4. Application for a New All Alcoholic Beverages Common Victualler License – Olive Restaurants, Inc. d/b/a Shiverick's Café & Bar located at 285 Main Street, Falmouth (10 minutes)

TOWN OF FALMOUTH

Office of the Town Manager & Select Board

59 Town Hall Square, Falmouth, Massachusetts 02540
Telephone (508) 495-7320
Fax (508) 457-2573

LIQUOR LICENSE HEARING

Notice is hereby given under Chapter 138 of the General Laws, as amended, that Olive Restaurant, Inc. d/b/a Shiverick Café & Bar has applied for an All Alcoholic Beverages Common Victualler License to be exercised at 285 Main Street, Falmouth, MA.

A hearing will be held in the Select Board's Meeting Room, Falmouth Town Hall on Monday, June 27, 2022, at 7:30 p.m. on the above application.

Per order of the Select Board

LICENSING BOARD
Nancy R. Taylor
Onjalé Scott Price
Samuel H. Patterson
Douglas C. Brown
Edwin (Scott) P. Zylinski, II

Publication date: Friday, June 17, 2022; Falmouth Enterprise

Madison Conn, a 2022 graduate of Falmouth High School, and Colin Bostwick, a junior at Norwich University, were each recipients of Falmouth Garden Club scholarships of $1,000.

Garden Club Awards Scholarships At June Luncheon

The annual meeting of the Falmouth Garden Club was held June 6 at The Flying Bridge. At this meeting the continuing slate of leaders was recognized and two scholarships to students of horticulture and related sciences were awarded.

Members of the executive committee are Martha Terry, president; Colleen Giacomozzi and Roseanne Mili, vice presidents; Heidi Di Giovanni, secretary; Ester Johnston, treasurer; Jan Munier, assistant treasurer; and Sue Spears, corresponding secretary. The current executive committee officially began the second year of its two-year term having capably led the club out of COVID-era restrictions while increasing membership by 19 members and successfully fundraising to support the club's initiatives.

Ms. Terry began the meeting by thanking The Flying Bridge Restaurant, which is usually closed on Mondays, for opening for the Falmouth Garden Club and providing members and guests with a delicious luncheon in an outstanding harbor-view setting. Additionally, she recognized attending past presidents who continue to share their expertise and love of gardening with Club. Ms. Terry recognized and thanked various committee chairs who coordinated the table arrangements and general organization of the event.

A special recognition from the Garden Club Federation of Massachusetts, the Floribunda Award, was awarded to Suzanne Buzanoski for outstanding service and dedication to the Falmouth Garden Club in 2022.

The highlight of the meeting was the award of two $1,000 scholarships to recipients who are advancing their studies in horticulture or related sciences. Madison Conn, a 2022 graduate of Falmouth High School, will begin her studies of marine biology at the University of Rhode Island with a special interest in kelp gardens. While accepting the award, Madison spoke of the inspiration and encouragement she received while working at Woods Hole Oceanographic Institution during her summer internship programs.

Colin Bostwick, a junior at Norwich University, accepted his award noting that he found in-person learning in marine biology at Norwich University, versus earlier COVID-imposed Zoom classes, to be the key to his success in college. He credits his many summers working in the fishing industry on Patriot Party Boats fishing charters for his love of the ocean and related scientific systems.

The meeting adjourned with all gardeners looking forward to the opening of local gardens for The Cape-wide Hydrangea Festival to be held July 8 and 9. This event is open to the public and serves as a major fundraiser for the club. Visit the website at www.falmouthgardenclub.org for more details.

Hearing • To Remove Town Manager

■ Continued from Page 1

to find a new town manager until all proceedings with Mr. Suso are resolved.

"We'll have to see what he (Mr. Suso) decides to do," Mr. Troy said, adding that it would do no good to come in, point fingers and question people's integrity.

Mr. Troy said that even in the initial performance review that began the whole affair, while overall negative, still included points of positive recognition of what the board thought Mr. Suso was doing well.

"I feel very confident that the select board is going to approach this hearing in a very dignified and restrained fashion," Mr. Troy said. "At all the public hearings to date, all the bricks that have been thrown were thrown by Mr. Suso, not the board."

Ramps • Part Of Pollution Mitigation Study

■ Continued from Page 1

in Falmouth, and the Mashpee-Wakeby boat ramp in Mashpee.

Additional Cape ramps included in the study are in Barnstable, Brewster, Dennis, Harwich, Orleans and Yarmouth.

"Boat ramps are generally points of direct discharge where stormwater flows untreated into freshwater ponds and coastal embayments," said Jordan Mora, a restoration ecologist for APCC. "These pollutants impair water quality, pose health risks to humans and wildlife and can lead to closures of swimming beaches and shellfish areas."

The pollutants—including nitrogen and phosphorus—decrease the natural nutrients in water bodies and encourage the growth of harmful algae, like cyanobacteria, which can kill fish and vegetation and create unsafe conditions for swimmers and wildlife, she continued.

At a public meeting last Thursday, Ms. Mora presented the beginning stages of the study, which included data collected throughout the study thus far and possible mitigation solutions, including installing sand and vegetation to soak up rainwater and reduce the movement of stormwater through nature-based landscaping.

The project is being funded through a Massachusetts Environmental Protection Agency Southeast New England Watershed grant, which is a program that began in 2021.

In the end, five boat ramps will be selected to receive funding for mitigation projects based on pollutant removal potential, cost estimates, ease of implementation and public use.

Advocating for their towns and boat ramps to be selected, residents of Sandwich, Bourne, Mashpee and Falmouth provided comments and feedback during last week's meeting.

Speaking on behalf of Peters Pond in Sandwich, Nancy Horn, who is part of the Friends of Peters Pond group, highlighted the recreational and private use of the pond by residents, visitors, Peter's Pond RV Park, children's camps and classes, and the recreation department.

"Other concerns for us are the invasive species that have come in, like the Asian clam, and the other is a plant that I can't think of the name of," Ms. Horn continued.

As a solution, she suggested the installation of a wash station at the boat ramp for boat owners and users to rinse down the exterior of their personal watercraft before they are launched into the pond, an idea that Susan Dangel of Mashpee agreed with.

"They both suggested a wash station to prevent invasives making it into the pond and both mentioned the movement between ponds depending on how busy places are," Ms. Mora said. "It's an interesting thing to note during the day that people might be moving their boat around to multiple ponds throughout the day. It's very helpful for us to understand because we didn't consider that when we started planning."

Ms. Dangel said that Mashpee-Wakeby is one of the largest ponds on Cape Cod and has one of the highest rates of use. Throughout the summer, the pond hosts 36 fishing tournaments and boasts 500 personal watercraft from lake residents alone.

"The boat launch is directly next to a swimming beach, it's feet away from the swimming beach, and 100 yards from the Mashpee Herring Run, which empties into the Mashpee River, which is arguably one of the worst water bodies on Cape," she added. "With every one-inch rainstorm, there are 20,000 gallons of water rushing into the lake and taking all of the bad stuff with it."

Mark Bracco of Falmouth, who is part of the Friends of Ashumet Pond, suggested that Ms. Mora and other ecologists look at the state list of fishing clubs and the dates they will be on different ponds throughout the state and in the area, while John Carroll of Bourne expressed concern for Barlows Landing.

"The problem now—because it used to be a lot smaller than it is now—with the increase in the size of boats and the use of the ramp, you're getting increased pollution," he said. "We are encouraging folks to try to keep things small and consider moving boats into the water by crane or travel lift."

Members of the Orleans Pond Coalition and the Friends of Bass River provided comments for their ponds and estuaries as well.

After the summer study is complete and conceptual designs are drafted, the ACPP will review the plans in October and select the ramps that will move forward in the planning, permitting and construction phases.

Residents Named To Honors Lists

Vanessa Estrela of East Falmouth, Hailey Gonsalves of East Falmouth, Emma Kelly of East Falmouth, Melissa Terry of East Falmouth and Brianna Waggett of East Falmouth made the spring dean's list at Curry College.

* * *

Falmouth resident Kinsale Steedman was named to the Hofstra University spring provost's list. The provost's list recognizes students who earned a perfect 4.0 grade point average.

* * *

Connecticut College announced that the following students made the dean's list for the spring semester.

Kelly Matthews of East Falmouth, Class of 2023, dean's honors, majoring in psychology and sociology.

Alice Pendergast of Falmouth, Class of 2022, dean's high honors, majoring in neuroscience;

Miranda Van Mooy, Class of 2024, dean's high honors, majoring in government.

* * *

McKenna Clapper of East Falmouth, Sierra Hefferan of East Falmouth and Dani Pyne of Teaticket were named to the spring dean's list at the University of Rhode Island.

* * *

East Falmouth resident Kaylee Kuehne and North Falmouth resident Jackson Weseman earned a place on the Dean College dean's list for the spring semester.

* * *

Calista Shank and Madison Mahoney of East Falmouth were named to the spring semester dean's list at the University of Delaware.

* * *

East Falmouth resident Catherine Brodie (Class of 2024), Teaticket resident Helena Connell of (Class of 2022) and Woods Hole resident Catherine Mooney (Class of 2024) made the College of the Holy Cross spring dean's list.

* * *

Colin Bostwick of East Falmouth was recognized on the dean's list at Norwich University for the spring semester.

* * *

Teaticket resident Madison Meal was named to the University of Alabama dean's list for the spring semester.

Legal Notices

The FALMOUTH CONSERVATION COMMISSION will hold a public hearing under Section 40, Chapter 131 of the general laws of the Commonwealth of Massachusetts Wetlands Protection Act and/or the Town of Falmouth Wetlands Protection Bylaw on Wednesday June 22, 2022 at 7:00 PM.

In accordance with Chapter 22 of the Acts of 2022 relating to the 2020 novel Coronavirus outbreak, the June 22, 2022 public meeting of the Falmouth Conservation Commission shall be physically closed to the public to avoid group congregation.

Alternative public access to this meeting shall be provided in the following manner:

1. The meeting will be televised via Falmouth Community Television.
2. Real-time public comment can be addressed to the Conservation Commission utilizing the Zoom virtual meeting software for remote access. This application will allow users to view and participate in the meeting. Text comments submitted with the Chat function will be read into the record at the appropriate points in the meeting.
   a. Zoom Login instructions
   i. Instructions and the meeting link for this specific meeting can be found at the following web address: [illegible]
   ii. Please plan on 10-15 minutes of preparation time to log in though it may be less if you have previously used Zoom on the device you will use to access this meeting.
3. Additionally public comments may be sent in advance of the meeting to concom@falmouthma.gov at least 5 hours prior to the beginning of the meeting. Documents and audio or video files may also be submitted via email. Submitted email comments and documents will be made a part of the meeting record and may be read into the record, summarized or displayed during the meeting at the discretion of the chair.
4. Applicants, their representatives and individuals with enforcement matters before the Conservation Commission may appear remotely and are not required to be physically present. Applicants, their representatives and individuals with enforcement matters before the Conservation Commission may contact the Conservation Department to arrange an alternative means of real time participation if unable to use the Zoom virtual meeting software. Documentary exhibits and/or visual presentations should be submitted in advance of the meeting to concom@falmouthma.gov, so they may be displayed for remote public access viewing.

Complete applications are available by request and will be sent via email.

REQUESTS FOR DETERMINATION OF APPLICABILITY

Christopher Elford, 129 Jericho Path, Falmouth, MA – For permission to construct a two-story addition

Charlie Ostrander, 59 Town Hall Square, Falmouth, MA – For permission to deploy and moor a scientific pontoon in Siders Pond

Thomas S. Crane, Charles M. Crane, and Josephine F. deGlee, 37 Hinckley Road, Falmouth, MA – For permission to replace two existing cesspools with the installation of a denitrifying sewage disposal system

Sherwood Drive, LLC, 145 Sherwood Drive, East Falmouth, MA – For permission to remove a portion of the existing stoop and decking, to construct an addition, to relocate the existing septic tank, to install a drywell, and to install mitigation plantings

Harvey P. Stein, 97 [illegible], Falmouth, MA – For permission to reconstruct an existing timber deck and steps in the same footprint

ETRAYLER LLC, 66 [illegible] Avenue, Falmouth, MA – For permission to construct a [illegible]

Thomas [illegible], 97 [illegible] Road, North Falmouth, MA – For permission to remove an existing propane tank, and to install a new propane tank and generator

Gassett Sunset LLC, 132 Gassett Road, Falmouth, MA – For permission to construct two dormers, and to replace windows, roofing and siding

Matthew R. Osborne, 111 Jericho Path, Falmouth, MA – For permission to remove an existing rinse station, rebuild and enlarge the existing back porch, to construct an addition and a front porch, to renovate the existing garage, and to install drywells

REQUESTS FOR A HEARING UNDER A NOTICE OF INTENT

David and Kathleen Bryson, 552 West Falmouth Highway, Falmouth, MA – For permission to construct a garage, an addition, a patio and a deck, to enlarge the gravel driveway, to remove the east wing of the house, trees, landings, and part of the existing patio, to remove nonnative vegetation, and to install mitigation and restoration plantings

Luciano and Debra Cosco, 333 Edgewater Drive West, East Falmouth, MA – For permission to reconstruct a seawall

Peter and Karen Hargraves, 31 Southview Way Nominee Trust, 31 Southview Way, East Falmouth, MA – For permission to construct a deck

Walter Mirdone, 420 West Falmouth Highway, West Falmouth, MA – For permission to reconfigure and replace the front yard landscaping, add a patio and hardscape, install mitigation plantings, and restore an area of unpermitted clearing

Katharine F., Peter W., and Alexander O. Abbott, 337 Meteek Road, Falmouth, MA – For permission to remove a patio, construct a deck and screened porch, install drywells and install mitigation plantings

By Order of Jamie Ubhaus, Chairman
Falmouth Conservation Commission
June 17, 2022

Falmouth Zoning Board of Appeals

Notice of Public Hearing for

June 23, 2022

Notice is hereby given of the following Public Hearing @ 6:30pm and Open Meeting in the Select Board's Meeting Room, Town Hall on Thursday, June 23, 2022

Amended – Application #[illegible]-22 Michele C. Brandt, 55 Club Valley Drive, East Falmouth, Ma: Applied to the Zoning Board of Appeals for a special permit pursuant to section(s) 240-3.2E(1) & (formerly 240-112) of the Code of Falmouth to allow a home occupation to operate a yoga studio. The subject property is 55 Club Valley Drive, East Falmouth, Ma

Files are available in the Board of Appeals Office at Town Hall for review by interested parties. Publication Dates: June 10, 2022 and June 17, 2022

June 10, 17, 2022

LEGAL ADVERTISEMENT
TOWN OF FALMOUTH

INVITATION TO BID
WASTEWATER TREATMENT FACILITY DENITRIFICATION FILTER PUMP REPLACEMENT
Contract no. WW-22-01

Sealed Bids for construction of Contract No WW-22-01, Wastewater Treatment Facility Denitrification Filter Pump Replacement for the Town of Falmouth, Massachusetts will be received by the Town of Falmouth Public Works Department at 416 Gifford Street, Falmouth, MA 02540 until 2:00 p.m. local time on June 23, 2022, and at that place and time will be publicly opened and read aloud.

The Work consists of removing denitrification filter pump(s) and replacing with new denitrification pump(s), complete, in accordance with the Bidding Documents heretofore prepared by GHD Inc. 250 Calendar Days will be allowed for contractor to achieve substantial completion and 280 calendar days to achieve final completion.

Electronic copies of Bidding Documents may be obtained via email request to [illegible].com after 12:00 pm on June 15, 2022. Paper copies of Bidding Documents may be obtained at the office of GHD (by appointment), 1545 Iyannough Road, Hyannis, MA 02601, with plan deposit of $75.00, printing time may be required. Additional cost of $50 per set for mailing of paper bid documents. Direct all questions regarding distribution of Bidding Documents to Laura M[illegible] of GHD Inc., 774-470-1633, email [illegible]ghd.com.

All other questions shall be submitted in writing to Sandy Tripp, at GHD Inc., Sandy.Tripp@ghd.com. The subject heading for all emails shall be: Subject: Falmouth WWTF Denitrification Filter Pump Replacement

Bidding and award of this Contract shall be required to comply with Massachusetts General Law Chapter 30 Section 39M, and all other applicable Massachusetts General Laws.

The Town of Falmouth reserves the right to waive any informality or to reject any or all Bids.

No prebid meeting will be held for this Project. The Wastewater Treatment Facility will be available to bidders from June 21 to June 24, 2022 for site inspections. Please contact the Department of Public Works at 508-457-2543 to request a WWTF site visit.

June 17, 2022

PUBLIC HEARING NOTICE

The Falmouth Select Board will hold a public hearing under Section 240-14 B (Wetlands Regulations) of the Zoning Bylaws of the Town of Falmouth on Monday, June 27, 2022 at 7:30 p.m. in the Select Board Meeting Room, Falmouth Town Hall, 59 Town Hall Square on the application of John P. Grab, Sr. and Dana U. Grab for permission to construct and maintain a private residential 4' x 32' pier, with two (2) 6' x 8' "T" ends in and over the waters of Flax Pond. The proposed work also includes mitigation plantings and restoration resource area buffer on the property located at 23 Southview Way, East Falmouth, MA. Area affected is Flax Pond. Interested parties may review the file on this hearing at the Office of the Select Board.

Per Order of the
Select Board

June 10, 17, 2022

REQUEST FOR PROPOSAL

REAL PROPERTY

The Falmouth Retirement Board is seeking proposals from qualified property owners to lease and/or purchase a parcel of land, with buildings thereon and associated parking, within the Town of Falmouth to use for the administrative offices of the Falmouth Contributory Retirement System. The option to lease office space shall be for a minimum term of 10 years with an option to extend the lease for an additional 10 year period. The Board has determined that the option to purchase is subject to M.G.L. Chapter 30B and Commonwealth of Massachusetts Regulations 840 CMR – Public Employee Retirement Administration Commission (PERAC).

All respondents are hereby advised that any proposal selected shall be subject to (1) formal approval by the Board in accordance with the specified evaluation criteria, including but not limited to, the best interests of the retirement system, (2) a written agreement, and (3) authorization of the engagement by PERAC. Additional terms of lease or purchase to be reasonably negotiated.

The RFP will be available on Monday, June 13, 2022. Completed original, hard copies and electronic copies of the respondent's RFP response must be received no later than 2:00 p.m. EST on Friday, August 5, 2022. Any bids submitted after this time will not be accepted. At its discretion, the Board reserves the right to cancel or reject in whole or in part any and all proposals in the best interest of the retirement system.

Requests for a copy of the RFP should be sent to:

Falmouth Retirement System
Attn: Francis St. Germaine, Director
80 Davis Straits, Suite 102
Falmouth, MA 02540

EMail: [illegible]@falmouthretirementma.gov

June 10, 17, 24, 2022

PUBLIC HEARING NOTICE

The Falmouth Select Board will hold a public hearing under Section 240-14 E (Wetlands Regulations) of the Zoning Bylaws of the Town of Falmouth on Monday, June 27, 2022 at 7:30 p.m. in the Select Board Meeting Room, Falmouth Town Hall, 59 Town Hall Square on the application of Simon and Irina Shafranskiy for a permanent license to upgrade an existing interim License #1137 and to allow replacement of existing dock in the same location in the waters of Childs River located at 8 Edgewater Drive East, East Falmouth, MA. Area affected is Childs River. Interested parties may review the file on this hearing at the Office of the Select Board.

Per Order of the
Select Board

June 10, 17, 2022

LIQUOR LICENSE HEARING

Notice is hereby given under Chapter 138 of the General Laws, as amended, that Ferryon Market & Liquor, LLC d/b/a Ferryon's Market has applied for a Transfer of an All Alcoholic Package Store License and a Pledge of License and Inventory located at 789 East Falmouth Highway, East Falmouth, MA.

A hearing will be held in the Selectmen's Meeting Room, Falmouth Town Hall on Monday, June 27, 2022, at 7:30 p.m. on the above application.

Per order of the Select Board

LICENSING BOARD
Nancy R. Taylor
Onjalé Scott Price
Samuel H. Patterson
Douglas C. Brown
Edwin (Scott) P. Zylinski, II

Friday, June 17, 2022

LIQUOR LICENSE HEARING

Notice is hereby given under Chapter 138 of the General Laws, as amended, that Otis Restaurant, Inc. d/b/a Sh[illegible] Café & Eatery has applied for an All Alcoholic Beverages Common Victualler License to be exercised at 255 Main Street, Falmouth, MA.

A hearing will be held in the Select Board's Meeting Room, Falmouth Town Hall on Monday, June 27, 2022, at 7:30 p.m. on the above application.

Per order of the Select Board

LICENSING BOARD
Nancy R. Taylor
Onjalé Scott Price
Samuel H. Patterson
Douglas C. Brown
Edwin (Scott) P. Zylinski, II

Friday, June 17, 2022

LIQUOR LICENSE HEARING

Notice is hereby given under Chapter 138 of the General Laws, as amended, that Olive Restaurant, Inc. d/b/a Shiverick Café & Bar has applied for an All Alcoholic Beverages Common Victualler License to be exercised at 285 Main Street, Falmouth, MA.

A hearing will be held in the Select Board's Meeting Room, Falmouth Town Hall on Monday, June 27, 2022, at 7:30 p.m. on the above application.

Per order of the Select Board

LICENSING BOARD
Nancy R. Taylor
Onjalé Scott Price
Samuel H. Patterson
Douglas C. Brown
Edwin (Scott) P. Zylinski, II

Friday, June 17, 2022

The Commonwealth of Massachusetts
Alcoholic Beverages Control Commission

☐ For Reconsideration

LICENSING AUTHORITY CERTIFICATION

Falmouth
City /Town

ABCC License Number

TRANSACTION TYPE (Please check all relevant transactions):
The license applicant petitions the Licensing Authorities to approve the following transactions:

- ☒ New License
- ☐ Transfer of License
- ☐ Change of Manager
- ☐ Change of Officers/ Directors/LLC Managers
- ☐ Change of Location
- ☐ Alteration of Licensed Premises
- ☐ Change Corporate Name
- ☐ Change of Ownership Interest (LLC Members/ LLP Partners, Trustees)
- ☐ Change of Class (i.e. Annual / Seasonal)
- ☐ Change of License Type (i.e. club / restaurant)
- ☐ Change of Category (i.e. All Alcohol/Wine, Malt)
- ☐ Issuance/Transfer of Stock/New Stockholder
- ☐ Other
- ☐ Change Corporate Structure (i.e. Corp / LLC)
- ☐ Pledge of Collateral (i.e. License/Stock)
- ☐ Management/Operating Agreement
- ☐ Change of Hours
- ☐ Change of DBA

APPLICANT INFORMATION

Name of Licensee: Olive Restaurants, Inc.
DBA: Shiverick's Cafe & Bar
Street Address: 285 Main Street
Zip Code: 02540
Manager: Elias Gregoriadis

Granted under Special Legislation? Yes ☐ No ☒
If Yes, Chapter
of the Acts of (year)

§12 Restaurant	Annual	All Alcoholic Beverages
Type (i.e. restaurant, package store)	Class (Annual or Seasonal)	Category (i.e. Wines and Malts / All Alcohol)

DESCRIPTION OF PREMISES Complete description of the licensed premises

One Floor of approximately 611 Sq. Ft. with bar to the left of the main dining area. Additional, smaller dining area past the bar towards the rear exit. Four rooms on the fininshed first floor. Full basement consisting of two rooms and a walk-in cooler for prepping ingredients, dish-washing and storage. No outdoor seating is currently being propsed.

LOCAL LICENSING AUTHORITY INFORMATION

Application filed with the LLA: Date: 6/3/2022 Time: 11:47 am

Advertised: Yes ☒ No ☐ Date Published: 6/17/2022 Publication: Falmouth Enterprise

Abutters Notified: Yes ☐ No ☒ Date of Notice:

Date APPROVED by LLA: 6/27/2022 **Decision of the LLA:** Approves this Application

Additional remarks or conditions (E.g. Days and hours)

For Transfers ONLY:
Seller License Number: Seller Name:

The Local Licensing Authorities By:

Alcoholic Beverages Control Commission
Ralph Sacramone
Executive Director

_____
_____
_____
_____

LICENSE APPLICATION REVIEW

Restaurant/Business: Olive Restaurant, Inc. dba Shiverick Café & Bar

Address: 285 Main Street

License Type: Common Victualler

☒ New or Transfer of License All Alcoholic Beverages Common Victualler License

or

☐ Change of License _____

☒	Police	No objection
☒	Fire	No issues w/application
☐	Building	approved restaurant plans
☒	Health	No issues with Health
☐	Zoning	
☒	Planning	No physical changes, no comment
☐	DPW	
☐	Assessor	
☐	Tax Collector	
☐	.	
☐	.	
☐	.	

NOTES: The Building Department has a copy of the restaurant plans. At this time, no changes are planned for the interior seating and storage plan from that of the previous owner's configuration or for outdoor seating.

Stanislava Gregoriadis was appointed Manager of Record when the Common Victualleus License was approved but Elias Gregoriadis will now be the Manager of Record.

AMENT KLAUER LLP
Attorneys at Law
39 Town Hall Square
Falmouth, MA 02540

Robert H. Ament, Esq.
Kevin P. Klauer II, Esq.
Matthew M. Terry, Esq.

Telephone (508) 540-6555
Fax (508) 457-1293
Website: www.amentklauer.com

May 27, 2022

VIA HAND DELIVERY

Phyllis Downey
Board of Selectmen
Town of Falmouth
59 Town Hall Square
Falmouth, MA 02540

Re: Application for New Annual, On-Premises Liquor License – 285 Main Street

Dear Ms. Downey:

Enclosed please find the following with respect to a new annual liquor license application for Olive Restaurants, Inc., d/b/a Shivericks's Café & Bar at 285 Main Street:

1) ABCC Application – New Annual, On-Premises License;
2) Building Commissioner Approval;
3) Floor Plans Stamped by Architect;
4) Certified Abutters' List;
5) Articles of Incorporation for Olive Restaurants, Inc.;
6) Corporate Vote;
7) Copy of unexpired Passport for manager Elias Gregoriadis;
8) Notarized CORI Request Forms;
9) TIPS Certificates for Elias and Stanislava Gregoriadis;
10) Lease between property owner and Olive Restaurants, Inc.;
11) Financing Documents for Home Equity Loan used to fund start-up costs;
12) On-Line ABCC Fee Transmittal Form and Payment Receipt;
13) Retail License Application – Common Victualler (previously submitted to the Town); and
14) Application and Advertising Fee of $100 payable to the Town of Falmouth.

Please schedule this matter on the Selectmen's agenda as soon as possible. If you require additional information, please do not hesitate to contact our office.

Very truly yours,

Matthew M. Terry, Esq.

MMT/
Enclosures

NEW LICENSE

To apply for an alcoholic beverages retail license, you will need the following:

- ✓ **$200 Fee** paid online through our online payment link: **ABCC PAYMENT WEBSITE**
- ✓ **Monetary Transmittal Form**
- ✓ **New Retail Application**
- ✓ **Manager Application**
- ✓ **Vote of the Entity**
- ✓ **Business Structure Documents**
  - If Sole Proprietor, **Business Certificate**
  - If partnership, **Partnership Agreement**
  - If corporation or LLC, **Articles of Organization** from the Secretary of the Commonwealth
- ✓ **CORI Authorization Form** Complete one for each individual with financial or beneficial interest in the entity that is applying AND one for the proposed manager of record. *This form must be notarized with a stamp or raised seal.*
- ✓ **Proof of Citizenship** for the proposed Manager of Record.
- **Supporting Financial Records** for all financing and or loans, including pledge documents, if applicable.
- ✓ **Legal Right to Occupy**, a lease or deed.
- ✓ **Floor Plan**
- ✓ **Abutter's Notification**
- **Advertisement**
- **Additional information, if necessary, utilizing the formats provided and or any affidavits.**
- **Management Agreement**, if applicable, requires the following:
  - Management Agreement Application
  - Management Agreement
  - Vote of the Entity
  - CORI Forms for all listed in Section 11 and attachments

Please Note: You may be requested to submit additional supporting documentation if necessary.

shiverick.cafe.bar@gmail.com

The Commonwealth of Massachusetts
Alcoholic Beverages Control Commission
95 Fourth Street, Suite 3, Chelsea, MA 02150-2358
www.mass.gov/abcc

RECEIVED
JUN - 3 2022
11:47 am
SELECTMEN'S OFFICE

APPLICATION FOR A NEW LICENSE

Municipality: Falmouth

1. LICENSE CLASSIFICATION INFORMATION

ON/OFF-PREMISES	TYPE	CATEGORY	CLASS
On-Premises-12	§12 Restaurant	All Alcoholic Beverages	Annual

Please provide a narrative overview of the transaction(s) being applied for. On-premises applicants should also provide a description of the intended theme or concept of the business operation. Attach additional pages, if necessary.

Applicant proposes a sit-down, table-service restaurant/cafe for casual dining.

Is this license application pursuant to special legislation? ○ Yes ◉ No Chapter: Acts of:

2. BUSINESS ENTITY INFORMATION

The entity that will be issued the license and have operational control of the premises.

Entity Name: Olive Restaurants, Inc. FEIN: 88-1646056

DBA: Shiverick's Cafe and Bar Manager of Record: Elias Gregoriadis

Street Address: 285 Main Street, Falmouth, MA 02540

Phone: [redacted] Email: [redacted]

Alternative Phone: [redacted] Website:

3. DESCRIPTION OF PREMISES

Please provide a complete description of the premises to be licensed, including the number of floors, number of rooms on each floor, any outdoor areas to be included in the licensed area, and total square footage. You must also submit a floor plan.

One finished floor of approximately 611 square feet with bar to the left of the main dining area. Additional, smaller dining area past the bar towards the rear exit. Four rooms on the finished first floor. Full basement consisting of two rooms and a walk-in cooler for prepping ingredients, dish-washing and storage. No outdoor seating is currently being proposed.

Total Square Footage: 1562 Number of Entrances: three Seating Capacity: 62

Number of Floors: 2 Number of Exits: three Occupancy Number: 62

4. APPLICATION CONTACT

The application contact is the person whom the licensing authorities should contact regarding this application.

Name: Elias Gregoriadis Phone: [redacted]

Title: President Email: [redacted]

5. CORPORATE STRUCTURE

Entity Legal Structure: Corporation

Date of Incorporation: March 14, 2022

State of Incorporation: Massachusetts

Is the Corporation publicly traded? ◯ Yes ◉ No

6. PROPOSED OFFICERS, STOCK OR OWNERSHIP INTEREST

List all individuals or entities that will have a direct or indirect, beneficial or financial interest in this license (E.g. Stockholders, Officers, Directors, LLC Managers, LLP Partners, Trustees etc.). Attach additional page(s) provided, if necessary, utilizing Addendum A.

