pilot watershed group to conduct further analyses, interpret and translate results, and identify opportunities for applying data within the watershed to help inform water quality management decisions.

Process: Drawing on a review of available data by watershed, as well as the data needed to effectively run the processing script, the project team will select a pilot watershed. This decision will be made as part of the project implementation process and with consideration to areas where use of the regional database and processing script may be illustrated most effectively. This will inform lessons learned and serve as a template for other watersheds. Two meetings with key decision-makers within the pilot watershed, as well as database developers and technical data experts will take place. The purpose of these meetings will be to unpack and illustrate how municipalities can apply project outputs to decision-making, as part of local planning and management efforts. Where and how analyses can help decision-makers evaluate implementation of local water quality plans will be a focus of these deliberations. After the pilot process has been completed WBNERR will convene a regional workshop to share results of what was learned and transfer lessons to decision-makers in other watersheds on Cape Cod. Lessons and results from the process will be captured in the final project report.

Anticipated Outcomes: Decision-makers from pilot watershed receive analyzed and interpreted watershed specific data to inform management efforts. Decision-makers understand, trust and can apply the project outputs.

Collaboration Objective 5: Work with monitoring organizations and selected researchers from the pilot watershed to identify monitoring and research gaps. This is essential to create a feedback loop that allows the project team to identify how the regional database can be used to help improve monitoring.

Process: Given the range of approaches being considered across the region to help improve water quality, it is critical that a component of this project is geared toward better understanding outstanding monitoring needs. A workshop will be held to identify (i) if and where monitoring should/can be enhanced or streamlined, (ii) if previously uncollected parameters are needed to capture key trends, (iii) gaps in current monitoring efforts and resources needed to meet these gaps, (iv) opportunities where monitoring groups can work together more effectively to achieve shared goals and strengthen the regional database.

Anticipated Outcome: Recommendations developed to help guide future monitoring efforts. Identification of key research needs that is shared with regional research entities.

Task 2 Outputs: 1) Guidance on database QA/QC; 2) List of priority data outputs for Task 3; 3) Final report for one pilot watershed; 4) Key recommendations to guide future monitoring efforts; 4) List of key research needs to help inform local management efforts

Task 3: Data analysis and development of a processing script

As previously described and as will be further developed and defined by the collaborative process, data analysis tools summarizing water quality data into metrics that are easy to digest, and representative of trends and patterns are needed. Information is needed at spatial scales ranging from the sampling station to the watershed to the region. In response to this regional management need the project team will analyze spatial and temporal trends in water quality across the coastal and fresh waters of Cape Cod.

Location-specific water quality monitoring is necessary to identify problems and develop and evaluate management solutions because underlying drivers of declining water quality may be dramatically different from one watershed to another. Broader spatial and temporal scale analyses are often not available when water quality monitoring focuses on a single watershed or water body. The project team plans to utilize the regional database to generate a region-wide dataset, which will be critical to understanding both local and broader scale patterns in water quality and climate indicators. For example: water quality, indicated by chlorophyll *a* pigments, has declined across Buzzards Bay and other Cape Cod coastal embayments over the past several decades. The decline in water quality observed across Buzzards Bay is more consistent with regional climate warming, rather than trends in nutrient loading or nitrogen concentration (Rheuban et al. 2016, Williamson et al. 2017). Using this database, the following question can be answered: do our observations in Buzzards Bay represent a similar pattern across the all the coastal and fresh waters of Cape Cod?

Woods Hole Oceanographic Institution (WHOI) will develop a processing script for data trend analyses. Detailed data analyses will allow end users to discern if implemented mitigation strategies are effective or if other factors beyond traditional management tools have impacted local and regional water quality. The proposed work will make data analysis accessible to local stakeholders by combining modern, open source data analytics toolboxes with web-based dashboards and GIS. The data analysis will be designed such that metrics will be generated upon request at user-defined spatial and temporal scales. Data analyses will utilize QA/QC protocols and will have the ability to integrate new data into analyses as the database is updated, providing long-term benefit to end users beyond the period of the grant.

In conjunction with the collaborative process, the project team will generate a detailed interpretation of historical water quality data for one pilot watershed. This detailed interpretation will also include an analysis of nitrogen loading history based on published nitrogen loading models. Project partners at WHOI completed a nitrogen loading trend analysis of 28 embayments within the Buzzards Bay watershed (Williamson et al. 2017) and propose a similar analysis for the detailed interpretation of a chosen embayment. Data needs for the historical nitrogen loading trend analysis, such as land use and MA level III assessors' data, have already been compiled by project partners. This historical nitrogen loading trend analysis will allow us to compare nutrient input trends with water quality trends and will provide a framework of analyses for other regional watersheds.

APCC staff will analyze and compare freshwater quality data to suitable water quality standards, including state and federal Clean Water Act standards for surface waters and drinking water. Work will take advantage of existing resources, such as the Cape Cod Pond and Lake Atlas, which includes freshwater standards for evaluating pond water quality that consultants have been using for most detailed pond studies since 2003.

All analyses will be used in development of water resources report cards and the “State of the Waters: Cape Cod” report, which will grade and characterize water resources (described as part of task 4).

Task 3 Outputs: 1) Complete and annotated processing script for estuarine data analyses; 2) Data trend analyses for currently available estuarine and freshwater data sets; 3) Data interpretation for one pilot watershed; 4) Evaluation of current water quality relative to known standards (ex. nitrogen TMDLs); 5) Comparison of water quality across regions to identify trends and commonalities; 6) Summary of results and needs assessment.

Task 4: Integration with web-based user interface and other information products

Data and analyses will be made available through a web-based user interface, water resources report cards, the “State of the Waters: Cape Cod” annual reports, and other information products.

The processing script will be integrated into the regional database and website user interface. Commission staff will review the data processing script developed by WHOI, work with WHOI staff to integrate the script into an SQL procedure, and verify script functionality through testing of the procedure. Commission staff will edit existing SQL tables or create new tables for processed data from the SQL procedure to interface with the web-based interface.

Estuarine data analyses that result from the processing script and that are consistent with the end user needs established in task 2 will be displayed on the regional database website. To ensure ease of access and use, Commission staff will work with project partners and the End User Group to assess the suitability of the current web interface. Charts and visuals will be edited and/or created, as needed, to display appropriate analyses.

Estuarine and freshwater data analyses will be used to develop the “State of the Waters: Cape Cod” report, which will be an organized compilation of report cards. All data and analyses from task 3 will be integrated into water resources report cards that characterize issues and form the basis of the report. APCC will characterize water resources based on analyses completed. Report cards will describe and grade watersheds, ponds and lakes, drinking water, coastal waters, and groundwater on Cape Cod.

To develop report cards, APCC will use a methodology that has been used effectively to raise public awareness and promote action in areas such as California, Florida, Maine, New Hampshire, New York, Oregon, Texas, Washington, the Great Lakes, Chesapeake Bay, U.S. waters and internationally. In Massachusetts, report cards have highlighted water quality problems and improvements in at least five water bodies, including the Blackstone River, Charles River, Mystic River, Buzzards Bay, and Taunton River. Report cards were also used to highlight beach water quality issues at 15 public beaches in metropolitan Boston. A list of the report cards referenced can be found in attachment B.

Aside from Buzzards Bay communities, Cape Cod does not have any water resources report cards to help the public and decision makers understand problems and encourage action. Most report cards assign a letter grade using defined criteria and sometimes the grade is combined with a color scale to indicate degree of severity. The result is powerful, graphic, and easy to comprehend.

The “State of the Waters: Cape Cod” Report will integrate the report cards and be easily understood by the general public yet developed with sufficient rigor to be accepted by experts and regulators. The report will be publicly available through digital and conventional media and will become a regular and prominent feature released at the APCC annual meetings and promoted in other venues. In subsequent years, the report will be updated to reflect the latest data.

The report will be used as an educational resource, but also to identify themes and issues and inform better public policy regarding the improvement and preservation of Cape Cod’s water resources.

Task 4 Outputs: 1) Updated web-based user interface to display and make publicly accessible all data and analyses; 2) Water resources report cards that provide letter grades for water quality of lakes, rivers, estuaries and coastal waters, groundwater, drinking water and watersheds; 3) “State of the Waters: Cape Cod” Report

Task 5: Targeted Outreach to Inform Local Action

Results will be delivered and translated to local-decision-makers best positioned to apply and integrate findings into local planning and management.

In addition to the workshops and meetings identified above, WBNERR will conduct two additional workshops to share results from this work with the full End User Group, other regional decision-makers, and the public. The purpose of these workshops is to share results of data analysis and information products with those who need the information to make decisions. Depending on timing and feedback from the End User Group and project team, these workshops may be stand alone or combined and/or coordinated with other long standing regional outreach events that are well known and well attended. Three of these include the One Cape Summit (led by the Commission), the Cape Coastal Conference (led by WBNERR and several partner organizations and agencies) and the APCC Annual Meeting. Linking the project outreach and communication plan with these established regional events will help to strengthen overall impact and enhance cohesiveness.

Annual Meetings: APCC will release the “State of the Waters: Cape Cod” Report at its annual meeting, in August/September of each year. Most meetings draw approximately 150 people. The Commission will showcase this project at the OneCape Summit, which focuses on both the environment and the economy, but was originally established to address progress on water quality improvement. The Summit attracts between 200 and 300 attendees each year. The annual Cape Coastal Conference will also be an opportunity for the distribution of project information. It typically draws between 300 and 400 attendees. This established pattern of annual regional events will help draw attention to the project and set the stage for utilizing project outputs to inform restoration and protection of water resources over the long term.

Social media: APCC will design and implement a social media campaign that will publicize the “State of the Waters: Cape Cod” Report. Planned work includes: 1) a blog with short articles and photos about water quality, natural history information on marine and freshwater systems, and best management practices for protecting water resources. 2) social media posts related to water quality and relaying specific information on issues and events to generate interest in this project.

During the first year of the project, the project team will establish a schedule for targeted outreach that takes into consideration annual meeting dates that are not known at the time of this submission.

Task 5 Outputs: 1) Presentation of project results and resources and additional engagement with end users at regional outreach events, including, but not limited to the OneCape Summit, Cape Cod Coastal Conference and the APCC Annual Meeting; 2) Social media posts to share information about the project and project outputs

Task 6: Final Report

The project team will provide a final report that summarizes the data collected, the collaborative process and key outputs and outcomes of the process, data analyses, and information products.

The final report will be available through the Commission’s website and partner websites. Information in the report will be shared at existing regional outreach events, as described in task 5, and sections of the final report will be shared individually. For example, water resources report cards and the “State of the Waters” Cape Cod report will be issued annually and serve as standalone documents. The watershed interpretation will serve a localized purpose, as well as be used as a framework for moving forward in other watersheds across the region. The water quality database will be accessible through the web-based interface and will be used by a wider audience than may utilize the final report.

Task 6 Outputs: Final report that includes, at a minimum, 1) Documentation of data collected and aggregated; 2) Database QA/QC procedures; 3) Annotated processing script; 4) Data analysis methods; 4) Detailed interpretation of one or more watersheds; 5) Water resources report cards; 6) “State of the Waters: Cape Cod” Report; 7) Documentation of public outreach and workshops

Project Timeline and Milestones:

	2018					2019												2020						
	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
Task 1																								
Data Compilation																								
Database QA/QC																								
WBNERR QAPP Development																								
Ponds and Lakes QAPP Development																								
Task 2																								
End User Group Mtgs																								
Monitoring Group Workshop																								
Identify Data Outputs/Analysis Needs																								
Pilot Watershed Interpretation																								
Identify Monitoring/Research Gaps																								
Task 3																								
Data Analysis/Script Development																								
Pilot Watershed Analysis/Interpretation																								
Task 4																								
Development of Report Card Template																								
Report Cards Released																								
"State of the Waters: Cape Cod" Released																								
Integrate Script with Database/Website																								
Task 5																								
Develop Targeted Outreach Schedule																								
Targeted Outreach/Workshops/Meetings																								
Task 6																								
Final Report																								

Local Impact: This project is in direct support of the 15 Cape Cod towns implementing local water quality plans, 11 of which are located within the SNEP region. Successful development of consistent and comparable data analyses will track trends in response to plan implementation, provide post-implementation information, help refine local decision-making, and facilitate management to improve water quality. The proposed processing script will be designed to allow for future automated analyses as new estuarine data are available, creating long-term capacity for embayment specific interpretation and informed local water quality decisions past the grant period. The proposed collection and analysis of freshwater data is consistent with the effort initiated for estuarine data in 2016 and will provide for a long-term, consistent database of all water resources information. The Commission is committed to maintaining the data, working with project partners to integrate new data into the future, and utilizing the QA/QC procedures developed as part of this project. APCC is committed to issuing the “State of the Waters: Cape Cod” Report on an annual basis to ensure ongoing evaluation of Cape Cod’s important water resources and responsive and responsible public policy decisions.

Regional Impact: The strong cooperative relationship among monitoring, management and non-profit organizations builds regional capacity to solve water quality challenges through collaborative and innovative restoration techniques. The combined, downloadable dataset allows for regional scale analyses to identify the impacts of climate and tidal variability on water quality management. The database structure, analyses, and information products will be transferable to other areas within the SNEP region and beyond that seek to collect and analyze long-term data sets and translate them into helpful information products.

The project team recognizes the importance of tracking both the impact of the project process and outcomes to inform future learning across the region and increase overall effectiveness. WBNERR has significant experience in project evaluation and will conduct evaluations of workshops held with managers and decision-makers to determine how well objectives were met and where efforts can be improved. WBNERR will also assess the impact of the collaborative process with the End User Group.

Results of these evaluations will be incorporated in the final project report as part of the body of learning related to this project.

Project Team (See attachment C): The project will be led by the Commission, with expertise in water resources, database development and project management. The Commission will lead project activities, coordinate project tasks, track progress, and maintain communication with project partners. Partner monitoring organizations include the CCS, SMAST and WBNERR. Each will provide data as well as guidance on quality assurance/control and serve as an advisor for data analysis. WBNERR will lead collaborative process, plan outreach workshops to decision-makers and researchers and facilitate end user meetings. WHOI will complete the processing script development and data analysis. APCC will expand upon existing freshwater databases and integrate estuarine and freshwater data and analyses into information products, including water resources report cards and the “State of the Waters: Cape Cod” Report, to increase knowledge and understanding of the health of water resources and identify water restoration needs. An End User Group will be established, consisting of project team members, the CCWPC, and other key end users identified in task 2 to assist in defining data outputs.

Integration and Multiple Benefits: This project takes a holistic approach to water resource issues, addressing both estuarine and freshwater quality. It seeks to advance several SNEP priorities, not limited to, fostering integrated approaches to restoring water quality, habitats and ecosystems; building local and regional capacity, tools and knowledge; strengthening sustainable partnerships; and improving the utility of environmental monitoring for ecosystem management. In addition to data collection and analysis, a program script, and information products, outputs will include a thoroughly vetted, downloadable database and metadata file for research and management applications consistent with DEP and EPA water quality monitoring strategies. This robust water quality database can be used by coastal scientists against other large datasets for future research projects. (e.g. marine fish and mammal migrations, coastal bird migrations, the spread of harmful algal blooms, etc.)

Leveraging: This project leverages work completed by each project partner and work completed by DEP and SMAST to develop total maximum daily loads for nitrogen and seeks to expand the effect of this research and long-term data accumulation on local management decisions. The Commission has developed databases and a web interface to store and share a regional data set. This project will take these efforts one step further to be responsive to local needs, fulfill the recommendations of the 208 Plan, and support existing management efforts to improve water quality, habitats and ecosystems.

Outreach and Communications: All work completed for this project will be included in a web-based interface. The program script will be integrated with the database and will be used on a regular basis, as additional data are available. The data and analyses will be used in water resources report cards and an annual “State of the Waters: Cape Cod” report created by APCC. APCC will build on the report cards and State of the Waters report to develop an “action agenda” that provides recommendations for actions to protect and restore water, along with measures for gauging success in implementing actions. The broad-based and diverse target audience will include the public as well as decisionmakers. Through the CCWPC, the Commission will work to share project outputs with each town. In addition, WBNERR will conduct targeted watershed-based workshops to translate information to local decision-makers. Other target audiences include full- and part-time residents, pond associations, municipal boards, departments and water quality/wastewater committees, fisheries stakeholders, other restoration partners, non-governmental organizations, elected officials, and others. Additional outreach materials will be developed, as needed, and project components will be included in presentations by the Commission and partners, as appropriate, at local, state, regional and national meetings to allow for knowledge transfer.

Literature cited can be found in attachment D.