- The individuals and titles listed in this section must be identical to those filed with the Massachusetts Secretary of State.
- The individuals identified in this section, as well as the proposed Manager of Record, must complete a CORI Release Form.
- Please note the following statutory requirements for Directors and LLC Managers:
  On Premises (E.g.Restaurant/ Club/Hotel) Directors or LLC Managers - At least 50% must be US citizens;
  Off Premises(Liquor Store) Directors or LLC Managers - All must be US citizens and a majority must be Massachusetts residents.
- If you are a Multi-Tiered Organization, please attach a flow chart identifying each corporate interest and the individual owners of each entity as well as the Articles of Organization for each corporate entity. Every individual must be identified in Addendum A.

Name of Principal	Residential Address	SSN	DOB
Elias Gregoriadis	4 Brainerd Road, North Falmouth, MA 02556	[redacted]	[redacted]

Title and or Position	Percentage of Ownership	Director/ LLC Manager	US Citizen	MA Resident
President and Treasurer	50%	◉ Yes ◯ No	◉ Yes ◯ No	◉ Yes ◯ No

Name of Principal	Residential Address	SSN	DOB
Stanislava Gregoriadis	4 Brainerd Road, North Falmouth, MA 02556	[redacted]	

Title and or Position	Percentage of Ownership	Director/ LLC Manager	US Citizen	MA Resident
Secretary	50%	◉ Yes ◯ No	◯ Yes ◉ No	◉ Yes ◯ No

Name of Principal	Residential Address	SSN	DOB

Title and or Position	Percentage of Ownership	Director/ LLC Manager	US Citizen	MA Resident
		◯ Yes ◯ No	◯ Yes ◯ No	◯ Yes ◯ No

Name of Principal	Residential Address	SSN	DOB

Title and or Position	Percentage of Ownership	Director/ LLC Manager	US Citizen	MA Resident
		◯ Yes ◯ No	◯ Yes ◯ No	◯ Yes ◯ No

Name of Principal	Residential Address	SSN	DOB

Title and or Position	Percentage of Ownership	Director/ LLC Manager	US Citizen	MA Resident
		◯ Yes ◯ No	◯ Yes ◯ No	◯ Yes ◯ No

Additional pages attached? ◯ Yes ◉ No

CRIMINAL HISTORY

Has any individual listed in question 6, and applicable attachments, ever been convicted of a State, Federal or Military Crime? If yes, attach an affidavit providing the details of any and all convictions. ◯ Yes ◉ No

6A. INTEREST IN AN ALCOHOLIC BEVERAGES LICENSE

Does any individual or entity identified in question 6, and applicable attachments, have any direct or indirect, beneficial or financial interest in any other license to sell alcoholic beverages? Yes ☒ No ☐ If yes, list in table below. Attach additional pages, if necessary, utilizing the table format below.

Name	License Type	License Name	Municipality
Steve's Pizzeria and More, Inc.	Annual Wine & Malt	00121-RS-0390	Falmouth

6B. PREVIOUSLY HELD INTEREST IN AN ALCOHOLIC BEVERAGES LICENSE

Has any individual or entity identified in question 6, and applicable attachments, ever held a direct or indirect, beneficial or financial interest in a license to sell alcoholic beverages, which is not presently held? Yes ☐ No ☒
If yes, list in table below. Attach additional pages, if necessary, utilizing the table format below.

Name	License Type	License Name	Municipality

6C. DISCLOSURE OF LICENSE DISCIPLINARY ACTION

Have any of the disclosed licenses listed in question 6Aor 6B ever been suspended, revoked or cancelled?
Yes ☐ No ☒ If yes, list in table below. Attach additional pages, if necessary, utilizing the table format below.

Date of Action	Name of License	City	Reason for suspension, revocation or cancellation

7. OCCUPANCY OF PREMISES

Please complete all fields in this section. Please provide proof of legal occupancy of the premises.

- If the applicant entity owns the premises, a deed is required.
- If leasing or renting the premises, a signed copy of the lease is required.
- If the lease is contingent on the approval of this license, and a signed lease is not available, a copy of the unsigned lease and a letter of intent to lease, signed by the applicant and the landlord, is required.
- If the real estate and business are owned by the same individuals listed in question 6, either individually or through separate business entities, a signed copy of a lease between the two entities is required.

Please indicate by what means the applicant will occupy the premises: Lease

Landlord Name: Jeffery Lawrence, Lawrence Realty T

Landlord Phone: 508-566-6878

Landlord Email: jefflawrence@comcast.net

Landlord Address: [redacted] East Falmouth, MA 02536

Lease Beginning Date: April 1, 2022

Rent per Month: $[redacted]

Lease Ending Date: March 31, 2027

Rent per Year: $[redacted]

Will the Landlord receive revenue based on percentage of alcohol sales? ○ Yes ◉ No

10. MANAGER APPLICATION

A. MANAGER INFORMATION

The individual that has been appointed to manage and control the licensed business and premises.

Proposed Manager Name: Elias Gregoriadis Date of Birth: [redacted]

Residential Address: 4 Brainerd rd. North Falmouth, MA. 02556

Email: [redacted] Phone: [redacted]

Please indicate how many hours per week you intend to be on the licensed premises: 50

B. CITIZENSHIP/BACKGROUND INFORMATION

Are you a U.S. Citizen?* (●) Yes ( ) No *Manager must be a U.S. Citizen

If yes, attach one of the following as proof of citizenship US Passport, Voter's Certificate, Birth Certificate or Naturalization Papers.

Have you ever been convicted of a state, federal, or military crime? ( ) Yes (●) No

If yes, fill out the table below and attach an affidavit providing the details of any and all convictions. Attach additional pages, if necessary, utilizing the format below.

Date	Municipality	Charge	Disposition

C. EMPLOYMENT INFORMATION

Please provide your employment history. Attach additional pages, if necessary, utilizing the format below.

Start Date	End Date	Position	Employer	Supervisor Name
1995		Cook and Manager	Steve's Pizzeria and More	Efstathios Gregoriadis

D. PRIOR DISCIPLINARY ACTION

Have you held a beneficial or financial interest in, or been the manager of, a license to sell alcoholic beverages that was subject to disciplinary action? ( ) Yes (●) No If yes, please fill out the table. Attach additional pages, if necessary,utilizing the format below.

Date of Action	Name of License	State	City	Reason for suspension, revocation or cancellation

I hereby swear under the pains and penalties of perjury that the information I have provided in this application is true and accurate:

Manager's Signature: [signature] Date: 4-26-2022

ENTITY VOTE

The Board of Directors or LLC Managers of Olive Restaurants, Inc. (Entity Name)

duly voted to apply to the Licensing Authority of Falmouth (City/Town) and the

Commonwealth of Massachusetts Alcoholic Beverages Control Commission on March 15, 2022 (Date of Meeting)

For the following transactions (Check all that apply):

- [x] New License
- [x] Transfer of License
- [ ] Change of Manager
- [ ] Change of Officers/ Directors/LLC Managers
- [ ] Change of Location
- [ ] Alteration of Licensed Premises
- [ ] Change Corporate Name
- [ ] Change of Ownership Interest (LLC Members/ LLP Partners, Trustees)
- [ ] Change of Class (i.e. Annual / Seasonal)
- [ ] Change of License Type (i.e. club / restaurant)
- [ ] Change of Category (i.e. All Alcohol/Wine, Malt)
- [ ] Issuance/Transfer of Stock/New Stockholder
- [ ] Other
- [ ] Change Corporate Structure (i.e. Corp / LLC)
- [ ] Pledge of Collateral (i.e. License/Stock)
- [ ] Management/Operating Agreement
- [ ] Change of Hours
- [ ] Change of DBA

"VOTED: To authorize Elias Gregoriadis (Name of Person)

to sign the application submitted and to execute on the Entity's behalf, any necessary papers and do all things required to have the application granted."

"VOTED: To appoint Elias Gregoriadis (Name of Liquor License Manager)

as its manager of record, and hereby grant him or her with full authority and control of the premises described in the license and authority and control of the conduct of all business therein as the licensee itself could in any way have and exercise if it were a natural person residing in the Commonwealth of Massachusetts."

A true copy attest,

Corporate Officer /LLC Manager Signature

Elias Gregoriadis

(Print Name)

For Corporations ONLY

A true copy attest,

Corporation Clerk's Signature

Stanislava Gregoriadis

(Print Name)

BUSINESS

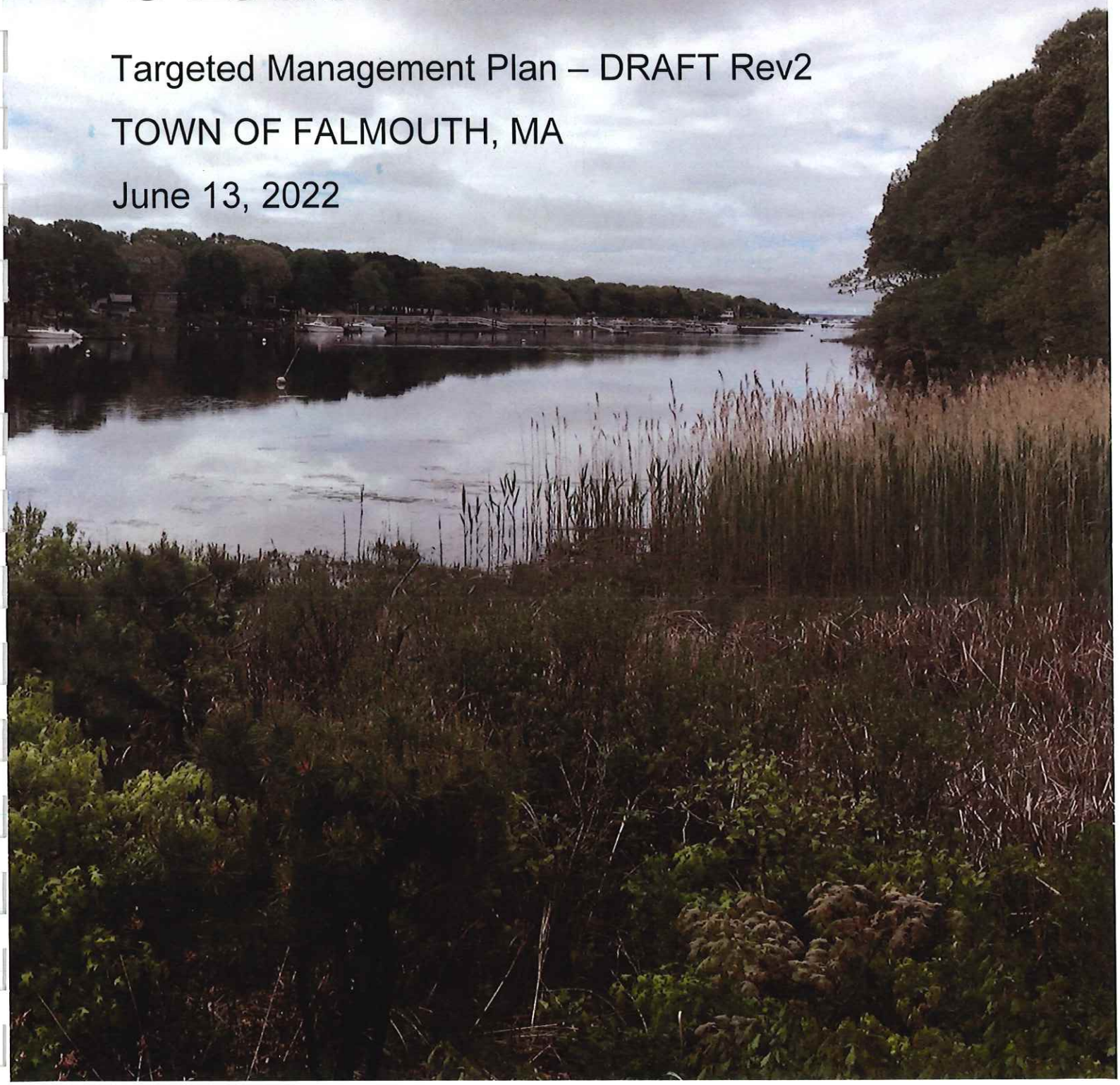
1. Presentation of Draft Great Pond Targeted Watershed Management Plan – Water Quality Management Committee (WQMC) (30 minutes)

Great Pond

Targeted Management Plan – DRAFT Rev2

TOWN OF FALMOUTH, MA

June 13, 2022



TOWN of FALMOUTH

DEPARTMENT OF PUBLIC WORKS, WASTEWATER DIVISION
416 GIFFORD STREET, FALMOUTH, MASSACHUSETTS 02540
TELEPHONE (508) 457-2543 x 3018

AMY LOWELL
WASTEWATER SUPERINTENDENT

June 16, 2022

Peter Johnson-Staub
Acting Town Manager
59 Town Hall Square
Falmouth MA 02540

Re: Draft Great Pond Targeted Watershed Management Plan - for Select Board Review

Dear Mr. Johnson-Staub,

Attached are six hard copies of the draft Great Pond Targeted Watershed Management Plan which has been prepared for Select Board review. To reduce paper use and the cost of distribution, all Town Departments and Boards with charges related to the plan are being provided notice of the availability of the report electronically, and appendices are not included in the hard copies of the document. Instead, the draft report and all its appendices will be available by the end of the day Friday June 17th electronically on the Town's website at the top left of the Wastewater Division's webpage (and at the top left of the Water Quality Management Committee's webpage). Hard copies of the Plan are being provided to the Town's Main Library and the East Falmouth Library.

The overall strategy to meet the Total Maximum Daily Load (TMDL) nitrogen limit for Great Pond has not changed since it was presented at a Select Board meeting on December 6, 2021. Since that meeting, the attached report has been prepared to document the background work and evaluation that led to that proposed strategy.

At the Select Board's meeting scheduled for the 27th of this month, we will provide a presentation about the draft plan and request the Select Board's authorization to send the plan to the Massachusetts Environmental Policy Act (MEPA) office (and all other appropriate distribution) for review. The MEPA review process will involve a public comment period and a public hearing, after which the Secretary of Energy and Environmental Affairs will issue a certificate providing comments which must be addressed in the final plan.

Sincerely,

Amy Lowell

Amy Lowell

cc (hard copy):
Jennifer Mullen, Finance Director
Falmouth Main Library
East Falmouth Library

cc (via email with link to document):
Town Planner and Planning Board
Zoning Administrator and Zoning Board of Appeals
Health Agent and Board of Health
Conservation Agent and Conservation Commission
Water Quality Management Committee
Director of Public Works
Water Superintendent
Town Engineer

GHD Inc.
1545 Iyannough Road,
Hyannis, Massachusetts 02601, United States
T +1 774 470 1630 | **F** +1 774 470 1631 | **E** info-northamerica@ghd.com | **ghd.com**

Printed date	6/13/2022 10:04:00 AM
Last saved date	June 13, 2022
File name	G:\111\11153041 Town of Falmouth South Coast CWMP Update_Am22 Great Pond TWMP Files\WP\Reports\Great Pond TWMP\Great Pond TWMP Draft Report.docx
Author	Anastasia Rudenko
Project manager	John Gregg
Client name	TOWN OF FALMOUTH, MA
Project name	TOWN OF FALMOUTH SOUTH COAST EMBAY
Document title	Great Pond | Targeted Management Plan – DRAFT Rev2
Revision version	Rev 02
Project number	11153041

Document status

Status Code	Revision	Author	Reviewer		Approved for issue		
			Name	Signature	Name	Signature	Date
Draft	2	Anastasia Rudenko	AR		AR		6/13/22
[Status code]							

Executive Summary

1. Introduction

The Great Pond Targeted Watershed Management Plan (GPTWMP) outlines Falmouth's comprehensive strategy for wastewater and nitrogen management in Great Pond to meet the watershed Total Maximum Daily Load (TMDL) requirements for Total Nitrogen (TN). Figure ES-1 (see Attachments) shows the extent of the Great Pond watershed.

This document was prepared in accordance with the February 7, 2020 Executive Office of Energy and Environmental Affairs (EOEEA) Secretary's Certificate. This document has been prepared by GHD, the Falmouth Water Quality Management Committee (WQMC) and its contractor Science Wares, Inc., the Department of Public Works' Wastewater Division and will have been approved by the Falmouth Select Board before submittal.

2. Great Pond TWMP Planning Basis

To meet the Great Pond TMDL, the Town of Falmouth has developed a nitrogen TMDL Compliance Preferred Alternative for Great Pond which integrates multiple nitrogen management strategies for this watershed including centralized sewering, shellfish aquaculture, stormwater improvements, permeable reactive barriers, and fertilizer reductions.

The Town has also developed a TMDL Compliance Contingency Alternative, which provides a conservative estimate of additional centralized wastewater collection and treatment that would be required if the pilot projects included in the Preferred Compliance Approach do not perform as anticipated.

The Town has implemented a robust monitoring program for pond water quality and for pilot projects and will continue to monitor performance through its adaptive management program. The Town may adjust its TMDL Compliance Approach over time if/as needed through a MEPA Notice of Project Change, based on the monitoring program findings.

An alternatives analysis was conducted to identify a preferred treated effluent discharge site for future wastewater flow. Three planning horizons (with associated wastewater flow rates) were established for the analysis, to allow each site to be evaluated for both near-term and longer-term treated effluent discharge needs. The planning flows are outlined in Table ES.1 and described below.

- **Planning Flow 1 (short-term planning flow)** represents anticipated average annual wastewater flow for the Great Pond Preferred Alternative. Planning Flow 1 (Figure ES-2 – see Attachments) includes flow allocations for existing permitted flow (2021 Permit), an Existing Sewer Area Redevelopment Allocation (ESRA), and the Teaticket / Acapesket Sewer Area (TASA).
- **Planning Flow 2 (medium-term planning flow)** represents anticipated average annual wastewater flow for the South Coast Preferred Alternative. Planning Flow 2 (Figure ES-3 – see Attachments) includes Planning Flow 1 and an allocation for potential future sewer service areas outlined by the Town of Falmouth WQMC in the South Coast estuaries in Seacoast Shores (Waquoit Bay watershed), Antler Shores (Waquoit Bay watershed), Seapit (Waquoit Bay watershed), Fishermans Cove (Bournes Pond watershed), and Oyster Pond (Oyster Pond watershed).
- **Planning Flow 3 (long-term/contingency planning flow)** represents anticipated average annual wastewater flow for the Great Pond Contingency Alternative. Planning Flow 3 includes Planning Flow 1, Planning Flow 2, and

an allocation for contingency sewering in the Great Pond watershed if pilot nitrogen management strategies do not perform as anticipated.

Table ES.1. Centralized Wastewater Management Alternatives Analysis Planning Flows 1 through 3

Planning Flow	Flow Components	Average Wastewater Flow (mgd)
Planning Flow 1: Great Pond Preferred Alternative	Existing Permitted Flow[1]	0.71
	Existing Sewer Area Redevelopment Allocation (ESRA)[2]	0.14
	Teaticket / Acapesket Sewer Area (TASA)[3,6]	0.36
Planning Flow 2: South Coast Preferred Alternative	Potential Bournes Pond, Oyster Pond and Waquoit Bay Sewer Area[3,4,7]	0.34
Planning Flow 3: Great Pond Contingency Alternative	Great Pond Contingency Sewering[5]	0.19
Planning Flow 1 Total		**1.21**
Planning Flow 2 Total		**1.55**
Planning Flow 3 Total		**1.74**

Notes:

Groundwater Discharge Permit No. 168-6, effective date February 5, 2021 (2021 Permit).

For this analysis, the Existing Sewer Area Redevelopment Allocation (ESRA) was estimated as 20% of existing permitted flow.

Flow includes Water Quality Management Committee (WQMC) allowance for infiltration/inflow (I/I) in a gravity system. Estimated I/I is not included in nitrogen load calculations.

Potential future sewer area outlined by the WQMC which includes Seacoast Shores, Antler Shores, Seapit, Fishermans Cove and Oyster Pond. WQMC analysis is based on the MVP tool future projections for these areas. These areas are all located outside of the Great Pond watershed.

Great Pond Contingency sewering provides an estimate of additional sewering to meet TMDL if load removal targets are not met by proposed pilot technologies.

Estimated wastewater flows for TASA were developed using water use data from 2014-2016 and a 20% wastewater allocation to account for undesignated redevelopment and potential development of currently un-developable parcels.

All wastewater flow in Planning Flow 2 is anticipated to be collected outside of the Great Pond watershed.

3. Great Pond Non-Traditional Nitrogen and Wastewater Management Technologies Update

3.1 Introduction

The February 2020 Secretary's Certificate issued to the Town of Falmouth recognized the efforts the Town had made in evaluating and piloting nitrogen removal measures to improve water quality in its coastal pond watersheds. Section 3 of this document provides a summary of pilot project implementation progress since the 2019 Notice of Project Change Report.

The following technologies are discussed: shellfish aquaculture, permeable reactive barriers (PRBs), eco-toilets, stormwater management, fertilizer management, nitrogen attenuation augmentation, and innovative and alternative (I/A) septic systems.

3.2 Shellfish Aquaculture

Using shellfish to reduce nitrogen concentrations is a non-traditional approach for improving estuarine water quality. Oysters (*Crassostrea virginica*) have been used because they grow rapidly, typically growing from seed to a harvestable (and marketable) size in less than two years. Pilot shellfish projects continue to show beneficial results for using shellfish to reduce nitrogen concentrations as a means for improving water quality.

Town of Falmouth projects that have concluded since 2019 include the examination of oyster aquaculture growing and overwintering strategies to maximize survival and growth potential; evaluation of denitrification rates in the sediments in Bournes Pond, Little Pond and Waquoit Bay; and evaluating the analytical technique to quantitatively estimate the nitrogen sequestered by shellfish growth.

These projects have demonstrated that large numbers of oysters can be successfully grown in floating gear in the Town of Falmouth's estuaries, while producing measurable improvements in water quality in near-field waters. The projects have also suggested that the accumulation of oyster waste products on nearby sediments can lead to increased rates of denitrification in these sediments.

In the past three years the Town of Falmouth has utilized the WQMC, the Department of Marine and Environmental Services (MES), and other resources to develop and implement a contractor pilot program in Eel River in Waquoit Bay. The program contracts growers who are able to sell shellfish commercially, with the idea that this revenue can potentially more than cover the cost of seed, labor, and materials required in using the shellfish to remove nitrogen from these impaired estuaries.

MES plans to expand its municipal propagation efforts with revenues received from the Aquaculture Contractor Pilot Program and expects to continue growing oysters in Little Pond, while also using it as an aquaculture training site. The municipal shellfish efforts in Little Pond and other areas of Falmouth also support significant community engagement through countless volunteers, providing hands-on learning opportunities for students, and providing skills development opportunities for local inmates.

3.3 Permeable Reactive Barriers (PRBs)

The Town of Falmouth, in partnership with the Woods Hole Oceanographic Institution, was awarded a grant in 2019 to install a pilot injection PRB in the Great Pond watershed. This alternative utilizes a liquid carbon source injected into the groundwater flow path to stimulate the bacterial conversion of nitrate to inert nitrogen gas.

The major goal of the project is to provide the data necessary to refine the long-term operational cost of an injection based PRB by more accurately determining the actual design life of the emulsified vegetable oil (EVO) in a field setting. Monitoring of the pilot PRB project terminated in May 2022 and a complete finding of the project is anticipated in December 2022.

3.4 Eco-toilets

In 2018, Falmouth completed a pilot project to evaluate the nitrogen-removal, costs, and public acceptance aspects of eco-toilets, which can be either composting or urine-diverting fixtures or combinations thereof. To encourage participation in this voluntary project, three different incentive programs over a three-year period were provided. Public participation in the Eco-Toilet Pilot Project was low in Falmouth, despite significant financial incentives and ongoing promotion to encourage participation.

Based on the poor response to the Eco-Toilet Program, eco-toilets are not included as a separate non-traditional technology for watershed planning purposes in Falmouth. They continue to be listed as an I/A septic system option. In watersheds where I/A septic systems are the recommended solution for TMDL-compliance, property owners will also be able to select eco-toilets that achieve the same level of nitrogen removal as is required for I/A septic systems. Currently, Falmouth does not have plans to pursue additional eco-toilet initiatives.

3.5 Stormwater Management

The Town of Falmouth's Department of Public Works engineering staff have worked to identify several candidate locations to implement stormwater Best Management Practices (BMP) for nitrogen removal. Based on subsequent field investigations of the several identified catchment areas and the necessary steps to implement the BMP, the Town has decided to further review the effectiveness of emerging technologies to carrying out any specific stormwater management projects.

As part of the stormwater and runoff management public outreach efforts, the Town distributes seasonal flyers on fertilizer use, grass clipping management, and leaf litter removal, and distributes informational flyers encouraging the proper management of pet waste with all pet registration/renewal applications.

3.6 Fertilizer Management

Since the adoption of the Nitrogen Control Bylaw for Fertilizer in 2012, the Town has continued its efforts on public education and enforcement of the conditions set forth in the bylaw. The efforts include an annual mailing by the Department of Marine and Environmental Services to the owners of approximately 2,700 properties within 100 feet of all coastal estuaries as well as, in 2022, an insert in the water bill sent to all 22,000 Town water accounts. Adherence to the Nitrogen Control Bylaw is now also a Standard Condition included in all Order of Conditions issued by the Town of Falmouth Conservation Commission.

3.7 Potential Watershed Modifications for Increased Nitrogen Attenuation

As part of the Town of Falmouth's examining of strategies to meet the TMDL in its watersheds, the Town has begun to evaluate the effectiveness of modifications to upstream environments to reduce nitrogen inputs in downstream estuaries. This Report includes updates on projects associated with the Mill Pond Restoration Project and the Coonamessett River Restoration Project.

3.8 Measuring the Impacts of Sewering on Little Pond Water Quality

Concurrent with the implementation of the Little Pond sewering project, the Town partnered with both the United States Geological Survey (USGS) and Marine Biological Laboratory (MBL) to establish baseline groundwater-quality data for the area. They have been conducting separate studies measuring the nitrogen in groundwater entering Little Pond before and after sewering to provide a true test case of the environmental benefits of sewers.

In addition, the Town has commissioned a survey of the benthic infaunal communities present in Little Pond that serve as indicators on the health of the system in locations where eelgrass is not present as well as to map present macroalgae and eelgrass assemblages. This survey will provide a baseline for comparison in future years, in order to gauge the impact of sewering on the pond ecosystem over time.

3.9 MassDEP Provisionally Approved Innovative/Alternative Septic Systems

As part of the investigation into technologies that could reduce nitrogen discharged to the groundwater at or near the source, the Town's WQMC in 2010 decided to pursue in situ testing of several such systems. The Town partnered with the Buzzards Bay Coalition in 2016 on the West Falmouth Harbor Shoreline Septic Remediation Project to install advanced I/A systems as part of the pilot project with the goal to achieve an effluent concentration of 12 mg TN/L for each I/A septic system or 70% removal.

Since 2019, the Town has been involved in several joint efforts with regional partners and representatives from the State on establishing a responsible management entity (RME) either on a regional or municipal level for the management of I/A systems. Additionally, the Town has been involved in independent discussions with the MassDEP on how to accelerate General Use approval for the several highly promising technologies able to achieve ≤ 10 mg TN/L which include NitROE, Nitrex, and the layer cake design.

4. Great Pond Traditional Wastewater Management Alternatives

4.1 Introduction

The largest source of controllable nitrogen in Great Pond is wastewater from on-site septic systems. Due to the very large nitrogen load reduction required to meet the Great Pond TMDL and because of the density of development adjacent to the pond, centralized sewering, treatment, and effluent discharge is an essential part of the Great Pond TWMP Preferred Compliance Approach.

4.2 Collection System

A portion of the Great Pond watershed was sewered in 2017 as part of the Little Pond Sewer Area (LPSA) project. The nitrogen load removal from Great Pond through sewering these parcels is estimated to be 1,000 kg/yr.

The Town's Great Pond TMDL Compliance Preferred Approach involves expanding the existing sewer collection system to include the Teaticket / Acapesket Sewer Area (TASA), shown in Figure ES-2 (see Attachments). Collection system construction will occur in two phases, first the Teaticket area, then the Acapesket area (areas are labelled 1 and 2 on Figure ES-2). Approximately 1,300 of the identified TASA parcels are in the Great Pond watershed (Figure ES-4 – see Attachments); the remainder are in Green Pond's watershed. Sewering of TASA is projected to remove 6,188 kg/yr of nitrogen from the Great Pond watershed. The conceptual collection system and wastewater flow estimates include an allocation for future growth, which will be taken into account in sizing of treated effluent discharge.

4.3 Wastewater Treatment

The Falmouth Wastewater Treatment Facility (WWTF) will be upgraded to treat the proposed flow from the TASA and the Existing Service Redevelopment Allocation (ESRA) – Planning Flow 1. In April 2022, Town Meeting approved a $24,000,000 appropriation to implement recommended WWTF improvements associated with meeting Planning Flow 1 needs. The project is currently being designed and is expected to go out to bid in the spring of 2023. Construction is expected to take up to two years to complete.

Additional future upgrades will be required to treat Planning Flow 2 and 3 at the Town of Falmouth WWTF.

4.4 Effluent Discharge

The Town of Falmouth WWTF currently has 15 effluent disposal open sand beds. The 2021 groundwater discharge permit for the WWTF established effluent flow limits for these beds by watershed. The permitted capacity of the existing Open Sand Beds 1-15 is allocated to current and future flows from areas currently sewered.

An effluent discharge evaluation was conducted as part of this project to compare treated effluent discharge sites for Planning Flow 1, with consideration for other planning horizons (Planning Flows 2 and 3). The following potential sites were included in the evaluation (the location of each site is outlined in Figure ES-5 – see Attachments):

- Increasing the capacity of Open Sand Beds 14 & 15 through an increase in the design hydraulic loading rate to the existing beds and a bed area expansion in the undeveloped area to the west and/or north of the existing beds.
- Development of new open sand beds and subsurface leaching fields at the Augusta Parcel.
- Development of new open sand beds at the Allen Parcel.
- Development of a new ocean outfall in Vineyard Sound or Buzzards Bay.

For each site, field investigations were performed, groundwater modelling was conducted, environmental impacts were evaluated, and construction cost was estimated. A Discharge Alternatives Evaluation Matrix was prepared comparing the results of these evaluations for each site, and was presented during Water Quality Management Committee on November 8, 2021 and November 22, 2021. At the November 22, 2021 meeting, the WQMC voted to:

1. Designate existing Open Sand Beds 14 & 15 as the preferred treated effluent discharge site for the projected ESRA/TASA flows in the short-term contingent on a follow-up evaluation of nearby Herring Brook (which the Town anticipates receiving in 2023).
2. Consider ocean outfall options in Buzzards Bay and Vineyard Sound, along with land-based options at the Allen and Augusta parcels, for projected mid-term and long-term wastewater flows.