BUDGET DESCRIPTION

Budget Table

Cost Item or Category	Cost Basis	RAE SNEP Request	Non-Federal Match	Match Source	Total Project Cost
Personnel					
Erin Perry, CCC	364 hrs. @ \$43.27	11,812.71	3,937.57	CCC	15,750.28
Tom Cambareri, CCC	153 hrs. @ \$49.53	5,683.57	1,894.52	CCC	7,578.09
Phil Detjens, CCC	208 hrs. @ \$44.45	6,934.20	2,311.40	CCC	9,245.60
Mario Carloni, CCC	364 hrs. @ \$37.18	10,150.14	3,383.38	CCC	13,533.52
Jo Ann Muramoto, APCC	500 hrs. @ \$48.00	18,000.00	6,000.00	APCC-MET	24,000.00
Don Keeran, APCC	502 hrs. @ \$43.20	16,264.80	5,421.60	APCC-MET	21,686.40
Kristin Andres, APCC	502 hrs. @ \$40.00	15,060.00	5,020.00	APCC-MET	20,080.00
Brian Horsley, APCC	416 hrs. @ \$32.00	9,984.00	3,328.00	APCC-MET	13,312.00
Amy Costa, CCS	390 hrs @ \$34.60	11,072.00	2,422.00	CCS	13,494.00
Brian Howes, PI SMAST	70 hrs. @ \$68.46	4,792.20	-		4,792.20
Roland Samimy, SMAST	70 hrs @ \$54.07	3,784.90	-		3,784.90
Outreach Asst., WBNERR	850 hrs. @ \$25.00	21,250.00	-		21,250.00
WQ Monitoring Asst., WBNERR	206 hrs. @ \$20.12	4,144.72	-		4,144.72
Waquoit Bay Volunteers, WBNERR	546 hrs. @ \$24.69	-	13,480.74	WBNERR	13,480.74
Jennie Rheuban, WHOI	1216 hrs. @ \$42.625	51,832.00	-		51,832.00
Total Personnel		190,765.24	47,199.21		237,964.45
Fringe					
Fringe, CCC	66.36%	22,947.70	7,649.23	CCC	30,596.93
Fringe, APCC	25.00%	14,827.20	4,942.40	APCC	19,769.60
Fringe, CCS	20.00%	2,214.40	484.40	CCS	2,698.80
Fringe, SMAST (+\$16.5/wk)	36.27%	3,176.91	-		3,176.91
Fringe, WBNERR	N/A	-	-		-
Fringe, WHOI	45.99%	23,837.54	-		23,837.54
Total Fringe		67,003.74	13,076.03		80,079.78
Travel					
In-state travel (APCC)	2,000 mi @ \$0.545	730.30	359.70	APCC-MET	1,090.00
Out-of-state (RAE Summit 2018; 2 CCC staff)	See Narrative	4,000.00	-		4,000.00
Out-of-state (RAE Summit 2018; 1 APCC staff)	See Narrative	1,340.00	660.00	APCC-MET	2,000.00
Out-of-state travel (WHOI - S. Doney)	See Narrative	4,798.00	-		4,798.00
Total Travel		10,868.30	1,019.70		11,888.00
Equipment					
WQ Monitoring Equipment	See Narrative	6,500.00	-		6,500.00
Total Equipment		6,500.00	-		6,500.00
Supplies					
Software (APCC)	See Narrative	335.00	165.00	APCC-MET	500.00
Workshop Supplies (APCC)	See Narrative	502.50	247.50	APCC-MET	750.00
Workshop Supplies (WBNERR)	See Narrative	1,500.00	-		1,500.00
Total Supplies		2,337.50	412.50		2,750.00
Contractual					
QAQC Database (CCC)	See Narrative	20,000.00	-		20,000.00
QAPP Development (CCC)	See Narrative	-	7,500.00	CCC	7,500.00
OneCape Conferences (Venues & AV equipment)	See Narrative	10,000.00	10,000.00	CCC	20,000.00
Workshop & Coastal Conference expenses (Venues & AV equipment; WBNERR)	See Narrative	6,000.00	-		6,000.00
Web Design (APCC)	See Narrative	13,400.00	6,600.00	APCC-MET	20,000.00
TMDL Solutions (SMAST)	See Narrative	3,500.00	-		3,500.00
Dr. Scott Doney	See Narrative	-	12,339.00	WHOI	12,339.00
Total Contractual		52,900.00	36,439.00		89,339.00
TOTAL DIRECT		\$ 330,375	\$ 98,146		\$ 428,521
CCC Indirect Cost (applied to direct labor only)	71.90%	24,863.46	8,287.82		33,151.29
APCC Indirect Cost	10.00%	9,044.38	3,274.42		12,318.80
CCS Indirect Cost (NICRA)	50.31%	4,428.80	3,717.80		8,146.60
SMAST Indirect Cost (NICRA)	59.00%	1,175.40	7,824.47		8,999.87
WBNERR Indirect Cost	10.00%	3,289.47	1,348.07		4,637.55
WHOI Indirect Cost (NICRA)	62.00%	26,822.00	23,066.00		49,888.00
Total Indirect Cost		\$ 69,624	\$ 47,519		\$ 117,142
TOTAL (Total Direct+Indirect)		\$ 399,998	\$ 145,665		\$ 545,663
Non-Federal Match as a Percentage of the Request:			36.42%		

Budget Table cont.

Grant Totals Per Partner

SNEP Watershed Grant Proposal - Grant Totals per Partner					
Project Partners		RAE SNEP Request	Non-Federal Match	Match Source	Total Project Cost
Cape Cod Commission	Direct Costs	91,528	36,676	CCC	\$ 128,204
	Indirect Costs	24,863	8,288	CCC	\$ 33,151
	Total:	116,392	44,964	CCC	\$ 161,356
Association to Preserve Cape Cod	Direct Costs	90,444	32,744	APCC-MET	\$ 123,188
	Indirect Costs	9,044	3,274	APCC-MET	\$ 12,319
	Total:	99,488	36,019	APCC-MET	\$ 135,507
Center for Coastal Studies	Direct Costs	13,286	2,906	CCS	\$ 16,193
	Indirect Costs	4,429	3,718	CCS	\$ 8,147
	Total:	17,715	6,624	CCS	\$ 24,339
Umass Dartmouth SMAST	Direct Costs	15,254	-	-	\$ 15,254
	Indirect Costs	1,175	7,824	SMAST	\$ 9,000
	Total:	16,429	7,824	SMAST	\$ 24,254
Waquoit Bay National Estuarine Research Reserve	Direct Costs	39,395	13,481	WBNERR	\$ 52,875
	Indirect Costs	3,289	1,348	WBNERR	\$ 4,638
	Total:	42,684	14,829	WBNERR	\$ 57,513
Woods Hole Oceanographic Institute	Direct Costs	80,467	12,339	WHOI	\$ 92,806
	Indirect Costs	26,822	23,066	WHOI	\$ 49,888
	Total:	107,289	35,405	WHOI	\$ 142,694
TOTAL:	Direct Cost	330,374	98,146		\$ 428,521
	Indirect Cost	69,624	47,518		\$ 117,142
	TOTAL:	\$ 399,998	\$ 145,665		\$ 545,663

Budget Narrative

Personnel

Cape Cod Commission

Thomas Cambareri, Water Resources Technical Services Director: Mr. Cambareri will assist with identification of water resources data sources, data compilation, identifying data analysis needs, and development of the pilot watershed interpretation (Task 1, Task 2, Task 3). 153 hrs. @ \$49.53/hr., total \$7,578.09.

Mario Carloni, Geospatial Developer: Mr. Carloni will be responsible for the database web interface and integrating the processing script with the SQL database and web interface (Task 4). 364 hrs. @ \$37.18/hr., total \$13,533.52.

Phil Detjens, Applications Manager: Mr. Detjens will oversee database development and management, integration of the processing script into an SQL procedure and creating and editing SQL tables (Task 4). 208 hrs. @ \$44.45/hr., total \$9,245.60.

Erin Perry, Special Projects Manager: Ms. Perry will serve as project lead for the grant and is responsible for oversight of the project, coordinating with project partners and reporting (Tasks 1-6). 364 hrs. @ \$43.27/hr., total \$15,750.28.

CCC will provide match of in-kind labor. Fringe benefits are allocated as a percentage applied to total direct salaries. The audited FY17 fringe rate is 66.36% and is broken out as: Retirement (23.40%), Paid Leave Benefits (23.21%), Health Insurance (18.12%), and Medicare (1.63%).

Association to Preserve Cape Cod

Jo Ann Muramoto, Director of Science Programs: Dr. Muramoto will be responsible for freshwater data compilation and data analysis and she will prepare the report cards (Task 1, Task 4). 500 hrs. @ \$48/hr., total \$24,000.

Don Keeran, Assistant Director: Mr. Keeran will serve in an advisory capacity and provide guidance on data compilation and development of report cards and State of the Waters Report (Task 1, Task 4). 502 hrs. @ \$43.20/hr., total \$21,686.40.

Kristin Andres, Director of Education and Outreach: Ms. Andres will oversee development of outreach products and activities for development and promotion of State of the Waters Annual Report (Task 4, Task 5). 502 hrs. @ \$40/hr., total \$20,080.

Bryan Horsley, Restoration Technician: Mr. Horsley will assist with GIS mapping and other technical assistance (Task 4, Task 5). 416 hrs. at \$32/hr., total, \$13,312.

APCC match is in-kind labor funded by a 2018 Massachusetts Environmental Trust grant.

Waquoit Bay National Estuarine Research Reserve

Outreach and Engagement Assistant: The Outreach and Engagement Assistant will work with and be supervised by Tonna-Marie Rogers, WBNERR Coastal Training Program Coordinator, and will provide support in collaborative process design, meeting planning and facilitation and overall coordination of WBNERR tasks. Working with the project team and the Commission as lead, the assistant will develop process agendas for end user meetings, design effective processes to meet meeting goals and record action items and decisions (Task 2, Task 5). 850 hrs. @ \$25/hr., total \$21,250.

Water Quality Monitoring Assistant: The Water Quality Assistant will be trained by the WBNERR Research Associate, Jordan Mora, to maintain water quality stations, including but not limited to, collecting and filtering water samples, calibrating equipment, deploying units, and managing downloaded data. The assistant will support Ms. Mora with QAPP development through research and writing (Task 1). 206 hrs. @ \$20.12/hr., total \$4,144.72.

Fringe benefits are not included in proposal, as staff identified are not benefit eligible.

Waquoit Bay Watcher volunteer hours are contributed as match. Volunteer hours are associated with the Waquoit Bay Watchers Citizen Science Water Quality Monitoring Program (SWMP). The SWMP and Waquoit Bay Watcher programs are ongoing and all past and future data collected will be submitted to the Cape Cod Commission's regional database (Task 1). 546 hrs. @ \$24.69/hr., total \$13,480.74.

APCC will act as the fiscal agent for WBNERR.

Woods Hole Oceanographic Institution

Jennie Rheuban, Research Associate III: Ms. Rheuban will be responsible for data analysis and development of processing scripts, providing advice and direction on the selection of a pilot watershed and working with the project team on database quality assurance and control and to complete the detailed interpretation in the pilot watershed. Ms. Rheuban will work with Commission staff to integrate the processing script with the existing SQL database (Task 2, Task 3, Task 4). 1,216 hrs. @ 42.625/hr., total \$51,832.

WHOI match is in-kind labor provided by Dr. Scott Doney in the amount of \$12,339 and a WHOI contribution of \$23,066 for indirect costs in excess of 25% of the requested amount. Dr. Doney will advise Ms. Rheuban on data analysis and assist with data interpretation. WHOI's fringe rate is included in their Negotiated Agreement with Department of Navy. Fringe benefits are allocated as percentage to

total assignable salaries and allocated paid leave benefits, excluding overtime salaries. The provisional fringe rate of 45.99% for calendar year 2018 is broken out as: Retirement (23.19%), Health/Dental (11.55%), FICA (7.72%), Workers Comp (0.38%), Disability (1.00%), and Other Benefits (2.15%).

Center for Coastal Studies

Amy Costa, Associate Scientist: Dr. Costa will assist with quality assurance and control of the database and provide advice and guidance on data outputs and analysis needs (Task 1, Task 2). 390 hrs. @ \$34.60/hr., total \$13,494.

CCS match is 70 hours of in-kind labor provided by Dr. Costa and \$3,718 in indirect cost (\$2,256 for indirect cost in excess of 25% of the requested amount and \$1,462 for indirect cost applied to the in-kind labor)

UMass Dartmouth School for Marine Science and Technology

Brian Howes, Coastal Systems Program Director: Dr. Howes will assist with quality assurance and control of the database and provide advice and guidance on data outputs and analysis needs (Task 1, Task 2). 70 hours @ \$68.46/hr., total \$4,792.20.

Roland Samimy, Senior Research Manager: Dr. Samimy will assist with quality assurance and control of the database and provide advice and guidance on data outputs and analysis needs (Task 1, Task 2). 70 hrs. @ \$54.07/hr., total \$3,784.90.

SMAST will provide match of \$7,824 in indirect costs. The fringe rate is broken out as: 34.68% fringe benefit, 1.41% FICA, plus an additional \$16.50 per week Health and Welfare.

Travel

In-State Travel

In-State Travel is budgeted for attendance at project partner meetings, advisory committee meetings, and SNEP grantee meetings. Total budgeted is \$1,090. APCC source of match is from a 2018 Massachusetts Environmental Trust grant. SNEP request: \$730.30. APCC's match: \$359.70.

Out-of-State Travel

RAE Summit: As suggested in the RFP, travel is budgeted for four staff to attend the 2018 RAE Summit. An estimate of \$6,000 includes conference registration fees, travel to/from airport, hotel, flight, and meals. APCC source of match is from a 2018 Massachusetts Environmental Trust grant. SNEP request: \$5,340. APCC's match: \$660.

Dr. Scott Doney: Travel is budgeted for Dr. Scott Doney to attend annual meetings on project results. Dr. Doney will provide guidance on data analysis and assist with data interpretation (Task 3). The total amount budgeted is \$4,798. This estimate includes travel from the University of Virginia to WHOI, lodging for one week per year for each of the two years of the proposed project, car rental and per diem.

Equipment

Water Quality Monitoring Equipment

WBNERR will purchase monitoring equipment needed to upgrade the WBNERR water quality monitoring program to data standards comparable to other partner organizations (Task 1). Currently, one of the four SWMP stations is still occupied by an older model sonde, the YSI 6600-series. This station will be upgraded consistent with other sites in Waquoit Bay. The equipment request is for a YSI EXO2 sonde in the amount of \$6,500 (Item #599502-01). The purchase will be made in advance of the 2019 sampling season.

Supplies

Software

APCC will purchase software for data analysis, statistical analysis and plotting. An estimate of \$500 is budgeted (Task 3). APCC source of match is from a 2018 Massachusetts Environmental Trust grant. SNEP request: \$335. APCC's match: \$165.

Workshop Supplies

APCC plans meetings to announce the State of the Waters report and has included an estimate of \$750 for supplies (Task 5). Source of match is from a 2018 Massachusetts Environmental Trust grant. SNEP request: \$502.50. APCC's match: \$247.50.

WBNERR has budgeted \$1,500 in supplies to support end user meetings and watershed-based workshops to translate data to decision-makers (Task 2, Task 5).

Contractual

Database QA/QC

The Commission will advertise and competitively award a contract to a qualified firm to perform quality assurance and control on the existing database and develop procedures for ensuring quality assurance and control on data loaded to the database in the future (Task 1). A budget estimate of \$20,000 is based on previous experience.

QAPP Development

The Commission will comply with State law, County policies and Uniform Guidance related to procurement and competitively award a contract to a qualified firm to develop a QAPP for pond and lake data (Task 1). A budget estimate of \$7,500 is based on previous experience and funds for the QAPP Development will be provided by the Cape Cod Commission.

OneCape Summits

The Commission will hold two OneCape Summits during the project period. The work proposed in this project will be highlighted at each and each will be used as an opportunity to share data outputs, analyses and available information products. A budget estimate of \$20,000 for venue and audio-visual equipment for two conferences is based on previous experience. The Commission will comply with State law, County policies and Uniform Guidance related to procurement and competitively award a contract to a venue to host the Summits. SNEP request: \$10,000. Commission's match: \$10,000.

Cape Coastal Conference and Workshops

Venue rental fees and fees associated with audio visual equipment are anticipated to support watershed-based workshops and other outreach initiatives, including the Cape Coastal Conference, where project outputs, analyses and information products will be highlighted (Task 2, Task 5). An estimate of \$6,000 is budgeted based on previous experience.

Web Design

APCC will comply with State law and Uniform Guidance related to procurement and competitively award a contract to a qualified web design firm to create a State of Waters website (Task 4). A budget estimate of \$20,000 is based on previous experience. APCC source of match is from a 2018 Massachusetts Environmental Trust grant. SNEP request: \$13,400. APCC's match: \$6,600.