Both recommendations were reviewed and endorsed by the Falmouth Select Board on December 6, 2021.

5. Great Pond Recommended Plan

The Recommended Plan provides a comprehensive strategy for wastewater and nitrogen management in Great Pond and includes a preferred approach and a contingency. Table ES.2 lists the estimated nitrogen load reduction for each compliance component to achieve the TMDL.

The Town has implemented robust monitoring programs and will continue to monitor performance through this adaptive management program. The Town will adjust its TMDL Compliance Approach as needed, based on the findings of the adaptive management program, through a MEPA Notice of Project Change.

Table ES.2. Nitrogen Budget for Great Pond to Achieve Nitrogen TMDL Compliance

Compliance Component – Nitrogen Removal Approach	Estimated Nitrogen Loading Reduction (kg-N/year)
	Preferred Alternative
Fertilizer Bylaw (25% of fertilizer load)[1,2]	425
Stormwater Best Management Practices (25% of impervious load)[1,2]	580
Shellfish Aquaculture (uptake)[1,2]	1,300 – 2,100
Shellfish Aquaculture (denitrification)[1,2]	650 – 1,050
Permeable Reactive Barrier at Shorewood Drive (300 feet)[1,2]	1,325
Sewer Extension – Little Pond Sewer Service Area (Great Pond)	1,000
Sewer Extension – Teaticket Acapesket Sewer Service Area Subarea 1	2,890
Sewer Extension – Teaticket Acapesket Sewer Service Area Subarea 2	3,298
Sewer Extensions – Contingency	0
Total Estimated Reduction	**11,468 – 12,668**
Nitrogen Removal TMDL Goal	**12,154**

Notes:
Anticipated removal rates provided by the Falmouth WQMC based on the information provided and actions described in Section 5.1.1.
Advancements in I/A technology will provide supplementary nitrogen removal if not met through primary alternatives.

Capital costs for the wastewater management facilities component of the TWMP are summarized in Table ES.3. The implementation schedule for the wastewater management facilities is outlined in Table ES.4.

Table ES.3. Capital Costs for Recommended Wastewater Facilities

Infrastructure	Planned Appropriation Date	Capital Costs (Adjusted for Mid-Point of Construction Dollars for Each Project)
TASA Improvements Falmouth WWTF Upgrade	April 2022 - complete	$24.0 M (2024$)
TASA Collection System Phase 1[1]	April 2024	$39.9 M (2026$)
Recharge Facilities for TASA / ESRA Flows at Expanded Open Sand Beds 14 and 15	April 2024	$1.4 M (2026$)
TASA Collection System Phase 2[2]	April 2026	$49.4 M (2026$)

Notes:
1. Phase 1 costs based on Alternative Number 2 Subarea 1 outlined in GP TM-1 (see Appendix), which assumes two new lift stations and one sewer easement is obtained for sewershed. This planning number will be refined as the Town finalizes available lift station and sewer easement locations. The cost estimate assumes a single force main system from TASA to the Falmouth WWTF and a grinder pump allowance.
2. Phase 2 costs based on Alternative TASA TM7 Subarea 2 outlined in GP TM-1, which assumes four new lift station locations are obtained for the sewershed. This planning number will be refined as the Town finalizes available lift station and sewer easement locations. The cost estimate assumes a single force main system from TASA to the Falmouth WWTF (constructed during Phase 1) and a grinder pump allowance.

Table ES.4. Great Pond TWMP Implementation Schedule

Activity	2022	2023	2024	2025	2026	2027	2028
Falmouth WWTF TASA Improvements Project Construction							
Town Meeting – Vote to Establish TASA Betterment Percentage							
TASA Collection System (Phases 1 & 2) and Recharge Facilities Design Appropriation and Ballot Vote							
TASA Collection System and Recharge Facilities Construction Appropriation and Ballot Vote							
TASA Collection System and Recharge Facilities Construction							

5.1 Contingency Compliance Approach

The Contingency Compliance Approach provides a conservative estimate of additional centralized wastewater collection and treatment that would be required within the Great Pond watershed if the pilot projects included in the Preferred Compliance Approach did not perform as anticipated (Table ES.5). Removal of an additional 4,966 kg-N/year through sewering would require the sewering of approximately 1,232 single-family residential properties sewered in the Great Pond watershed north of Route 28 (based on an average nitrogen removal of 4.6 kg-N/year unattenuated N load per single-family home). Findings of the adaptive management program will be used to assess whether additional sewering will need to be incorporated into the Town's Compliance Approach in the future. Proposed changes will be documented through a MEPA Notice of Project Change, as required.

Table ES.5. Nitrogen Budget for Great Pond to Achieve Nitrogen TMDL Compliance

	Estimated Nitrogen Loading Reduction (kg-N/year) - Contingency Alternative
Fertilizer Bylaw (25% of fertilizer load)	0
Stormwater Best Management Practices (25% of impervious load)	0
Shellfish Aquaculture (uptake)[1]	0
Shellfish Aquaculture (denitrification)[1]	0
Permeable Reactive Barrier at Shorewood Drive (300 feet)[1]	0
Sewer Extension – Little Pond Sewer Service Area (Great Pond)	1,000
Sewer Extension – Teaticket Acapesket Sewer Service Area Subarea 1	2,890
Sewer Extension – Teaticket Acapesket Sewer Service Area Subarea 2	3,298
Sewer Extensions – Contingency	4,966
Total Estimated Reduction	**12,154**
Nitrogen Removal TMDL Goal	**12,154**

6. Climate Change / Greenhouse Gas Evaluation for Preferred Alternative

This section outlines the Base Case and Preferred Alternative greenhouse gas (GHG) evaluation that was conducted using the USEPA's Portfolio Manager and discusses potential opportunities for on-site energy generation as part of future wastewater infrastructure design and construction.

7. MEPA Draft Section 61 Findings and Mitigation

An update to the Section 61 findings and mitigation measures is a regulatory requirement. The changes to these findings have built upon those in the original CWMP. Mitigation measures are described to general construction sites, sewer construction, wastewater treatment facility, and effluent discharge sites. The report also includes additional mitigation measures involving adaptive management and climate change.

8. Consistency with Cape Cod Commission Section 208

The 2015 Section 208 Plan outlines the Cape Cod Commission's (CCC) consistency criteria for review of large planning efforts as a replacement to the Development of Regional Impact (DRI) review process, which was its regulatory predecessor. Compliance with these criteria is required for the Town to be eligible for State Revolving Fund (SRF) loan opportunities and is required as part of the MEPA process and watershed permitting process. The report outlines the consistency approach for each CCC consistency criteria for this project.

9. Update on Comprehensive Planning Process

The Town of Falmouth has adopted the general CWMP approach of working west to east (beginning at Little Pond) to develop TWMPs to address nitrogen mitigation needs along its southern coastline. This approach allows for traditional wastewater collection infrastructure to be extended from existing infrastructure, which is primarily located within the Town's downtown areas and the Little Pond Sewer Service Area, a portion of which is currently within the Great Pond watershed. A proposed strategy (or compliance approach) for each watershed is outlined in Section 9 of this report.

Each strategy will continue to be refined as a TWMP for each subsequent watershed is developed and as pilot project/water quality data is collected and analyzed. The Town will continue to monitor Little Pond and West Falmouth Harbor to evaluate whether the significant improvements and management strategies implemented in those watersheds achieve the anticipated results.

One of the conclusions of the nitrogen management planning process has been that it will be extremely challenging to meet the TMDLs for all of the Town's coastal ponds with land-based treated wastewater discharge. Therefore, the

Town of Falmouth has initiated an investigation into the feasibility of an ocean outfall for future treated wastewater discharge. If, through this process, it is found that an outfall is infeasible due to cost or other factors, the Allen and/or Augusta parcel could be employed for land-based discharge for wastewater collected from future sewer service areas.

The proposed schedule for the development of the remaining South Coast Estuary TWMPs is outlined in Table ES.6.

Table ES.6. Future TWMP Development Schedule

Action Item	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Ocean Outfall Evaluations													
Green and Bournes Pond TWMP													
Waquoit Bay TWMP													

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(The following Figures are found in the Attachments section at the end of the report text)

Appendices

Glossary of Common Acronyms

ACRE	Applied Coastal Research and Engineering, Inc.
ASAR	Alternatives Screening Analysis Report
BBC	Buzzards Bay Coalition
BCDHE	Barnstable County Department of Health and Environment
BMP	Best Management Practices
BOD	Biochemical Oxygen Demand
CCC	Cape Cod Commission
CCWPC	Cape Cod Water Protection Collaborative
CFR	Code of Federal Regulations
CMR	Code of Massachusetts Regulations
CRWG	Coastal Resources Working Group
CWMP	Comprehensive Wastewater Management Plan
CWMP/FEIR/TWMP	Comprehensive Wastewater Management Plan and Final Environmental Impact Report, and Targeted Watershed Management Plan
CWSRF	Clean Water State Revolving Fund
CZM	Coastal Zone Management
DCWMP/DEIR	Draft CWMP and Draft Environmental Impact Report
DEP	Department of Environmental Protection
DIN	Dissolved Inorganic Nitrogen
DMF	Division of Marine Fisheries
DO	Dissolved Oxygen
DON	Dissolved Organic Nitrogen
DPW	Department of Public Works
EEA	Energy and Environmental Affairs
EIR	Environmental Impact Report
ENF	Environmental Notification Form
EOEEA	Executive Office of Energy and Environmental Affairs
EPA	Environmental Protection Agency
FCTV	Falmouth Community Television
GHD	GHD Inc.
GHG	Greenhouse Gas
GIS	Geographic information System
gpd	Gallons per day
gpd/sf	Gallons per day per square foot
GWDP	Groundwater Discharge Permit Program

IMA	Inter-Municipal Agreement
I/A	Innovative and Alternative
JBCC	Joint Base Cape Cod
kg/d	Kilograms per Day
kg/yr.	Kilograms per Year
kW	Kilowatt
lbs./yr.	Pounds per Year
LPSSA (or LPSA)	Little Pond Sewer Service Area
MassDEP	Massachusetts Department of Environmental Protection
MassDOT	Massachusetts Department of Transportation
MBL	Marine Biological Laboratory
MEP	Massachusetts Estuaries Project
MEPA	Massachusetts Environmental Policy Act
MES	Marine and Environmental Services
MESA	Massachusetts Endangered Species Act
mgd	million gallons per day
mg/L	milligrams per liter
M.G.L.	Massachusetts General Law
MHC	Massachusetts Historical Commission
MSL	Mean Sea Level
NAR	Needs Assessment Report
NHESP	Natural Heritage and Endangered Species Program
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent
NO3	Nitrate
NPC	Notice of Project Change
NPDES	National Pollutant Discharge Elimination System
NRCS	National Resource Conservation Services
N/L	Nitrogen per Liter
N/yr	Nitrogen per Year
ORP	Oxidation/Reduction Potential
OSHA	Occupational Safety and Health Administration
PEF	Project Evaluation Form
PGP	Programmatic General Permit
PON	Particulate Organic Nitrogen
ppm	parts per million

PRB	Permeable Reactive Barrier
psi	pounds per square inch
PSU	Practical Salinity Units
QAPP	Quality Assurance Project Plan
RMME	Responsible Municipal Management Entity
SAS	Soil Absorption System
SEU	Sewer Equivalent Unit
SBR	Sequencing Batch Reactor
sf	Square Foot
SMAST	School for Marine Science and Technology
SNEP	Southeast New England Program
SRF	State Revolving Fund
STA	Soil Treatment Area
SWPPP	Stormwater Pollution Prevention Plan
TASSA	Teaticket Acapesket Sewer Service Area
TM	Technical Memorandum
TMDL	Total Maximum Daily Load
TN	Total Nitrogen
TN/L	Total Nitrogen per Liter
TWMP	Targeted Watershed Management Plan
UCWSC	Upper Cape Water Supply Cooperative
UMass	University of Massachusetts
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
WFH	West Falmouth Harbor
WFHSSSR	West Falmouth Harbor Shoreline Septic System Remediation
WHOI	Woods Hole Oceanographic Institute
WHRC	Woods Hole Research Center
WNMP	Watershed Nitrogen Management Plan
WPA	Wetlands Protection Act
WQMC	Water Quality Management Committee
WWTF	Wastewater Treatment Facility

1. Introduction

1.1 Report Background and Purpose

The Town of Falmouth's Comprehensive Wastewater Management Project (CWMP) is being developed to protect its coastal environment from impacts of excessive nitrogen to impaired estuaries. Excessive nitrogen loading to the Town's sensitive coastal watersheds is impacting water quality and marine resources in the area. The Massachusetts Estuaries Project has completed studies in multiple Falmouth estuaries indicating that most of this nitrogen originates from wastewater sources. The Falmouth CWMP Project is being completed to provide an environmentally and economically sound approach for wastewater and nitrogen management for watersheds along their south facing coast (from Little Pond to Waquoit Bay) and West Falmouth Harbor. This area is generally referred to as the CWMPs Planning Area.

The Town has adopted the approach of working west to east (starting at Little Pond) to develop Targeted Watershed Management Plans (TWMPs), as part of the overall CWMP, to address nitrogen mitigation needs along its southern coastline. This approach allows for traditional infrastructure to be extended from existing infrastructure, which is primarily located within the Town's downtown areas and the Little Pond Sewer Service Area (LPSA).

The Great Pond Targeted Watershed Management Plan (GPTWMP) outlines Falmouth's comprehensive strategy for wastewater and nitrogen management in Great Pond to meet the watershed Total Maximum Daily Load (TMDL) requirements for Total Nitrogen (TN).

This report is the eighth report developed by the Town of Falmouth related to this Comprehensive Wastewater Management Planning (CWMP) Project. Previous reports prepared for this CWMP project are summarized below:

3. The Needs Assessment Report (NAR), dated October 2007, documented the wastewater and nitrogen management needs for the Planning Area and related areas of Falmouth.
4. The Alternatives Screening Analysis Report (ASAR), dated November 2007, identified possible solutions to address identified wastewater and nitrogen management needs and screened the alternatives to retain the most feasible options for cost development and detailed evaluation.
5. The Environmental Notification Form (ENF) document, dated December 17, 2007, summarized the findings of the Needs Assessment Report to initiate environmental review of the project (as part of the Massachusetts Environmental Policy Act or MEPA review process).
6. The Draft Comprehensive Wastewater Management Plan and Draft Environmental Impact Report (DEIR) and Draft Notice of Project Change, dated July 30, 2012, presented the draft plan and further advanced MEPA review of the project. A Secretary's Certificate was issued on November 14, 2012, stating that the DEIR was adequate, and provided a scope of work for the FEIR.
7. The Final CWMP/FEIR/TWMP, dated September 16, 2013, summarized the detailed evaluations and changes made to the planning project since the review of the Draft Report, and presented the Recommended Plan to address the wastewater and nitrogen management needs of the Little Pond watershed. It also presented the estimated environmental impact (and benefits) of the Recommended Plan as compared to the consequence of not acting on the wastewater needs (also called the No-Action Alternative).
8. The Amended TWMP, dated October 6, 2014, was issued to address a Massachusetts Department of Environmental Protection (MassDEP) request to clarify the Town's approach for addressing the Nitrogen TMDL for Little Pond using the traditional and non-traditional management approach identified in the 2013 CWMP Report. The associated Adaptive Management Plan identified several pilot projects and other initiatives necessary to determine the feasibility of non-traditional wastewater and nitrogen management strategies being considered as part of the planning effort.

9. The South Coast Embayments and West Falmouth Harbor CWMP/TWMP Notice of Project Change Update, dated December 2019, outlined a Compliance Plan Approach for each impaired watershed in the Planning Area and provided an update on the efforts and studies being conducted to assess the feasibility of non-traditional wastewater and nitrogen management strategies incorporated into the Compliance Plan Approaches.

This report outlines Falmouth's strategy to meet its nitrogen Total Maximum Daily Load (TMDL) goals in Great Pond and provides an outline of next steps the Town will undertake to develop TMDL strategies for the Town's other impaired coastal estuaries.

1.2 Public Participation and Outreach Program

The Town of Falmouth actively participates in public awareness outreach efforts on water quality issues. The Water Quality Management Committee (WQMC) is the primary means of publicly discussing strategic planning efforts toward restoring the impaired estuaries. Table 1.1 provides a summary of WQMC meetings and publicly available archives relating to the activities of the WQMC since the 2019 Notice of Project Change was developed.

Table 1.1 Summary of Meeting Records for the Falmouth Water Quality Management Committee

Year	Regular Committee Meetings	Number of Meetings Available Through FCTV	Number of Articles in Local Newspaper
2019	20	6	19
2020	12	4	7
2021	14	8	11
2022 (through March 1, 2022)	2	2	1
Total through March 1, 2022	**48**	**20**	**38**

The WQMC holds regular public meetings that typically occur on the first and third Thursday of each month. In accordance with the Massachusetts Open Meeting Law, the agenda for each WQMC meeting is publicly posted on the Town's website at least 48 hours prior to the meeting in accordance with Massachusetts General Law. Detailed minutes from each meeting are also publicly available on the Town's website. Current and archived agenda and minutes can be found at:

https://ma-falmouth.civicplus.com/AgendaCenter/Water-Quality-Management-Committee-39

The Water Quality Management Committee will continue to work with the Select Board and Town departments to inform the public and to provide a forum for open dialogue on water quality issues. This project has been publicly presented at two Select Board meetings since 2019, and the findings of this report shall be presented a future Select Board meetings anticipated in 2022.

1.2.1. Coordination and Outreach to Neighboring Towns and JBCC

1.2.1.1. Joint Base Cape Cod

The Town of Falmouth is actively participating in discussions and evaluations related to the potential use of the wastewater infrastructure at Joint Base Cape Cod (JBCC). This is a regional multi-year effort that includes JBCC, and the Towns of Falmouth, Barnstable, Bourne, Mashpee, and Sandwich.

1.2.1.2. Nitrogen Loading Allocation for Waquoit Bay Watershed

The Town of Falmouth is actively working with its neighboring communities of Mashpee and Sandwich to establish nitrogen loading allocations and responsibility for Waquoit Bay. It is anticipated that the communities will establish these allocations in the future to aid in each community's approach to address the nitrogen impacts in this shared watershed.

1.3 MEPA and DRI Review Process

The environmental review process was initiated in December 2007 with the filing of an ENF with the MEPA office of the Executive Office of Energy and Environmental Affairs (EOEEA) as well as the Cape Cod Commission (CCC). Project documents that have undergone MEPA review and received a Certificate of the Secretary of Energy and Environmental Affairs are summarized in Table 1.2.

Table 1.2 Summary of Town of Falmouth CWMP EOEEA Certificates

Document	EOEEA Certificate Approval Date
Environmental Notification Form	January 30, 2008
Draft CWMP/DEIR	November 14, 2012
Final CWMP/FEIR/TWMP	January 10, 2014
Bournes Pond Inlet Widening	February 10, 2016
CWMP/TWMP NPC Update	February 7, 2020

The environmental review process will continue with the MEPA and CCC review of this Great Pond TWMP report. A Secretary's certificate is expected at the end of this review. After a successful MEPA review, the CCC will complete their 208 Consistency Review.

1.4 Environmental Impact Review Process

The Final CWMP/FEIR/TWMP, dated September 16, 2013, summarized the detailed evaluations and changes made to the planning project since the review of the Draft Report, and presented the Recommended Plan to address the wastewater and nitrogen management needs of the Little Pond watershed. It also presented the estimated environmental impact (and benefits) of the Recommended Plan as compared to the consequence of not acting on the wastewater needs (also called the No-Action Alternative).

The 2019 NPC EOEEA Certificate, dated February 7, 2020, confirmed that a supplemental Environmental Impact Report (EIR) would not need to be prepared for the Great Pond TWMP.

2. Great Pond TWMP Planning Basis

The Great Pond System watershed is divided into 24 sub-watersheds. The 'Final Great, Green and Bournes Pond Embayment Systems Total Maximum Daily Loads (TMDL) for Total Nitrogen (Report #96-TMLD-6 Control #181.0)' outlines target threshold watershed loads for two waterbodies in the Great Pond System – Great Pond and Perch Pond. The TMDL Report outlines the maximum nitrogen loading that each waterbody may receive while maintaining its water quality standards and designated uses. Table 2.1 outlines the nitrogen TMDLs for the two waterbodies.

Table 2.1. Great Pond and Perch Pond Total Maximum Daily Loads (TMDL)

Major Watershed	Waterbody Segment	Description[1]	Nitrogen TMDL (kg/d)[2]
Great Pond System	Great Pond	From the inlet of Coonamessett River to Vineyard Sound (excluding Perch Pond), Falmouth	22.50 (8213 kg/yr)
	Perch Pond	Connects to northwest end of Great Pond, west of Keechipam Way, Falmouth	0.59 (215 kg/yr)

Sources:

1. Massachusetts Year 2016 Integrated List of Waters.
2. 'Table 5 – the Total Maximum Daily Loads (TMDL) for the Great, Green and Bournes Pond Embayment Systems, represented as the sum of the calculated target threshold loads (from controllable watershed sources), atmospheric deposition, and sediment sources (benthic flux)' of the 'Final Great, Green and Bournes Pond Embayment Systems Total Maximum Daily Loads for Total Nitrogen' (Report #96-TMDL-6 Control #181.0), dated April 6, 2006.

The largest source of controllable nitrogen for both watersheds is on-site septic systems. Nitrogen from septic systems enters the waterbody in two ways:

- Direct groundwater discharge into the watershed (groundwater load) – this represents septic system loads that flow directly through groundwater to the main embayment waterbody.
- Surface water discharge (surface water load) – this represents septic system loads from up-gradient watersheds that enters a stream (in this case the Coonamessett River) and/or pond via groundwater before discharging into the main embayment waterbody. During the development of the MEP Report, flow and nitrogen concentration measurements were taken at a stream gauge in the Coonamessett River at Route 28 to quantify surface water discharge loads into Great Pond. Surface water loads are represented as a point discharge from an upper watershed into the main waterbody.

Other sources of nitrogen to the watersheds include natural background, land use (stormwater runoff and fertilizers), atmospheric deposition, and the Massachusetts Military Reservation Wastewater Treatment Facility (WWTF) plume and nutrient-rich embayment sediments. Of these sources, land use, septic system, and WWTF sources are typically considered "controllable" sources of nitrogen.

The Falmouth Water Quality Management Committee (WQMC) established a nitrogen removal goal (Table 2.2) to meet the Great Pond TMDL based on the difference between the present attenuated nitrogen load from septic systems, runoff and fertilizer (based on data provided by the MEP Report), and the threshold nitrogen load (based on data provided by the MEP Report).

Table 2.2. Great Pond Total Maximum Daily Load (TMDL) Nitrogen Removal Goal

Subembayment / Surface Water Source	Present Nitrogen Load (kg/yr)[1]	Threshold Nitrogen Load (kg/yr)[1,2]	Nitrogen Reduction Required (kg/yr)
Great Pond	9,125	1,358	7,767
Perch Pond	1,964	329	1,635
Coonamessett River	8,260	5,508	2,752
Total Great Pond System	**19,349**	**7,195**	**12,154**

Notes:

1. Data from 'Massachusetts Estuaries Project Linked Watershed-Embayment Model to Determine Critical Nitrogen Loading Thresholds for Great/Perch Pond, Green Pond, and Bournes Pond, Falmouth, Massachusetts – Final Report – April 2005 Table VIII-3: Comparison of subembayment total attenuated watershed loads (including septic, runoff, and fertilizer) used for modeling of present and threshold loading scenarios of the Ashumet Valley systems. These loads do not include direct atmospheric deposition (onto the sub-embayment surface) or benthic flux loading terms.' Data converted from kg/day to kg/yr.
2. Data from 'Final Great, Green and Bournes Pond Embayment Systems Total Maximum Daily Loads for Total Nitrogen (Report +96-TMDL-5 Control #181.0) Table 5: The Total Maximum Daily Load (TMDL) for the Great, Green, and Bournes, Pond Embayment Systems, represented as the sum of the calculated target threshold loads (from controllable watershed sources), atmospheric deposition, and sediment sources (benthic flux).

To meet the Great Pond TMDL, the Town of Falmouth has developed a nitrogen TMDL Compliance Preferred Alternative for Great Pond which integrates multiple nitrogen management strategies for this watershed including centralized sewering, on-site innovative and alternative septic systems (I/A systems), shellfish aquaculture, stormwater improvements, permeable reactive barriers, and fertilizer reductions. The portion of the Great Pond watershed to be sewered under the Preferred Alternative (Teaticket Acapesket Sewer Areas 1 and 2) is shown on Figure 2-1 (see Attachments).

The Town has also developed a TMDL Compliance Contingency Alternative, which provides a conservative estimate of additional centralized wastewater collection and treatment that would be required if the pilot projects included in the Preferred Compliance Approach did not perform as anticipated.

The Town has implemented a robust monitoring program for pilot projects and will continue to monitor pilot project performance through its adaptive management program. The Town will adjust its TMDL Compliance Approach if/as needed through a MEPA Notice of Project Change, based on program findings.

The Great Pond TMDL Compliance Plan for both the Preferred Alternative and Contingency Alternative is summarized in Table 2.3.

Table 2.3. Great Pond Nitrogen TMDL Compliance Plan

Compliance Component – Nitrogen Removal Approach	Estimated Nitrogen Loading Reduction (kg-N/year)[4]	
	Preferred Alternative	Contingency Alternative
Fertilizer Bylaw (25% of fertilizer load)[1,2]	425	0
Stormwater Best Management Practices (25% of impervious load)[1,2]	580	0
Shellfish Aquaculture (uptake)[1,2]	1,300 – 2,100	0
Shellfish Aquaculture (denitrification)[1,2]	650 – 1,050	0
Permeable Reactive Barrier at Shorewood Drive (300 feet)[1,2]	1,325	0
Sewer Extension – Little Pond Sewer Area (Great Pond)	1,000	1,000
Sewer Extension – Teaticket Acapesket Sewer Area 1[3]	2,890	2,890
Sewer Extension – Teaticket Acapesket Sewer Area 2[3]	3,298	3,298
Sewer Extensions – Contingency	0	4,966
Total Estimated Reduction	**11,468 – 12,668**	**12,154**
Nitrogen Removal TMDL Goal	**12,154**	**12,154**

Notes:

1. Anticipated removal rates provided by the Falmouth Water Quality Management Committee (WQMC). See Section 3 for background.
2. Advancements in I/A technology will provide supplementary nitrogen removal if not met through primary alternatives.
3. Estimated wastewater flows developed using water use data from 2014, 2015 and 2016 and a 20% allocation to account for undesignated redevelopment and potential development of currently un-developable parcels.
4. If a treated effluent site is selected within the Great Pond watershed additional nitrogen loading reduction will be required to offset the nitrogen load returned to the watershed through treated effluent discharge.

2.1. Projected Wastewater Flows and Nitrogen Loads

The Town of Falmouth operates the Falmouth Wastewater Treatment Facility (WWTF), located at Blacksmith Shop Road. The WWTF currently operates under Groundwater Discharge Permit No. 168-6, effective date February 5, 2021 (2021 Permit) and has a permitted average annual effluent flow of 0.71 mgd.

The WWTF has 15 treated effluent disposal open sand beds. The Town of Falmouth has allocated all its permitted treated effluent discharge capacity at the existing open sand beds for existing sewer service areas.

An alternatives analysis was conducted to identify a preferred treated effluent discharge site for future wastewater flow. Three planning horizons (with associated wastewater flow rates) were established for the analysis, to allow each site to be evaluated for both near-term and longer-term treated effluent discharge scenarios. The planning flows are outlined in Table 2.4 and described below.

- **Planning Flow 1 (short-term planning flow)** represents anticipated average annual wastewater flow for the Great Pond Preferred Alternative. Planning Flow 1 includes flow allocations for existing permitted flow (2021 Permit), an Existing Sewer Area Redevelopment Allocation (ESRA) and the Teaticket / Acapesket Sewer Area (TASA).
- **Planning Flow 2 (medium-term planning flow)** represents anticipated average annual wastewater flow for the South Coast Preferred Alternative. Planning Flow 2 includes Planning Flow 1 and an allocation for potential future sewer service areas outlined by the Town of Falmouth Water Quality Management Committee (WQMC) in the South Coast estuaries in Seacoast Shores (Waquoit Bay watershed), Antler Shores (Waquoit Bay watershed), Seapit (Waquoit Bay watershed), Fishermans Cove (Bournes Pond watershed) and Oyster Pond (Oyster Pond watershed).

– **Planning Flow 3 (long-term / contingency planning flow)** represents anticipated average annual wastewater flow for the Great Pond Contingency Alternative. Planning Flow 3 includes Planning Flow 1, Planning Flow 2, and an allocation for contingency sewering in the Great Pond watershed if pilot nitrogen management strategies do not perform as anticipated.

Table 2.4. Centralized Wastewater Management Alternatives Analysis Planning Flows 1 through 3

Planning Flow	Flow Components	Average Wastewater Flow (mgd)	Average Current Septic Nitrogen Load Removed from Great Pond Watershed (kg/yr)[7,8]
Planning Flow 1: Great Pond Preferred Alternative	Existing Permitted Flow[1]	0.71	1,000[6]
	Existing Sewer Area Redevelopment Allocation (ESRA)[2]	0.14	0
	Teaticket / Acapesket Sewer Area (TASA)[3]	0.36[7]	6,188[8]
Planning Flow 2: South Coast Preferred Alternative	Potential Bournes Pond and Waquoit Bay Sewer Area[3,4]	0.34	0[9]
Planning Flow 3: Great Pond Contingency Alternative	Great Pond Contingency Sewering[5]	0.19	4,966
Planning Flow 1 Total		**1.21**	**7,188**
Planning Flow 2 Total		**1.55**	**7,188[9]**
Planning Flow 3 Total		**1.74**	**12,154[9]**

Notes:

1. Groundwater Discharge Permit No. 168-6, effective date February 5, 2021 (2021 Permit).
2. For this analysis the Existing Sewer Area Redevelopment Allocation (ESRA) was estimated as 20% of existing permitted flow.
3. Flow includes Water Quality Management Committee (WQMC) allowance for infiltration / inflow (I/I) in a gravity system. Estimated I/I is not included in nitrogen load calculations
4. Potential future sewer area outlined by the WQMC which includes Seacoast Shores, Antler Shores, Seapit, Fishermans Cove and Oyster Pond. WQMC analysis is based on the MVP tool future projections for these areas. These areas are all located outside of the Great Pond watershed.
5. Great Pond Contingency sewering provides an estimate of additional sewering to meet TMDL if load removal targets are not met by proposed pilot technologies.
6. Estimated septic nitrogen load removal from the portion of the Little Pond Sewer Service Area (LPSA) located in the Great Pond watershed.
7. Estimated wastewater flows for TASA were developed using water use data from 2014-2016 and a 20% wastewater allocation to account for undesignated redevelopment and potential development of currently un-developable parcels. The future allocation in this flow estimate is not included in the nitrogen load estimate to allow for a comparison of anticipated current septic nitrogen load removed through sewering to the current septic nitrogen load that needs to be removed from the watershed to meet the TMDL. The collection system and treatment facility will be sized to convey and treat anticipated future flows from the identified sewershed.
8. Estimated existing septic nitrogen load removal from the portion of the Teaticket Acapesket Study Area (TASA) located in the Great Pond watershed.
9. All wastewater flow in Planning Flow 2 is anticipated to be collected outside of the Great Pond watershed.

3. Great Pond Non-Traditional Nitrogen and Wastewater Management Technologies Update

3.1. Introduction

The following section has been written by Science Wares Inc. on behalf of the WQMC to document the non-traditional nitrogen and wastewater management technologies currently being demonstrated/piloted in the Town of Falmouth. This information was provided to GHD by the Town for inclusion in this Report.

The February 2020 Secretary's Certificate issued to the Town of Falmouth on the "Notice of Project Change for the Comprehensive Wastewater Management Plan and Targeted Watershed Management Plan – South Coast Embayments and West Falmouth Harbor" recognized the efforts the Town of Falmouth had made in evaluating and piloting nitrogen removal measures to improve water quality in its coastal pond watersheds. The Secretary's Certificate also required the Town of Falmouth to provide additional information by December 2022 on the implementation of various pilot projects outlined in the CWMP. This section is intended to provide that required additional information.

The primary funding for these investigations came from Article 17, a bond issue for $2.77 million passed by Town Meeting and the voters in 2011. The intent was to gather information for a comprehensive analysis of options and alternatives to conventional sewers. The article was purposely broad in scope as to on-site demonstrations and pilot projects. Additional funding supporting several of the alternative projects was awarded through the EPA's Southern New England Program, and the Air Force Center for Environmental Excellence mitigation funds, totaling over $500,000 since June 2019.

The sections listed below summarize the information that has been gathered on various projects and nitrogen-reduction strategies during the past three years:

3.2 Shellfish Aquaculture
3.3 Permeable Reactive Barriers (PRBs)
3.4 Eco-toilets
3.5 Stormwater Management
3.6 Fertilizer Management
3.7 Potential Watershed Modifications for Increased Nitrogen Attenuation
3.8 Measuring the Impacts of Sewering on Little Pond Water Quality
3.9 MassDEP Provisionally Approved Innovative / Alternative Septic Systems

3.2. Shellfish Aquaculture

Using shellfish to reduce nitrogen concentrations is a non-traditional approach for improving estuarine water quality. Oysters (*Crassostrea virginica*) have been used because they grow rapidly, typically growing from seed to a harvestable (and marketable) size in less than two years. Pilot shellfish projects continue to show beneficial results for using shellfish to reduce nitrogen concentrations as a means for improving water quality.

Town of Falmouth projects that have concluded since 2019 include the examination of oyster aquaculture growing and overwintering strategies to maximize survival and growth potential, evaluation of denitrification rates in the sediments in Bournes Pond (Appendix 3.1), Little Pond and Waquoit Bay (Appendix 3.2), and evaluating the analytical technique to quantitatively estimate the nitrogen sequestered by shellfish growth.

These projects have demonstrated that large numbers of oysters can be successfully grown in floating gear in the Town of Falmouth's estuaries, while producing measurable improvements in water quality in near-field waters. The

projects have also suggested that the accumulation of oyster waste products on nearby sediments can lead to increased rates of denitrification in these sediments.

In West Falmouth Harbor the ongoing shellfish initiative to re-establish a self-sustaining oyster reef was initiated in 2014 and was most recently surveyed in 2021. Survey results indicate the reef has become well established and continues to thrive.

In the past three years the Town of Falmouth has utilized the Water Quality Management Committee (WQMC), the Department of Marine and Environmental Services (MES), and other resources to develop and implement a contractor pilot program in Eel River in Waquoit Bay. The program contracts growers who are able to sell shellfish commercially, with the idea that this revenue can potentially more than cover the cost of seed, labor, and materials required in using the shellfish to remove nitrogen from these impaired estuaries.

Three sites that support 20,000 sq. ft. of floating gear were identified in Eel River adjacent to Washburn Island and were permitted with contractors selected by the Town in 2019. In its current program design as outlined in the Request for Statements of Qualifications (Appendix 3.3), the Town manages the aquaculture licenses for each of the sites. The private growers are responsible for purchasing, transporting, installing, maintaining, and harvesting the shellfish. The growers are also responsible for providing any gear needed to implement the project according to town specifications. The Town has required the exclusive use of floating gear. The Town of Falmouth has made floating bags, floating working spaces (8' x 20'), upwellers, overwintering space, and gear storage space available for lease to the contracted growers. With the revenues generated from the leasing of town-owned resources for the program, the Town plans to increase its municipal propagation efforts and expand its aquaculture program.

In addition to the growing requirements, the program requires that the growers produce a minimum of 18,600 kg of net increase in harvest weight of oysters over the time that the oysters are grown in the Eel River site annually (see Appendix 3.3). Stocking density specifications for the sites were designed to fully utilize each site with 25% of the area devoted to first year oysters and the remaining 75% for second year oysters that will be harvested at the end of the season. Based on the stocking densities laid out in the program design, under normal conditions, a minimum of 279,000 oysters should be available for harvesting on an annual basis from each 0.5-acre site. To ensure compliance with harvest weight requirement, the growers are required to report the deployment and harvest weights of the oysters each season and provide samples to the town for independent analysis of nitrogen content to ensure a target nitrogen removal goal is being met. Based on municipal propagation data from various sites in Falmouth, the target for nitrogen removal per acre is 130 kg N/yr and is expected to be attainable by any commercial grower when following the draft policy on aquaculture within the estuaries.

In 2021, the first year of full-scale deployment, a total of 635,150 oysters were landed. One grower exceeded the target while the other two contracted growers did not fully utilize the specified gear as detailed, and their oyster landings were below the target. Those growers were instructed to make necessary alterations for the 2022 growing season to ensure their harvest meets the Town's target. Overall, the estimated total nitrogen removal by the Eel River pilot project in 2021 was 126 kg, 70% of the conservative target for shellfish uptake being used in the compliance plans. The 2021 removal is equivalent to sewering approximately 25 homes using an average loading rate of 5.0 kg N/yr, while the potential for when the growing target is achieved is equivalent to 36 residential sewer connections.

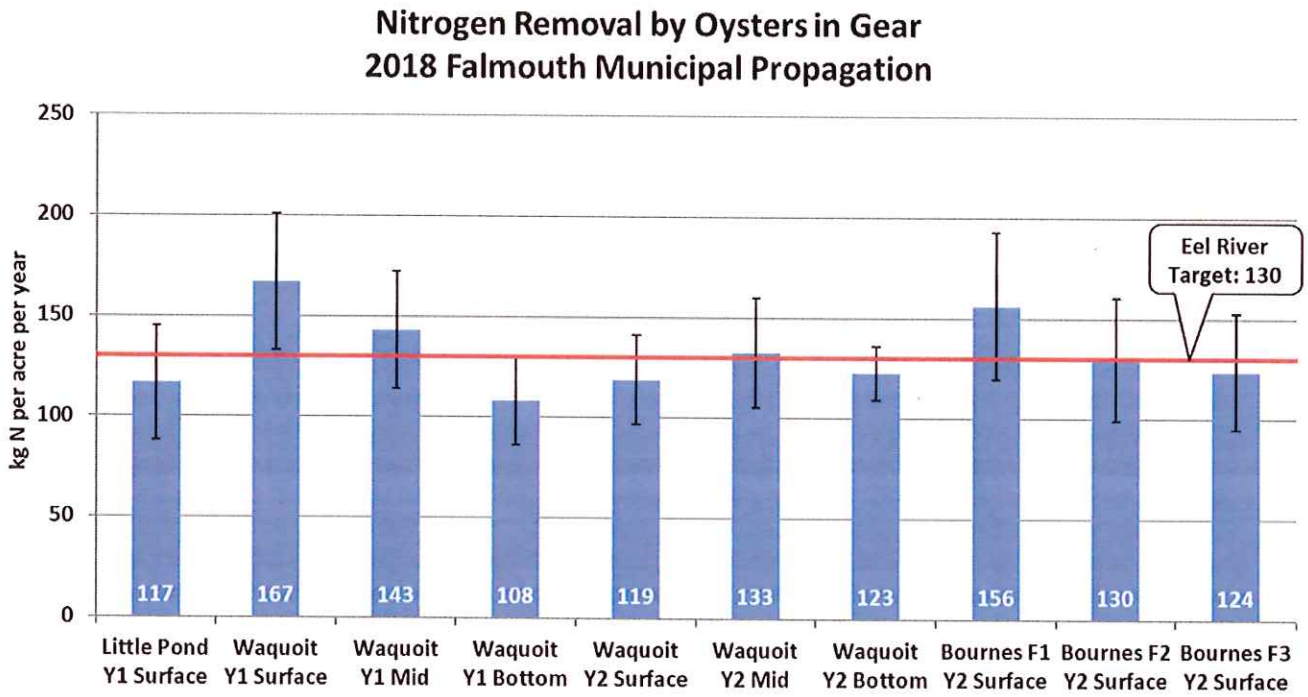


Figure 3.1 *Summary of Nitrogen Removal Measurements Made by MES During 2018*

With the initial success of the Aquaculture Contractor Pilot Program demonstrated in 2020 and 2021, MES has conducted initial shellfish surveys in Great Pond to determine areas and locations suitable to expand the program. Final surveys of Great Pond are being actively conducted and are projected to be completed in early 2022. The remaining estuaries will all be surveyed and evaluated for feasibility and suitability for expansion of the contractor pilot program.

MES has continued to grow oysters in Little Pond as part of its municipal propagation program. The Town currently has a minimum estimated effective nitrogen removal of 29 kg/yr from oyster aquaculture on 0.25 acres of Little Pond. The municipal aquaculture program currently has the capacity to expand to approximately 1.0 acre in Little Pond and the amount of municipal propagation varies due to availability of funding for seed purchase and staffing. Due to site constraints in Little Pond, the propagation is not likely to exceed 0.5 acres which would equate to a maximum removal of 60 kg N/yr.

Oysters grown in Little Pond are relayed to Great Pond, Green Pond, and West Falmouth Harbor for recreational and commercial harvest. MES plans to expand its municipal propagation efforts with revenues received from the Aquaculture Contractor Pilot Program and expects to continue growing oysters in Little Pond, while also using it as an aquaculture training site. The municipal shellfish efforts in Little Pond and other areas of Falmouth also support significant community engagement through countless volunteers, providing hands-on learning opportunities for students, and providing skills development opportunities for local inmates.

3.3. Permeable Reactive Barriers

The Town of Falmouth, in partnership with the Woods Hole Oceanographic Institution, was awarded a $298,598 grant in 2019 to install a pilot injection permeable reactive barrier (PRB) in the Great Pond watershed. This alternative utilizes a liquid carbon source (emulsified vegetable oil) injected into the groundwater flow path to stimulate the bacterial conversion of nitrate to inert nitrogen gas. The major goal of the project is to provide the data necessary to refine the long-term operational cost of an injection based PRB by more accurately determining the actual design life of the emulsified vegetable oil (EVO) in a field setting.

As outlined in the proposal (Appendix 3.4) the project was designed for the PRB to "fail" within the project performance period in order to determine the exact amount of EVO necessary for a full-scale system that should last between 5-10 years between injections. The project injected EVO along a 120 ft. transect running perpendicular to the groundwater flow at the head of Great Pond. One 60 ft. length of the transect was dosed with a treatment of EVO estimated to last one year while the other side was given a dose estimated to last two years. Five multi-level and three single level monitoring wells were installed in the vicinity of the PRB. The multi-level wells each consist of 10 sampling depths to allow for vertical profiling of the performance of the injection. Quarterly monitoring of all new and existing wells within the network has been conducted since injection and will continue through the late spring of 2022 to monitor the efficiency of nitrate removal, trace metals, and longevity of the EVO.

During the course of the project, the two-year side has consistently reduced the nitrate coming into the PRB to near background levels in the upper portion of the injection zone. As of January 2022, data indicates that the nitrate removal of the PRB at depth on the two-year side is showing early signs of reduced efficiency (Figure 3-2) Data from the one-year side has not shown any indication of denitrification occurring at the site perhaps because of a limited availability of carbon to stimulate the bacterial metabolic processes because of potentially uneven dispersion of the EVO within the PRB line. Monitoring of the pilot PRB project will be terminated in May 2022 and a complete report of the project's findings is anticipated in December 2022.

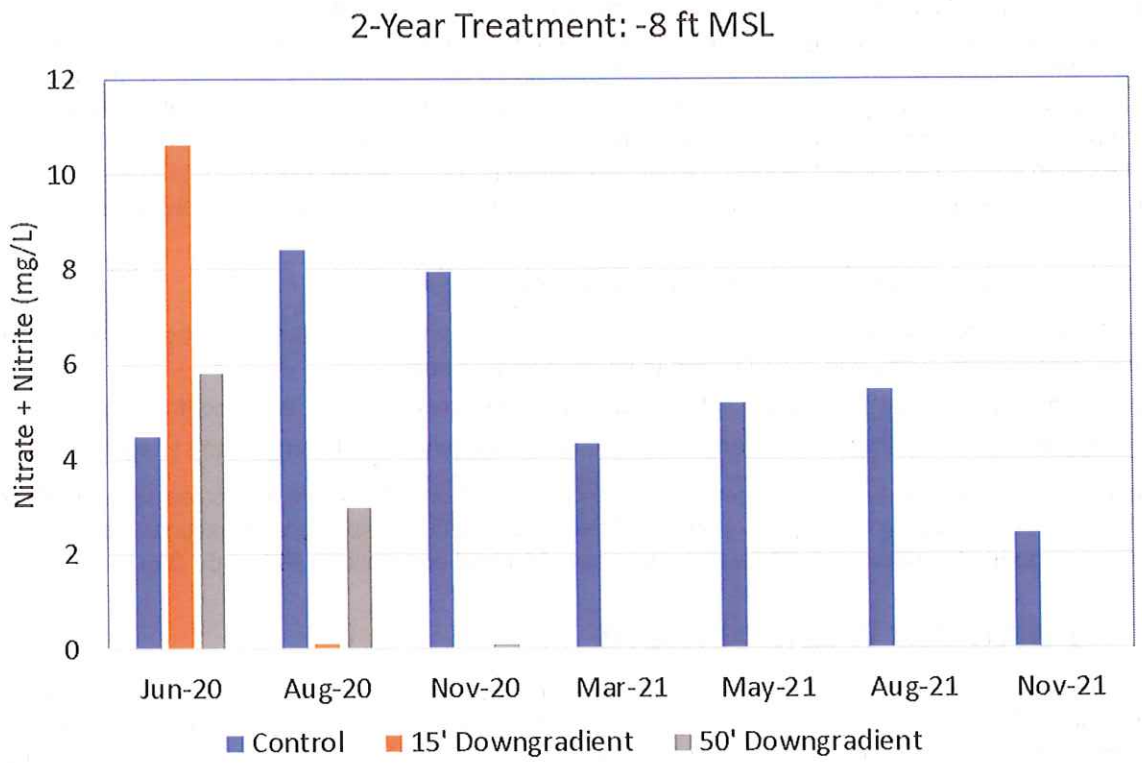


Figure 3.2 ***Pre- and Post-EVO Injection Time Series of Nitrate+Nitrite***

3.4. Eco-toilets

In 2018, Falmouth completed a pilot project to evaluate the nitrogen-removal, costs and public acceptance aspects of eco-toilets, which can be either composting or urine-diverting fixtures or combinations thereof. To encourage participation in this voluntary project, three different incentive programs over a three-year period were provided. Public participation in the Eco-Toilet Pilot Project was low in Falmouth, despite significant financial incentives including a $5,000 grant, a free professional home evaluation and ongoing outreach to encourage participation. Of the 170 people who showed initial interest in eco-toilets, 55% indicated they ultimately chose not to participate due to factors

such as the effort involved in ongoing operation and maintenance of the eco-toilet and a concern over resale value of the home. Cost was only a factor for 10% of respondents who did not choose to participate. Based on the poor response to the eco-toilet program in Falmouth, eco-toilets are not included as a separate non-traditional technology for watershed planning purposes in Falmouth. They continue to be listed as an Innovative/Alternative (I/A) septic system option. In watersheds where I/A septic systems are the recommended solution for TMDL-compliance, property owners will also be able to select eco-toilets that achieve the same level of nitrogen-removal as is required for I/A septic systems. At this time, Falmouth does not have plans to pursue additional eco-toilet initiatives.

3.5. Stormwater Management

The Town of Falmouth's Department of Public Works engineering staff is charged with administering the Town's Stormwater Management Program. In 2021, The Falmouth Select Board adopted Stormwater Management Rules and Regulations. Falmouth Department of Public Works staff have worked to identify several candidate locations to implement stormwater Best Management Practices (BMP) for nitrogen removal. Based on subsequent field investigations of the several identified catchment areas and the necessary steps to implement the BMP, the Town has decided to further review the effectiveness of emerging technologies such as media boxes prior to carrying out any specific stormwater management projects.

The Town has been working towards mapping all known outfalls, stormwater BMPs, and receiving waterbodies with impairments. In 2020, the Town completed a BMP pollutant reduction estimate summary for its existing structural stormwater BMPs located within a contributing watershed to an impaired waterbody (Appendix 3.5). All known BMPs and waterbodies have been mapped, as well as a number of outfalls. Initial catchment delineations have also been completed based on topographic mapping and available stormwater system information. As the Town completes a survey of existing BMPs, the nutrient reduction estimates will be updated per the MS4 permit requirements. The Falmouth Department of Public Works continues to employ Best Management Practices in all of its road improvement projects.

Recent examples of projects utilizing Best Management Practices include:

1. Teaticket Path reconstruction project where significant drainage improvements redirecting stormwater through a sedimentation basin, weirs and gravel trench to improve water quality.
2. New employee parking lot constructed behind Town Hall with pervious pavement to control stormwater.
3. Coonamessett Gateway Park which includes a series of weirs, swales and rain gardens to control stormwater.

As part of the stormwater and runoff management public outreach efforts, the Town distributes seasonal flyers on fertilizer use and grass clipping management and leaf litter removal and distributes informational flyers encouraging the proper management of pet waste with all pet registration/renewal applications (Appendix 3.6).

3.6. Fertilizer Management

Since the adoption of the Nitrogen Control Bylaw for Fertilizer in 2012 (Appendix 3.7), the Town continues its efforts on public education and enforcement of the conditions set forth in the bylaw. The efforts include an annual mailing by the Department of Marine and Environmental Services to the owners of approximately 2,700 properties within 100 feet of all coastal estuaries as well as an insert in the bill going to 22,000 town water accounts (Appendix 3.6). Adherence to the Nitrogen Control Bylaw is now also a Standard Condition included in all Order of Conditions issued by the Town of Falmouth Conservation Commission.

3.7. Potential Watershed Modifications for Increased Nitrogen Attenuation

As part of the Town of Falmouth's approach for examining strategies to meet the TMDL in its watersheds, the Town has begun to evaluate the effectiveness of modifications to upstream environments to reduce nitrogen inputs in downstream estuaries.

3.7.1. Mill Pond Restoration Project

The Town of Falmouth partnered with the University of Massachusetts Dartmouth School of Marine Science and Technology (SMAST) to conduct a study on nutrient cycling in Mill Pond, a 16-acre heavily degraded freshwater pond located directly upstream from Green Pond and responsible for attenuation of approximately 62% of its nitrogen inputs that would otherwise enter Green Pond (Unruh et al. 2018). The main objective in the management of Mill Pond is the control of the nitrogen and phosphorus loads entering Green Pond. Since 2019, the Town has implemented several of the recommendations made by SMAST (see Appendix 3.9 – Unruh et al. 2018), and those recent efforts are detailed below.

3.7.1.1. Macrophyte Harvesting

One approach the Town piloted was to attempt to reduce the nutrient load being recycled within Mill Pond by harvesting the macrophytes. Reducing the macrophyte biomass in the pond should reduce the nutrient load to the sediments and water column of Mill Pond when the plants begin to decay in the fall. In addition, a reduction in the surface-level plants should allow for more wind-driven surface layer mixing which may aid in odor control.

It was thought harvesting would have multiple benefits including the removal of the harvested macrophyte material and its associated nutrient load; visual and odor reduction to address neighborhood concerns, and an allowance for the ecosystem service of plant growth that continually removes phosphorus from the sediments. This form of macrophyte management is considered an adaptive management approach needing evaluation of its effectiveness prior to establishing a long-term maintenance plan.

Since 2019, the Town pursued this strategy and in October 2020 completed the initial harvesting. The Town harvested all accessible plants from the surface of the pond equivalent to 10,000 kg of vegetation (wet weight). Subsequent analysis of the plant matter yielded less nitrogen and phosphorus removal per kg than anticipated from pilot measurements (see Appendix 3.9 – Unruh et al. 2018). In total, the harvesting efforts removed 21 kg N and 3.4 kg P from the system (see Appendix 3.10 - Ells et al. 2021) at a cost of $743/kg N. This does not include the generous no-cost shore support of the Department of Public Works staff to move the harvested material to its final disposal location. The Town determined this strategy was not cost effective for nitrogen removal and has decided not to continue this effort.

3.7.1.2. Supplemental Aeration

The Notice of Intent filed for the macrophyte harvesting also included piloting the technique of providing supplemental oxygen to the sediments of Mill Pond during the critical highly anoxic summer months to promote the natural denitrification occurring in the sediments. Seasonal aeration was permitted and piloted in the summer of 2020.

Nanobubble technology was chosen to use in the pond due to the longer retention time of the physical nanobubbles and their Brownian movement[1]. By supersaturating the water with nanobubbles in the deployment area, the physics of the movements of the nanobubbles suggested that a portion of those bubbles should have been delivered to the sediments while others were dispersed throughout the water column prior to releasing their oxygen content. Data from the 2020 pilot season indicated that the oxygen demand in the pond's current state (eutrophic and heavily vegetated) was too high to isolate a clear signal in increased oxygen availability from the aeration activities even in the immediate

[1] Brownian movement is defined as the erratic random movement of microscopic particles in a fluid, as a result of continuous bombardment from molecular motion of the surrounding medium.

vicinity of the generator output (Ells et al. 2021). This also indicated that to provide a meaningful supplement of oxygen would require a much larger system with a greater cost that would need to be maintained for years.

It is believed that the most cost-effective approach for improving bottom water aeration will be to implement strategies that minimize the density of macrophytes in the water column including the reduction of nutrient inputs into the pond. This should increase the efficiency of natural processes of oxygen transfer from the atmosphere at the surface and mixing into the lower waters.

3.7.1.3. Construction of a Detention Pond

This is a preferred management option and best management practice for cranberry bogs to increase the retention time of water coming from upstream to allow plant matter and fine sediments to settle prior to being washed downstream into Mill Pond. In 2021, the Town completed the excavation of a 0.25-acre detention pond in the cranberry bogs immediately upstream from Mill Pond. Due to its recent installation, there has been no monitoring to determine the effectiveness of this strategy, however SMAST estimates this strategy could reduce the nitrogen and phosphorus loads to Mill Pond by 192 and 40 kg/yr respectively (Unruh et al. 2018). A monitoring plan is being developed with monitoring proposed to begin in the spring of 2022.

3.7.1.4. Additional Strategies

In 2021, the Town partnered with SMAST to pilot a new technology for nutrient reduction not previously listed as a recommendation in the assessment by Unruh et al. (2018) (Appendix 3.9). A pilot-scale modular permeable reactive barrier (Appendix 3.11) was deployed in the channel of the cranberry bogs upstream from the site of the detention pond. This system consisted of an array of mesh bags filled with woodchips (for nitrogen reduction) and Alum (for phosphorus reduction). Deployment of the modular permeable reactive barrier system was included in the NOI for the detention pond and has been permitted within the detention pond and main input channel into Mill Pond. Data from this pilot project is currently being analyzed to determine its effectiveness and the most efficient and cost-effective strategy to scale up the deployment.

3.7.2. Coonamessett River Restoration Project

The Coonamessett River flows from Coonamessett Pond to Great Pond, a total length of about 4,750 meters (15,580 feet). The Massachusetts Estuaries Project (MEP) report for the Great Pond watershed (Howes, 2005) estimates that over 50% of the unattenuated nitrogen load to Great Pond enters via the Coonamessett River.

In 1971, the Town of Falmouth acquired approximately 45 acres of cranberry bogs along the lower reach of the Coonamessett River south of Sandwich Road. The bogs are divided into three main areas: Lower Bog, Middle Bog, and Reservoir Bog. Cultivation of Lower Bog ceased in 2010, and Middle and Reservoir Bogs were retired in 2013. Lower Bog was restored to wetlands in 2018.

As part of the restoration process, the river channel was physically lengthened by making it more sinuous in order to increase the water's residence time within the wetland and increase the potential for greater nitrogen attenuation prior to discharging into Great Pond.

Since 2019 the wetland restoration of Middle Bog and Reservoir Bog have been completed. The Coonamessett River Restoration Project was led by the Town of Falmouth Conservation Commission with the support of nearly two dozen partners. Major funding sources include National Oceanic and Atmospheric Administration (NOAA), Massachusetts Environmental Trust, Massachusetts Fish & Game/Division of Ecological Restoration, US Fish and Wildlife Service, and the Town of Falmouth.

To monitor the potential nitrogen attenuation due to the bog restoration efforts, the Woods Hole Research Center (WHRC) was contracted in 2018 to install several sampling wells and monitor eleven stations along the entire length of the Coonamessett River. This research project is quantifying the physical and nitrogen dynamics of the river over a three-year period. Initial water quality monitoring and characterization of the nitrogen export from the river began in 2019 and has continued through early 2021.

3.8. Measuring the Impacts of Sewering on Little Pond Water Quality

Concurrent with the implementation of the Little Pond sewering project, the Town partnered with both USGS and Marine Biological Laboratory (MBL) to establish baseline groundwater-quality data for the area. They have been conducting separate studies measuring the nitrogen in groundwater entering Little Pond before and after sewering to provide a true test case of the nitrogen reduction impact of sewers.

The objective of Falmouth's $40 million investment in sewering the approximately 1,400 sewer connections in the lower watershed of Little Pond was not solely the reduction of nitrogen inputs into the pond, but the restoration of water quality and clarity, and regrowth of eelgrass, an increase in diversity of the benthic community and infauna habitat quality. Given the length of time nitrogen has had to accumulate in the pond, immediate results are not to be expected. But Little Pond will provide a valuable demonstration project of an impaired water body where an 88% reduction in the nitrogen load is being achieved through sewering, while all other inputs are being held largely constant.

This should provide useful information as the town plans for larger sewering projects around the larger, but similar, coastal ponds to the east of Little Pond in the years ahead.

Prior to sewering portions of the Little Pond watershed, the Town partnered with USGS and EPA on a project to monitor the groundwater beneath the Maravista Peninsula using a series of 18 monitoring wells installed at key locations within a neighborhood on the eastern side of Little Pond. The objectives of the study are to assess groundwater levels and water quality beneath a densely developed coastal neighborhood undergoing a conversion from septic systems and cesspools to municipal sewers and develop an understanding of water-quality conditions before and after installation of the sewers.

Groundwater sampling by the USGS began in June of 2016 and has continued to date. The most recent report compiles the monitoring data from 2016-2019 (McCobb et al. 2021, Appendix 3.12). Data from the USGS efforts are beginning to show the impacts of sewering on the groundwater in Maravista while the continued monitoring data from the Pond Watch Monitoring Program will indicate when the effects of sewering have reached Little Pond. Although early in the restoration process, unpublished results from the September 2020 sampling event indicate decreasing trends in median nitrate concentrations at 11 of 14 monitoring sites.

In a separate study, the MBL has been monitoring groundwater along the shoreline of Little Pond through a series of 12 wells installed along the immediate shoreline around the entirety of the pond. Through the Semester in Environmental Sciences Program (SES) at MBL, undergraduate students have collected and analyzed samples since the summer of 2016.

Most of the Town's MEP reports were completed in the early 2000's using data that is now about 20 years old. Ahead of realizing the potential effects of sewering in the Little Pond watershed, the Town funded an updated baseline evaluation of Little Pond water quality following the same protocols as were used for the MEP study in 2006 (Appendix 3.12).

This updated baseline will characterize the benthic infaunal communities present in the system that serve as indicators on the health of the system in location where eelgrass is not present as well as to map present macroalgae and eelgrass assemblages. The assessment data are coupled with the level of diversity (H') and evenness (E) of the benthic community and the total number of individuals to determine the infaunal habitat quality. Data for this effort was collected during the summer of 2021. A report on the findings of the baseline evaluation is anticipated in Fall 2022 (see Appendix 3.13 – project scope).

3.9. MassDEP Provisional Innovative / Alternative Systems

Beginning in 2010, the Town and the general public became increasingly aware of a wide variety of innovative / alternative septic systems available either 'off the shelf' or under development as prototypes. As part of the investigation into technologies that could reduce nitrogen discharged to the groundwater at or near the source, the

Town's Water Quality Management Committee decided to pursue in situ testing of several such systems. The Town partnered with the Buzzards Bay Coalition in 2016 on the West Falmouth Harbor Shoreline Septic Remediation Project to install advanced I/As systems as part of the pilot project with the goal to achieve an effluent concentration of 12 mg TN/L for each I/A septic system or 70% removal.

The project was initiated in 2016 and initially installed 20 I/A systems in the West Falmouth watershed as a part of Phase I. Phase II expanded the project to include an additional 10 I/A installations within West Falmouth. The final I/A systems in Phase II of the project were installed in 2020. The Buzzards Bay Coalition continues to monitor all systems within the project area and report performance to the County.

The DEP currently requires that advanced I/A septic systems must meet a standard of 19 mg TN/L.

A review conducted in 2021 by the Town on the cost and performance of I/A systems as recorded by the Barnstable County Septic Management Program indicated that fewer than half of the I/A's installed in Falmouth with data reported in the last five years, on average perform at the level of ≤ 19 mg N/L (Appendix 3.14). Based on the TMDL targets, the Town considers the standard of 19 mg N/L to be too high to effectively improve the health of an impaired estuary and considers the documented performance of the systems with General Use approval to be inadequate. The review also highlighted three main roadblocks which prevent the widespread use of I/As from being a practicable alternative to sewering including the excessive requirements to get a system to General Use approval, the required capital, operating, maintenance, and monitoring costs, and the limited nitrogen reduction credit recognized by the state.

Since 2019, the Town has been involved in several joint efforts with regional partners and representatives from the State on establishing a responsible management entity (RME) either on a regional or municipal level for the management of I/A systems (Appendix 3.15). Additionally, the Town has been involved in independent discussions with the MassDEP on how to accelerate General Use approval for the several highly promising technologies able to achieve ≤ 10 mg TN/L which include NitROE, Nitrex and the layer cake design.