TMDL Solutions

TMDL Solutions will work with SMAST to support and provide guidance on data analysis and interpretation (Task 2). SNEP request: \$3,500.

Dr. Scott Doney

Dr. Doney will advise Ms. Rheuban and project partners on biogeochemical data analysis and assist with data interpretation (Task 3). \$12,339 in consulting charges is provided as in-kind match by WHOI.

Indirect Cost

Cape Cod Commission

In accordance with 2 CFR Part 200 App. VII D1b, the Commission, a local government agency that receives less than \$35 million in direct Federal funding, is not required to obtain NICRA. The Commission's audited FY17 indirect rate is 71.90% and is applied to direct labor only. CCC indirect costs included in the SNEP request (\$24,863) are within 25% indirect cost limit. This indirect cost rate equals to 27.16% rate if applied to the Commission's Modified Total Direct Costs of \$91,528.

Association to Preserve Cape Cod

Association to Preserve Cape Cod does not have Negotiated Indirect Cost Rate Agreement and de minimis indirect cost rate of 10% was applied to APCC's Modified Total Direct Costs of \$123,188. Total Indirect Cost: \$12,318.80. SNEP Request: \$9,044. APCC's match: \$3,274.

Waquoit Bay National Estuarine Research Reserve

Waquoit Bay National Estuarine Research Reserve does not have Negotiated Indirect Cost Rate Agreement and de minimis indirect cost rate of 10% was applied to WBNERR's Modified Total Direct Costs. Total Direct cost amount of \$52,875 was reduced by the estimated cost of equipment (\$6,500) for Modified Total Direct Costs of \$46,375. Total Indirect Cost: \$4,637. SNEP Request: \$3,289. WBNERR's match: \$1,348.

Woods Hole Oceanographic Institution

Woods Hole Oceanographic Institution has a Negotiated Indirect Cost Rate Agreement with Department of the Navy, Office of Naval Research, dated January 5, 2018, for the period of 1/1/18 – 12/31/18 (attached) The provisional indirect cost rate for 2018 is 62% and is allocated to Modified Total Direct Costs. Total Indirect Costs: \$49,889 (MTDC base of \$80,467). SNEP request: \$26,822 (25% of the agency request of \$107,289). WHOI's match: \$23,066.

Center for Coastal Studies

Center for Coastal Studies has submitted their Indirect Cost Proposal dated November 30, 2017 to the US Department of Commerce, NOAA Grants Division. CCS has received a letter from NOAA, dated January 31, 2018, stating that Center for Coastal Studies may use their indirect cost rate of 50.31% cited in its Indirect Rate Cost Proposal until the Proposal evaluation process is completed (attached). Indirect Cost rate of 50.31% was applied to MTDC of \$16,192.80. Total Indirect Cost: \$8,147. SNEP Request: \$4,429 (25% of the CCS request of \$17,715). CCS's match: 3,718.

UMass Dartmouth School for Marine Science and Technology

UMass Dartmouth has a Negotiated Indirect Cost Rate Agreement with the Department of Health and Human Services, dated March 10, 2017 (attached). The predetermined rate of 59% is effective for the period of 7/1/18 – 6/30/2010 and has been applied to MTDC of \$15,254. UMass Dartmouth SMAST has elected to include only \$1,175.40 of the indirect costs in their SNEP request and to apply the difference towards their match. Total Indirect Cost: \$9,000. SNEP request: \$1,175. UMass Dartmouth SMAST's match: \$7,825.

Total Indirect Costs included in the SNEP request (\$69,624) equal to 17.41% of the total amount of \$399,998 requested from SNEP for the proposed project.

Grant Totals Per Task

	Total Project Cost Per Task			
	Cost Item	SNEP	Non-Federal Match	Total
Task 1	Salaries & Fringes	46,558.28	24,898.39	71,456.68
	RAE Summit	1,001.67	165.00	1,166.67
	In-State Travel	182.58	89.93	272.50
	QA/QC Database	20,000.00	-	20,000.00
	QAPP Development	-	7,500.00	7,500.00
	Equipment	6,500.00	-	6,500.00
	Indirect Cost	10,314.72	8,460.99	18,775.71
Subtotal:		\$ 84,557	\$ 41,114	\$ 125,672
Task 2	Salaries & Fringes	42,847.38	3,601.53	46,448.92
	RAE Summit	666.67	-	666.67
	Workshop Supplies	750.00	-	750.00
	Cape Coastal Conference	2,500.00	-	2,500.00
	Indirect Cost	11,248.60	9,288.09	20,536.68
Subtotal:		\$ 58,013	\$ 12,890	\$ 70,902
Task 3	Salaries & Fringes	64,364.61	4,653.33	69,017.95
	RAE Summit	1,001.67	165.00	1,166.67
	In-State Travel	182.58	89.93	272.50
	Software	335.00	165.00	500.00
	TMDL Solutions	3,500.00	-	3,500.00
	Dr. Scott Donney & Travel	4,798.00	12,339.00	17,137.00
	Indirect Cost	22,022.25	19,109.62	41,131.87
Subtotal:		\$ 96,204	\$ 36,522	\$ 132,726
Task 4	Salaries & Fringes	71,867.10	19,744.97	91,612.07
	RAE Summit	1,001.67	165.00	1,166.67
	In-State Travel	182.58	89.93	272.50
	Web Design	13,400.00	6,600.00	20,000.00
	Indirect Cost	20,145.69	9,154.09	29,299.78
Subtotal:		\$ 106,597	\$ 35,754	\$ 142,351
Task 5	Salaries & Fringes	28,891.78	6,297.26	35,189.04
	RAE Summit	1,001.67	165.00	1,166.67
	In-State Travel	182.58	89.93	272.50
	Workshop Supplies	1,252.50	247.50	1,500.00
	OneCape Conferences	10,000.00	10,000.00	20,000.00
	Cape Coastal Conference	3,500.00	-	3,500.00
	Indirect Cost	4,492.26	1,038.66	5,530.92
Subtotal:		\$ 49,321	\$ 17,838	\$ 67,159
Task 6	Salaries & Fringes	3,239.28	1,079.76	4,319.04
	RAE Summit	666.67	-	666.67
	Indirect Cost	1,400.00	466.67	1,866.67
Subtotal:		\$ 5,306	\$ 1,546	\$ 6,852
TOTAL:		\$ 399,998	\$ 145,665	\$ 545,663

LIST OF ATTACHMENTS

Maps, photos, drawings, and additional information

- Attachment A. Map of Project Area
- Attachment B. Report Card Examples
- Attachment C: Project Team
- Attachment D: Literature Cited

Letters of Commitment

- Association to Preserve Cape Cod
- Buzzards Bay Coalition
- Cape Cod Water Protection Collaborative
- Center for Coastal Studies
- UMass Dartmouth School for Marine Science and Technology
- Waquoit Bay National Estuarine Research Reserve
- Woods Hole Oceanographic Institution

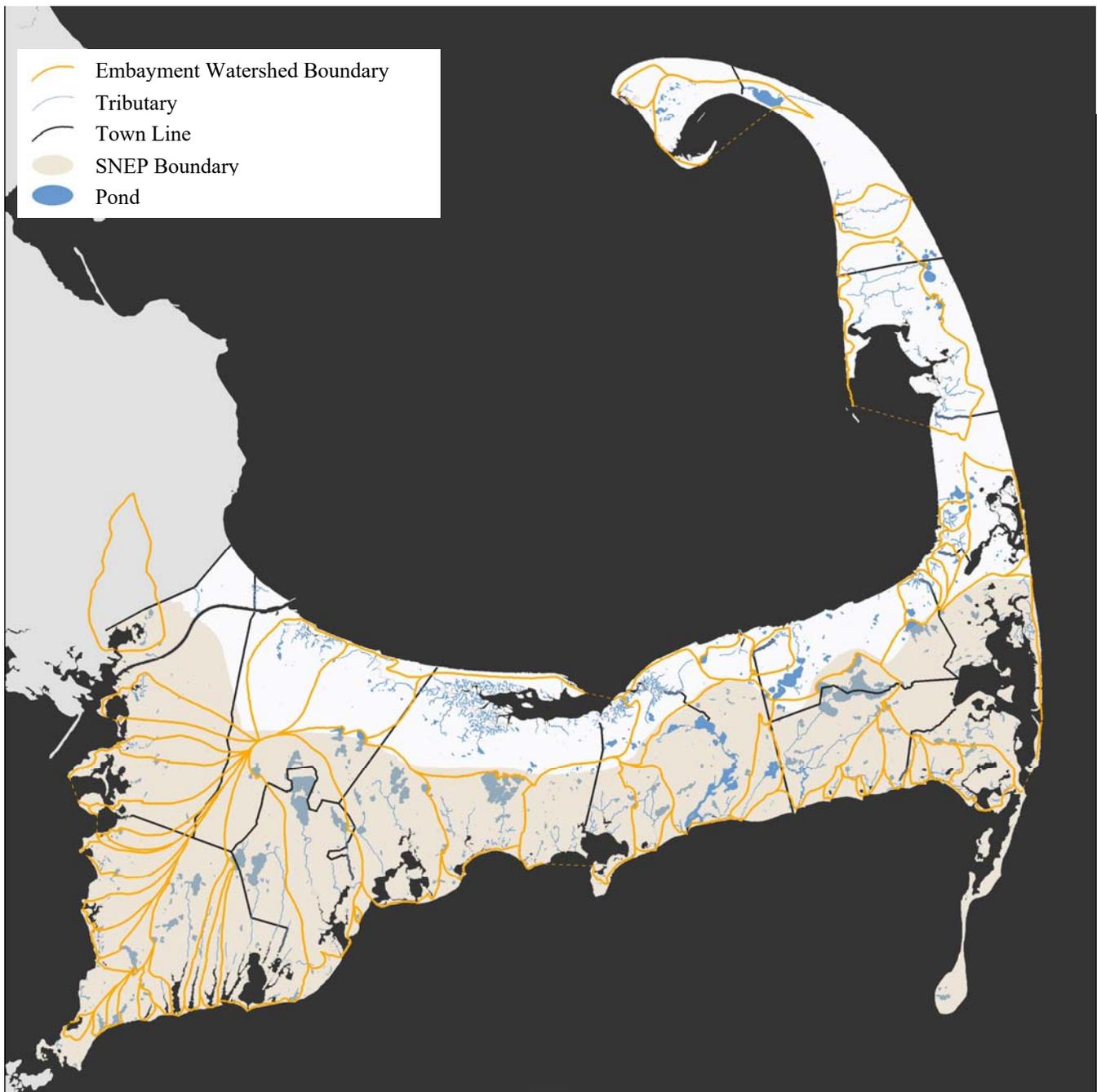
Organizational Budget and Statement of Financial Position

- Barnstable County Approved FY19 Operating and Capital Budget – Cape Cod Commission
- Barnstable County's Basic Financial Statements
 - Summary of Auditor's Results, Schedule of Findings and Questioned Costs
 - Expenditures and Changes in Fund Balances
 - Schedule of Fringe and Indirect Cost Rate – Cape Cod Commission

Negotiated Indirect Cost Rate Agreements

- Center for Coastal Studies
- UMass Dartmouth School for Marine Science and Technology
- Woods Hole Oceanographic Institution

Attachment A: Map of Project Area



Map of Project Area: The proposed project area includes all of Barnstable County. Approximately 60% of Cape Cod is within the SNEP boundary. Almost all the watersheds on Cape Cod that fall within the SNEP boundary are nitrogen impaired and have established total maximum daily loads or Massachusetts Estuaries Project Technical Reports documenting degradation and nitrogen thresholds.

Attachment B: Report Card Examples

California

- Elkhorn Slough National Estuarine Research Reserve. Elkhorn Slough Water Quality Report Card. <http://www.elkhornslough.org/waterquality-reportcard/>.
- California Environmental Protection Agency, State Water Resources Control Board. 2014-2015. https://www.waterboards.ca.gov/about_us/performance_report_1415/plan_assess/11112_tmdl_outcomes.shtml.
- Heal the Bay. Beach Report Cards for California beach water quality. <http://beachreportcard.org/default.aspx?tabid=4>.

Chesapeake Bay

- Chesapeake Bay Report Card. <https://ecoreportcard.org/report-cards/chesapeake-bay> .

Florida

- Florida Department of Environmental Protection. Interactive Water Quality Report Cards. <https://floridadep.gov/dear/watershed-monitoring-section/content/interactive-water-quality-report-cards>

Great Lakes

- Donahue, Michael J. January 2002. The Great Lakes: A Report Card. <https://scholarlycommons.law.case.edu/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=1451&context=cuslj>.
- Mills County Watershed Report Card. http://erieconserves.org/wp-content/uploads/mills_report_card.pdf.

Maine

- Natural Resources Council of Maine. 2014 Report Card for Maine. https://www.nrcm.org/wp-content/uploads/2013/09/2014_legislative_reportcard.pdf.

Massachusetts

- Blackstone River Watershed Interactive Water Quality Map. http://zaptheblackstone.org/interactive_map/index.php.
- Environmental Protection Agency, Region 1. 2017. Charles River water quality earns a “B” in 2015. <https://www.epa.gov/newsreleases/charles-river-water-quality-earns-b-grade-2016>.
- Massachusetts Water Resources Authority. 2014. EPA’s annual report card gives the Charles River an A- . <http://www.mwra.com/01news/2014/091114-epa-report-card-charles-river-a-.html>.
- Mystic River Report Card. 2016. <https://mysticriver.org/epa-grade/>.
- Mystic River Watershed Report Card. 2016. 2016 Mystic River Watershed Report Card Frequently Asked Questions. <https://www.epa.gov/mysticriver/2016-mystic-river-watershed-report-card-frequently-asked-questions>.
- Report of the Buzzards Bay Citizens’ Water Quality Monitoring Program 1992-1995. <http://buzzardsbay.org/bbpreports/1996-buzzards-bay-water-quality-monitoring-report.pdf>.
- Save the Harbor/Save the Bay. Annual Beach Water Quality Report Card on the Metropolitan Region’s public beaches. 2017. Report on 2016 beach water quality at 15 public beaches in 10 communities in the Boston area (Lynn, Swampscott, Nahant, Revere, Winthrop, East Boston, South Boston, Dorchester, Quincy and Hull). <http://www.savetheharbor.org/Content/beachesreportcard/>.
- Taunton River Watershed Alliance. 2017. 2016 Water Quality Report Card. <https://savethetaunton.org/2017/02/15/2016-water-quality-report-card/>.

New Hampshire

- New Hampshire Department of Environmental Services. Watershed Report Cards. https://www.des.nh.gov/organization/divisions/water/wmb/swqa/report_cards.htm.

New York

- Long Island Sound Water Report Cards. <https://ecoreportcard.org/report-cards/long-island-sound/>.

Oregon

- City of Portland, Oregon, Watershed Report Card. <https://www.portlandoregon.gov/bes/62109>.
- State of Oregon. Water Quality Index. <http://www.oregon.gov/deq/wq/Pages/WQI.aspx>.
- Willamette River (Oregon) Report Card. <http://www.oregon.gov/deq/wq/Pages/Willamette-River-Report.aspx>.
- Heal the Bays. Beach Report Card for Oregon. <http://beachreportcard.org/?st=OR&f=1>.

Texas

- Mission-Aransas National Estuarine Research Reserve. Little Bay Report Card. <https://missionaransas.org/little-bay-report-card>.

U.S.

- Environmental Working Group. 2017. Clean Water Report Card: Failing Grades. https://static.ewg.org/reports/2000/FailingGrades.pdf?_ga=2.72469146.882043222.1512587101-937361266.1512587101.

Washington State

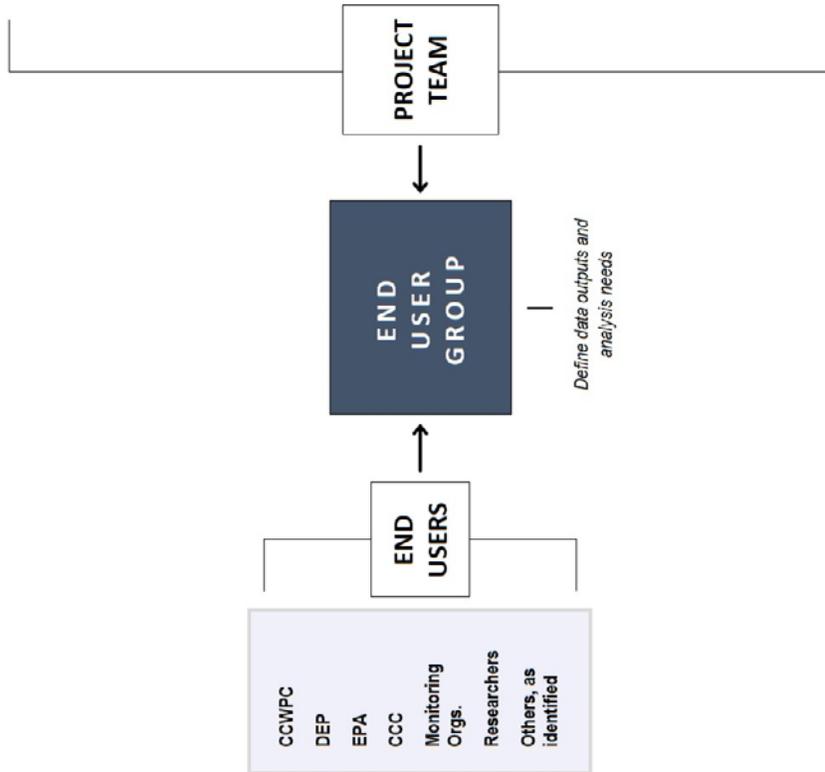
- Pierce County, Washington. 2016 Report Card on Surface Water Health. <https://www.piercecountywa.org/ArchiveCenter/ViewFile/Item/5481>.