In 2021, the Water Quality Management Committee began drafting a proposed bylaw that would mandate the use of I/A's within a 300 ft. boundary of specified impaired watersheds (Appendix 3.16). The specified estuaries are those that could potentially meet their TMDL using I/A septic systems capable of achieving an average effluent concentration ≤ 10 mg N/L. The watersheds that have the potential to meet their TMDLs using I/A's alone included in the current proposed bylaw are West Falmouth Harbor, Quissett Harbor, and Fiddler's Cove.

4. Great Pond Traditional Wastewater Management Alternatives

4.1. Introduction

This Section outlines the traditional wastewater management strategies included in the Great Pond TMDL Compliance Preferred Alternative, which includes:

- Existing sewering in the Great Pond watershed (the Little Pond Sewer Area)
- Sewer extensions in the Great Pond watershed (the Teaticket Acapesket Study Area)
- An Existing Sewer Area Redevelopment Allocation (ESRA)
- Upgrades at the Falmouth WWTF to treat collected wastewater from TASA and ESRA (Planning Flow 1)
- Identification of a preferred treated effluent discharge approach for Planning Flow 1

4.2. Collection System

4.2.1. Anticipated Nitrogen Load Removal Through Sewering

4.2.1.1. Little Pond Sewer Service Area

A portion of the Great Pond watershed was sewered in 2017 as part of the Little Pond Sewer Area (LPSA) project. LPSA includes 253 parcels in the Great Pond watershed. As of January 2022, according to the Town of Falmouth Wastewater Division, 99.5% of the parcels in LPSA have been connected to the sewer system. The nitrogen load removal from Great Pond through sewering these parcels is estimated to be 1,000 kg/yr.

4.2.1.2. Teaticket Acapesket Sewer Service Area

As part of the Great Pond TMDL Compliance Preferred Alternative, the Teaticket Acapesket Sewer Area (TASA) will be sewered to significantly reduce septic nitrogen load to the Great Pond watershed. The proposed collection system will collect wastewater from approximately 1,800 parcels in the Great and Green Pond watersheds through a combination of gravity and low-pressure sewers and then will convey the flow to the Town of Falmouth WWTF.

Approximately 1,300 of the identified TASA parcels are in the Great Pond watershed. The existing nitrogen load removal projected for Great Pond through sewering of TASA is estimated to be 6,188 kg/yr. The conceptual collection system and wastewater flow estimates include an allocation for future growth, which will increase the overall nitrogen load removal of the system in the future and will be taken into account in sizing of treated effluent discharge.

Sewering will be augmented by the other nitrogen-reduction strategies discussed in Section 3 of this report as part of the Great Pond TMDL Compliance Preferred Alternative.

The conceptual TASA Phase 1 collection system is illustrated in Figure 4-1 (see Attachments) The conceptual collection system, which was developed to optimize the extent of gravity sewer in the system, involves two new lift stations (one on the Town owned Augusta parcel on Route 28, and one within Falmouthport) and two existing lift stations (Alphonse Street Lift Station and Spring Bars Road Lift Station). This layout relies on the Town obtaining a set of four sewer easements on private properties. If the Town is not able to acquire the proposed sewer easements, more of the collection area will be served by low pressure (and grinder pumps), as shown on Figure 4-2 (see Attachments). As the project progresses to design, the Town will further refine the layout of the proposed sewers.

Flow from TASA is proposed to be conveyed from a single booster lift station (on the Augusta parcel on Route 28) via force main to the Town of Falmouth Wastewater Treatment Facility (WWTF). The proposed force main is anticipated

to follow Brick Kiln Road to Blacksmith Shop Road and connect to the Town of Falmouth WWTF, as shown on Figure 4-3 (see Attachments).

4.2.2. Project Phasing

The proposed TASA collection system is divided into two phases. Phase 1 consists of infrastructure on the Maravista and Teaticket Peninsulas (primarily within the Great Pond Watershed) and connections to approximately 678 sewer equivalent units (SEUs) on 602 properties. Phase 2 includes infrastructure on the Acapesket Peninsula (within both Great Pond and Green Pond Watersheds) and connections to approximately 1,189 properties. Lift Station locations and easements (if any) on the Acapesket peninsula Phase 2 area have yet to be determined.

4.3. Wastewater Treatment

4.3.1. Treatment of Flows from Great Pond Watershed and Existing Service Redevelopment Allocation (ESRA)

An evaluation of the existing Town of Falmouth WWTF's ability to treat the proposed flow from TASA and ESRA, on a capacity and treatment level basis, was conducted and is summarized in the 'Falmouth WWTF Fiscal Sustainability Plan Including a Plant Evaluation and Condition Assessment – Final Report' prepared by GHD and dated December 2020 (attached Appendix 4.1). That report recommended a set of WWTF upgrades to provide capacity to treat anticipated flows from TASA and ESRA (Planning Flow 1) while continuing to meet the WWTF's groundwater discharge permit. In April 2022, Town Meeting approved a $24,000,000 appropriation to implement the recommended WWTF improvements. A ballot vote passed in May 2022 to complete borrowing authorization for this project, referred to as the 'Falmouth WWTF TASA Improvements Project'. The project is currently being designed and is expected to go out for bid in the spring of 2023. Additional future upgrades will be required to treat Planning Flows 2 and 3 at the Town of Falmouth WWTF.

Projected flows and loads for the upgraded facility to treat Planning Flow 1 are summarized in Tables 4.1 and 4.2.

Table 4.1. Falmouth WWTF TASA Improvements Project – Design Flows

Parameter	WWTF Pre-LPSA (mgd)	LPSA (mgd)	TASA (mgd)	ESRA (mgd)	Total Future Flow (mgd)
Average Day	0.45	0.26	0.36	0.14	1.21
Maximum Month	0.81	0.47	0.65	0.25	2.18
Maximum Day	0.86	0.49	0.68	0.27	2.30
Peak Hour	1.53	0.88	1.22	0.48	4.11

Table 4.2. Falmouth WWTF TASA Improvements Project – Design Loads[1]

Influent Characteristic	WWTF Pre-LPSA (lb/d)	LPSA (lb/d)	TASA (lb/d)	ESRA (lb/d)	Total (lb/d)
BOD	670	630	680	210	2,190
TSS	700	740	800	220	2,460
TN	110	150	160	30	450
TP	20	20	20	10	70

Notes:
1. Reference: 'Falmouth WWTF Fiscal Sustainability Plan Including a Plant Evaluation and Condition Assessment – Final Report' prepared by GHD and dated December 2020. Totals are shown rounded to two significant figures.

Table 4.3 summarizes the wastewater treatment process improvements recommended in this evaluation to serve TASA and ESRA flows (Planning Flow 1) and continue to meet the groundwater discharge permit.

Table 4.3. Falmouth WWTF TASA Improvements Project - Recommended Process Improvements [1]

Item	Recommendation {for Planning Flow 1}
Secondary Treatment	– Add one SBR tank, including all equipment.
Sludge Processing	– Add one new blended sludge tank. – Add two new thickened sludge tanks. – Add two new gravity belt thickeners. – Modify the existing Sludge Processing Building to accommodate recommended new sludge processing equipment (gravity belt thickeners and ancillary equipment). – Add a new pipe and pump gallery for sludge processing and storage.
Equalization Volume	– Add new equalization tanks (the size of two additional influent wet wells).
UV Disinfection	– Replace the existing UV system.

Notes:
1. Improvements associated with treating flows from TASA and ESRA. Reference: 'Falmouth WWTF Fiscal Sustainability Plan Including a Plant Evaluation and Condition Assessment – Final Report' prepared by GHD and dated December 2020.

4.3.2. Treatment of Future Flows (Conceptual Level)

A conceptual layout for future expansions at the WWTF (beyond the capacity to treat TASA and ESRA flow) is outlined in the 'Falmouth WWTF Fiscal Sustainability Plan Including a Plant Evaluation and Condition Assessment – Final Report' prepared by GHD and dated December 2020 (attached Appendix 4.1).

The conceptual layout shows proposed locations for additional preliminary and secondary treatment processes and sludge handling processes. The conceptual layout represents one way the facility could expand in the future to further increase capacity and is based on maximizing available space at the site. A treatment facility evaluation will be required to identify required improvements at the Falmouth WWTF to treat anticipated flows from Planning Flows 2 and 3.

4.3.3. Potential Future Regulatory Requirements

4.3.3.1. Contaminants of Emerging Concern (CECs)

The term Contaminants of Emerging Concern (CECs) is used to represent chemicals in three sub-categories:

- Endocrine disruptors
- Pharmaceuticals

- Personal care products

CECs are being detected in water and wastewater in extremely small concentrations due to improvements in analytical methods for these chemicals and to the prevalence of pharmaceutical and personal care product use. CECs are considered "emerging" because neither the extent of the human nor the environmental health risk of these constituents has been determined, and there are few regulatory limits on them (in Massachusetts CECs are only regulated in effluent groundwater discharges to Zone I or II groundwater areas).

If required in the future, wastewater treatment processes could be added to reduce CECs, for example:

- Coagulation and flocculation
- Membrane filtration
- Advanced oxidation
- Granular activated carbon (GAC) adsorption

In addition to the many contaminants that fall into the category of CEC's, per- and polyfluoroalkyl substances (PFAS) is a group of chemicals that has received attention recently. PFASs are manmade chemicals used in many products including household cleaning products and sprays, food packaging, and firefighting foam. PFAS contaminants are linked to negative health effects including cancer and thyroid hormone distribution. PFAS has been detected in groundwater and drinking water supplies throughout the United States and the world.

When a treated effluent discharge is within a Zone I or II groundwater area, Massachusetts has implemented effluent concentration limits for Total Organic Carbon (Total Organic Carbon is used as a surrogate for CECs). The existing treated effluent discharge areas at the Town of Falmouth WWTF and the future treated effluent discharge locations evaluated for this project are all outside Zone I and Zone II groundwater areas and are not subject to effluent Total Organic Carbon concentration limits.

4.3.3.2. Phosphorus Removal

The Town of Falmouth WWTF currently does not have an effluent phosphorus limit. Soil attenuation evaluations (outlined in Section 4.4), conducted for the two proposed effluent recharge sites upgradient of freshwater bodies (Open Sand Beds 14&15 and the Allen Parcel) indicated that the soils between the proposed effluent recharge sites and the nearest freshwater bodies have a significant phosphorous attenuation capacity. Because of these soil attenuation evaluation findings, phosphorus treatment is not anticipated to be required at the Town of Falmouth WWTF.

The 'Town of Falmouth, Massachusetts Final Blacksmith Shop Road Wastewater Treatment Facility Phosphorus Removal Evaluation', prepared by GHD and dated March 2014 (Appendix 4.2) outlines options for phosphorus removal processes that could be added to the treatment process in the future, if phosphorus removal is required at the plant to reduce effluent phosphorus concentrations to less than 1 mg/L.

If required in the future, wastewater treatment processes could be added to the treatment process for phosphorus removal and include:

- Metal salt precipitation
- Cloth filtration

4.4. Effluent Discharge

4.4.1. Technology Evaluation (Summary of Past Effort)

Effluent discharge technology options for future flows were initially evaluated as part of the 'Little Pond, Great Pond, Green Pond, Bournes Pond, Eel Pond, and Waquoit Bay Watersheds Alternatives Screening Analysis Report', prepared by GHD and dated November 2007. An updated technology evaluation was conducted in 2019 and is summarized in 'TASA TM-3 – Technical Memorandum No, 3,' prepared by GHD and dated April 2019 (Appendix 4.3).

This evaluation recommended the following effluent discharge technologies be evaluated further as part of subsequent planning efforts:

1. Open sand beds are recommended for conceptual layout development due to their relatively high hydraulic loading capacity, which allows for a smaller footprint than other land-based discharge options. The Town of Falmouth currently uses this technology at the Falmouth WWTF and is familiar with the technology.
2. Subsurface leaching facilities are recommended for further evaluation in areas with a potential secondary use (for example under fairways in a golf course or under public parks/ballfields) due to their minimal visual impact. The Town of Falmouth currently uses this technology at the New Silver Beach WWTF and is familiar with the technology.
3. Ocean outfalls are recommended for conceptual layout development due to the relatively small land area required for this technology, relatively high disposal capacity, and the ability to discharge outside a nutrient impacted watershed thereby reducing nitrogen loading impacts to coastal embayments through effluent discharge. The Town of Falmouth had an ocean outfall in Woods Hole that was abandoned in the 1980s.

4.4.2. Potential Effluent Discharge Site Evaluations

25 potential sites for treated effluent recharge were identified and screened in 2007. An updated discharge technology evaluation was conducted in 2019 for 6 land-based sites and 2 ocean outfall options. Based on the findings of these previous evaluations, 3 potential land-based effluent discharge site options and 2 potential ocean outfall locations were selected for further consideration as future effluent discharge sites. Each site was evaluated for each of the three Planning Horizons outlined in Section 2.1, to assess the suitability of each site for both near-term and longer-term wastewater planning needs.

A description of each site is provided in this Section. Field investigations and nutrient sensitive receptors analyses for each land-based site are summarized in this Section and outlined in further detail in 'Great Pond Targeted Watershed Management Plan Final Technical Memorandum 3 - Additional Site Characterizations of Allen Parcel, Beds 14 & 15 and Augusta Parcel (GP TM-3)' prepared by GHD and dated June 2022 (Appendix 4.4).

4.4.2.1. Existing/Expanded WWTF Open Sand Beds 14 & 15

The Town of Falmouth WWTF has 15 effluent disposal open sand beds. The 2021 groundwater discharge permit for the WWTF allocates effluent flow limits to these beds by watershed. Open Sand Beds 1-13 are located within the West Falmouth Harbor watershed and are subject to an annual effluent nitrogen load limit of 4,109 pounds per year (equivalent to an average annual flow of 0.45 mgd at an average annual effluent total nitrogen concentration of 3 mg/L). Open Sand Beds 14-15 are located outside of the West Falmouth Harbor watershed. The average annual flow limit for Open Sand Beds 14-15 is 0.26 mgd. The permitted capacity of the existing Open Sand Beds 1-15 is allocated to current and future flows from existing sewer service areas.

This project evaluated options to increase the capacity of Open Sand Beds 14 & 15 through an increase in the design hydraulic loading rate to the existing beds and a potential bed area expansion in the undeveloped area to the west and/or north of the existing beds.

4.4.2.1.1. Treated Effluent Hydraulic Load Testing to Assess Appropriate Hydraulic Loading Rate for Site

The permitted hydraulic loading rate for Open Sand Beds 14 & 15 is based on a hydraulic loading rate of 7 gallons per day / square foot (gpd/sf). In the Summer of 2020, an in-situ treated effluent hydraulic load test was performed at Open Sand Beds 14 & 15 to evaluate the potential to increase the permitted hydraulic loading rate of the two existing open sand beds. This evaluation was performed in accordance with the MassDEP approved 'Final Hydraulic Load Testing – Work Plan for Existing Open Sand Beds 14 & 15', prepared by GHD and dated July 7, 2020. Testing occurred during a two-month period (August and September 2020) using treated effluent from the Town of Falmouth WWTF. The capacity of beds 14 and 15 was observed to be greater than the WWTF effluent flow available during the test period, so the maximum infiltration rate for the beds could not be determined during the test. However, the test did demonstrate that together, the beds could accommodate at least 11 gpd/sf. Testing results were reviewed with

MassDEP on June 15, 2021, and it was agreed that a weighted loading rate of 11 gpd/sf was hydraulically appropriate for the site.

The treated effluent hydraulic load testing findings are provided in the 'Final Open Sand Beds 14 & 15 Hydraulic Load Test Summary', prepared by GHD and dated May 24, 2021 (Appendix 4.5).

4.4.2.1.2. Field Investigations

USDA maps indicate that the soils in the area are primarily Plymouth-Barnstable Complex (484). Plymouth-Barnstable Complexes are generally defined as hilly or rolling and bouldery. Soil borings completed at the site in 2014 indicate consistent, sandy material at depth across the existing open sand bed footprint site. The 2020 field investigations, which consisted of 2 shallow geo-probe borings and 3 test pits, indicated subsurface material that is generally considered appropriate for infiltration purposes. The results of this 2020 field investigation are described in greater detail in the 'Great Pond Targeted Watershed Management Plan – Technical Memorandum 3 Additional Site Characterizations of Allen Parcel, Beds 14&15 and Augusta Parcel (GP TM 3)', prepared by GHD and dated 2022.

4.4.2.1.3. MassWildlife Rare Species Listing

A State-Listed Rare Species request was submitted in 2020 for the parcel upon which Open Sand Beds 14 & 15 are located. A response letter was received from the Massachusetts Division of Fisheries and Wildlife (DFW) on February 7, 2020 (NHESP Tracking No. 02-23886) which stated that the Natural Heritage database indicates that the site is not currently mapped as a Priority or Estimated Habitat.

4.4.2.1.4. Potential Phosphorus Migration Evaluation

Groundwater modeling and particle tracking of treated water recharge at the Open Sand Beds 14 & 15 site conducted in 2011[2] indicated that flow discharged to open sand beds 14 & 15 is anticipated to migrate with groundwater to Buzzards Bay. The groundwater model also indicated that approximately 42% of the treated effluent would pass through Crocker Pond, a small freshwater kettle pond to the west of Recharge Beds 14 & 15. Because Crocker Pond is a freshwater pond, it is phosphorus limited. An evaluation conducted by EcoLogic in 2013[3] indicated that the aquifer soils downstream of Recharge Beds 14 & 15 have a large capacity to sequester phosphorus and significantly retard migration of phosphorus downstream. The 2013 evaluation considered an annual average effluent flow of 0.26 mgd to Open Sand Beds 14 & 15 under three effluent treatment scenarios:

- Effluent total phosphorus concentration of 2.5 mg/L (actual average effluent WWTF total phosphorus concentration based on December 2010 – June 2014 WWTF data)
- Effluent total phosphorus concentration of 1.0 mg/L (representing an upgrade to enhanced secondary treatment for phosphorous with chemical addition)
- Effluent total phosphorus concentration of 0.2 mg/L (representing an upgrade to tertiary treatment for phosphorous).

The absorptive capacity of the soil (in years) was estimated to be 100 years for the existing level of treatment at the WWTF and up to 1,400 years if the WWTF were upgraded to tertiary treatment for phosphorus.

In 2021[4], EcoLogic ran an additional simulation within the existing Open Sand Beds 14 & 15 footprint, which increased the average annual flow discharged at the site to 0.55 mgd. The analysis was conducted using the 10-year average effluent Total Phosphorus concentration (2010 – 2020) from the Falmouth WWTF of 2.68 mg/L. A simulation was also conducted for the average annual flow of 0.26 mgd using the 10-year effluent phosphorus average. Both simulations are summarized in Table 4.4.

[2] 'Technical Memorandum No. 9 – Groundwater Modeling for Sites 7 and 10', prepared by GHD, dated October 4, 2011.
[3] 'Crocker Pond, Falmouth: Potential Soil Attenuation of Phosphorus Migration from infiltrating Treated Wastewater at Site 7', prepared by EcoLogic LLC, dated August 8, 2013 and September 20, 2013.
[4] 'Appendix 4.7: Crocker Pond, Falmouth Potential Soil Attenuation of Phosphorus Migration from Infiltrating Treated Wastewater at Falmouth WWTF Open Sand Beds 14 &15', prepared by EcoLogic, LLC and dated June 2021.

Table 4.4. Estimated Soil Attenuation Capacity Between Open Sand Beds 14 & 15 and Downgradient Freshwater Bodies at Two Treated Effluent Discharge Rates

Downgradient Freshwater Bodies	Zone	Soil Attenuation Capacity Time Period (years) Between Open Sand Beds 14&15 and Downgradient Freshwater Bodies	
		Average Annual Treated Effluent Flow = 0.26 mgd	Average Annual Treated Effluent Flow = 0.55 mgd
Crocker Pond	Unsaturated	3.9	4.5
	Saturated	99.6	162.4
	Total	**103.5**	**166.9**

Notes:
1. Effluent TP Concentration = 2.68 mg/L (2010 through 2020 Falmouth WWTF data).

Counter-intuitively, the conclusion was that the soil attenuation capacity time period (years) was actually longer at a higher discharge rate, because at a higher discharge rate, the discharge would spread out over a larger soil prism increasing the soil surface area available for phosphorus attenuation.

In 2021, EcoLogic also reviewed groundwater monitoring well data downgradient of Open Sand Beds 14 & 15. The analysis indicated that phosphorus migration is consistent with the 2013 evaluation. Over the monitoring period (2016 – 2020) groundwater phosphorus concentrations in the monitoring wells remained consistent (i.e., did not increase), with the exception of Monitoring Well 21A, as anticipated. MW-21A and 21B are located twelve feet downgradient from the end of Open Sand Bed 14. MW-21A is screened at the top of the water table. MW-21B is screened 28 feet below MW-21A. As expected, phosphorus concentrations in MW-21A have increased over time, due to the well's immediate proximity to the discharge beds and minimal contact time with the soil, whereas phosphorus concentrations in MW-21B have a lower phosphorus concentration due to the increased opportunity for phosphorus attenuation within the soil profile at a lower depth. EcoLogic concluded that the monitoring data collected to date does not indicate issues of potential concern related to downgradient phosphorus migration.

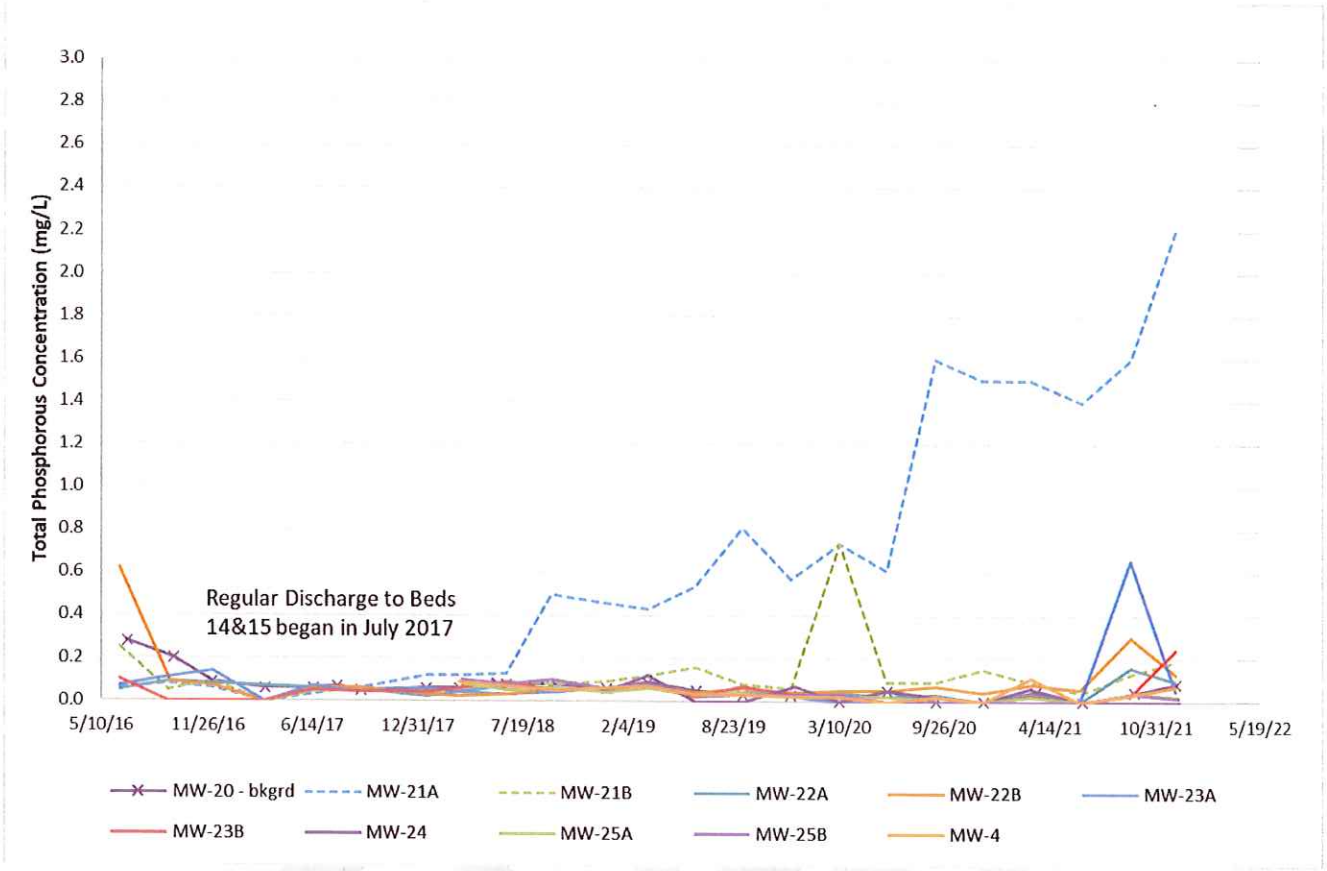


Figure 4.1 *Total Phosphorus Concentrations in Open Sand Bed 14 & 15 Groundwater Monitoring Well Network*

4.4.2.1.5. Assessment of Nitrogen Migration Through Groundwater to Surface Waters and Groundwater Mounding

GHD developed a local-scale groundwater model for Open Sand Beds 14 & 15, based on the USGS regional flow model developed for the Sagamore Lens of the Cape Cod aquifer system (Walter, et. al., 2019). The local-scale model provides greater resolution in the vicinity of the site.

A particle tracking simulation was conducted under this groundwater flow field to estimate potential effluent migration (advective migration only) from the proposed effluent discharge area to downgradient waterbodies. The results of the modeling scenarios were analyzed to determine the percentage of total effluent recharge that reaches specific receptors under each scenario.

Initial simulations were used to estimate the maximum average annual flow that can be recharged at Open Sand Beds 14 & 15, without any treated effluent discharge migration in groundwater from Open Sand Beds 14 & 15 to West Falmouth Harbor. Initial simulations indicate up to 0.76 mgd (average annual flow) can be recharged at Open Sand Beds 14 & 15 without discharge migration via groundwater to West Falmouth Harbor. Table 4.5 outlines two simulations modelling a recharge of 0.76 mgd from Open Sand Beds 14 & 15. Additional simulations should be conducted once a conceptual layout has been established for a potential open sand bed expansion at this site to refine this value.

Groundwater mounding analyses, conducted for the initial simulations, indicate that the modelled groundwater mound is anticipated to extend through Crocker Pond. Further investigations should be conducted to assess potential impacts of the groundwater mound on Crocker Pond.

Table 4.5. Treated Effluent Discharge Migration in Groundwater to Surface Water as a Percentage of Discharge from Open Sand Beds 14 & 15 (as a Percentage of Total Discharge at the Site)

Scenario	Model Input		Model Output				
	Average Annual Flow to Open Sand Beds 9-13 (mgd)	Average Annual Flow to Open Sand Beds 14 -15 (mgd)	Herring Brook	Buzzards Bay	West Falmouth Harbor		
					Mashapaquit Creek	Snug Harbor	Outer Harbor
2021 Permit Conditions	0.45	0.26	0%	55%	33%	0%	12%
2020-Existing Open Sand Beds 14 & 15-0.76 mgd[1]	0.45	0.76	11%	56%	22%	1%	9%
2020-Expanded Open Sand Beds 14 & 15-0.76mgd[2]	0.45	0.76	16%	75%	3%	0%	6%

Notes:

1. Scenario 2020-Existing Open Sand Beds 14 & 15-0.76 mgd represents anticipated average annual treated effluent flow to the existing Open Sand Beds 14 & 15 under Planning Flow 1.
2. Scenario 2020-Expanded Open Sand Beds 14 & 15-0.76mgd represents anticipated average annual treated effluent flow to an expanded Open Sand Beds 14 & 15 under Planning Flow 1. This scenario assumes that the existing open sand beds are expanded to the north.
3. All percentages rounded to nearest whole number

4.4.2.1.6. Summary of Evaluations at Open Sand Beds 14 & 15

Findings of the evaluations conducted for Open Sand Beds 14 & 15 are summarized below:

- Field investigations indicate subsurface material that is generally considered appropriate for infiltration purposes.
- Treated effluent hydraulic load testing at the site indicates that the site can hydraulically accommodate an increase in hydraulic loading rate (findings indicate that a hydraulic loading rate of at least 11 gpd/sf is currently appropriate for the site from a hydraulic perspective).
- MassWildlife has indicated that the site is not currently mapped as a Priority or Estimated Habitat.
- A phosphorus migration analysis indicated that the anticipated soil absorption capacity between the site and downgradient freshwater bodies is greater than 100 years, based on the Falmouth WWTFs current treated effluent phosphorus concentrations.
- Particle tracking simulations indicate that additional flow (up to 0.76 mgd total average annual flow) can be discharged at the site without any treated effluent discharge migration in groundwater to surface water in the West Falmouth watershed. These simulations will be further refined once a conceptual layout has been established for a potential open sand bed expansion.

4.4.2.2. Augusta Parcel

The Augusta Parcel is approximately 20 acres and is town-owned. It is surrounded by residential and commercial properties and is located in the Great Pond watershed. The site is currently undeveloped, but portions of the site have previously been cleared and developed for uses including a drive-in movie theater site. The site was previously identified as a potential site for wastewater facilities to serve the Teaticket area of Falmouth. The site has been selected as the location for a proposed booster station, as part of the TASA collection system conceptual layout. This booster station would collect raw wastewater from the Teaticket / Acapesket Study (TASA) area (and possibly other future services areas) and pump it to the Town of Falmouth WWTF.

The site has also been identified as a potential site for treated effluent discharge. The deed for the Augusta Parcel currently limits potential wastewater treatment and disposal on the property to flow from an area including the Maravista peninsula and most of the Acapesket peninsula, as well as an area north of Route 28 which is not currently under consideration for sewering. In 2020, Falmouth Town Counsel confirmed that this deed restriction will expire in August 2033.

The Town of Falmouth has expressed an interest in developing playing fields or other recreational uses on the site as a secondary use. To accommodate this, conceptual layouts developed for the site incorporate both open sand beds and subsurface leaching trenches (to allow the potential accommodation of playing fields on a portion of the site).

4.4.2.2.1. Field Investigations

USDA maps indicate that the soils on the site are primarily Carver Sands (252C & 259B) and Merrimac Fine Sandy Loam (254A). During hydraulic load testing, conducted in Fall of 2018 a hydraulic loading rate of 138 gpd/sf was observed on this parcel. MassDEP has previously indicated that, if hydraulic load testing indicates a high infiltration rate, the agency would consider a maximum design loading rate of 7 gpd/sf for open sand beds until performance testing with actual treated effluent from a WWTF proved that a higher rate was warranted. Based on this MassDEP limitation, a proposed design hydraulic loading rate of 7 gpd/sf was used for the site for planning. If the site is developed, it is recommended that performance testing be conducted with actual treated effluent from a WWTF to evaluate the ability to request an increase in the rated capacity of the open sand beds. Additional field investigations (borings and test pits) conducted in 2020 confirmed a high anticipated permeability at the site and very favorable soils for treated effluent discharge.