International

- World Wildlife Fund. Healthy Rivers for All. <https://www.worldwildlife.org/initiatives/healthy-rivers-for-all>.

Attachment C: Project Team

Woods Hole Oceanographic Institution	<p>Analysis Lead</p> <ul style="list-style-type: none"> Data analysis Processing script development Pilot watershed implementation Integration with database for future analysis and reporting
Waquoit Bay National Estuarine Research Reserve	<p>Collaboration Lead Data and Analysis Advisor</p> <ul style="list-style-type: none"> Provide data Project advisor Quality assurance/control guidance Data analysis advisor Structure collaboration process Facilitate end user meetings
UMass Dartmouth School for Marine Science and Technology	<p>Data and Analysis Advisor</p> <ul style="list-style-type: none"> Provide data Project advisor Quality assurance/control guidance Data analysis advisor
Center for Coastal Studies	<p>Data and Analysis Advisor</p> <ul style="list-style-type: none"> Provide data Project advisor Quality assurance/control guidance Data analysis advisor
Association to Preserve Cape Cod	<p>Information Products Lead</p> <ul style="list-style-type: none"> Integrate water resources data and analyses into information products Create water resources report cards Develop regional State of the Waters report Complete Freshwater data
Cape Cod Commission	<p>Project Lead</p> <ul style="list-style-type: none"> Lead project activities Coordinate tasks and track progress with project partners Database management Lead communication with project partners Data compilation and analysis



AGENDA ITEM 8e

Authorizing the award of contracts for the leasing and maintenance of portable toilets to Nauset Disposal for the Towns of Brewster, Eastham and Yarmouth

COMMONWEALTH OF MASSACHUSETTS

BARNSTABLE, SS.

At a regular meeting of the Barnstable County Board of Regional Commissioners, in the Commissioners' Conference Room, in the Superior Courthouse, on the fifth day of February, A.D. 2020, motion by Commissioner Beaty to authorize the award of contracts for the leasing and maintenance of portable toilets to Nauset Disposal for the Towns of Brewster, Eastham and Yarmouth, as presented, 2nd by Commissioner Flynn, approved 0-0-0

Ronald Bergstrom, Chair: Y

Mary Pat Flynn, Vice-Chair: Y

Ronald R. Beaty, Commissioner: Y

A true copy, attest, February 5, 2020


Janice O'Connell, Regional Clerk



COUNTY OF BARNSTABLE

PURCHASING

DEPARTMENT OF FINANCE

SUPERIOR COURT HOUSE

P.O. BOX 427

BARNSTABLE, MASSACHUSETTS 02630

Phone: (508) 375-6637

Fax: (508) 362-4136

Email:

jennifer.frates@barnstablecounty.org

Jennifer Frates
Chief Procurement Officer

January 15, 2020

MEMORANDUM

TO: County Commissioners

FROM: Jennifer Frates, Chief Procurement Officer

RE: Notice of Bid Award - #7899 Leasing & Maintenance of Portable Toilets

Barnstable County issued an Invitation for Bid #7899 for the Service and Maintenance of Portable Toilets for towns in the County. Two bids were received.

Please vote to award the bid for the Towns of Brewster, Eastham and Yarmouth to Nauset Disposal as the responsive, responsible bidder offering the lowest overall price based on the pricing listed on the attached spreadsheet.

The Towns will enter into their own contracts with the vendor.

Thank you.

Bid # 7899 Leasing and Maintenance of Portable Toilets

Nauset										Frazier				
Town	ADA Units per unit/per day	Regular Units per unit/per day	Overall Price -- entire contract period	Additional/ Emergency Pumping	Special Event per day	Additional Emergency Units per Day	ADA Units per unit/per day	Regular Units per unit/per day	Overall Price -- entire contract period	Additional/ Emergency Pumping	Special Event per day	Additional Emergency Units per Day		
Brewster	19.00	19.00	47,101.00	50.00	175.00	175.00	14.67	14.67	77,140.00	125.00	180.00	180.00		
Eastham	20.00	20.00	37,340.00	50.00	175.00	175.00	16.13	16.13	41,350.00	125.00	180.00	180.00		
Yarmouth	19.00	19.00	10,545.00	50.00	175.00	175.00	10.31	10.31	24,750.00	160.00	180.00	180.00		

AGENDA ITEM 8f

Authorizing the execution of a contract with American Fire Training Systems, for a Fire Training Academy Prop (Mobile), for an amount not to exceed \$374,000.00, for a period from January 22, 2020 through May 1, 2020

Bid# 7897
Contract# 460-20-7897

**Contract for Services
Terms and Conditions**

**Barnstable County
3195 Main Street
Barnstable, MA 02630**

And

American Fire Training Systems, Inc.
15200 New Ave.
Lockport, IL 60441

THIS AGREEMENT is made this **22nd** day of **January, 20 20** by and between **American Fire Training Systems Inc.** (hereinafter referred to as Contractor), and Barnstable County (hereinafter referred to as County).

The Contract for Services Terms and Conditions and any agreed upon changes thereto included in any Contract Amendments shall take precedence over any additional or conflicting terms and conditions as may be included in any other document attached hereto.

NOW THEREFORE, the County and the Contractor do mutually agree as follows:

1. **Employment of Contractor.** The Contractor hereby agrees to perform the services hereinafter set forth in the Scope of Services. Contractor hereby agrees to hold the County harmless from any claims regarding worker's compensation benefits, unemployment compensation benefits, retirement benefits, or any other benefit normally attributable to the status of "employee" and Contractor specifically agrees to pay for all damages incurred by the County, including costs, benefits, and reasonable attorney fees in the event the Contractor files such claim.

2. **Scope of Services.** The contractor shall perform the scope of services set forth in Per Attachments A: Bid Scope & Specifications & Attachment D: Proposal

3. **Contract Amendments.** The following amendments to the Contract have been executed by duly authorized representatives of the Parties and are attached hereto and incorporated herein:

4. **Time of Performance.**

Start Date: 1/22/2020 **End Date:** 5/1/2020

5. **Responsible County Official:** The County Official and Department exercising managerial and budgetary control for this Contract shall be: **Phil Burt, Director of Fire & Rescue Training Academy**

6. **Payment:**

A. The County shall compensate the Contractor for the services rendered at the rate of \$374,000 per Attachment B (e.g., hour, week, month, project, etc.).

- B. In no event shall the Contractor be reimbursed for time other than that spent providing the described service(s).
- C. Payment will be made upon submittal and approval of the Contractor's Invoice(s) that is (are) received Monthly , Quarterly , Other (specify) 50% deposit for materials, \$93,000 at 75% completion and balance due within 20 days of final on site walk thru with department official.
- D. Reimbursement for Travel and Other Contractor Expenses:
 - All travel and meals are part of this Contract. No reimbursement will be made.
 - Contractor will be reimbursed for pre-approved travel in an amount not to exceed \$. Copies of receipts must be submitted. Any expense claimed by the Contractor for which there is no supporting documentation shall be disallowed.
 - Contractor will be reimbursed for OTHER expenses in an amount not to exceed \$.
 - OTHER Expenses shall be limited to: \$ Copies of receipts must be submitted. Any expense claimed by the Contractor for which there is no supporting documentation shall be disallowed.
- E. The total of all payments made against this Contract shall not exceed: **\$374,000.00**

Upon acceptance of the Contractor's invoice, payment will be made within thirty (30) days. If an invoice is not accepted by the County within fifteen (15) days, it shall be returned to the Contractor with a written explanation for the rejection. At the end of each County fiscal year Contractor must submit any outstanding invoices for services performed or delivered during the fiscal year (July 1-June 30) to the County no later than July 31st of the year when the services were performed. Contractors shall submit invoices within sixty (60) days of completing the work.

7. Termination or Suspension of Contract for Cause. If through any sufficient cause, the Contractor or the County shall fail to fulfill or perform its duties and obligations under this Contract, or if either party shall violate or breach any of the provisions of this Contract, either party shall thereupon have the right to terminate or suspend this Contract, by giving written notice to the other party of such termination or suspension and specifying the effective date thereof. Such notice shall be given at least fifteen (15) calendar days before such effective date.

8. Termination for Convenience of County. The County shall have the right to discontinue the work of the Contractor and cancel this contract by written notice to the Contractor of such termination and specifying the effective date of such termination. In the event of such termination or suspension of this Contract, the Contractor shall be entitled to just and equitable compensation for satisfactory work completed, for services performed and for reimbursable expenses necessarily incurred in the performance of this Contract up to and including the date of termination or suspension.

9. Amendments. The County may, from time to time, require changes in the Scope of Services to be performed hereunder. Such changes, including any increase or decrease in the amount of the Contractor costs, which are mutually agreed upon by the County and the Contractor, shall be incorporated in written amendments to this Contract.

10. Non-Discrimination in Employment and Affirmative Action. The Contractor shall take affirmative action

to ensure that qualified applicants and employees are treated without regard to age, race, color, religion, sex, marital status, sexual orientation, national origin, disability, or Vietnam Era Veteran status. The Contractor agrees to comply with all applicable Federal and State statutes, rules and regulations prohibiting discrimination in employment including but not limited to: Title VII of the Civil Rights Act of 1964, as amended; Massachusetts General Laws Chapter 1518§(1); the Americans with Disabilities Act of 1990; and all relevant administrative orders and executive orders including Executive Order 11246.

11. Subcontracting. None of the services to be provided to the County pursuant to this Contract shall be subcontracted or delegated in whole or in part to any other organization, association, individual, corporation, partnership or other such entity without the prior written approval of the County. No subcontract or delegation shall relieve or discharge the Contractor from any obligation or liability under this Contract except as specifically set forth in the instrument of approval. If this Contract is funded in whole or in part with federal funds, Contractor further agrees to comply with the provisions of the Office of Management and Budget Circular A-110, as amended, with respect to taking affirmative steps to utilize the services of small and minority firms, women's business enterprises and labor surplus area firms. All subcontracts shall be in writing and shall contain provisions which are functionally identical to, and consistent with, the provisions of this Contract. The County shall have the right to obtain a copy of the subcontract upon request.

12. Interest of Members of County and Others. No officer, member or employee of the County, and no member of its governing body of the locality or localities in which the Project is situated or being carried out who exercises any functions or responsibility in the review or approval of the undertaking or carrying out of the Project, shall participate in any decision relating to this Contract which affects his personal interest or the interest of any corporation, partnership, or association in which he is directly or indirectly financially interested or has any personal or pecuniary interest, direct or indirect, in this Contract or the proceeds thereof.

13. Conflict of Interest. Contractor acknowledges that it may be subject to the Massachusetts Conflict of Interest statute, Mass. Gen. Laws ch. 268A, and to that extent, Contractor agrees to comply with all requirements of the statute in the performance of this Contract.

14. Assignability. The Contractor shall not assign any interest in this Contract and shall not transfer any interest in the same (whether by assignment or novation), without the prior written consent of the County thereto; provided, however that claims for money due or to become due the Contractor from the County under this Contract may be assigned to a bank, trust company, or other financial institution without such approval. Notice of any such assignment or transfer shall be furnished promptly to the County.

15. Recordkeeping, Audit, and Inspection of Records. The Contractor shall maintain books, records, and other compilations of data pertaining to the requirements of the Contract to the extent and in such detail as shall properly substantiate claims for payment under the Contract. All such records shall be kept for a period of seven (7) years or for such longer period as is specified herein. All retention periods start on the first day after final payment under this Contract. If any litigation, claim, negotiation, audit or other action involving the records is commenced prior to the expiration of the applicable retention period, all records shall be retained until completion of the action and resolution of all issues resulting therefrom, or until the end of the applicable retention period, whichever is later. If this contract is funded in whole or in part with state or federal funds, the state or federal grantor agency, the County or any of its duly authorized representatives or designees, shall have the right at reasonable times and upon reasonable notice, to examine and copy, at reasonable expense, the books, records and other compilations of data of the Contractor which pertain to the provisions and requirements of this Contract. Such access shall include on-site audits, review and copying of records.

16. **Findings Confidential.** Any reports, information, data, etc., given to or prepared or assembled by the Contractor under this Contract which the County requests to be kept as confidential shall not be made available to any individual or organization by the Contractor without the prior written approval of the County.

17. **Publication, Reproduction and Use of Material.** No material produced in whole or in part under this Contract shall be subject to copyright in the United States or in any other country. The County shall have the unrestricted authority to publish, disclose, distribute, and otherwise use, in whole or in part, any reports, data or other materials prepared under this Contract.

18. **Political Activity Prohibited.** None of the services to be provided by the Contractor shall be used for any partisan political activity or to further the election or defeat of any candidate for public office.

19. **Anti-Boycott Warranty.** During the term of this Contract, neither the Contractor nor any "affiliated company" as hereafter defined, shall participate in or cooperate with an international boycott, as defined in Section 999 (b) (3) and (4) of the Internal Revenue Code of 1954, as amended by the Tax Reform Act of 1986, or engage in conduct declared to be unlawful by Sections 2 and 3 of Chapter 151E, Massachusetts General Laws. As used herein, an "affiliated company" shall be any business entity of which at least 51% of the ownership interested is directly or indirectly owned by the Contractor or by a person or persons or business entity or entities which directly or indirectly own at least 51% of the ownership interests of the Contractor.

20. **Choice of Law.** This Contract shall be construed under and governed by the laws of the Commonwealth of Massachusetts. The Contractor and the agents thereof, agree to bring any federal or state legal proceedings arising under this Contract, in which the County are a party, in a court of competent jurisdiction within the Commonwealth of Massachusetts. This paragraph shall not be construed to limit any rights a party may have to intervene in any action, wherever pending, in which the other is a party. All parties to this contract and covenant agree that any disputes be litigated in the District or Superior courts in Barnstable County.

21. **Force Majeure.** Neither party shall be liable to the other nor be deemed to be in breach of this Contract for failure or delay in rendering performance arising out of causes factually beyond its control and without its fault or negligence. Such causes may include but are not limited to: acts of God or the public enemy, wars, fires, floods, epidemics, strikes, or unusually severe weather. Dates or times of performance shall be extended to the extent of delays excused by this section, provided that the party whose performance is affected notifies the other promptly of the existence and nature of such delay.

22. **Compliance with Laws.** The Contractor shall promptly comply with all applicable laws, rules, regulations, ordinances, orders and requirements of the Commonwealth and any state or federal governmental authority relating to the delivery of the services described in this Contract subject to section 18 above. Unless otherwise provided by law, the Contractor shall promptly pay all fines, penalties and damages that may arise out of or are imposed because of the Contractor's failure to comply with the provisions of this section and, shall indemnify the County against any liability incurred as a result of a violation of this section. If the Contractor receives federal funds pursuant to this Contract, Contractor understands and agrees to comply with all requirements outlined in the Office of Management & Budget Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards (2 CFR Part 200 subpart A-F)

23. **Tax Exempt Status.** The County is exempt from federal excise, state, and local taxes; therefore, sales to the County are exempt from Massachusetts sales and use taxes. If the County should become subject to any

such taxes during the term of this Contract, the County shall reimburse the Contractor for any cost or expense incurred. Any other taxes imposed on the Contractor on account of this Contract shall be borne solely by the Contractor.

24. **Headings, Interpretation and Severability.** The headings used herein are for reference and convenience only and shall not be a factor in the interpretation of the Contract. If any provision of this Contract is declared or found to be illegal, unenforceable, or void, then both parties shall be relieved of all obligations under that provision. The remainder of the Contract shall be enforced to the fullest extent permitted by law.

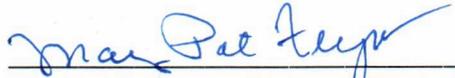
25. **Waiver of Liability.** The Contractor hereby covenants and agrees to waive any and all claims against Barnstable County and release Barnstable County from any liability arising out of the Scope of Services.

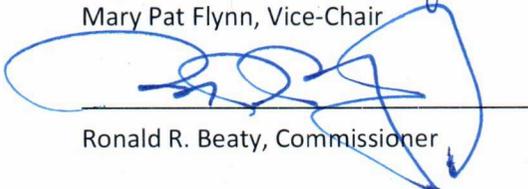
IN WITNESS WHEREOF, the County and Contractor have executed this Agreement this 5th day of February in the year Two Thousand and Twenty.

FOR THE COUNTY:

County Commissioners:


Ronald Bergstrom, Chair

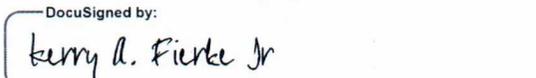

Mary Pat Flynn, Vice-Chair


Ronald R. Beaty, Commissioner

02/05/20
Date

FOR THE CONTRACTOR:

American Fire Training Systems Inc.

DocuSigned by:

Kerry A. Fierke Jr, General Manager
1/29/2020 | 3:47 PM EST

Date

COMMONWEALTH OF MASSACHUSETTS

BARNSTABLE, SS.

At a regular meeting of the Barnstable County Board of Regional Commissioners, in the Commissioners' Conference Room, in the Superior Courthouse, on the fifth day of February, A.D. 2020, motion by Commissioner Beaty to authorize the award of contracts for the leasing and maintenance of portable toilets to Nauset Disposal for the Towns of Brewster, Eastham and Yarmouth, as presented, 2nd by Commissioner Flynn, approved 0-0-0

Ronald Bergstrom, Chair: Y

Mary Pat Flynn, Vice-Chair: Y

Ronald R. Beaty, Commissioner: Y

A true copy, attest, February 5, 2020


Janice O'Connell, Regional Clerk



Attachment A – Bid Scope & Specifications

MARITIME TRAINING SIMULATOR

SCOPE & GENERAL REQUIREMENTS:

1. The mobile training simulator shall be two-level, constructed from a one-trip International Organization for Standardization (ISO) container, and mounted on a DOT Compliant Chassis. All modifications, fittings, catwalks, and railings (etc.) shall be OSHA compliant.
2. Vendor shall provide a graphical representation of their training simulator solution at time of proposal which substantially satisfies the requirements herein.
3. The training simulator shall comply with NFPA 1402 “Standard on Facilities for Fire Training and Associated Props” 2019 Edition”9.
4. The selected vendor shall prepare layout drawings and coordinate a design review meeting upon project award.
5. The Live-Fire component of the training simulator shall provide Class “B” LPG fueled training only.
6. The training simulator shall have emergency egress, emergency lighting and emergency shut-off controls.
7. The training simulator exterior shall be painted and lettered per the County’s choice of color and design.
8. The awarded vendor must provide past performance at time of proposal showing capability to design, fabricate, deliver, and assemble a simulator of similar complexity as that being proposed.
9. Proposals shall include all costs associated with all aspects of the simulator (including but not limited to design, build and delivery.)
10. Awarded Vendor shall include a (1) day “Train the Trainer Course” for up to 12 students within two weeks of training simulator delivery.
11. Vendor shall include a hard copy and an electronic version of the Training Simulator Operations and Maintenance Manual at time of delivery.

SIMULATOR SPECIFICATIONS:

1. The training simulator shall include (1) burn room. Burn room shall be fabricated as a secondary fully insulated sleeve within the container structure and designed for Class “B” LPG Fuels.
2. A pitched roof prop shall be incorporated into the simulator for vertical ventilation training purposes.
3. A drywall poke out shall be incorporated below the pitched roof prop.
4. Multiple points of egress via personnel doors shall be provided and various windows included for differing training scenarios (both maritime and non-maritime).
5. The training simulator shall have a retractable extension tower with repel anchor and bail out window.
6. The training simulator shall have a retractable catwalk at floor level on both sides of the simulator with stair access to the roof and ground.
7. Interior and exterior stairwells, doors and windows shall be provided to support various training scenarios (both maritime and non-maritime design – e.g. interior maritime ladder, scuttle hatch).
8. The training simulator shall include a SCBA reconfigurable maze and confined space training capabilities. The maze system shall allow the interior floor space to be reconfigured to support various interior fire attack scenarios.
9. A Cold Smoke and Distribution System resulting in zero visibility shall be included.
10. The training simulator shall provide rope rappelling training capabilities that are compliant with applicable OSHA standards (certification shall be provided at time of delivery).
11. Rooftops shall contain a galvanized steel bar grating surface and an OSHA compliant galvanized guardrail system.
12. An electrical system, fixed interior and exterior lighting and a generator shall be included and installed.
13. Exterior Full Height Standpipe System with a Siamese FDC connection at ground level, and hose connection at all story-levels shall be included.
14. An on-board ASME Compliant LPG Fuel Supply shall be included.

Class "B" LPG General Specifications:

1. The LPG delivery and control system must be tested and certified by a Nationally Recognized (third-party) Testing Laboratory (NRTL) as required by NFPA 1402.
2. Control Panel must consist of a simple series of buttons to provide safe burn prop operation (two themed props shall be included). The operating condition of each of the buttons must be visually indicated by lamps. A guarded emergency gas off (EGO) button must be positioned on the control panel.
3. The control panel must be located within a designated control room.
4. A temperature monitoring and data logging system must be interlocked with the gas delivery and control system at the designated burn room. The system must digitally display the temperatures and discontinue gas delivery to the props at the user specified upper temperature limit.
5. A combustible gas detection system must be interlocked with the gas delivery and control system at the designated burn room. The system must digitally display sample concentration levels within the proximity of the props, terminate gas delivery and activate an external alarm when 25 percent of the lower explosive level (LEL) is exceeded.
6. A mechanically assisted ventilation system must be provided. The system must be capable of one air change per minute and be interlocked with the gas delivery and control system.
7. All components for the LPG System must be commercially available (non-proprietary) so that they can be serviced by a third-party qualified technician, if needed.
8. An Automatic Ignition Source and Flame Safety System which continuously monitor's the live fire environment must be utilized.
9. Normally closed electromechanical valves must be utilized for fuel delivery purposes.

Comparable / alternative solutions (vendor exceptions) will be considered.

Attachment B

Bid Response Form

The undersigned BIDDER proposes and agrees that the proposal is based upon the items described in the Invitation for Bid documents and that the requirements have been read and understood by the proposer.

BID PRICE:

Price Proposal: THREE HUNDRED SEVENTYFOUR THOUSAND dollars (\$374,000.⁰⁰)

Bidder acknowledges addenda numbered 7897 #1,2

Signed: Kerry A Fierke Jr. Print Name: KERRY A. FIERKE JR.

Company: AMERICAN FIRE TRAINING SYSTEM'S, INC.

Business Address: 15200 NEW AVE

LOCKPORT, IL 60441

Phone: 630-878-5493 Fax: 630-257-8844

Email: _____ Date: 12-5-19

JR@AMERICANFIRETRAININGSYSTEMS.COM

ACORD <small>TM.</small>		CERTIFICATE OF LIABILITY INSURANCE	DATE (MM/DD/YYYY) 12/05/2019
PRODUCER Phone: (815) 727-2611 Fax: (815) 727-2648 A FAZIO INC. 550 RUBY ST P O BOX 1248 JOLIET IL 60434-1248		THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.	
Agency Lic#: Cust #2015860		INSURERS AFFORDING COVERAGE	NAIC #
INSURED AMERICAN FIRE TRAINING SYSTEMS, INC. 15200 S NEW AVE LOCKPORT IL 60441		INSURER A: Landmark American Insurance Company INSURER B: Erie Insurance Exchange INSURER C: INSURER D: INSURER E:	26271

COVERAGES

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. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR	ADD'L LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS												
A		GENERAL LIABILITY	LHA111950	02/04/19	02/04/20	EACH OCCURRENCE \$ 1,000,000												
	<input checked="" type="checkbox"/>	COMMERCIAL GENERAL LIABILITY				DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000												
	<input type="checkbox"/>	CLAIMS MADE <input checked="" type="checkbox"/> OCCUR				MED. EXP (Any one person) \$ 5,000												
	GEN'L AGGREGATE LIMIT APPLIES PER:					PERSONAL & ADV INJURY \$ 1,000,000												
<input checked="" type="checkbox"/>	POLICY	<input type="checkbox"/> PROJECT <input type="checkbox"/> LOC				GENERAL AGGREGATE \$ 2,000,000												
						PRODUCTS-COMP/OP AGG. \$ 2,000,000												
B		AUTOMOBILE LIABILITY	Q05-1030969	05/10/19	05/10/20	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000												
	<input type="checkbox"/>	ANY AUTO				BODILY INJURY (Per person) \$												
	<input checked="" type="checkbox"/>	SCHEDULED AUTOS				BODILY INJURY (Per accident) \$												
	<input checked="" type="checkbox"/>	HIRED AUTOS				PROPERTY DAMAGE (Per accident) \$												
<input checked="" type="checkbox"/>	NON-OWNED AUTOS																	
		GARAGE LIABILITY				AUTO ONLY - EA ACCIDENT \$												
		<input type="checkbox"/> ANY AUTO				OTHER THAN EA ACC \$												
						AUTO ONLY: AGG \$												
NO		EXCESS / UMBRELLA LIABILITY				EACH OCCURRENCE \$												
	<input type="checkbox"/>	OCCUR	<input type="checkbox"/>	CLAIMS MADE		AGGREGATE \$												
	<input type="checkbox"/>	DEDUCTIBLE				\$												
	<input type="checkbox"/>	RETENTION \$				\$												
		WORKERS COMPENSATION AND EMPLOYERS' LIABILITY				<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;"></td> <td style="width:25%;">WC STATUTORY LIMITS</td> <td style="width:25%;">OTHER</td> </tr> <tr> <td>E.L. EACH ACCIDENT</td> <td></td> <td>\$</td> </tr> <tr> <td>E.L. DISEASE-EA EMPLOYEE</td> <td></td> <td>\$</td> </tr> <tr> <td>E.L. DISEASE-POLICY LIMIT</td> <td></td> <td>\$</td> </tr> </table>		WC STATUTORY LIMITS	OTHER	E.L. EACH ACCIDENT		\$	E.L. DISEASE-EA EMPLOYEE		\$	E.L. DISEASE-POLICY LIMIT		\$
	WC STATUTORY LIMITS	OTHER																
E.L. EACH ACCIDENT		\$																
E.L. DISEASE-EA EMPLOYEE		\$																
E.L. DISEASE-POLICY LIMIT		\$																
		ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED?																
		If yes, describe under SPECIAL PROVISIONS below																
		OTHER:																

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/EXCLUSIONS ADDED BY ENDORSEMENT/ SPECIAL PROVISIONS
 BID #7897 MOBILE FIRE TRAINING PROP. ADDITIONAL INSURED: COUNTY OF BARNSTABLE, ALL OTHER POLITICAL SUBDIVISIONS/ ENTITIES, AS THEIR INTERESTS MAY APPEAR, ITS OFFICERS AND EMPLOYEES, ON A PRIMARY AND NON-CONTRIBUTORY BASIS. A WAIVER OF SUBROGATION APPLIES TO GENERAL LIABILITY INSURANCE IN FAVOR OF COUNTY OF BARNSTABLE, AND "ALL OTHER POLITICAL SUBDIVISIONS", ITS OFFICERS, AND EMPLOYEES.

CERTIFICATE HOLDER BARNSTABLE COUNTY PURCHASING DEPT. SUPERIOR COURTHOUSE 3195 MAIN ST. PO BOX 427 BARNSTABLE, MA 02630 Attention:	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, IT'S AGENTS OR REPRESENTATIVES. AUTHORIZED REPRESENTATIVE  Steve Fazio
---	--



American Fire Training Systems

*15200 New Ave Lockport, IL. 60441
The first name in fire training facilities!*

*(Who`s Parent Company is A Warehouse on Wheels
INC .) 12315 New Ave Lemont, IL 60439*

Proposal for a Class B 3 Mobile live fire Maritime training prop approx. 1200 sq ft for the Barnstable MA County Fire Academy

Objective:

Provide (1) Class B live fire Mobile Maritime **training prop**, Also provide bonded and insured installation.

Proposed By: Kerry "Jr." Fierke (American Fire Training Systems, Inc.)

AFTS and A Warehouse on Wheels Inc. is a Family Owned and operated Business:
39 years of experience in custom fabrication of ISO Containers, Semi Trailers, Heavy Equipment, and Structural Framework with over 16 years building and constructing Fire training structures, mobile fire trainers and stand alone training props with over 350 units built in total to date.

Present Customers Include:

Exelon Corp. Chicago IL
Caterpillar Corp. Peoria IL
W.R. Grace. Summit IL
GE Capital California
Prairie Materials Inc. Romeoville IL
Enercon Engineering Inc. East Peoria IL
Applied Mechanical Technology, Momence IL

Firefighting References:

See AFTS attached reference sheet

(Call AFTS Inc. for more Names, Divisions, Depts., and Phone Numbers)
See attached for Additional references



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Project Description:

American Fire Training Systems, Inc. will design, construct and install a mobile unit training prop, for the purpose of providing live fire training to new and incumbent firefighters in a controlled environment, meeting all NFPA 1403 and OSHA applicable codes standards and recommendations. Structural specifications are not intended to meet building code requirements for occupied structures.

Warranty:

Main Structure is warrantied for craftsmanship 2 years the burn room is warrantied for 1 year under normal operations. If in the burn the recommended use is exceeded, warranty will become void. Exterior finish will be warrantied for 2 years for cracking if unit is incidentally struck by tools then affected areas should be treated immediately by dept staff.

Specifications and main Components used for fabrication:

ISO Containers: The use (1) modified new 51`Lx8`Wx8.5`H high cube connex containers. (1) New 2020-51` Tandem axle DOT complainant trailer chassis.

- **Structure:** The structure is designed in accordance with the RFP, and drawings Provided by American Fire Training Systems, Inc.

General Components and build description: All structural components shall be of non-combustible material, consisting of stainless steel, galvanized, corten, and mild steel.

- Floor structure in the burn chamber will be of 1/8" stainless steel diamond plate. All Non-burn area flooring will consist of 16 ply Apitong wood and have a minimum of 350# sf ft capacity, all apitong wood floor will be sealed with anti-skid rhino lined material. Burn room will have 10 gauge stainless steel corrugated panels with 2000 ceramic blanket behind panel`s.
- All handrails will be made of galvanized steel material with 25 year life expectancy in compliance with OSHA standards.
- Stairs will be made of 25 year galvanized steel material in compliance with OSHA standards with 36" tread surface.
- All doors will be constructed of steel welded assembly with locking mechanism (36"x80") 3 stainless hinges. (See drawings for door locations.)
- All windows will be constructed of steel welded assembly with locking mechanism (36"x36") 2 stainless hinges. (See drawings for window locations.)
- All components will consist of NEW materials.
- Exterior finish shall be painted per customer's choice of color, with quality 2 part marine urethane finish and top clear coat.



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TACTICAL AND RESCUE BURN AND NON-BURN FACILITIES

This is a quote for the Mobile live fire training prop. The unit will be designed to assist in a manner, which provides safety first while allowing for realistic training circumstances.

The unit's training capabilities will include, but is not limited to, interior and exterior tactical attack, ventilation (horizontal), direct attack .

The unit will be designed and fabricated utilizing the most current codes, standards and recommendations, published for this type of facility.

General Information

Purpose

The training facility will be designed for basic firefighter training as well as providing current training for the experienced veteran. The unit design will offer skill testing capabilities that meet minimum Firefighter I training requirements for basic firefighting skills as directed in the NFPA 1001-1402-1403-1500.

Drawings

American Fire Training Systems, Inc. will provide 3 copies of preliminary drawings for verification as well as final drawings before manufacturing.

Code Compliancy

This training prop is being manufactured with the intended use as a non occupied structure for fire and smoke training. It is the responsibility of the owner to acquire certifications for any additional adjustments. The facility will meet all OSHA and NFPA codes, standards and recommendations



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Facility

Hardware

All attachment hardware is to be either stainless steel or mild steel galvanized material.

Concrete

American Fire Training Systems recommends that the foundation should be 6" to 8" thick concrete slab with steel mesh, or rebar reinforcements, or specified otherwise piers see AFTS recommended drawing's for foundation specs. Not applicable for mobile units

Components

All manufactured materials will be new and of non-combustible material in burn areas.

Main Structure

The use of 1-51' ISO Standard Cube container that will be used of non-combustible materials in burn room . Structural posts are 8"x8" sq and .50" minimum.

Exterior Walls

Wall panels will be constructed of 14 gauge corrugated corten steel, with continuous seam welded to structural members.