4.4.2.2.2. MassWildlife Rare Species Listing

A State-Listed Rare Species request for the Augusta Parcel was submitted in 2020. A response letter was received from the Massachusetts Division of Fisheries and Wildlife (DFW) on December 23, 2020 (NHESP Tracking No. 20-39770). The response letter stated that the Natural Heritage database indicates that the site is not currently mapped as a Priority or Estimated Habitat.

4.4.2.2.3. Potential Phosphorus Attenuation Evaluation

No freshwater bodies have been identified downgradient of the Augusta Parcel. Therefore, a phosphorus migration evaluation was not completed for this site.

4.4.2.2.4. Assessment of Nitrogen Migration Through Groundwater to Surface Waters and Groundwater Mounding

GHD developed a local-scale groundwater model for the Augusta Parcel, based on the USGS regional flow model developed for the Sagamore Lens of the Cape Cod aquifer system (Walter, et. al., 2019). The local-scale model provides greater resolution in the vicinity of the Augusta Parcel. A particle tracking simulation was conducted under this groundwater flow field to estimate potential effluent migration (advective migration only) from the proposed effluent discharge area to downgradient waterbodies. The results of the modeling scenarios were analyzed to determine the percentage of total effluent recharge that reaches specific receptors under each scenario.

Modeling simulations were conducted for Planning Flows 1 and 3. These two flow rates were chosen to simulate the range of flows under consideration for this site. The simulations indicate that at Planning Flow 1, 100 percent of treated effluent discharged at the Augusta parcel is anticipated to surface in Great Pond. The modeling also indicates that at Planning Flow 3, a small percentage of treated effluent migration in groundwater is anticipated to surface in Perch Pond (which flows into Great Pond) and the majority flows directly to Great Pond. Model scenario findings are summarized in Table 4.6.

Groundwater mounding analyses, conducted for the initial simulations, indicate that the anticipated groundwater mound does not intersect any surface water bodies.

Table 4.6. Treated Effluent Discharge Migration in Groundwater to Surface Water as a Percentage of Discharge from the Augusta Parcel (as a Percentage of Total Discharge at the site)

Scenario	Model Input		Model Output	
	Average Annual Flow to Open Sand Beds (mgd)	Average Annual Flow to Subsurface Leaching Trenches (mgd)	Great Pond	Perch Pond
2021-Augusta-0.5mgd	0.5	0	100%	0%
2021-Augusta-1.03mgd	0.95	0.08	95%	5%

Notes:

4. Scenario 2021-Augusta-0.5mgd represents anticipated average annual treated effluent flow to the Augusta Parcel under Planning Flow 1.
5. Scenario 2021-Augusta-1.03mgd represents anticipated average annual treated effluent flow to the Augusta Parcel under Planning Flow 3.
6. All percentages rounded to nearest whole number

4.4.2.2.5. Summary of Evaluations at the Augusta Parcel

Findings of the evaluations conducted at the Augusta Parcel are summarized below:

- Field investigations indicate subsurface material with a high infiltration capacity that is very favorable for treated effluent discharge.
- MassWildlife has stated that the site is not currently mapped as a Priority or Estimated Habitat.
- No freshwater bodies (phosphorus sensitive receptors) were identified downgradient of the site.
- Particle tracking simulations indicate that at Planning Flow 1 all treated effluent discharge is anticipated to migrate through groundwater to Great Pond. As flow increases to the site (Planning Flow 3), a small portion of the treated effluent discharge is anticipated to surface in Perch Pond (which flows into Great Pond), and the majority surfaces directly in Great Pond.

4.4.2.3. Allen Parcel (Site 4)

The Allen Parcel is approximately 70 acres and is Town-owned. The parcel is forested and undeveloped. Fourteen acres in the southwest corner of the parcel – labeled as 'Lot 3' on the '2005 Allen Parcel Plan of Land' – has been identified for general municipal use. The property has a 100-foot-wide utility easement along the western boundary of the property. The "municipal use" portion of the property abuts residential neighborhoods to the south and west.

4.4.2.3.1. Field Investigations

USDA maps indicate that the soil at the site is predominately Enfield Silt Loam (265A) with a pocket of Merrimac Fine Sandy Loam (254B) in the southwest corner of the property. Initial subsurface investigations at the site in 2010 indicate primarily outwash plain with sandy soils. A 3-day hydraulic load test conducted in 2018 indicated generally high permeability at the test site (measured recharge rates of 130 gpd/sf) and generally favorable soils for treated effluent recharge. During the 2018 field investigations, a layer of lower-permeability soil was discovered approximately 10-inches thick at approximately 28-inches to 38-inches below grade. This layer (if found within the boundary of the proposed effluent recharge facilities) would need to be excavated and removed if the site were developed for treated effluent disposal. Further investigation of this layer was conducted in 2020 through soil borings and test pits. The test pits generally indicated:

- silt loam in the upper 3-feet of soil in all the test pits,
- loamy sand from approximately 3 feet to up to 11 feet below ground elevation, and
- medium to coarse sand below the loamy sand.

Medium to coarse sand is typically highly favorable for treated effluent infiltration. Silt loam and loamy sand are anticipated to have a lower infiltration rate than medium to coarse sand. It is anticipated that the less permeable materials (silt loam) would need to be removed if the site were developed for infiltration of treated wastewater. However, once the less permeable material is removed, the deeper soils have a high permeability rate and are generally favorable for treated effluent discharge.

4.4.2.3.2. MassWildlife Rare Species Listing

A State-Listed Rare Species request was submitted for the Allen Parcel in January 2020. A response letter was received from the Massachusetts Division of Fisheries and Wildlife (DFW) on February 7, 2020 (NHESP Tracking No. 20-39170). The response letter noted that a portion of the project site is located within Priority Habitat 223 (PH 223) for five state-listed rare species.

A pre-filing consultation request was submitted for the site in Spring 2021. Upon review of the submitted conceptual plans for the site, DFW indicated that the portion of the site under consideration for treated effluent disposal is not anticipated to have any state-listed species concerns due to the following reasons:

1. The four butterfly and moth species in the rare-species listing response (Herodias underwing moth, buck moth, frosted elfin, and pink sallow) are associated with the pine-dominated habitat in the northeastern and eastern portions of the property and not in the southwestern portion of the property, which is the proposed project area.
2. Eastern Whip-poor-will habitat is only mapped on lands that fall under an existing protection and the proposed project area does not fall under this category.

4.4.2.3.3. Potential Phosphorus Attenuation Evaluation

Fresh-water bodies are typically phosphorus limited. Four fresh-water bodies were identified down-gradient of the proposed Allen Parcel site:

- Coonamessett River
- Flax Pond
- Mill Pond
- Backus Brook

In 2021 an evaluation was conducted by EcoLogic to assess the potential soil attenuation capacity of the soil between the Allen Parcel and each down-gradient fresh-water body.

Three (3) composite soil samples (representing separate soil horizons) were collected from a soil boring and submitted to the Cornell University Nutrient Analysis Laboratory to quantify soil characteristics related to the soil's capacity to absorb phosphorus. The analysis indicated that the soils are composed predominately of sand-sized particles, low in organic matter, oxic (oxygen is present) in the unsaturated zone, and slightly acidic. These soil characteristics are considered highly favorable for phosphorus adsorption.

EcoLogic used an empirical model to estimate the phosphorus retention capacity of the soils within the anticipated flow path of the treated effluent (soil prism), using the estimated quantities of reactive aluminum present in the analyzed samples and parameters established through literature reviews. Estimated saturated and unsaturated soil prism volumes were estimated using the groundwater model developed by GHD for the site. The estimated soil attenuation capacity was calculated for Planning Flow 1 and Planning Flow 3. These two flow rates were chosen to simulate the range of flows under consideration for this site. The analysis was conducted using the 10-year average effluent Total Phosphorus concentration (2010 – 2020) from the Falmouth WWTF of 2.68 mg/L.

The analysis indicated a 50-to-60-year soil attenuation capacity between the Allen Parcel and the Coonamessett River, and over 100 years of soil attenuation capacity between the Allen Parcel and Flax Pond, Mill Pond, and Backus Brook in both flow scenarios (Table 4.7).

Table 4.7. Allen Parcel Estimated Soil Attenuation Capacity to Downgradient Freshwater Bodies

Downgradient Freshwater Body	Zone	Soil Attenuation Capacity Time Period (years) Between the Allen Parcel and Downgradient Freshwater Bodies	
		Average Annual Treated Effluent Flow = 0.5 mgd	Average Annual Treated Effluent Flow = 1.03 mgd
Coonamessett River	Unsaturated	0.2	0.5
	Saturated	49.3	60.1
	Total	**49.5**	**60.6**
Flax Pond	Unsaturated	2.2	2.7
	Saturated	139.6	113.0
	Total	**141.8**	**115.7**
Mill Pond	Unsaturated	1.0	1.0
	Saturated	309.8	208.1
	Total	**310.8**	**209.1**
Backus Brook	Unsaturated	2.2	1.8
	Saturated	478.5	174.6
	Total	**480.7**	**176.4**

Notes:
1. Effluent TP concentration = 2.68 mg/L (2010 through 2020 Falmouth WWTF data).

4.4.2.3.4. Assessment of Nitrogen Migration Through Groundwater to Surface Waters and Groundwater Mounding

GHD developed a local-scale groundwater model for the Allen Parcel, based on the USGS regional flow model developed for the Sagamore Lens of the Cape Cod aquifer system (Walter, et. al., 2019). The local-scale model provides greater resolution in the vicinity of the Allen Parcel. A particle tracking simulation was conducted under this groundwater flow field to estimate potential effluent migration (advective migration only) from the proposed effluent discharge area to down-gradient waterbodies. The results of modeling scenarios were analyzed to determine the percentage of total effluent recharge that reaches specific receptors under each scenario.

Modeling simulations were conducted for Planning Flow 1 and Planning Flow 3. These two flow rates were chosen to simulate the range of flows under consideration for this site. The results of the two simulations are summarized in Table 4.8. In both scenarios, particles flow to Great Pond via Flax Pond and/or the Coonamessett River, and particles flow to Green Pond via Flax Pond, Backus Brook, and/or Mill Pond. Under both scenarios, approximately 65% of the discharge at the Allen parcel ultimately flows to Great Pond, and 35% ultimately flows to Green Pond. However, the "route" that the particles take to the coastal ponds is different in the two scenarios. For example, the model indicates in the higher effluent discharge scenario, a larger percentage of flow surfaces directly in the Coonamessett River and Backus Brook.

Groundwater mounding analyses, conducted for the initial simulations, indicate that the anticipated groundwater mound does not intersect any surface water bodies.

Table 4.9. Estimated Hydraulic Capacity by Effluent Discharge Site and What Planning Flows Each Site Could Accommodate

Parameter	Open Sand Beds 14/15	Augusta Parcel	Allen Parcel	Ocean Outfall
Area Available for Effluent Discharge (acres)	3.1 acres	19.4 acres	12.6 acres	N/A
Maximum Estimated Average Annual Flow Hydraulic capacity (mgd)	0.5 mgd[3]	1.03 mgd	1.6 mgd	2+ mgd
Hydraulic Capacity for Planning Flow 1 - Great Pond Preferred Approach?	✓	✓	✓	✓
Hydraulic Capacity for Planning Flow 2 – South Coast Preferred Approach?	No	✓	✓	✓
Hydraulic Capacity for Planning Flow 3 – Great Pond Contingency Approach?	No	✓	✓	✓
Hydraulic Capacity for Additional Future Sewering?	No	No	Limited	✓

Notes:

1. Approximate area available for treated effluent discharge was estimated for each site based on identified constraints at the site.
2. Maximum estimated average annual flow hydraulic capacity (mgd) was estimated based on selected treated effluent discharge technology for the site and a design hydraulic loading rate of 7 gpd/sf for open sand beds and 3 gpd/sf for subsurface leaching facilities.
3. Estimated additional capacity available at the site.

4.4.3. Discharge Evaluation Matrix

A discharge evaluation alternatives matrix (Table 4.10) was developed to compare the treated effluent discharge sites. Each site was evaluated based on the following parameters:

1. **Site Description**
   - Location
   - Property Ownership
   - Distance to the Falmouth WWTF on Blacksmith Shop Road
2. **Regulatory Constraints**
   - Current Zoning
   - Property Legal Restrictions
   - Additional Studies Anticipated to develop the site for treated effluent discharge.
   - Anticipated length of treated effluent discharge permitting process.
3. **Environmental Impacts**
   - Downstream Phosphorus Receptors
   - Downstream Nitrogen Receptors
4. **Public Acceptance**
   - Estimated annual energy use for the treated effluent infrastructure (treated effluent lift station, force main system and treated effluent discharge)
   - Proposed treated effluent discharge method
   - Adjacent land uses
   - Anticipated odor or noise impacts.
   - Potential Secondary Uses

- Existing Land Use

5. **Planning Level Capital Cost Estimates**
   - Preliminary level Engineers Opinion of Probable Capital Costs for treated effluent infrastructure (treated effluent lift station, force main system and treated effluent discharge) sized for Planning Flow 1 (Great Pond Preferred Alternative). Cost estimate for each planning flow is inflated to the anticipated midpoint of construction for that project. Midpoint of construction for Planning Flow 1 is estimated as 2026 for cost estimating purposes.
   - Preliminary level Engineers Opinion of Probable Capital Costs for treated effluent infrastructure (treated effluent lift station, force main system and treated effluent discharge) sized for Planning Flow 2 (South Coast Preferred Alternative). Cost estimates are cumulative with previous planning flows. Cost estimate for each planning flow is inflated to the anticipated midpoint of construction for that project. Midpoint of construction for Planning Flow 2 is estimated as 2037 for cost estimating purposes.
   - Preliminary level Engineers Opinion of Probable Capital Costs for treated effluent infrastructure (treated effluent lift station, force main system and treated effluent discharge) sized for Planning Flow 3 (Great Pond Contingency Alternative). Cost estimates are cumulative with previous planning flows. Cost estimate for each planning flow is inflated to the anticipated midpoint of construction for that project. Midpoint of construction for Planning Flow 3 is estimated as 2047 for cost estimating purposes.

Table 4.10. Planning Flow 1-3 Discharge Evaluation Matrix

Category	Parameter	Open Sand Beds 14/15	Augusta Parcel	Allen Parcel	Ocean Outfall
Site Description	Location	Off Thomas Landers Road	Off Brick Kiln Road	Off Carriage Shop Road	Buzzards Bay or Vineyard Sound
	Ownership	Town Owned	Town Owned	Town Owned	State Owned
	Distance to Falmouth WWTF (miles) – approximate force main length	0 miles	4 miles	4 miles	6 miles (Vineyard Sound) 2 miles (Buzzards Bay)
Regulatory Constrains	Zoning	– Municipally Owned – Zoned Public Use	– Municipally Owned – Zoned Light Industrial A (Would Need to Be Rezoned for Public Use)	– Municipally Owned – Zoned Light Industrial A (Would Need to Be Rezoned for Public Use)	N/A
	Legal Restrictions	None	Deed restriction limits effluent discharge until 2033	None	Marine Sanctuaries Act, Clean Water Act
	Additional Studies Anticipated	Hydrogeological Evaluation (as part of the Groundwater Discharge Permit Application Process)	Hydrogeological Evaluation (as part of the Groundwater Discharge Permit Application Process)	Hydrogeological Evaluation (as part of the Groundwater Discharge Permit Application Process)	Field investigations, ambient monitoring, hydrodynamic modeling
	Anticipated Length of Permitting Process	Up to 8 months (Groundwater Discharge Permit)	Up to 8 months (Groundwater Discharge Permit)	Up to 8 months (Groundwater Discharge Permit)	Uncertain (multiple federal and state permits)

Category	Parameter	Open Sand Beds 14/15	Augusta Parcel	Allen Parcel	Ocean Outfall
Environmental Impacts	Downstream Phosphorus Receptors	Crocker Pond, Herring Brook	None	Flax Pond, Coonamessett River, Mill Pond, Backus Brook	None
	Downstream Nitrogen Receptors	Buzzards Bay, Herring Brook	Great Pond	Great Pond, Green Pond	Vineyard Sound or Buzzards Bay. Potential impacts to downstream nitrogen receptors can be mitigated through proposed outfall design. Modeling indicates that potential impacts are below the level of detection.
Modeling Public Acceptance	Estimated Annual Energy Use	Minimal (gravity flow)	Moderate (pumping from WWTF to remote site)	Moderate (pumping from WWTF to remote site)	Moderate (pumping from WWTF to remote site)
	Proposed Discharge Method	Open Sand Beds	Open Sand Beds and Subsurface Leaching Trenches	Open Sand Beds	Ocean Outfall
	Anticipated Odor or Noise Impacts – Post Construction	No	No	No	No
	Adjacent Land Use(s)	Municipal Wastewater Treatment Facility, One Residential Property	Lumberyard, Residential Properties	Town Conservation Land, Residential Properties	Potential impact would be undetectable along the shore based on outfall placement.
	Identified Potential Secondary Uses	None	Future Recreational Fields	None	None
	Existing Land Use	Existing Open Sand Beds; potential expansion area is undeveloped wooded.	Disturbed currently undeveloped parcel (former outdoor movie theater); partially wooded.	Undeveloped parcel, wooded.	No detectable impact.

Category	Parameter	Open Sand Beds 14/15	Augusta Parcel	Allen Parcel	Ocean Outfall
Planning Level Cumulative Capital Cost Estimates	Planning Flow 1: Great Pond Preferred TMDL Compliance Approach	$1.4 M	$23M - $27M	$30M	N/A
	Planning Flow 2: South Coast Preferred TMDL Compliance Approach	Cannot accommodate additional flow	$28M - $33M	$35M	$57M - $217M
	Planning Flow 3: Great Pond Contingency TMDL Compliance Approach	Cannot accommodate additional flow	$33M - $36M	$38M	$57M - $217M

Notes:

1. Cost estimate ranges are based on six alternatives that were developed through Great Pond TWMP Working Group Meetings and represent cost range of sending different effluent discharge site combinations.
2. Cost estimates are cumulative. Cost estimate for each planning flow is inflated to the anticipated mid-point of construction for that project. Midpoint of construction is estimated as 2026 for Planning Flow 1, 2037 for Planning Flow 2 and 2047 for Planning Flow 3.
3. Cost estimate for Open Sand Beds 14-15 for Planning Flow 1 assumes an increase in rated hydraulic load capacity of the existing beds as well as an expansion of the beds. Cost estimate range for Augusta Parcel represents differing assumptions in the portion of Planning Flow 1 discharged at Open Sand Beds 14-15.
4. Outfall cost range depends on many variables including outfall location, length, soil characteristics, diameter and pipe material. Additional study is recommended to better define outfall cost.

4.4.4. Conclusions

The Discharge Alternatives Evaluation Matrix was presented to and discussed during Water Quality Management Committee Meetings on November 8, 2022 and November 22, 2022. At the November 22, 2022, the WQMC supported the recommendation of the Great Pond TWMP Working Group to:

1. Designate existing Open Sand Beds 14 & 15 as the preferred treated effluent discharge site for the projected ESRA/TASA flows in the short-term contingent on the MEP report results for Herring Brook (which the Town is anticipating receiving in 2023).
2. Consider ocean outfall options in Buzzards Bay and Vineyard Sound, along with land-based options at the Allen and Augusta parcels, for projected mid-term and long-term wastewater flows.

Both recommendations were reviewed and discussed with the Falmouth Select Board on December 6, 2021.

4.5. Coastal Resilience Design Conditions

The Town of Falmouth is a coastal community with over 68 miles of coastline. The proposed Teaticket Acapesket Study Area (TASA) is covered by two Federal Emergency Management Agency Flood Insurance Rate Maps (FEMA FIRMs).

- FEMA Flood Insurance Rate Map (FIRM) Number 25001C0737J, effective July 16, 2014
- FEMA Flood Insurance Rate Map (FIRM) Number 25001C0729K, effective July 16, 2014

FEMA defines the land area covered by the floodwaters of the Base Flood as a Special Flood Hazard Area (SFHA). The Base Flood is the 1-percent annual chance flooding event and is also commonly known as the 100-year flood

event. The SFHA is broken down into three different coastal flood zones, which are designated by wave height, as follows:

- AE Zone – Area with shallow flooding only, where potential for breaking waves and erosion is low. Wave height is expected to be less than 1.5 feet.
- Coastal AE Zone – Area with potential for breaking waves and erosion during the Base Flood. Wave height is expected to be 1.5 to 3.0 feet.
- VE Zone – Wave height is expected to be greater than 3.0 feet.

The Base Flood Elevation (BFE) shown on a FEMA FIRM includes the anticipated wave height for a given area. Portions of the proposed TASA area are located within all three of the coastal flood zones. The most recent FEMA FIRM maps show anticipated Base Flood Elevations between 12 feet and 15 feet above mean sea level for areas within the SFHA.

Construction in the SFHA is regulated by the Massachusetts Building Code and would require provisions in the design to allow wastewater infrastructure located in the SFHA to withstand the Base Flood. As the design of wastewater infrastructure proceeds, FEMA FIRM maps and industry design guidelines and regulations will be assessed, and design accommodations will be incorporated to increase the coastal resilience of this infrastructure.

5. Great Pond Recommended Plan

The Recommended Plan provides a comprehensive strategy for wastewater and nitrogen management in Great Pond and includes a Preferred Compliance Approach and Contingency Compliance Approach.

The Preferred Compliance Approach integrates multiple nitrogen management strategies for this watershed including centralized sewering, on-site innovative and alternative septic systems (I/A) systems, shellfish aquaculture, stormwater improvements, permeable reactive barriers, and fertilizer reduction.

The Contingency Compliance Approach provides a conservative estimate of additional centralized wastewater collection and treatment that would be required within the Great Pond watershed if the pilot projects included in the Preferred Compliance Approach did not perform as anticipated.

The Town has implemented a robust pilot project monitoring program and will continue to monitor pilot project(s) performance through this adaptive management program. The Town will adjust its TMDL Compliance Approach as needed, based on the findings of the adaptive management program, through a MEPA Notice of Project Change.

5.1. Preferred Compliance Alternative

The Great Pond TMDL Preferred Compliance Approach (for Planning Flow 1), which integrates traditional wastewater management with pilot nitrogen management strategies, is outlined in Table 5.1. Each compliance component is described in further detail in this section.

Table 5.1. Nitrogen Budget for Great Pond to Achieve Nitrogen TMDL Compliance

Compliance Component – Nitrogen Removal Approach	Estimated Nitrogen Loading Reduction (kg-N/year)
	Preferred Alternative
Fertilizer Bylaw (25% of fertilizer load)[1,2]	425
Stormwater Best Management Practices (25% of impervious load)[1,2]	580
Shellfish Aquaculture (uptake)[1,2]	1,300 – 2,100
Shellfish Aquaculture (denitrification)[1,2]	650 – 1,050
Permeable Reactive Barrier at Shorewood Drive (300 feet)[1,2]	1,325
Sewer Extension – Little Pond Sewer Service Area (Great Pond)	1,000
Sewer Extension – Teaticket Acapesket Sewer Service Area Subarea 1	2,890
Sewer Extension – Teaticket Acapesket Sewer Service Area Subarea 2	3,298
Sewer Extensions – Contingency	0
Total Estimated Reduction	**11,468 – 12,668**
Nitrogen Removal TMDL Goal	**12,154**

Notes:

1. Anticipated removal rates provided by the Falmouth Water Quality Management Committee (WQMC) based on the information provided and actions described in Section 5.1.1.
2. Advancements in I/A technology will provide supplementary nitrogen removal if not met through primary alternatives.

5.1.1. Demonstration Projects of Non-Traditional Wastewater and Nitrogen Management Technologies and Approaches

5.1.1.1. Fertilizer Management

The Town of Falmouth adopted a Nitrogen Control Bylaw in 2012 and continues to coordinate a public education and enforcement program for the conditions outlined in the bylaw. The Town conducts an annual mailing to approximately 2,700 properties within 100 feet of all coastal estuaries and requires adherence to the bylaw as a Standard Condition in all Order of Conditions issued by the Falmouth Conservation Commission.

5.1.1.2. Stormwater Best Management Practices

The Town of Falmouth is subject to, and manages, stormwater in accordance with the 2016 General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4s), issued through the U.S Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) Phase II Stormwater Permit Program.

The NPDES permit outlines requirements for discharges to impaired waters with an approved TMDL. These requirements and the Town's actions to meet them are outlined below.

- **Public education and outreach** – The Town of Falmouth distributes seasonal flyers outlining fertilizer use requirements, grass clipping management and leaf litter removal. The Town also distributes informational flyers encouraging proper management of pet waste with all pet registration / renewal applications.
- **Stormwater management in new development and redevelopment** – The Town adopted a Construction and Post-Construction Bylaw on June 28, 2021, which allows the Town to adopt regulations to regulate illicit discharges. In 2021, the Select Board adopted "Stormwater Management Rules and Regulations", which meets the Town's permit requirements providing provisions for investigating and eliminating illicit discharges and for implementing enforcement actions.
- **Good housekeeping and pollution prevention for permittee owned operations** – The Town conducts street sweepings at least twice annually, in accordance with its permit requirements.

5.1.1.3. Shellfish Aquaculture – Uptake and Denitrification

The Town of Falmouth is evaluating the establishment of shellfish aquaculture within Great Pond based on the findings at the other locations currently being evaluated throughout the town.

The Falmouth Department of Marine and Environmental Services (MES) has conducted initial shellfish surveys in Great Pond to determine areas and locations to expand the town's shellfish program to Great Pond. The Town is currently conducting final surveys, which are anticipated to be completed in 2022.

Presuming that 10 acres are available for shellfish aquaculture within the pond, the town is anticipating that the project will remove 1,300 kg-N/yr – 2,100 kg-N/yr through nitrogen uptake and 650 kg-N/yr – 1,050 kg-N/yr through denitrification. Shellfish nitrogen removal estimates are based on measured values from the pilot projects in Falmouth and published values on a per organism basis from Barnstable County (Reitsma et al 2017).

5.1.1.4. Shorewood Drive Permeable Reactive Barrier

The Town of Falmouth is evaluating the installation of a 300-foot permeable reactive barrier (PRB) on a site located off Shorewood drive. It is anticipated that the project has the potential to remove up to 1,325 kg-N/yr based on the US Environmental Protection Agency (USEPA estimated nitrogen mass flux). A pilot PRB was installed at this site in 2019 and is currently being monitored to verify performance assumptions.

5.1.2. Traditional Wastewater Management

5.1.2.1. Service Area and Nitrogen Removal

Septic nitrogen load will be removed from the Great Pond watershed through two collection system extensions (the existing LPSA extensions and the proposed TASA extension).

The existing Little Pond Sewer Service Area (which was sewered in 2017) includes 253 parcels in the Great Pond watershed. The nitrogen load removal from Great Pond through sewering of these parcels is estimated to be 1,000 kg/yr.

The proposed Teaticket Acapesket Study Area (TASA) collection system (Phases 1 & 2) is anticipated to collect wastewater from 1,289 parcels in the Great Pond watershed on the Maravista, Acapesket and Teaticket peninsulas. The anticipated load removal from this collection system is 6,188 kg/yr.

Anticipated septic nitrogen load removals from both collection system extensions in the Great Pond watershed are summarized in Table 5.2.

Table 5.2. Anticipated Septic Nitrogen Load Removals in the Great Pond Watershed

	Number of Sewered Parcels in the Great Pond Watershed	Anticipated Septic Nitrogen Load Removal from the Great Pond Watershed (kg/yr)
Little Pond Sewer Service Area (LPSSA)	253	1,000
Proposed Teaticket Acapesket Study Area (TASA)	1,289	6,188[1]

Notes:

1. Estimated wastewater flows for TASA were developed using water use data from 2014-2016 and a 20% wastewater allocation to account for undesignated redevelopment and potential development of currently un-developable parcels. The future allocation in this flow estimate is not included in the nitrogen load estimate to allow for a comparison of anticipated current septic nitrogen load removed through sewering to the current septic nitrogen load that needs to be removed from the watershed to meet the TMDL. The centralized system and treatment facility will be sized to convey and treat anticipated future flows from the identified sewershed.

5.1.2.2. Collection and Transmission System Layout

Septic nitrogen load will be removed from the Great Pond watershed through the existing Little Pond Sewer Area (LPSA) sewer extension and the proposed Teaticket Acapesket Sewer Area (TASA) sewer extension. The portions of both collection systems within the Great Pond watershed are outlined in Figure 5-1 (see Attachments). As outlined in Figure 4-3 (see Attachments), flow collected through TASA will be conveyed to the Falmouth WWTF through a force main system and two existing lift stations serving LPSA.

The conceptual layout for the TASA collection system is outlined in Table 5.3. The Town is currently working to secure proposed lift station locations and sewer easements. As both are finalized the conceptual layout and preliminary capital cost estimates for the project will be adjusted accordingly.

Table 5.3. TASA Collection System Conceptual Layout

Component	Estimated Quantities[1,2] - TASA Phase 1	Estimated Quantities[1,2] - TASA Phase 2
Gravity Mains (miles)	4.8	11.5
Low Pressure Sewer (miles)	3.2	0.8
Force Main (miles)	5.0	2.8
Gravity Manholes	140	250
Gravity Connections[3,4]	447	1,137
Grinder Pumps[3,4]	231	52
Connection to Existing Lift Stations	2	0
New Lift Stations	2	4

Notes:

1. Estimated quantities were based on a SewerCAD model developed for the service area. No surveys have been conducted as part of this project. All values are considered approximate and are provided for calculating costs and for general comparison purposes of alternatives. TASA Phase 1 conceptual layout assumes 4 sewer easements are obtained on the Teaticket Peninsula.
2. Linear pipe quantities have been rounded to the nearest hundred. Quantities for manholes were rounded to the nearest tens.
3. Houses that are adjacent to a gravity sewer but are located at a lower elevation than the sewer will require a small pump and a small diameter force main to connect to the system and are not counted in the quantity of grinder pumps.
4. Approximate number of connections is on a per parcel basis and includes 19 additional connections in Cedar Meadows, 1 additional connection in Tea Garden and 56 additional connections in Falmouthport.

5.1.2.3. Wastewater Treatment at the Falmouth WWTF

The Town of Falmouth is currently in the design phase of the Falmouth WWTF TASA Improvements Project, which will provide capacity to treat anticipated flows from TASA and ESRA (Planning Flow 1). Future upgrades will be required to treat Planning Flow 2 and 3 at the Falmouth WWTF. Design flows and loads for the TASA Improvements project are outlined in Tables 5.4 and 5.5 for Planning Flow 1.