Interior Walls in burn room

Interior walls will be insulated with 2000 degree ceramic fiber blanket capable of withstanding elevated temps but the mobile is not to ever exceed 900 degrees.

Flooring

Floor structural members will be 5 3/4" channel x .125 with weather resistant coating. Floor decking in burn rooms will be stainless steel 1/8 " diamond plate. And a non skid coating will be applied to the 1-1/8" hard wood in non burn areas with a 350# per sq ft load rating.

Roof Structure

The roof structure will be constructed of 14 gauge corrugated corten steel with a active working deck to be constructed from 1/8" thick galvanized steel diamond plate with OSHA compliant hand railing and 4" safety toe kick around roof deck perimeter.



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Stairs

All interior staircase material is to be constructed of 25 year galvanized bar grating. All interior or exterior stairs will provide a minimum 36" wide tread surface with OSHA compliant hand railings.

Doors

All non burn doors will be constructed of 11 gauge steel single sided, 2 part urethane painted mild steel or galvanized steel. Doors will be a complete welded assembly, stainless steel hinge minimum of three (3) hinges and appropriate door mechanisms. Door size will be 36"x84" The door frames will be constructed of 2"x2"x1/8" square tubing. Burn doors will be constructed the same but made of all stainless steel construction.

Windows

All non windows are to be constructed of 11 gauge galvanized, stainless or mild steel single sided. Windows will be complete welded assembly. Each window will be hinged on one side with a minimum of two stainless steel hinges. Window size will be 36"x36". Window frames are to be constructed of 2"x2"x1/8" square tubing steel. Burn windows will be constructed the same but made of all stainless steel construction.

Railings

All open railing are with a vertical distance above ground in excess of 40" will include OSHA compliant railings. Each railing will supply roof access through an approved opening. All railings will be constructed of 1 1/2"x1 1/2"x 11 gauge square tubing steel. All exterior railings will have a galvanized finish.

Exterior Finish

Main body is to be painted with a base color with one access color for doors, windows. Each unit will be prepped, primed and painted with 2 part urethane marine coating per customer color code specifications.



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CONTRACT AGREEMENT FOR MANUFACTURING OF FIRE TRAINING FACILITY

This sales agreement is made on _____, between American Fire Training Systems, Inc., a company organized and existing under the laws of the State of Illinois, with its principal office located at 15200 S. New Avenue Lockport, IL, and the County of Barnstable MA located at 3195 Main St Barnstable MA 02630, organized and existing under the laws of the State of Massachusetts.

SECTION ONE.

MANUFACTURE AND SALE; DESCRIPTION

Seller agrees to manufacture and sell to buyer the following goods: (1) Turn-key class B live mobile fire maritime training prop.

SECTION TWO.

PAYMENT

Buyer agrees to pay for the goods as follows: County of Barnstable will issue a formal purchase order. AFTS will ask for a deposit for initial materials cost (\$187,000.00) when AFTS is completed with 75% of such fabrication AFTS would request another progress payment(\$93,500.00) the remaining balance of (\$93,500.00) would then be paid 20days net due after the final walk thru on site with dept official, with no retainage. Other payment option's can be negotiated by calling Kerry Fierke JR at the main office 630-878-5493.

SECTION THREE.

DELIVERY SCHEDULE

Seller shall commence to manufacture within 4-6 weeks following receipt of buyer's PO# and deposit. Subject to the provisions of Section Five, seller will complete such manufacturing and make the goods available for inspection at anytime. Approximate completion date will be approx 150-180 days from fabrication start date. If American Fire Training Systems, Inc. has completed fabrication and buyer's site is not ready, American Fire Training Systems, Inc. agrees to store finished products at American Fire Training Systems, Inc. facility for up to 60 days free of charge. BEFORE MAY 1, 2020

K.F.



American Fire Training Systems

The first name in fire training facilities!



SECTION FOUR.

EXCUSE FOR NONPERFORMANCE

Seller's obligations under this agreement are accepted subject to strikes, labor troubles (including strikes or labor troubles affecting any suppliers of seller), floods, fires, acts of God, accidents, delays, shortage of cars, contingencies of transportation, and other causes of like or different character beyond the control of seller. Impossibility of performance by reason of any legislative, executive, or judicial act of any governmental authority shall excuse performance of or delay in performance of this agreement.

SECTION FIVE.

WARRANTIES AND LIMITATIONS

Main Structure is warranted for craftsmanship 2 years. If in the burn the recommended use is exceeded, warranty will become void. Exterior finish will be warranted for 2 years for cracking if unit is incidentally struck by tools then affected areas should be treated immediately by dept staff.

SECTION SIX.

ENTIRE AGREEMENT

The parties agree that this constitutes the entire agreement and there are no further items or provisions, either oral or otherwise. Buyer agrees that it has not relied upon any representations of seller as to prospective performance of the facility, but has relied upon its own inspection and investigation of the subject matter. American Fire Training Systems, Inc. assumes no liability after unit is complete and while facility is being used for training.

Timeline: Completion of facility will take approximately 150-180 days upon receipt of PO# and deposit. Approximate time spent on site for instillation is 1 day weather permitting.



American Fire Training Systems

The first name in fire training facilities!



Date: 12-19-19

Total cost with in this proposal is \$374,000.00

PRICE GOOD FOR 90 DAYS

[Buyer Signature]

[Date]
Kerry A Fierke Jr.

[Seller Signature]

12-19-19

[Date]

Included Items

- #1- -Dept graphic logo`s
- #2- 1-20,0000 CFM smoke generator
- #3- 10 hour train the trainer course up to 12 trainees per day
- #4 – RTD temperature monitoring system
- #5 – Delivery of all fabricated parts
- #6 – Set up on site

American Fire Training Systems, Inc. assumes no liability after unit is complete and while facility is being used for training.

Any questions regarding this proposal please call Kerry “JR” Fierke on his cell (630-878-5493) or office # (630-257-3659)

**AMERICAN FIRE TRAINING SYSTEMS INC.
15200 NEW AVE
LOCKPORT IL 630-257-3659 office 630-257-8844 fax**

Not included with in this proposal, Payment and Performance bond add 3% to total cost

American Fire Training Systems Inc.
15200 New Ave Lockport IL 60441
Training Packages and Compliancy

American Fire Training Systems is proud to offer a variety of training packages and training towers to meet the needs of virtually any Fire Department in the United States. AFTS understands the needs for firefighter training when new tools such as a burn facility, training tower or other are introduced into the department. AFTS starts with a basic training package and then customizes each session to maximize the amount of information being delivered by AFTS instructors.

AFTS conforms and addresses the required NFPA 1402 and 1403,1500 when designing and constructing facilities for fire service training centers.

The main components that AFTS constructs accomplish general fire fighting training effectively, efficiently and safely and are presented in each mobile or structure designed by AFTS.

Live Fire Basic training package begins with a classroom session that covers NFPA 1402,1403 and lays out a plan for your departments needs. Examples and templates of site safety plans, SOP's, rehab and hydration policies are included for department files to be built upon to fit their specific needs. Command and control procedures for Fixed burn and mobile fire facilities are covered to assist departments in utilizing their new facility to it's greatest potential. Following classroom time, department personnel are walked through proper procedures, safety considerations of the facility and taught the preferential methods of building fires for training in their new facility. Students are supervised while conducting and managing appropriate sized fires for their facility and taught about conditions that could cause safety problems for them during Live Fire evolutions.

Also included in ALL Basic Fire and Non Fire training packages are a prop familiarization. Students are introduced to each prop that has been specified to their facility and shown basic techniques to enhance student teaching points. Instructors answer all questions about each facility and ensure that your departments new tool is up to AFT specifications.

The Basic training package is designed as a 8-10 hour course dependent upon the number of students attending the Train the Trainer. Maximum amount of students is 15; however class size may be increased with proper notification and adjustment of fee schedule. AFT instructors will contact your designated representative and cover all aspects of the basic package prior to coming to your facility and ensure that your departments needs are being met.

Additional custom training to meet your departments needs will also be taking into consideration prior to arrival to ensure customers are getting to most out of their facility. If departments desire specific additional training in areas beyond their facilities basic

operations, additional days may be scheduled to supplement those needs. Areas that AFTS instructors specialize in are:

Firefighter Safety & Survival techniques, Rescue and RIT, Engine and Truck Company Operations, Thermal Imaging Camera Basics, Pump Operations, High Rise Operations, Fire Academy Recruit training.

AFT instructors are amongst some of the most highly sought after trainers in the country and are dedicated to keeping firefighters safe through their message of proper trainer for real world firefighters. They are led by the lead instructor Maj. Brian Arnold of the Oklahoma City Fire Department. Maj. Arnold is a 27 year veteran of the fire service with experience as both a career and volunteer firefighter. He has served with OKC FD since 1991, is a contributing writer to Fire Engineering Magazine & The Urban Firefighter on-line magazine; he has been an FDIC HOT Instructor and classroom presenter since 2007 and delivers both Hands On training as well as lectures across the US. Maj. Arnold is also the founder of Oklahoma's only 19 week firefighter recruit academy at Eastern Oklahoma County Technology Center Fire Training which provides entry level firefighters for more than 21 area departments and has logged more than 2000 burns in Fixed Burn, Mobile Fire and Acquired Structure burns.

Major Arnold draws upon some of the most talented and passionate firefighters across the country with instructors from FDNY, New Jersey, Maine, Oklahoma, Kansas, Colorado & California. He hand picks specific teams to fit the needs of each department to ensure each training package has the most qualified instructors possible to deliver requested needs. AFT is committed to not only building the Best facilities on the market for quality fire training, but also offering the Best and Most qualified personnel to instruct departments to maximize the facility to it's utmost potential. Let the personnel of AFTS build a Total package for you and your department to keep your firefighters prepared and safe for now as well as the future.



Pro-Safe Fire Training Systems Inc.
940 Winston Churchill Blvd.
Oakville, ON, Canada L6J 7X5
Phone 905-337-8137 Fax 905-842-0011
www.prosafefire.com

PROPANE/NATURAL GAS TOWER BURN SYSTEM

PERFORMANCE STATEMENT

The Propane/Natural Gas Live Fire Burn System is designed to provide safe and effective training in control and extinguishment of fires that may occur in residential, commercial, industrial, military, marine structures. The Pro-Safe Live Fire Burn System design will permit training exercises with varying levels of difficulty and a wide range of training fire characteristics.

The Burn System utilizes propane or natural gas fueled flame generation system under automatic control to provide training fires that are realistic in appearance and that respond via manual control.

The Burn System can have a stainless steel mockup structure with the general appearance of the represented combustible item or material (stove, bed, couch, engine etc.). All flame producing components are located as required to produce flame growth in and around the structure consistent with the represented fire. The main pilot ignition system is inextinguishable during training exercises and is also concealed.

Each individual fire location is designed and constructed of stainless steel and aluminum to withstand the heat of the fire and the application of extinguishing agent without any significant deterioration or loss of function over the design life of the simulator. The burner and pilot guard are manufactured of stainless steel for longer life and reduction in maintenance. Each fire simulator and the smoke generation system conform to all applicable US Standards and Codes pertaining to live fire simulators and props.

Fuel Regulation and Control Assembly

Fuel supply will be the responsibility of the Customer.

Pro-Safe Fire Training Systems Inc. will supply and install a fuel regulation and control assembly to the gas supply from a stub-out point at ground level at a predetermined location. The fuel regulation and control assembly consist of a second stage regulator; a blocking valve and pressure gauge, and outlets to individual fireplaces with manual valves.

Any additional fuel regulation & control required by local codes will be the responsibility of the owner. The second stage regulator reduces the line pressure to the Burn System operating pressure. The blocking valve is open when both dead-man switches are depressed, and any fire in the trainer is enabled; and closes with any automatic or manual emergency shutdown or when all fires are disabled.

TRAINING TODAY'S HEROES.



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Building Modifications

The Customer will provide the rooms within the buildings to house the live fire training simulators. Pro-Safe will coordinate with the tower manufacturer to make any modifications necessary for the installation of fire simulators and smoke generating system to building specifications prior to final design.

High Temperature Lining

The buildings burn rooms must be lined with a protective burn room lining.

Smoke Generation Systems

The Pro-Safe Burn System has a 10,000 CFM smoke generation system. Smoke can be independently selectable to operate with each training fire, or alone for search and rescue training.

The smoke is distributed as an aerosol fog using an oil base smoke fluid that is safe and non-flammable in the fire-training environment. The smoke will limit visibility to one or one and a half (1 to 1-1/2) feet at three (3) feet above the floor during obscuration and search and rescue training exercises. Pro Safe provides individual smoke distribution fans to allow selectable smoke locations on the control panel. Smoke can be used independently or in conjunction with live fire scenarios.

Control System

Each fireplace location is automatically controlled utilizing computerized controls (PLC), a main control panel, and safety officer pendant. The control system will also monitor all trainer safety systems, and can stop all fire/smoke production and begin building ventilation as appropriate for the specific safety system alarm or malfunction.

Training fires are initiated using the control panel. The control system will regulate gas flow to each training fire to produce flame growth, height, and extinguishment consistent with the specific training objectives as called by the safety officer.

The Propane/Natural Gas Burn System has its own control components distributed among all fire control equipment to provide individual control of each fire as well as a safety interface to monitor the entire trainer for safety conditions and shut down trainer operation if required. The safety system monitors the trainer's gas detection, burn room temperature and emergency stop systems controlling the trainer's gas supply and ventilation system.

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Control Panel

The Pro-Safe control system shall utilize a programmable logic controller (PLC) system to provide total safe and effective control of the flame generation system. The PLC shall control the gas pilot control and distribution valves, pilot ignition components, and pilot monitoring components.

Each exercise shall be controlled using the 10" Touch Panel Operator Control Panel. The touch panel shall contain all of the controls and indicators required for safe and easy operation of flame ignition, flame growth, flashover initiation, and safety monitoring of the training scenario.

Pro-Safe will provide a 10" backlit LCD touch screen to enable and monitor system all of the system operations. The various screens provide an easy to read layout of information displayed for the operator. Each screen illustrates the intended information in a clear concise manner that requires no additional information. The Pro-Safe display includes text messages, as necessary, displayed in response to an operator request or text messages automatically displayed by the system to assist the operator in using the system, and identifying any situations.

The Pro-Safe Touch-Screen Panel will contain the following features:

- Password-protected controller log-on screen
- A control system test screen.

The Pro-Safe PLC will check the following:

- All natural gas delivery components
- Safety systems
- Input-Output communication channels
- Pilot confirmation for each fire

The Gas sensor test screen will allow the gas detection system to be checked and if need be calibrated prior to fire training.

The following Fire Training Screens will be provided:

- Fire scenario status for each fire
- Temperature readout at the 5-foot level in the burn room
- Temperature readout at the ceiling in the burn room
- LEL readout of unburned gas levels
- Programming of fire parameters
- Burn-time information
- System messages

Parameter Specification

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Flame Height – Low 2-4 feet above the burner platform.

Flame Height – High 5-7 feet above the burner platform.

B Wireless Hand Held Control Unit

Pro-Safe can provide a wireless hand held pendant for complete control of fire generation, smoke generation, ventilation, emergency stop, and “dead man” functions. All safety system functions can be monitored on the wireless control panel. Further details and specifications for the Pro-Safe Wireless Pendant options are included.

All controls are industrial grade PLC's.

C Control System Monitoring

All safety features including pilots, gas flow, LEL levels, temperature, and ventilation shall be constantly reported to the PLC control system. On top of the smoke system and all purge cycles being reported back to the PLC.

D Data Storage and Reporting

Each evolution shall be assigned a unique serial # and all components of the evolution shall be available to download to excel via the provided USB port.

Ventilation System

The Burn System includes exhaust ventilation fans to provide purge air to remove excess heat, combustion by-products, and unburned combustible gas from the training compartment. The fan is automatically turned on for pre-operation ventilation of the Burn System when the key is turned to the ON position.

In addition, the fan will also automatically turn on as the result of any emergency shut down, when the gas detection system reaches the shut down level (20% LEL), or when the compartment temperature reaches the shut down level. The ventilation system consists of high temperature exhaust fans to fully discharge the burn room at a minimum rate of (1) air change per minute in accordance with NFPA 1402. The exhaust fans will continue operating until any emergency stop condition has been successfully corrected.

The purge cycle will engage automatically for four reasons:

- a) Upon initial startup of the control panel. The purge cycle will operate for three minutes.
- b) Upon activation of any E-Stop button. This cycle will continue until the E-Stop button is reset.
- c) Upon detection of 20% LEL raw propane gas. This cycle will continue until the percentage LEL is registered less than 10%
- d) Upon detection of interior burn chamber temperature above the upper limit (programmable) of the five-foot temperature sensor.