Table 5.4. Falmouth WWTF TASA Improvements Project – Design Flow[1]

Parameter	WWTF Pre-LPSA (mgd)	LPSA (mgd)	TASA (mgd)	ESRA (mgd)	Total Future Flow (mgd)
Average Day	0.45	0.26	0.36	0.14	1.21
Maximum Month	0.81	0.47	0.65	0.25	2.18
Maximum Day	0.86	0.49	0.68	0.27	2.30
Peak Hour	1.53	0.88	1.22	0.48	4.11

1. -

Table 5.5. Falmouth WWTF TASA Improvement Project – Design Loads[1]

Influent Characteristic	WWTF Pre-LPSA (lb/d)	LPSA (lb/d)	TASA (lb/d)	ESRA (lb/d)	Total Future Load (lb/d)
BOD	670	630	680	210	2,190
TSS	700	740	800	220	2,460
TN	110	150	160	30	450
TP	20	20	20	10	70

Notes:
1.

5.1.2.4. Effluent Discharge

The Water Quality Management Committee (WQMC) recommendations for effluent discharge based on the findings presented in Section 4 are summarized below:

1. Design existing Open Sand Beds 14 & 15 as the preferred treated effluent discharge site for the projected ESRA / TASA flows in the short-term contingent on the MEP report results for Herring Brook (which the Town is anticipating receiving in 2023). Additional flow is anticipated to be accommodated at this site through a combination of expanding the existing open sand bed area and an increase in hydraulic loading rate to 11 gpd/ sf for the expanded footprint. Groundwater modelling simulations will need to be conducted of the conceptual layout to establish the maximum allowable flow to these beds.
2. Consider ocean outfall options in Buzzards Bay and Vineyard Sound, along with land-based options at the Allen and Augusta parcels, for projected mid-term (Planning Flow 2) and long-term (Planning Flow 3) wastewater flows.

5.1.2.5. Estimated Costs and Anticipated Implementation Schedule

Capital costs for the wastewater management facilities component of the TWMP are summarized in Table 5.6. The implementation schedule for the wastewater management facilities is outlined in Table 5.7.

Table 5.6. Capital Costs for Recommended Wastewater Facilities

Infrastructure	Planned Appropriation Date	Capital Costs (Adjusted for Mid-Point of Construction Dollars for Each Project)
TASA Improvements Falmouth WWTF Upgrade	April 2022 - complete	$24.0 M (2024$)
TASA Collection System Phase 1[1]	April 2024	$39.9 M (2026$)
Recharge Facilities for TASA / ESRA Flows	April 2024	$1.4 M (2026$)
TASA Collection System Phase 2[2]	April 2026	$49.4 M (2026$)

Notes:
1. Phase 1 costs based on Alternative Number 2 Subarea 1 outlined in GP TM-1, which assumes two new lift stations locations and one sewer easement is obtained for sewershed. This planning number will be refined as the Town finalizes available lift station and sewer easement locations. The cost estimate assumes a single force main system from TASA to the Falmouth WWTF and a grinder pump allowance.
2. Phase 2 costs based on Alternative TASA TM7 Subarea 2 outlined in GP TM-1, which assumes four new lift stations locations are obtained for sewershed. This planning number will be refined as the Town finalizes available lift station and sewer easement locations. The cost estimate assumes a single force main system from TASA to the Falmouth WWTF and a grinder pump allowance.

Table 5.7. Great Pond TWMP Implementation Schedule

Activity	2022	2023	2024	2025	2026	2027	2028
Falmouth WWTF TASA Improvements Project Construction							
Town Meeting – Vote to Establish TASA Betterment Percentage							
TASA Collection System (Phases 1 & 2) and Recharge Facilities Design Appropriation and Ballot Vote							
TASA Collection System and Recharge Facilities Construction Appropriation and Ballot Vote							
TASA Collection System and Recharge Facilities Construction							

5.1.2.6. Expected Impact of Great Pond Sewering on Green Pond Nitrogen Removal

Although not a primary goal of the Great Pond TWMP, The Teaticket / Acapesket Study Area (TASA) collection system will collect wastewater from 502 parcels in the Green Pond watershed. The nitrogen load removal in Green Pond through TASA sewering (of Phase 2 area) is estimated at 2,410 kg-N/yr.

This sewer extension will significantly reduce the nitrogen loading to Green Pond and will be augmented by additional removals provided by the non-traditional nitrogen mitigation strategies. Green Pond will be addressed through a future targeted watershed management plan.

5.2. Contingency Compliance Alternative

The Great Pond TMDL Contingency Compliance Alternative provides a conservative estimate of additional centralized wastewater collection and treatment that would be required if none of the pilot projects included in the preferred alternative did perform as anticipated (Table 5.8).

Table 5.8. Nitrogen Budget for Great Pond to Achieve Nitrogen TMDL Compliance

	Estimated Nitrogen Loading Reduction (kg-N/year) - Contingency Alternative
Fertilizer Bylaw (25% of fertilizer load)[1]	0
Stormwater Best Management Practices (25% of impervious load)[1]	0
Shellfish Aquaculture (uptake)[1]	0
Shellfish Aquaculture (denitrification)[1]	0
Permeable Reactive Barrier at Shorewood Drive (300 feet)[1]	0
Sewer Extension – Little Pond Sewer Service Area (Great Pond)	1,000
Sewer Extension – Teaticket Acapesket Sewer Service Area Subarea 1	2,890
Sewer Extension – Teaticket Acapesket Sewer Service Area Subarea 2	3,298
Sewer Extensions – Contingency	4,966
Total Estimated Reduction	**12,154**
Nitrogen Removal TMDL Goal	**12,154**

Removal of an additional 4,966 kg-N/year through sewering would require the sewering of approximately 1,232 single family residential properties sewered in the Great Pond watershed north of Route 28 (based on an average nitrogen removal of 4.6 kg-N/year unattenuated N load per single family home).

5.3. No Action Alternative

As part of the development of the Recommended Plan a No Action Alternative was considered to establish an initial baseline for the project and summarize potential impacts if the Town were to proceed without implementing any recommended improvements to addresses its nitrogen reduction needs in Great Pond through an approved TWMP.

The impact of excessive nitrogen impact on coastal waters and other natural resources is well documented. Without addressing these identified needs Falmouth would continue to lose natural and economic resources, including declines in finfishing and shellfishing habitats, decline in property values, continued algal blooms in coastal embayments, beach and shellfish closures, and potential declines in tourism as the aesthetic impacts of excessive nitrogen loading continue to impair the Town's water resources.

Financial impacts of the No Action Alternatives may include:

- Reduced property values and revenues
- MassDEP issuance of Consent Order to achieve the TMDLs and associated fines for not doing so in a timely manner
- Reduced commercial shellfish / fin-fish income
- Potential litigation
- Reduced income to local businesses due to the reduced attractiveness of the town to tourists and seasonal residents and retirees with accompanying loss of jobs.
- Loss of future funding for projects through the State Revolving Fund (SRF) or other means

5.4. Adaptive Management and Monitoring

The Town of Falmouth's CWMP includes the implementation of an adaptive management process to incorporate cost effective non-traditional methods into the plan once they demonstrate feasibility. The adaptive management process will involve ongoing water quality monitoring to monitor and respond to the results of the implementation of the preferred compliance plan

This adaptive management approach will enable the CWMP to be adjusted based on the monitoring results of the environmental and economic impacts associated with the construction of sewers and implementation of non-traditional projects in Falmouth. Coordination with MassDEP and CCC will also be conducted, and key factors incorporated into the adaptive management plan.

6. Climate Change / Greenhouse Gas Evaluation for Preferred Alternative

6.1. Base Case and Preferred Alternative Greenhouse Gas Evaluation

A Base Case and Preferred Alternative greenhouse gas (GHG) evaluation was conducted using the USEPA's Portfolio Manager. The EPA Portfolio is an online tool designed to assess energy and water consumption at a facility. The tool provides a benchmark score which compares the performance of the facility analyzed with similar facilities. The tool calculates anticipated GHG emissions for the facility based on the data entered. The GHG analysis is included in the 'Falmouth WWTF Fiscal Sustainability Plan Including a Plant Evaluation and Condition Assessment – Final Report' prepared by GHD and dated December 2020 (attached Appendix 4.1).

For a municipal wastewater treatment plant, the following inputs are used to determine energy consumption at a facility:

- Zip code
- Average influent flow
- Average influent biological oxygen demand (BOD5)
- Average effluent biological oxygen demand (BOD5)
- Plant design flow rate
- Presence of fixed film trickling filtration process
- Presence of nutrient removal process
- Annual electricity and fuel usage.

The existing Falmouth WWTF (average design flow = 0.71 mgd) was evaluated as the Base Case. The Preferred Alternative evaluated the proposed Falmouth TASA Improvements WWTF Project, which will increase the average design flow of the facility to 1.21 mgd. The GHG analysis for the Base Case and Preferred Alternative is summarized in Table 6.1.

Table 6.1. Base Case and Preferred Alternative Greenhouse Gas Evaluation

Scenario	Design Average Annual Flow (mgd)	Utility Benchmark Score	Site (kBTU/gpd)	Source (kBTU/gpd)	CO2 Emissions (short tons / yr)
Base Case	0.71	19	5.17	14.49	265.3
Preferred Alternative	1.21	19	4.07	11.40	355.3

6.2. Opportunities for On-Site Energy Generation

6.2.1. Biogas / Anaerobic Sludge Digestion

An anaerobic digestor can be used at wastewater treatment facilities to convert biosolids to biogas. Anaerobic digestion is a sludge reduction technology with several beneficial byproducts, including biogas which can be converted into electricity, heat and a biosolid byproduct.

If a facility has excess capacity in its anaerobic digester, it can also consider co-digestion where additional energy-rich organic waste materials such as fats, oils, grease, and food scraps are added to the existing waste stream in order to

increase methane production. The WEF MOP 32 estimates that the biogas produced by the digestion of biosolids is approximately 60% methane. It is also possible to use the methane gas from anaerobic digestion as a hydrogen source to fuel hydrogen fuel cells. The biogas can be used to power boilers, generators, pumps, or blowers. In a combined heat and power (CHP) application the biogas can be used to power an engine or turbine and the waste heat can be recovered to heat the anaerobic digester.

Ideally a plant considering co-digestion should be located in close proximity to an industry or business that is a source of carbon-based waste, however the Falmouth facility is in an isolated area and the town does not have a large industry base that would typically support such a facility. In addition to the increased energy production from accepting additional waste streams, co-generation can be a possible revenue stream if constructed at a suitable scale and in a favorable market.

6.2.2. Solar Photovoltaic (PV) Systems

Solar photovoltaic (PV) arrays can be used by facilities with adequate space to produce renewable energy on-site. Arrays can by ground-mounted or roof-mounted depending on the orientation of the facility's building and available roof space. South facing roofs with minimal shadow interference provide the most ideal conditions for a roof-mounted solar array.

A shade analysis would need to be conducted at a potential site to determine the feasibility of a solar installation. On average, Massachusetts experiences 4.5 sun hours per day of solar energy. This means that over an entire year, direct sunlight hits an area for an average of 4.5 hours per day. By comparison Phoenix, Arizona experiences 6.4 sun hours per day. For an equivalent amount of power output from a PV panel in Massachusetts, the module area would be designed to be approximately 40% larger than in Phoenix.

The Town has conducted an evaluation as part of the Fiscal Sustainability Plan and Plant Evaluation on the feasibility of installing a solar array system at the Falmouth WWTF (at the location of the existing decommissioned wind turbines). A clearing that is approximately 16,000 square feet has been identified for the potential installation. Once the wind turbines are removed, this area could be cleared and be an open space that sits at an angle approximately 10 degrees from due south, which is near ideal for the orientation of a solar array. It is estimated that approximately 65% of the available space (10,400 square feet) could be utilized for a solar array installation, which would allow for spacing between rows of solar panels to prevent neighboring rows from casting shadows on the rows behind them (which would decrease the overall efficiency of the array). Assuming that each solar panel is 17.55 square feet with a nameplate rating of 315 watts, a 600-panel installation could be constructed with an overall solar array nameplate rating of approximately 190 kW.

Based on solar data obtained from a weather station 1.2 miles from the Town of Falmouth, this area receives an average of 4.86 sun hours per day of solar energy. Assuming standard modules are used, mounted in a fixed tilt position of 41 degrees at above 10 degrees off due south, the estimated annual energy production from the array is 270 kWH per year. At an estimated utility cost of $0.13/kWh, the value of the offset energy is approximately $35,000.

Presently, the cost of installing a solar array on Cape Cod is approximately $3.35 per watt. The estimated installation cost for a 190 kW array would be approximately $635,000 and the system would have a simple payback period (without taking any potential grants or incentives into account) of approximately 18 years. This analysis was conducted using the National Renewable Energy Lab's online software and solar data.

The panels require little to no maintenance and have a life cycle of approximately 30 to 40 years. The system inverters are anticipated to last 15-20 years.

6.2.3. Hydroelectric Energy Recovery

Hydropower can be used to harvest potential energy in a pipeline or at the outfall of a wastewater treatment plant. The higher elevation of the water surface leaving the final process relative to the invert of the effluent discharge pipe provides a static elevation head that can potentially be converted into kinetic energy through a small hydro-turbine. Several low head generation devices could be explored during design. The system's energy grade line and anticipated flow are the two most important factors to size a proposed turbine, estimate power generator and cost of the installation.

7. MEPA Draft Section 61 Findings and Mitigation

7.1. Introduction

This chapter identifies and presents proposed mitigation measures and Draft Section 61 Findings for each permit or other approval anticipated to be issued by State Agencies, as required by the Massachusetts Environmental Policy Act (MEPA) regulation 301 CMR 11.07. All mitigation measures will be funded and implemented by the Town of Falmouth, its agents, representatives, and/or contractors in addition to any required State agency actions.

7.2. Draft Section 61 Findings for State Agency Actions

Anticipated State agency permits and actions are summarized in Table 7.1.

Table 7.1 Draft Section 61 Findings for State Agency Actions

State Agency	Agency Permits / Actions
US Environmental Protection Agency (USEPA)	– National Pollutant Discharge Elimination System (NPDES) Permitting Program (as applicable), under 40 CFR Chapter 1, Section 122.26 (15) for NPDES Stormwater Permit for Construction Activities and review of developed Stormwater Pollution Prevention Plan (SWPPP).
Department of the Army, New England District, Corps of Engineers	– Permit requirement under Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403), as applicable – Permit requirement under Section 404 of the Clean Water Act – Massachusetts Programmatic General Permit (PGP) or Category II or III Individual Permit
Massachusetts Executive Office of Energy and Environmental Affairs (EOEEA)	– TWMP approval – Notice of Project Change approval
Massachusetts Department of Environmental Protection (MassDEP)	– Groundwater Discharge Permit Program (MGL c. 21 s. 43 and 314 CMR 5.00) BRP WP11 for facility modifications with plan approval and / or a new effluent discharge permit – Sewer System Extension and Connection Permit Program (MGL c. 21 s. 43 and 314 CMR 7.00) BRP WP 13, 17, 0r 18. – WP68 – Treatment works plan approval for new/modified facility associated with groundwater discharge non-industrial or reclaimed water use permits. (314 CMR 5.00) – Chapter 91 License (MGL c. 91), as applicable – Notice of Intent (NOI) Wetland Protection Act (WPA) Form 3 (as applicable) and Falmouth Conservation Commission approvals (as applicable) for work within the 100-foot buffer to a wetlands (310 CMR 10.00) – Air Quality Permits (as applicable) – BWP AQ 04 – Asbestos Removal Notification may be required for asbestos pipe removal – BWP AQ 06 - Construction / Demolition Notification – Emergency Engine and Emergency Turbine Compliance – required for all new emergency or standby engines with a rated power output equal to or greater than 37 kW or emergency turbine with a rated power output less than one megawatt constructed, substantially reconstructed, or altered after March 23, 2006.

State Agency	Agency Permits / Actions
	– Air Quality Permit BWP AQ 14, 15, 16, 17 Operating Permits - required for major sources of air pollution by the Clean Air Act Amendments of 1990 (as applicable if triggered by anticipated emission from the WWTF or proposed odor control systems). – Bureau of Waste Site Cleanup Filing of Utility Release Abatement Plan (as applicable), for excavation within known contaminated sites.
Massachusetts Office of Coastal Zone Management (CZM)	– Federal Consistency Review – Pre-consultation to applicability
Commonwealth of Massachusetts Department of Public Works	– Permit for work within State Highway Layouts – required for any work on Route 28
Massachusetts Division of Fisheries & Wildlife	– Natural Heritage & Endangered Species Program (NHESP), MESA (321 CMR 10.00) and/or WPA (310 CMR 10.00) for work below the mean high-water line, in a fish run, or in a priority or estimated habitat.
Massachusetts Division of Marine Fisheries (DMF)	– Consultation on potential impacts to diadromous fish species and mitigations measures, as appropriate.
Massachusetts Historical Commission (MHC)	– Consultation / review for any collection system components and pump stations to be constructed outside of road rights-of-way.
Cape Cod Commission (CCC)	– TWMP Approval as part of the Development of Regional Impact (DRI) approval process.
Town of Falmouth	– Building permits for the construction of structures recommended in the TWMP – Wastewater Department sewer connection permitting

7.3. Planned Mitigation Measures

The following mitigation measures have been identified to limit negative environmental impacts and/or create positive environmental impacts during development and operation of the Recommended Plan.

7.3.1. General Construction Measures

During construction, the site(s) shall be secured to prevent unauthorized entry to the construction site, and to protect existing and adjacent facilities and properties. Supplemental lighting, signs, railings, and construction barriers shall be used as necessary to provide safety to employees, construction workers, visitors, and the general public during the construction process in accordance with Occupational Safety and Health Administration (OSHA) and other applicable regulations.

Water used during the construction process, and that generated from runoff on the site, will be controlled by proper site grading, and by providing temporary berms, drains, and other means to prevent soil erosion. These means will also be used to reduce puddling and runoff on the site. Existing and new catch basins will be protected from siltation using hay bales, siltation fence, and catch basin inserts. At no time will the pumping of silt-laden water to surface waters, stream corridors, or wetlands be allowed. Pollution controls will also be provided to prevent the contamination of soils, water, and the atmosphere from the discharge of noxious, toxic substances, and pollutants during the construction process.

Erosion control measures including hay bales, siltation fencing, and erosion control fabric will be used to provide sedimentation barriers where required. Temporary seeding and mulching may also be used to minimize soil erosion and provide soil stabilization on slopes. Diversion trenches may also be used on the uphill side of disturbed areas to divert surface runoff. Land disturbances will be kept to a minimum to reduce impacts and erosion. All erosion and stormwater control methods shall be in accordance with the USEPA National Pollution Discharge Elimination System (NPDES) General Permit requirements, Commonwealth of Massachusetts regulations, and the Town of Falmouth regulations. A Stormwater Pollution Prevention Plan (SWPPP) will be required as part of the NPDES General Permit.

The site will be maintained free of waste materials, debris, and trash following each day of work. Waste and other debris will be collected and disposed of off-site periodically. At no time during construction will the dumping of spoil material, waste, trees, brush, or other debris be allowed into any stream corridor, any wetland, any surface waters, or any unspecified location. The permanent or unspecified alteration of stream flow lines is not allowed during construction. Recycling of waste and construction debris will likely be mandated as well and should always be considered during construction.

Construction noise from heavy equipment will normally be limited to within normal operating hours of 7:00 a.m. to 5:00 p.m. Dust controls, including the use of street sweepers and/or watering trucks, will be used to minimize air-borne dust as necessary.

7.3.2. Sewer Expansion to the Teaticket Acapesket Study Area (TASA) Construction

In addition to the measures identified in the general construction section, police details and other traffic controls will be necessary to minimize traffic problems during sewer expansion construction. Detours and trucking routes will need to be identified prior to construction, and these routes will need to be designed to minimize impacts to surrounding residential areas not accustomed to heavy construction and increased vehicle traffic. Construction within the Teaticket Acapesket Sewer Service Area will have to allow for safe travel of both pedestrians and vehicle traffic.

Sewer extensions are planned in the road layouts to avoid impacts to animal habitats, wetlands, historic areas, or potential archaeological sites. Construction in these areas will impact traffic (vehicle, pedestrian, and bicycle) in the roadways during construction. Construction procedures for traffic control, erosion protection, dust control, noise prevention, and wetland protection will be implemented as appropriate. Use of trench boxes, bracing, and other shoring methods will be utilized to provide the necessary safety for workers and others at the construction site. To the extent practicable, any private property, including trees and vegetation, that is damaged during construction is to be repaired or replaced. All roads, both publicly and privately owned, impacted by construction associated with the implementation of the collection system shall be restored to a condition safe and appropriate for vehicular traffic. Any collection system components and lift stations to be constructed outside of road rights-of-way will be reviewed with the Massachusetts Historical Commission if located with an archeologically sensitive area and may also require Conservation Commission review or NHESP review depending on their location as well.

The collection system lift stations need to be located in lower-elevation areas to be able to utilize gravity pipes for collection and subsequent pumping. Where required, wetland regulations and permitting will be followed to minimize impacts to any adjacent wetlands.

Stormwater and construction runoff will be managed through the implementation of construction SWPPPs established prior to construction and regulated under USEPA NPDES General Permits for Construction.

Areas requiring sewers located within parts of town identified as barrier beach will have to be designed and constructed to meet specific State requirements for work within these areas (Executive Order 181), and will have the following stringent requirements for the construction of sewers on a barrier beach:

1. All infrastructure must be protected from coastal flood hazards.
2. The sewers cannot promote additional growth on the barrier beach that would not have otherwise been allowed.

Previous discussions held with Massachusetts Coastal Zone Management (CZM), the agency that upholds Executive Order 181, have identified that the water quality benefits provided by the collection system extensions will greatly outweigh the slight risk that a catastrophic coastal hazard could damage some of the infrastructure. Collection system extensions will be designed to withstand reasonably expected coastal flood hazards in accordance with ASCE-24; lift stations will be designed to withstand a 100-year storm, and all pipes and equipment suitably protected from wave action. Lift stations will be located outside of flood zones when possible and protected with a system of check valves in critical areas, and generally protected from floods and natural hazards to the extent reasonable.

The Town's existing Flow Neutral bylaw adopted in January of 2014, applies to existing and future sewer areas, including the TASA sewer expansion area.

7.3.3. Wastewater Treatment Facility Site and Effluent Recharge Area Improvements

In addition to those mitigation measures identified previously, the following measures will be provided at the existing Blacksmith Shop Road WWTF and effluent recharge sites. The wastewater treatment system will be upgraded to provide capacity to process the wastewater collected from the Teaticket Acapesket Study Area (TASA). Removal of this local source of nitrogen will significantly reduce the amount of nitrogen entering Great Pond to make substantial progress towards achievement of the TMDLs during the 20-year planning period.

The upgrade will increase the production of biosolids (sludge) and increase the volume of treated water recharged to the water table at the WWTF site. The sludge will be disposed of or reused at an approved off-site facility in accordance with MassDEP guidelines. The treated effluent recharge will be monitored as part of an approved groundwater discharge permit. Odor and noise mitigation measures will also be considered as part of the final design to minimize the impacts to adjacent properties during construction and operation.

Energy efficient design features to minimize GHG release from the WWTF will be considered during preliminary and detailed design. GHG evaluations were completed as summarized in this report and these evaluations should be considered during design of any expansions of the WWTF.

The following mitigation measures will be observed to avoid or minimize adverse environmental impacts:

- The WWTF improvements will take place on a previously developed parcel (existing Blacksmith Shop Road WWTF) and in existing structures.
- New lift stations will have exterior façades which will complement and be consistent with neighborhood aesthetics.
- Vegetative screens will be employed if it is determined that they are necessary for aesthetic reasons.
- Consultation with expert agencies during the design phase and continued contact during construction if there is a resource that may be affected.
- Work will be halted if archaeological resources are uncovered during construction.
- The contractor will be required to thoroughly clean up the site before the contract is considered complete.
- Proper handling and storage of possible contaminants and hazardous substances will be required of the contractor, in addition to proper notifications.
- Access roads will be dampened to minimize construction dust if required.
- Debris will not be burned as a means of disposal.
- No construction work will normally be performed during evening, holiday, or weekend hours.
- A Resident Project Representative will be employed to ensure that the project area is kept clean and that mitigation measures are met.

7.3.4. Planned Mitigation Measures: Adaptive Management and Monitoring

Adaptive management provides a significant mitigation measure mechanism for the Recommended Plan. The Recommended Plan includes the implementation of an Adaptive Management process to consider the performance of the demonstration/pilot projects and to incorporate cost-effective non-traditional methods into the plan once they demonstrate feasibility. The Adaptive Management process will also monitor groundwater elevations, water quality, and the performance at coastal embayments during construction and upon completion of the phased sewering project. This Adaptive Management approach will enable the Recommended Plan to be adjusted based on the monitoring

results of the environmental and economic impacts associated with construction of new sewers in Falmouth. Coordination with MassDEP and CCC will occur through the Adaptive Management process.

7.4. Summary

Table 7.2 summarizes the mitigation measures outlined in this Chapter. Funding of these projects and mitigation measures is all anticipated to come from Town Funding and to be supported by various grant and loan opportunities including Natural Resources Conservation Service (NRCS), the Massachusetts State Revolving Fund (SRF) program, Southeast New England Program (SNEP) Grants, Cape and Islands Water Protection Trust, CZM grants and additional funding sources.

Table 7.2 Mitigation Measures Summary Table

Category	Proposed Mitigation Measure	Implementation	Preliminary Schedule
General Construction – Site Access / Public Safety Impact	The site(s) shall be secured to prevent unauthorized entry to the construction site, and to protect existing and adjacent facilities and properties. Supplemental lighting, signs, railings, and construction barriers shall be used as necessary to provide safety to employees, construction workers, visitors, and the general public during the construction process in accordance with OSHA and other applicable regulations. Police details and detours will be implemented in accordance with Traffic Control Plans included with the Project Contract Documents.	Contractor	During Construction
General Construction - Stormwater	Provisions for stormwater management and erosion control shall be managed in accordance with the approved SWPPP and NPDES General Permit.	Contractor	During Construction
General Construction – Construction Debris	The site(s) will be maintained free of waste materials, debris, and trash following each day of work. Waste and other debris will be collected and disposed of off-site periodically. At no time during construction will the dumping of spoil material, waste, trees, brush, or other debris be allowed into any stream corridor, any wetland, any surface waters, or any unspecified location. The permanent of unspecified alteration of stream flow lines is not allowed during construction. Recycling of waste and construction debris will likely be mandated as well and should always be considered during construction.	Contractor	During Construction
General Construction – Noise and Dust Control	Normal construction hours will be between 7 am and 5 pm during normal business days. No work will be allowed on Holidays and the Contractor will be required to provide adequate dust control measures during construction.	Contractor	During Construction
Wastewater Facilities Construction Mitigation – Resource Areas	As necessary, appropriate Notice of Intent documents and Request for Determinations will be filed relative to work proposed with buffer areas or resource areas. Orders of Conditions, as received, will be incorporated into the Construction Documents.	Town / Contractor	Permitting Prior to Construction / Mitigation during Construction through compliance with Order of Conditions.
Wastewater Facilities Construction Mitigation - Flooding	To the extent practicable, facilities will be located out of flood hazard zones. Because lift stations are typically located in low lying areas to maximize gravity sewer service, additional provisions for coastal resiliency and flood protection will need to be made to mitigate impacts. During construction,	Town / Contractor	During design and construction

Category	Proposed Mitigation Measure	Implementation	Preliminary Schedule
	management of dewatering and protection from storms will be required.		
Wastewater Facilities Construction Mitigation – Site Impacts	The WWTF improvements will take place on a previously developed parcel (existing Falmouth WWTF).	Town / Contractor	During construction
Wastewater Facilities Construction Mitigation – Aesthetics	New lift stations will have exterior facades which will compliment and be consistent with neighborhood aesthetics as appropriate. Vegetative screens will be employed, if determined necessary, for aesthetic reasons.	Town / Contractor	During design and implemented during construction
Wastewater Facilities Construction Mitigation - Archeological	Development of a Post Discoveries Review Plan (if necessary). Work will be halted if archaeological resources are uncovered during construction.	Town / Contractor	Plan development prior to Bidding, implementation during construction
Wastewater Facilities Construction Mitigation - General	A Resident Representative will be employed to ensure that the project area is kept clean and that mitigation measures are met.	Town	During construction
Adaptive Management – TMDL Compliance	Implementation of an Adaptive Management process which will consider the performance of the demonstration projects and incorporate cost-effective non-traditional methods into the plan once they demonstrate feasibility. The adaptive management process will involve ongoing water quality monitoring to monitor and respond to the results of the implementation of the preferred compliance plan.	Town	Pre and post construction/ implementation
Climate Change Mitigation	The Town of Falmouth participates on regional committees to assist with planning for and mitigation of potential impacts due to climate change in response to their projects.	Town	Pre and post construction / implementation

8. Consistency with Cape Cod Commission Section 208

The 2015 Section 208 Plan outlines the Cape Cod Commission's (CCC) consistency criteria for review of large planning efforts as a replacement to the Development of Regional Impact (DRI) review process, which was its regulatory predecessor. The criteria outlined in the CCC's "Guidance on Section 208 Plan Update: Obtaining a Consistency Determination" are listed in Table 8.1 along with Falmouth's strategy to meet each criteria. Compliance with these criteria is required for the Town to be eligible for State Revolving Fund (SRF) loan opportunities and is required as part of the MEPA process and Watershed permitting process.