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Gas Detection/ Sensing System

Pro-Safe provides One (1) Propane/Natural Gas Sensor per burn room. The sensor will be mounted at an appropriate level above the floor in each training compartment to ensure complete coverage.

The installed Propane/Natural Gas Detectors constantly test samples of air from these locations. The Propane/Natural Gas Detectors analyze air for unburned combustible gas content in order to detect any buildup of gas in the training compartment before dangerous levels are reached.

The combustible gas concentration levels are constantly reported to the PLC, and measured as a percent of the Lower Explosive Level (LEL). Should the detected gas concentration level at any location reach 10% LEL, the control panel light will illuminate. Should the detected gas concentration level at any location reach 20% LEL, an automatic and immediate shutdown of the entire Burn System will occur. The exhaust fan will start, all fires and smoke generation will be stopped immediately and an audible alarm will sound. The exhaust fans will not stop until the LEL reaches a level lower than 10%.

Pro Safe provides a Non-Intrusive Remote Calibrator for periodic calibration of the gas detectors. This allows for easy calibration of the sensors and eliminates the possibility of operator error causing malfunction during calibration.

Catalytic Bead type gas sensors shall be specified and used. This type of sensor has proven reliable in the harsh conditions of a live fire training burn room. Infrared and optical type sensors are not reliable and result in frequent nuisance faults and shall not be used.

Burn Room Temperature Monitoring and Control

Temperature levels within the training compartments are constantly monitored during operation to protect both personnel and equipment from excessive heat with Temperature Sensors. Temperature Sensors are located in all burn rooms, at approximately five (5) feet above the floor level.

If the detected compartment temperature level reaches a preset limit (programmable) on the sensor, the exhaust fan will be automatically turned on to prevent any further increase in temperature. If the detected compartment temperature level reach an upper preset limit (programmable) on the sensor, the safety systems will immediately initiate an emergency shutdown of the fire, and further operation of the fire will be disabled until the temperature is reduces to a safe level and the panel is reset.

Pilot flame Monitoring and Control

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The Pro-Safe Burn System constant pilot design is inextinguishable; can withstand temperatures up to 1000 degrees Fahrenheit and a direct water stream pressure of over 100 gallons per minute at 100 psi. The Pilot System has a constant check integrated to confirm the pilot. Should the pilot not be confirmed through the PLC controlled pilot temperature monitor, gas cannot be released for main flame generation. The control system provides the operator with pilot activation, pilot confirmation, and pilot temperature at all times for **all** fireplaces during the training scenario.

The pilot burner is located in a position to ensure all main flame generation is ignited. The pilot burner and pilot flame are not visible to the trainee and are located within the fire pan. Application of agent will not extinguish the pilot. Fires are controlled completely from the operator control system.

Manual Emergency Shutdown System Stop Switches

In addition to the dead man button on the safety officer pendant, and the operator dead man pedal, the Burn System will contain a minimum of two (2) separate means for manually initiating an immediate shutdown of all fireplaces in the event of an emergency or unsafe condition.

Manual E-Stop (emergency stop) buttons are provided at all burn room egress doors, and a Manual E-Stop button is located on the operator panel. The E-Stop buttons permit the operator, safety officer, or the trainees to immediately shut down all fire and smoke generation if an unsafe condition is observed, or if a trainee responds in an unsafe manner.

All Manual E-Stop buttons are hardwired to provide a fail-safe shutdown, independent of the PLC monitoring system. When any E-Stop button is pressed, all training fires are immediately shut down, the ventilation system is activated, and an audible alarm sounds. Trainer operation is then disabled and will remain disabled until the E-Stop button is reset (pulled out).

Fail Safe Gas Control valves

The Burn System is equipped with fail-safe gas safety shutoff valves (SSOVs) at all critical locations along the gas distribution system. These valves are controlled by electric solenoid operated valves that automatically close on loss of electric power.

System Security

The Burn System provides for verification of a trained operator interface to prevent unauthorized use or access to the controls. This is accomplished by key switch.

Operational and Maintenance Training

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Oakville, ON, Canada L6J 7X5
Phone 905-337-8137 Fax 905-842-0011
www.prosafefire.com

Pro-Safe provides an authorized and licensed factory technician to train personnel in the proper operation, maintenance and troubleshooting of the Propane/Natural Gas Burn System. The training includes both operation and maintenance training for up to 10 site personnel associated with the operation of the system.

During the operational instruction, each student will be able to operate all system safety features and operational controls, know all operational policies and procedures necessary for the safe and effective operation of the system, and fully understand capabilities and how the system operates.

Owner and Operations Manuals

A Master Operations Manual is provided for the Owner. The training course along with the manual will ensure that personnel are able to safely and effectively operate the system.

Warranty Services

Pro-Safe Fire Training Systems will repair or replace any part of the provided equipment which, within twelve (12) months of commissioning, is found to be defective in workmanship or in material, provided this material is installed, operated and maintained by the buyer in accordance with approved practices and on the provision that the buyer gives proper notification as soon as the defect becomes apparent.

The PLC Control system is equipped with a modem for remote assistance, troubleshooting and upgrade procedures. The customer is required to provide a dedicated phone line that does not run through a switchboard for proper use of this feature.

The remote assistance feature allows Pro Safe to 'dial in' and monitor operation and functions of the burn system to provide feedback or troubleshooting assistance to the customer should it be required.

Post Purchase Support

Pro Safe shall provide a 24/7 toll free support phone number for customers. Should any technician be required, Pro Safe shall provide the proper support at a time suitable to the customer. At Pro-Safe, we pride ourselves on our commitment to excellent customer service and support.

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Maritime Trainer References

Lundenburg Seamanship School

Design, build and install a custom burn system in an existing marine training tower. This system consisted of a flashover unit in the main engine room and three burn pans surrounding the engine prop. In addition, there was a smoke machine/distribution system, temperature sensors and propane detection system installed.

Jimmy Hanson
Training Operations Director
P.O. Box 75, Piney Point, MD 20674-0075
(301) 994-0010 x5737

Nova Scotia Community College

Design, build and install in a new marine style steel tower. This system consisted of a 3 room burn system including; Kitchen fire with flashover/rollover, 2nd floor bunk bed prop and an engine room fire, smoke machine, ventilation system, control system and temperature and propane safety shutdowns.

Loren MacDonald
902-491-6720
Nova Scotia Community College
226 Reeves street
PO Box 1225
Port Hawkesbury, NS B0E 2V0

Mid Columbia Fire & Rescue

53' 2 Storey Mobile Structural Training Unit with the following features: Shipboard simulations including QAWTH, QAWTD, Confined Space Scuttle shaft, galley/kitchen fire, flange fire, bed fire, flashover, hot spot wall, range hood fire, moveable pan, transformer fire, electrical distribution center fire, rear folding second storey staircase, interior staircase to second storey, folding aluminum 18'x8' second storey room

Captain Joel Brown
541-296-9445
1400 West 8th
The Dalles, Oregon

TRAINING TODAY'S HEROES.

Intertek**AUTHORIZATION TO MARK**

This authorizes the application of the Certification Mark(s) shown below to the models described in the Product(s) Covered section when made in accordance with the conditions set forth in the Certification Agreement and Listing Report. This authorization also applies to multiple listee model(s) identified on the correlation page of the Listing Report.

This document is the property of Intertek Testing Services and is not transferable. The certification mark(s) may be applied only at the location of the Party Authorized To Apply Mark.



Control Number: 3139518 Authorized by: Michelle Lake Date: 16 Dec 2008
for William T Starr, Certification Manager

This document supercedes all previous Authorizations to Mark for the noted Report Number.

This Authorization to Mark is for the exclusive use of Intertek's Client and is provided pursuant to the Certification agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Authorization to Mark. Only the Client is authorized to permit copying or distribution of this Authorization to Mark and then only in its entirety. Use of Intertek's Certification mark is restricted to the conditions laid out in the agreement and in this Authorization to Mark. Any further use of the Intertek name for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. Initial Factory Assessments and Follow up Services are for the purpose of assuring appropriate usage of the Certification mark in accordance with the agreement they are not for the purposes of production quality control and do not relieve the Client of their obligations in this respect

Intertek Testing Services NA Inc
165 Main Street, Cortland, NY 13045
Telephone 800-345-3851 or 607-753-6711 Fax 607-756-6699

Applicant:	<u>Pro Safe Fire Training Systems Inc.</u>	Manufacturer:	<u>Pro Safe Fire Training Systems Inc.</u>
Address:	<u>940 Winston Churchill Blvd , Oakville, Ontario L6J 7X5</u>	Address:	<u>97 Airport Rd., RR#2 Parry Sound, Ontario P2A 2W8</u>
Country:	<u>Canada</u>	Country:	<u>Canada</u>
Contact:	<u>Mr. Gordon Seehaver</u>	Contact:	<u>Mr. Gordon Seehaver</u>
Phone:	<u>(705) 378-5990</u>	Phone:	<u>(705) 378-5990</u>

Party Authorized To Apply Mark: Same as Manufacturer
Report Issuing Office: 6225 Kenway Drive, Mississauga, Ontario, L5T 2L3

Standard(s):	Standard for Industrial Control Panels (UL 508A, 1 st Ed , April 25, 2001; w/rev thru 12-28-07)
Product :	Control Panels for Fire Training Equipment for indoor/outdoor use.
Models:	Simulator Control Panel Assembly Model SCP-100, Gas Valve Cabinet Assembly Model GV-100 and Pilot Valve Cabinet Assembly Model PV-100.



165 Main Street
Cortland, NY 13045

Telephone: 888-347-5478
Facsimile: 607-758-9608
www.intertek-etlsemko.com

LISTING CERTIFICATE

Participant's/Manufacture: Pro-Safe Training Systems, Inc.
 Address: 30 Woods Road
 Nobel, ON P0G 1G0
 Canada

Order Number: 3139518

Type of Equipment: Fire Extinguisher Training System

Model/Type Designation: 2436, 3660

Report No.: 3086096TOR-005

I, the undersigned, hereby certify that the equipment specified above complies with the Safety Standard(s) for Industrial Control Equipment (UL-508), Industrial & Commercial Gas-Fired Package Furnace (CAN/CGA-3.2) & Ovens & Furnaces (NFPA-86) and is authorized to bear the ETL Listing Mark under the terms of the Intertek Certification Agreement.



Signature Joanne Nutting

Date: March 26, 2010

Name Joanne Nutting
Senior Directory Coordinator
Intertek Testing Services NA Inc.
165 Main Street
Cortland, NY 13045



Intertek**AUTHORIZATION TO MARK**

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This document is the property of Intertek Testing Services and is not transferable. The certification mark(s) may be applied only at the location of the Party Authorized To Apply Mark.

Applicant:	Pro-Safe Fire Training Systems, Inc.	Manufacturer:	Prosafe Fire Training Systems, Inc.
Address:	P.O. Box 188 Parry Sound, ON P2A 2X3	Address:	RR# 2-97 Airport Rd. Lot #9, Plan 166
Country:	Canada	Country:	Canada
Contact:	Mr. Gordon Seehaver	Contact:	Mr. Gordon Seehaver
Phone:	905-337-8137	Phone:	905-337-8137
FAX:	905-842-0011	FAX:	905-842-0011
Email:	goseehaver@prosafefire.com	Email:	goseehaver@prosafefire.com

Party Authorized To Apply Mark: Same as Manufacturer
Report Issuing Office: Vancouver

Control Number: 3139518

Authorized by: _____

for Michelle Lake
 William T. Starr, Certification Manager



This document supersedes all previous Authorizations to Mark for the noted Report Number.

This Authorization to Mark is for the exclusive use of Intertek's Client and is provided pursuant to the Certification agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Authorization to Mark. Only the Client is authorized to permit copying or distribution of this Authorization to Mark and then only in its entirety. Use of Intertek's Certification mark is restricted to the conditions laid out in the agreement and in this Authorization to Mark. Any further use of the Intertek name for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. Initial Factory Assessments and Follow up Services are for the purpose of assuring appropriate usage of the Certification mark in accordance with the agreement, they are not for the purposes of production quality control and do not relieve the Client of their obligations in this respect.

Intertek Testing Services NA Inc.
 165 Main Street, Cortland, NY 13045
 Telephone 800-345-3851 or 607-753-6711 Fax 607-756-6699

Standard(s):	Standard for Ovens and Furnaces NFPA 86, 2007 Edition
Product:	Fire Training System
Brand Name:	Pro-Safe
Models:	GV-100 and PV-100

PROPOSAL FOR MOBILE FIRE TRAINER BARNSTABLE COUNTY F.D. - BARNSTABLE, MA.



CONCEPTUAL VIEWS

UNIT SPECIFICATIONS

- 1 - 5'1" CONTAINER
- 1 - 14'X8' BURN ROOM
- 1 - 4' BURN APRON
- 1 - BURN WINDOW
- 1 - BURN DOOR
- 3 - FLOOR DRAINS
- 2 - EXTERIOR PLATFORMS
- 1 - STANDPIPE
- 1 - EXTERIOR "SHIPS" LADDER
- 1 - FORCED ENTRY DOOR
- 1 - STANDARD DOOR
- 1 - DOOR WITH D.D.W.
- 2 - BREACH WINDOWS
- 1 - SCBA CONFIGURABLE MAZE (CONFIGURABLE)
- 1 - RTD SYSTEM - 4 SENSORS & 1 SCANNER
- 1 - 10' RETRACTABLE TOWER W/ BAIL-OUT WINDOW
- 1 - SKINNED REPELL WALL
- 2 - OUTRIGGERS
- 1 - ROOF PITCH SIM
- 1 - WIDRYWALL POKE-OUT
- 1 - EXTERNAL STAIR RUN
- 1 - INTERIOR SHIPS STAIR RUN
- 1 - SHIPS DOOR
- 1 - 2-ZONE LIP GAS SYSTEM
- 1 - SHIPS DOOR IN PANEL
- 2 - SHIPS LADDER
- 1 - WATCH TO ROOF
- 1 - CLASS 'B' CONTROL ROOM
- 1 - SHIPS WINDOW
- ROOFTOP SAFETY RAILINGS W/ TOEKICK

TRAINING AREA
TOTAL SQ. FT. = 700-800-FT.

1136 SQ
FT

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AMERICAN FIRE TRAINING SYSTEMS, INC.
12315 SOUTH NEW AVE., POB #39
LEMONT, ILLINOIS 60439
(630) 257-0112



PROPOSAL FOR MOBILE FIRE TRAINER
BARNSTABLE COUNTY F.D. - BARNSTABLE, MA.

DRAWN BY: PRD
REV: -
DATE: 12-12-19
SCALE: -
P. NO. P001010
DWS NO.

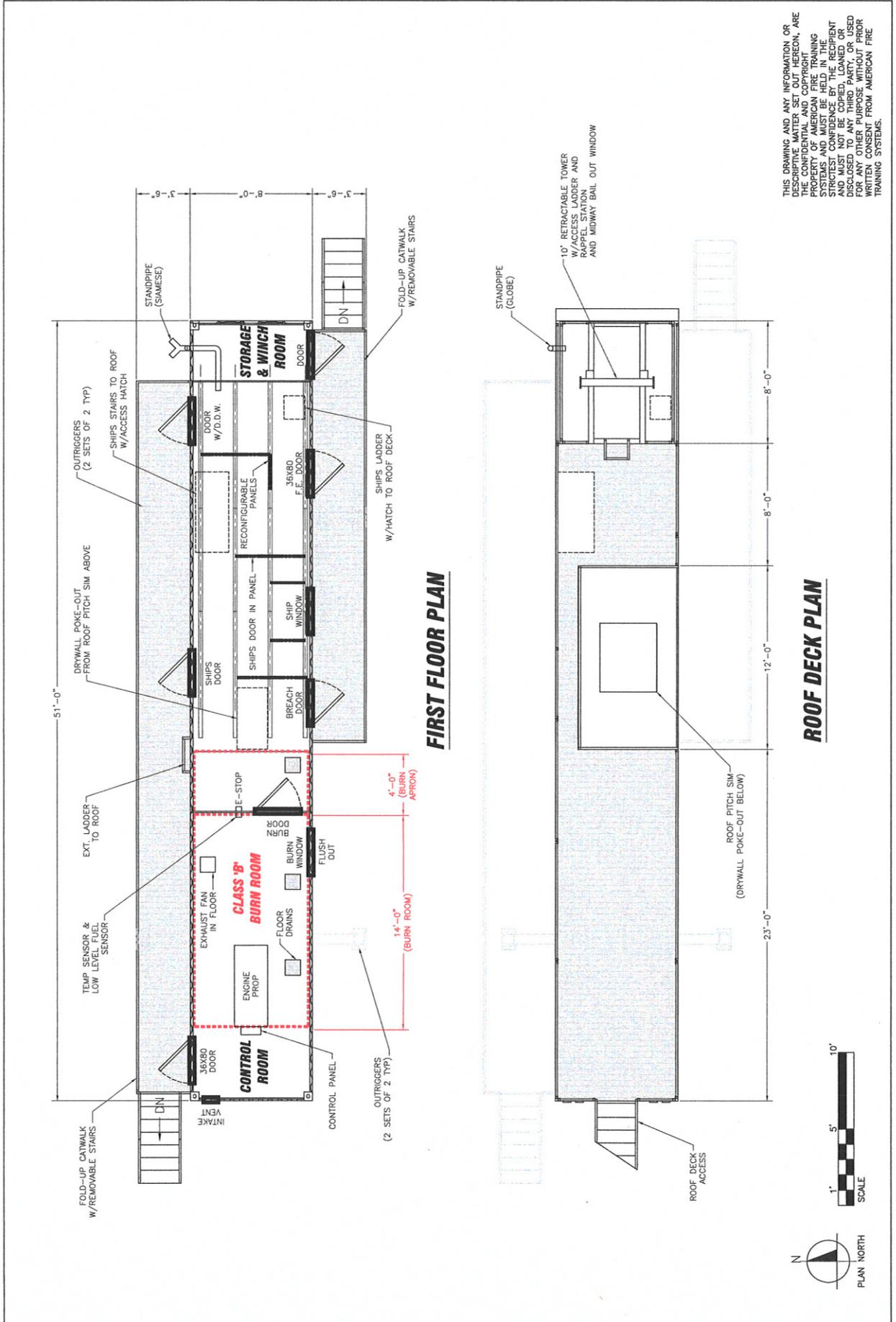
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AMERICAN FIRE TRAINING SYSTEMS, INC.
 12315 SOUTH NEW AVE, POB #39
 LEMONT, ILLINOIS 60439
 (630) 257-0112



**PROPOSAL FOR MOBILE FIRE TRAINER,
 BARNSTABLE COUNTY F.D. - BARNSTABLE, MA.**

DWG NO:	A01
P NO:	PO01010
SCALE:	AS SHOWN
DATE:	12-12-19
REV:	-
DRAWN BY:	PRD













(1) OF 35
Built

AGENDA ITEM 8g

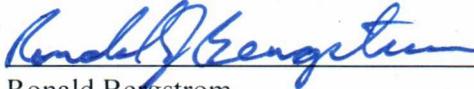
Authorizing the discharge of a mortgage to Barnstable County, by and through the Cape Cod Commission, and through an assignment of mortgage by the Housing Assistance Corporation, dated May 11, 1995 and recorded at the Barnstable County Registry of Deeds at Book 9703 Page 60

DISCHARGE OF MORTGAGE

Barnstable County, the holder of a mortgage by **Rosamund Brayton** dated February 2, 1994 and recorded at the Barnstable County Registry of Deeds at Book 9141, Page 219, through Assignment of Mortgages by Housing Assistance Corp. to **Barnstable County**, by and through the Cape Cod Commission, dated May 11, 1995 and recorded at the Barnstable County Registry of Deeds at Book 9703 Page 60 acknowledges satisfaction of the same.

Witness our hand and seal this 5th day of February, 2020

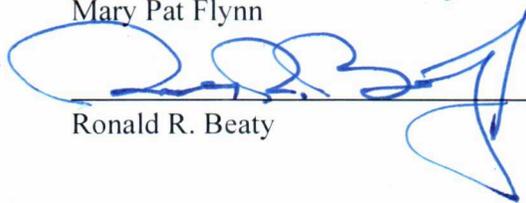
BARNSTABLE COUNTY, As County Commissioners



Ronald Bergstrom



Mary Pat Flynn

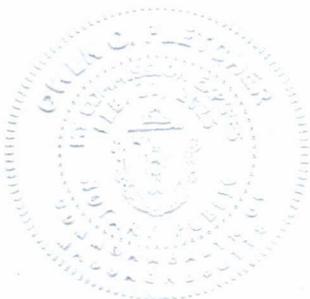


Ronald R. Beaty

COMMONWEALTH OF MASSACHUSETTS

Barnstable, ss.

On this _____ day of February, 2020, before me, the undersigned notary public personally appeared Ronald Bergstrom, Mary Pat Flynn and Ronald R. Beaty, as Barnstable County Commissioners, and proved to me through satisfactory evidence of identification, which was personal knowledge, to be the persons whose names are signed on the preceding or attached document, and acknowledged to me that they signed it voluntarily for its stated purpose.





Notary Public

My Commission Expires: 02/21/25

COMMONWEALTH OF MASSACHUSETTS

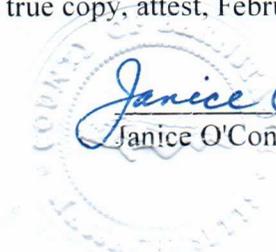
BARNSTABLE, SS.

At a regular meeting of the Barnstable County Board of Regional Commissioners, in the Commissioners' Conference Room, in the Superior Courthouse, on the fifth day of February, A.D. 2020, motion by Commissioner Beaty to authorize the discharge of a mortgage by Rosamund Brayton to Barnstable County, by and through the Cape Cod Commission, and through an assignment of mortgage by the Housing Assistance Corporation, dated February 2, 1994 and recorded at the Barnstable County Registry of Deeds at Book 9703 Page 60, as presented, 2nd by Commissioner Flynn, approved 0-0-0

Ronald Bergstrom, Chair:	<u>Y</u>
Mary Pat Flynn, Vice-Chair:	<u>Y</u>
Ronald R. Beaty, Commissioner:	<u>Y</u>

A true copy, attest, February 5, 2020


Janice O'Connell, Regional Clerk





BARNSTABLE COUNTY
DEPARTMENT OF HUMAN SERVICES
3195 Main Street, Post Office Box 427
Barnstable, Massachusetts 02630
Office: 508-375-6628 | Fax: 508-362-0290
www.bchumanservices.net

BARNSTABLE COUNTY HOME PROGRAM

MEMORANDUM

To: Jack Yunits, Jr., County Administrator / County Commissioners
From: Renie Hamman, HOME Program Manager
RE: Discharge of HOME Mortgage
20 Short Way, West Yarmouth / Brayton, Rosamund
Date: January 31, 2020

Enclosed, please find an original Discharge of Mortgage for the above-reference property respectfully requested to be properly executed by the County Commissioners. This deferred no-interest loan was made under an old Homeowner Rehab Program by the Barnstable County HOME Program back in 1994. At that time, the Rehab Program was administered by the Housing Assistance Corp. ("HAC") who made the individual loans to the homeowner (*see pertinent pages of the HOME Program Mortgage attached*). These loans were subsequently assigned to Barnstable County in an Assignment of Mortgage in 1995 (*see pertinent pages of Assignment of Mortgage attached*).

This older Homeowner Rehab Program granted funds to homeowners as a fifteen (15) year forgiveness loan. As long as the homeowner remained in the home, after fifteen years, the loan, in this case \$4,565.00, was to be forgiven. See Covenants paragraph 1. Repayment. of the HOME Program Mortgage attached. As the fifteen years have now passed, this loan is to be forgiven; and a Discharge of the Mortgage has been requested to clear title.

Thank you,
Renie Hamman, HOME Program Manager

Renie Hamman

HOME INVESTMENTS PARTNERSHIP PROGRAM

MORTGAGE

THIS MORTGAGE (this "Mortgage") is made this 2nd day of February 1994 between the mortgagor, Rosamund Brayton

(herein "Borrower") whose address is 20 Short Way,
W. Yarmouth, Massachusetts MA, and the mortgagee
Honoring Assistance Corp., whose address is
460 W. Main St. Hyannis, Massachusetts
02601 (herein "Lender").

Background and Granting Clause

Borrower is indebted to Lender in the principal sum of Seven
Thousand, Five Hundred Sixty and 00/100 Dollars (\$7,565.00) (the "Loan") which indebtedness is evidenced by Borrower's Promissory Note of even date herewith (the "Note"), providing for repayment of the Loan under certain conditions and providing for other conditions of the Loan.

TO SECURE to Lender the repayment under the Note and the performance of the covenants and agreements of Borrower contained in this Mortgage and in the Loan Agreement of even date between Borrower and Lender (the "Loan Agreement"), Borrower does hereby mortgage, grant and convey to Lender, with MORTGAGE COVENANTS, upon the STATUTORY CONDITION and with the STATUTORY POWER OF SALE the

(9)

following described property located in the County of Barnstable Commonwealth of Massachusetts, which has the address of 20 Short Way, W. Yarmouth Massachusetts 02673 (the "Property Address"), as more particularly described on ~~Exhibit A~~ attached hereto;

TOGETHER with all the buildings and improvements now or hereafter erected on such real property, and all fixtures, easements, rights, licenses, appurtenances and rents, all of which shall be deemed to be and remain a part of the property covered by this Mortgage; and all of the foregoing, together with said real property are hereinafter referred to as the "Property."

Borrower covenants that Borrower is lawfully seized of the estate hereby conveyed and has the right to mortgage, grant and convey the Property, and that the Property is unencumbered, except for that certain mortgage by and between the Borrower and Housing Assistance Corp (the "Senior Mortgage"). Borrower warrants and covenants to defend generally the title to the Property against all claims and demands, subject to encumbrances of record.

Covenants

Borrower and Lender covenant and agree as follows:

1. Repayment. In the event the Borrower sells or transfers the Property before the [fifteenth] anniversary of the Note, the Borrower shall repay to the Lender an amount as calculated under the Note.
2. Prior Mortgages; Charges; Liens. Borrower shall perform all of Borrower's obligations under the Senior Mortgage, including Borrower's covenants to make payments when due. Borrower shall pay

Assignment of Mortgages

Housing Assistance Corp., a Massachusetts non-profit corporation, the Mortgage "Lender" and holder of the mortgages set forth on the attached List of Mortgages, each dated as there indicated and each recorded with Barnstable Registry of Deeds, hereby assigns said mortgages and the notes and claims secured thereby to Barnstable County, acting on behalf of both itself and The Executive Office of Communities and Development of The Commonwealth of Massachusetts (EOCD) by and through the Cape Cod Commission having a mailing address of 3225 Main Street, P.O. Box 228, Barnstable, Massachusetts.

105

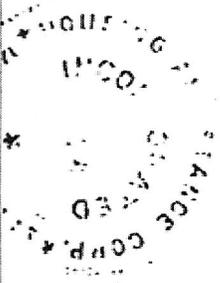
In witness whereof, the said Housing Assistance Corp. has caused its corporate seal to be hereto affixed and these presents to be signed, in its name and behalf by F B PRISORAY, its Executive Director, this 11 day of MAY A.D. 1995.

Signed and sealed in the presence of

HOUSING ASSISTANCE CORP.

Beltrami, Conner

By: [Signature]
Executive Director
(For Authority see Instrument _____ of _____
Book 21925, Page 448



RECEIVED
JUN 9 2 38 PM '95
BARNSTABLE COUNTY
REGISTRY OF DEEDS

LIST OF MORTGAGESBarnstable County
Registry of Deeds

<u>NAME/PROPERTY ADDRESS</u>	<u>DATE OF MORTGAGE</u>	<u>BOOK</u>	<u>PAGE</u>
Blair, Alan D & Marie A 75 Jamie Lane, Falmouth	4/12/94	9141	201
Brayton, Rosamund G. 20 Short Way, Yarmouth	4/12/94	9141	219
Carter, Daniel F. 550 W. Yarmouth Rd., W. Yarmouth	6/22/94	9247	327
Champion, Marion E. 24 Bryar Lane, Yarmouth	4/12/94	9141	192
Chelman, Richard C. & Jean P. 437 Davisville Rd., Falmouth	4/12/94	9141	183
Connolly, Jean 301 Maravista Ave., Falmouth	12/30/94	9504	258
Connors, Frances E. & Brendan Andrews 108 North Dennis Rd., Dennis	3/3/95	9576	252
DeYoung, Edward & Lorraine 59 Walnut St., Barnstable	6/22/94	9247	336
Dixon, John C. & Beverly A. 26 Howard Ave., Bourne	12/30/94	9504	294
Eastman, David C. & Jill A. 79 West Tupelo Dr., Harwich	8/4/94	9309	317
Eaton, Joanne S. 105 Kelly Road, Barnstable	4/12/94	9141	228

AGENDA ITEM 8h

Authorizing the execution of Certificates for Dissolving Septic Betterments



**BARNSTABLE COUNTY
COMMUNITY SEPTIC MANAGEMENT
LOAN PROGRAM**

3195 MAIN STREET/ P.O.BOX 427
BARNSTABLE, MASSACHUSETTS 02630



Phone: (508) 375-6610

Fax: (508) 375-6854

www.barnstablecountysepticloan.org

MEMORANDUM

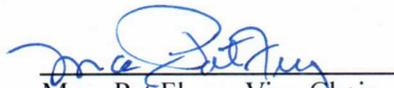
DATE: January 31, 2020
TO: Board of Regional Commissioners
FROM: Community Septic Management Loan Program
SUBJECT: Certificates for Dissolving Septic Betterments

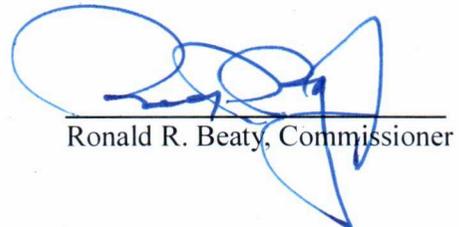
Please execute Certificates for Dissolving Septic Betterments certifying that the betterment assessments upon the hereinafter described parcels of real estate in the Notices of Betterment Assessment recorded in Barnstable County Registry of Deeds or Barnstable Registry District of the Land Court as listed below, stating that betterments to be assessed pursuant to a betterment agreement for septic improvements, in accordance with General Laws, Chapter 111, Section 127B 1/2 have, together with any interest and costs thereon, been paid or legally abated.

Approved:

Board of Regional Commissioners


Ronald Bergstrom, Chair


Mary Pat Flynn, Vice-Chair


Ronald R. Beaty, Commissioner

02/05/20
Date

CERTIFICATES FOR DISOLVING SEPTIC BETTERMENTS FOR 02/05/20

Barnstable Registry District of the Land Court			Barnstable County Registry Of Deeds					
Notice of Betterment Assessment Document No.	Deed Reference Document No.	Deed Reference Certificate of Title No.	Notice of Betterment Assessment Book	Notice of Betterment Assessment Page	Deed Reference Book	Deed Reference Page	Owner(s) Named in Betterment Assessment	Location of Property
1378797	1366283 Lot 224 Plan 30561-B Sh 6	218886	X	X	X	X	Caribbean Realty Inc.	Assessors Map 58 Parcel 187 44 Lower Brook Road South Yarmouth (Yarmouth)
1267605	1267507 Lot 122 Plan 35239-B Sh 5	206020	X	X	X	X	Edward R. Conway Linda E. Conway	Assessors Map 200 Parcel 143 9 West Old Chatham Road South Dennis (Dennis)
X	X	X	30449	337	23565	21	Stephen J. Kane Holly A. Kane	Assessors Map 156 Parcel 1-2 101 Willow Street West Barnstable (Barnstable)
X	X	X	31152	323	12390	187	B. Cole Morton Lisa Rose Morton	Assessors Map 29 Parcel 1244 45 Vanessas Way Wellfleet
X	X	X	26609	268	14447	268	Lawrence T. Davis Lisa K. Davis	Assessors Map 75 Parcel 1 554 Main Street Dennis Port (Dennis)
X	X	X	30495	74	27400	262	William R. Moran Nellie G. Moran	Assessors Map 36 Parcel 135 96 Captain Chase Road Dennis Port (Dennis)
X	X	X	27614	1	8592	342	Dennis Parris Mary Jo Parris	Assessors Map 91 Parcel 1 15 Tar Kiln Road Orleans
X	X	X	25330	327	10983	29	Scott A. Alberti Tracey A. Alberti	Assessors Map 28 Parcel 128 4 Hickory Circle Marshpee
X	X	X	32173	301	10745	306	Steven L. Chalke	Assessors Map 23 Parcel 59 7 Windsor Road Sandwich

COMMONWEALTH OF MASSACHUSETTS

BARNSTABLE, SS.

At a regular meeting of the Barnstable County Board of Regional Commissioners, in the Commissioners' Conference Room, in the Superior Courthouse, on the fifth day of February, A.D. 2020, motion by Commissioner Beaty to authorize the Chair to execute Certificates for Dissolving Septic Betterments, as presented, 2nd by Commissioner Flynn, approved 3-0-0

Ronald Bergstrom, Chair: Y

Mary Pat Flynn, Vice-Chair: Y

Ronald R. Beaty, Commissioner: Y

A true copy, attest, February , 2020


Janice O'Connell, Regional Clerk