Table 8.1 Consistency with Cape Cod Commission Section 208 Plan

Criteria	Consistency Approach
Waste Treatment Management Agency (WMA) assumes responsibility for controllable nitrogen for any part of the watershed within its jurisdiction	The Town of Falmouth is a designated WMA and is actively addressing its controllable nitrogen needs through the CWMP process.
Plan meets applicable nutrient reduction targets	The Great Pond TWMP has been developed to meet target nitrogen thresholds as established by the MEP report for Great Pond as summarized in Tables 5.1 and 5.8.
Planning occurs at a watershed level with consideration of a hybrid approach	The Great Pond TWMP presents a hybrid approach to watershed management utilizing both traditional and non-traditional nitrogen management strategies. The TWMP also includes a contingency approach if the pilot projects do not perform as anticipated. See Tables 5.1 and 5.8 for proposed approach and contingency approach and associated management strategies.
Public Engagement	The Great Pond TWMP has a strong public outreach component engaging stakeholders and the general public through multiple public meetings as outlined in Section 1.2.
Plan includes proposed strategies to manage nitrogen from new growth	Falmouth adopted a flow neutral bylaw in January 2014, which applies to all existing and future sewer service areas.
Plan includes an Adaptive Management Approach	The Town of Falmouth's CWMP includes the implementation of an adaptive management process to incorporate cost effective non-traditional methods into the plan as they demonstrate feasibility. The adaptive management process will involve ongoing water quality monitoring to monitor and respond to the results of the implementation of the preferred compliance plan
Plan includes a pre- and post-implementation program.	The Town continues to implement a monitoring program to track pre- and post-implementation conditions in its impaired coastal estuaries.
Plan includes a description and assessment of the Town's proposed funding strategy	Refer to Section 5 of this Great Pond TWMP for an outline of major funding milestones in the implementation schedule.
WMA commits to regular 208 Plan Consistency reviews until water quality goals, generally reviewed at least every 5 years	Falmouth will continue to support the CCC in their submittal of 208 Plan Consistency reviews and provide supporting documentation, as requested, outlining their progress.
In shared watersheds, WMA seeking 208 Consistency Review collaborate with neighboring WMA(s) on nitrogen allocation, shared solutions, and cost saving measures	The Great Pond watershed is entirely within the Town of Falmouth.

9. Update on Comprehensive Planning Process

The Town of Falmouth has adopted the general CWMP approach of working west to east to develop TWMPs to address nitrogen mitigation needs along its southern coastline. This approach allows for traditional wastewater collection infrastructure to be extended from existing infrastructure, which is primarily located within the Town's downtown areas and the Little Pond Sewer Service Area, a portion of which is currently within the Great Pond watershed.

9.1 Update of Town's Progress on Achieving TMDL Compliance in Little Pond, Green Pond, Bournes Pond, Waquoit Bay, West Falmouth Harbor

The 2019 Notice of Project Change outlined the Town's compliance strategy for each watershed. These compliance approaches (as summarized in the following tables) present the proposed nitrogen load reduction by strategy and watershed. Each strategy includes ranges for pilot technologies based on anticipated performance values for each technology. These ranges will be refined as pilot project data is collected and analyzed. Proposed sewer areas are presented as ranges based on average per parcel water use rates across the Planning Area. The water use estimates and wastewater generation estimates will be refined as conceptual layouts are developed for each area as part of a future TWMP.

Each strategy will continue to be refined as a TWMP for each subsequent watershed is developed and as pilot project/water quality data is collected and analyzed. The Town will continue to monitor Little Pond and West Falmouth Harbor to evaluate whether the significant improvements and management strategies implemented in those watersheds achieve the anticipated results. Refer to Section 5 for the Great Pond compliance approach associated with the Recommended Plan for that watershed.

Table 9.1 Little Pond TMDL Compliance Approach

Nitrogen Removal Strategy	Estimated Nitrogen Load Reduction (kg-N/yr)
Sewering	4,141 – 5,252
I/A Systems	340
Fertilizer (25% of fertilizer load)	158
Stormwater (25% of impervious load)	116
Aquaculture (uptake)	33 – 53
Shellfish (denitrification)	17 – 27
Total Estimated Nitrogen Load Removal	**4,805 – 5,946**
Nitrogen Removal TMDL Goal	5,006

Table 9.2 West Falmouth Harbor TMDL Compliance Approach

Nitrogen Removal Strategy	Estimated Nitrogen Load Reduction (kg-N/yr)
Wastewater Treatment Improvement	8,792
I/A Systems	92
Fertilizer (25% of fertilizer load)	91
Stormwater (25% of impervious load)	285
Aquaculture	0
Total Estimated Nitrogen Load Removal	**9,260**
Nitrogen Removal TMDL Goal	8,472

Table 9.3 Green Pond TMDL Compliance Approach

Nitrogen Removal Strategy	Estimated Nitrogen Load Reduction (kg-N/yr)
Fertilizer Bylaw (25% of fertilizer load)	227
Stormwater BMPs (25% of impervious load)	172
Stormwater – Captain's Lane Catchment Area	120
Aquaculture (uptake)	390 – 630
Shellfish (denitrification)	195 – 315
Mill Pond	491 – 961
Sewer Extensions (total)	2,058 – 2,610
Total Estimated Reduction	**3,653 – 5,035**
Nitrogen Removal TMDL Goal	4,453

Table 9.4 Bournes Pond TMDL Compliance Approach

Nitrogen Removal Strategy	Estimated Nitrogen Load Reduction (kg-N/yr)
Fertilizer Bylaw (25% of fertilizer load)	121
Stormwater BMPs (25% of impervious load)	126
Aquaculture (uptake)	1,352 – 1,680
Shellfish (denitrification)	676 – 840
Inlet Widening (50% of controllable load)	1,995
Total Estimated Reduction	**4,270 – 4,762**
Nitrogen Removal TMDL Goal	4,162

Table 9.5 Waquoit Bay TMDL Compliance Approach

Subwatershed	Nitrogen Removal Strategy	Estimated Nitrogen Load Reduction (kg-N/yr)
Eel Pond	Fertilizer Bylaw (25% of fertilizer load)	195
	Stormwater BMPs (25% of impervious load)	97
	Aquaculture (uptake)	1,170 – 1,890
	Shellfish (denitrification)	585 – 945
	Sewer Extension – Antler Shores	923 – 1,170
	Sewer Extension – Seacoast Shores	2,440 – 3,094
	Total Eel Pond Estimated Reduction	**5,409 – 7,391**
	Eel Pond Nitrogen Removal Goal	3,241
Childs River	Fertilizer Bylaws (25% of fertilizer load)	207
	Stormwater BMPs (25% of impervious load)	130 – 195[1]
	Aquaculture (uptake)	390 – 630
	Shellfish (denitrification)	195 – 315
	Sewer Extension – Seacoast Shores	1,615 – 2,049
	Sewer Extension - Seapit	414 – 5255
	Mashpee Sewering	1,173 – 1,487
	Total Childs River Estimated Reduction	**4,124 – 5,408**
	Nitrogen Removal Goal	5,274
Hamblin Pond / Little River	Mashpee Sewering	2,394 – 3,037
	Mashpee Shellfish	1,850
	Fertilizer Bylaw (25% of fertilizer load)	87
	Stormwater BMPs (25% of impervious load)	93
	Total Hamblin Pond Estimated Reduction	**4,424 – 5,067**
	Hamblin Pond Nitrogen Removal Goal	3,734
Quashnet / Moonakis River	Mashpee Sewering	1,349 – 1,711
	Fertilizer Bylaw (25% of fertilizer load)	377
	Stormwater BMPs (25% of impervious load)	677
	Total Quashnet / Moonakis River Estimated Reduction	**2,403 – 2,765**
	Quashnet / Moonakis River Nitrogen Removal Goal	3,035
Total Waquoit Bay (without Jehu Pond / Great River)	**Total Waquoit Bay Estimated Reduction (without Jehu Pond / Great River)[2]**	**16,360 – 20,631**
	Total Waquoit Bay Nitrogen Removal Goal (without Jehu Pond / Great River	15,284

Notes:

1. Stormwater reduction range based on reduction of the entire system or only Child River North.
2. Due to the complex flow dynamics of the Waquoit Bay system, overages in the estimated nitrogen reduction in Eel Pond may compensate for the deficit in the Child's River.

9.2 Medium- and Long-Term Future Flows

The TWMP Compliance Plans outlined in Section 9.1 outlines areas that the Town is evaluating for centralized sewer infrastructure as part of future TWMP planning. The Town of Falmouth will continue to evaluate options to upgrade the Falmouth WWTF to treat identified medium- and long-term flows (Planning Flows 2 and 3) and will continue evaluating land-based and ocean outfall effluent recharge options for future planning flows.

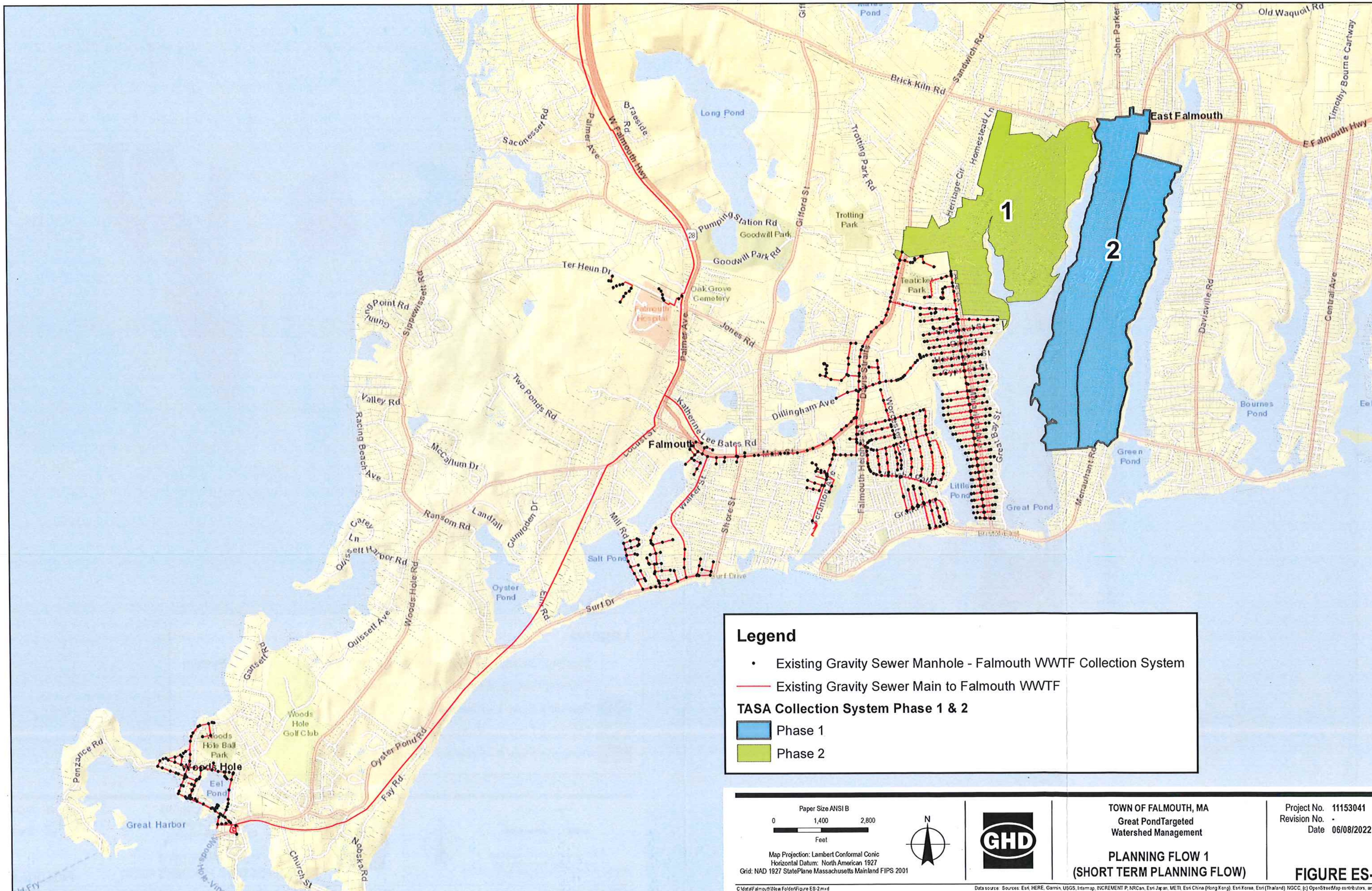
9.3 Future TWMP Development Schedule

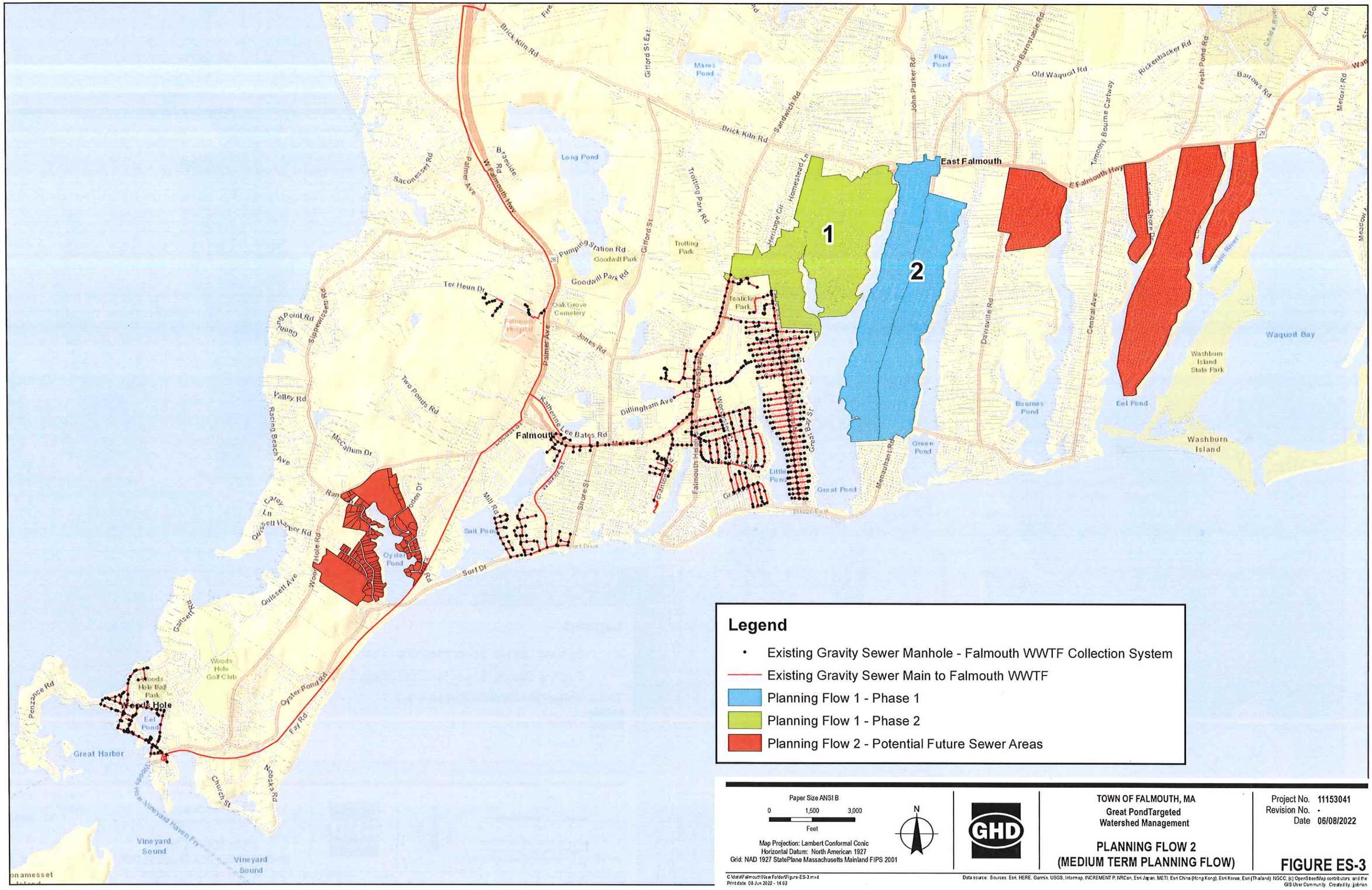
The proposed schedule for the development of the South Coast Estuary TWMPS is outlined in Table 9.6.

Table 9.6 Future TWMP Development Schedule

Action Item	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Ocean Outfall Evaluations													
Green & Bournes Pond TWMP													
Waquoit Bay TWMP													

Attachments


Legend
Existing Gravity Sewer Manhole - Falmouth WWTF Collection System
Existing Gravity Sewer Main to Falmouth WWTF
TASA Collection System Phase 1 & 2
Phase 1
Phase 2
1
2
Paper Size ANSI B
0
1,400
2,800
Feet
Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1927
Grid: NAD 1927 StatePlane Massachusetts Mainland FIPS 2001
N
GHD
TOWN OF FALMOUTH, MA
Great PondTargeted
Watershed Management
PLANNING FLOW 1
(SHORT TERM PLANNING FLOW)
Project No. 11153041
Revision No. -
Date 06/08/2022
FIGURE ES-2
East Falmouth
Falmouth
Woods Hole
Long Pond
Great Pond
Little Pond
Green Pond
Bournes Pond
Salt Pond
Oyster Pond
Eel Pond
Great Harbor
Trotting Park
Teaticket Park
Goodwill Park
Oak Grove Cemetery
Woods Hole Ball Park
Woods Hole Golf Club
Old Waquoit Rd
Brick Kiln Rd
Sandwich Rd
John Parker
Timothy Bourne Cartway
E Falmouth Hwy
Homestead Ln
Heritage Cir
Trotting Park Rd
Gifford St
Pumping Station Rd
Goodwill Park Rd
W Falmouth Hwy
Braeside Rd
Palmer Ave
Saconesset Rd
Ter Heun Dr
Jones Rd
Point Rd
Gunning
Sippewissett Rd
Valley Rd
Racing Beach Ave
Two Ponds Rd
McCallum Dr
Katharine Lee Bates Rd
Dillingham Ave
Locust St
Walker St
Shore St
Mill Rd
Surf Drive
Surf Dr
Ransom Rd
Landfall
Cumloden Dr
Carey Ln
Quissett Harbor Rd
Woods Hole Rd
Quissett Ave
Elm Rd
Gansett Rd
Oyster Pond Rd
Fay Rd
Nobska Rd
Church St
Penzance Rd
Great Bay St
Menauhant Rd
Davisville Rd
Central Ave
Falmouth Heights



Legend

- Existing Gravity Sewer Manhole - Falmouth WWTF Collection System
- Existing Gravity Sewer Main to Falmouth WWTF
- Planning Flow 1 - Phase 1
- Planning Flow 1 - Phase 2
- Planning Flow 2 - Potential Future Sewer Areas

Paper Size ANSI B

0 1,500 3,000

Feet

Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1927
Grid: NAD 1927 StatePlane Massachusetts Mainland FIPS 2001

N

GHD

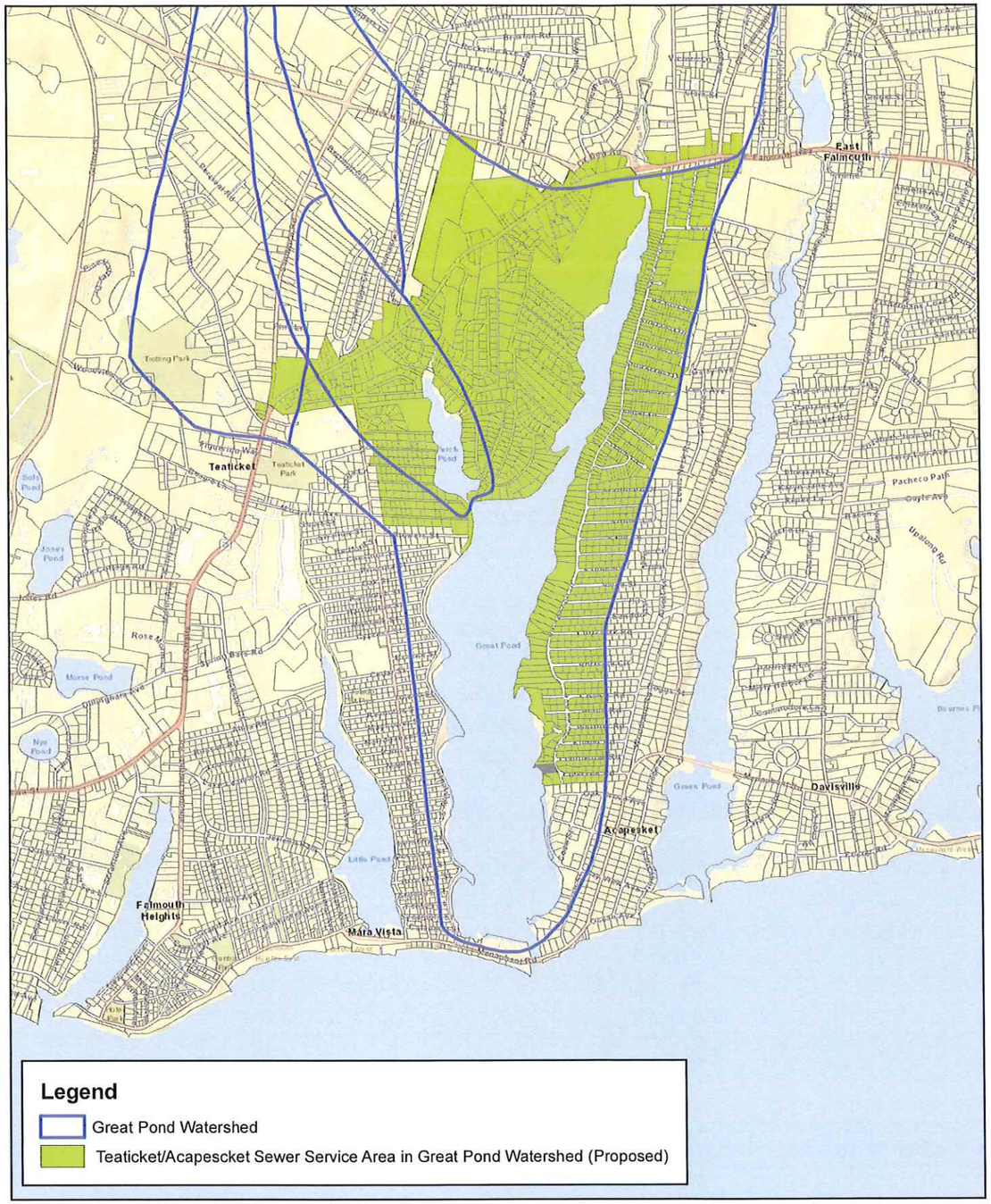
TOWN OF FALMOUTH, MA
Great PondTargeted
Watershed Management

PLANNING FLOW 2
(MEDIUM TERM PLANNING FLOW)

Project No. 11153041
Revision No. -
Date 06/08/2022

FIGURE ES-3

C:\data\Falmouth\New Folder\Figure-ES-3.mxd
Print date: 08 Jun 2022 - 14:02



Paper Size ANSI A

0 1,000 2,000

Feet

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Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane Massachusetts Mainland FIPS 2001

GHD

TOWN OF FALMOUTH, MA
Great Pond Targeted
Watershed Management

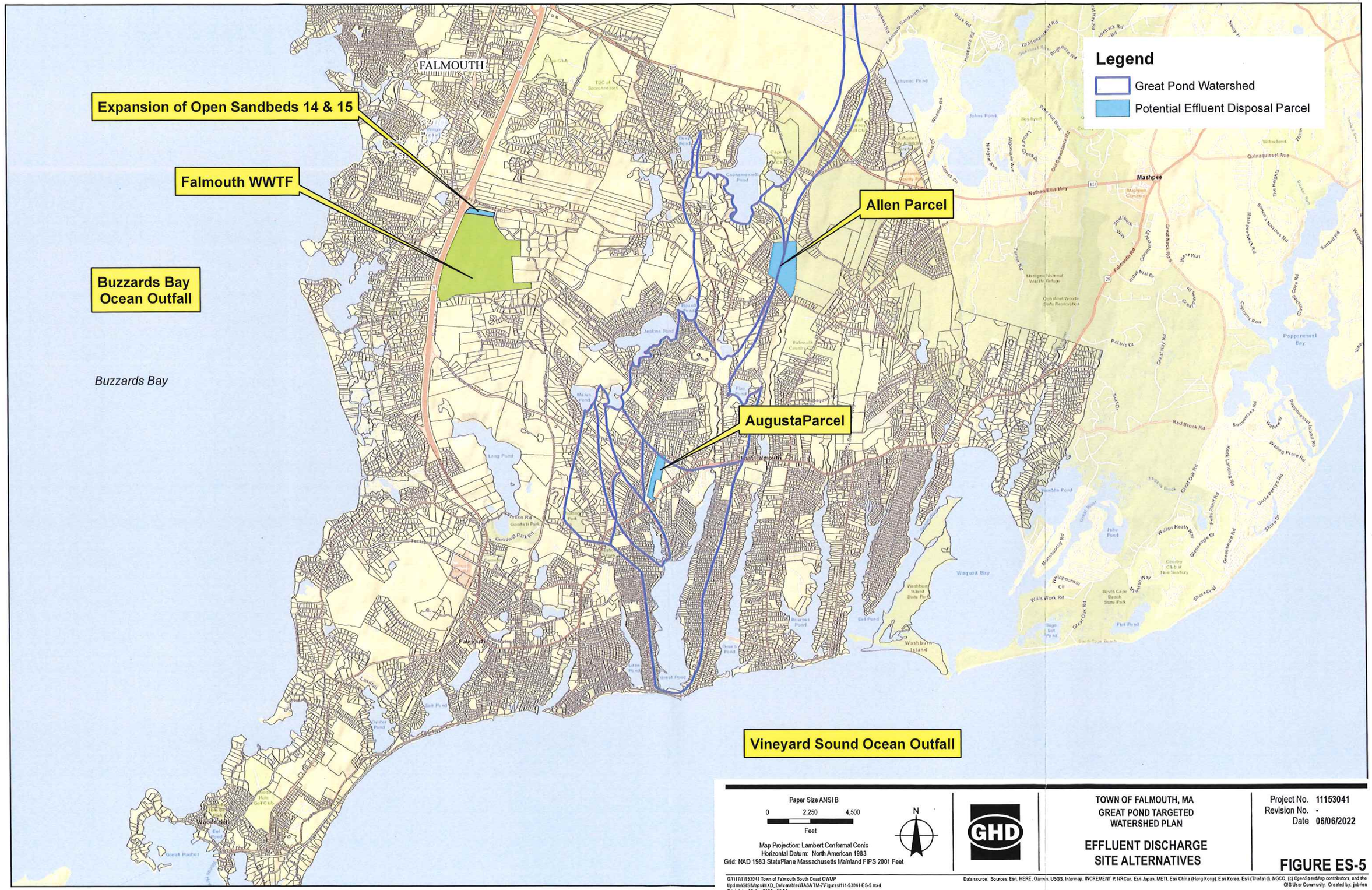
TASA PARCELS IN THE
GREAT POND WATERSHED

Project No. 11153041
Revision No. -
Date 06/06/2022

FIGURE ES-4

C:\Data\Falmouth\New Folder\Figure ES-4.mxd
Print date: 06 Jun 2022 - 07:55

Data source: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community Created by: jobrien



Paper Size ANSI B

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Feet

Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane Massachusetts Mainland FIPS 2001 Feet

N

GHD

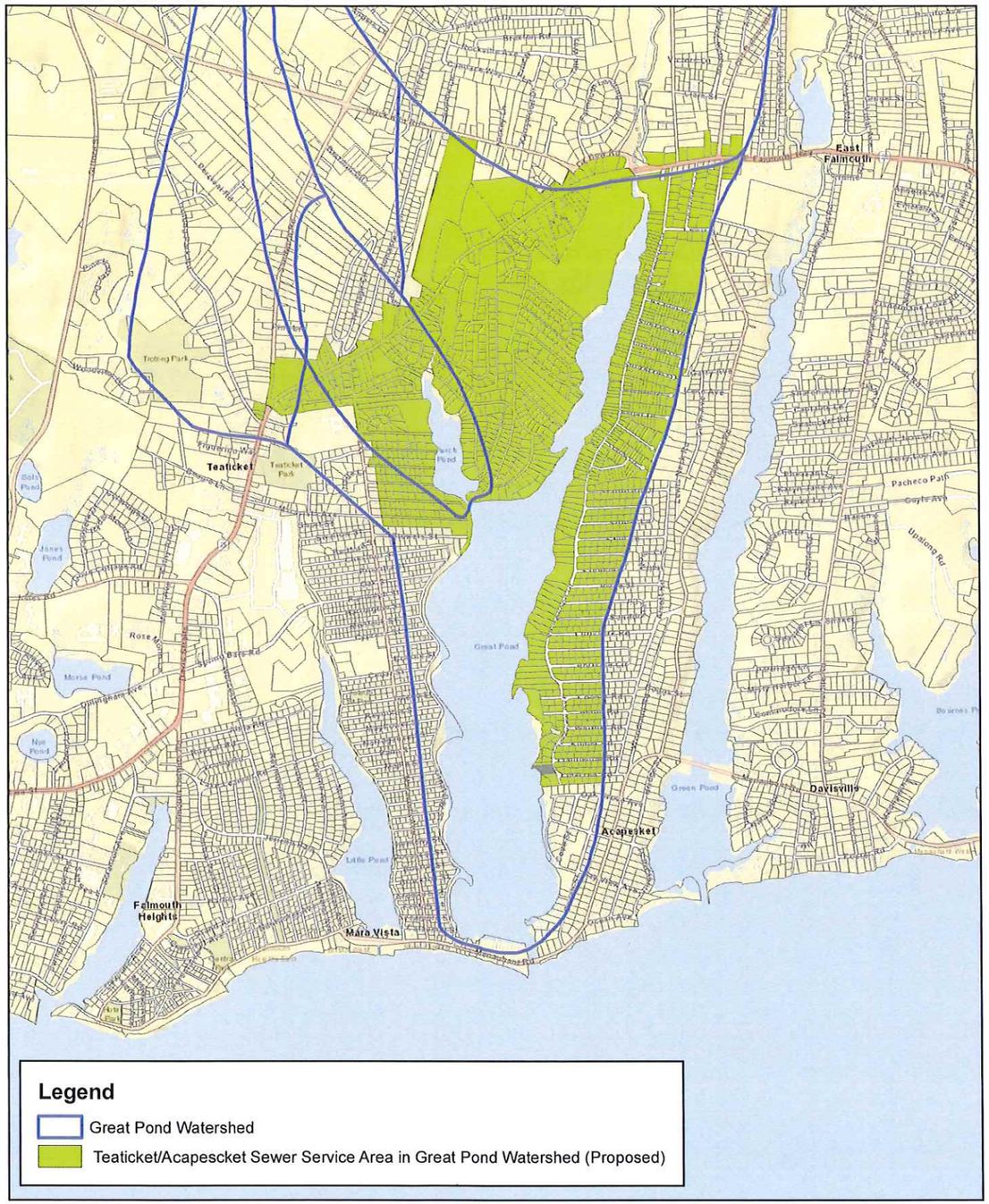
TOWN OF FALMOUTH, MA
GREAT POND TARGETED WATERSHED PLAN

EFFLUENT DISCHARGE SITE ALTERNATIVES

Project No. 11153041
Revision No. -
Date 06/06/2022

FIGURE ES-5

G:\11\11153041 Town of Falmouth South Coast CWMP Update\GIS\Maps\MXD_Deliverables\TASA TM-7\Figures\111-53041-ES-5.mxd
Print date: 06 Jun 2022 - 08:04



Paper Size ANSI A

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Feet

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Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane Massachusetts Mainland FIPS 2001

GHD

TOWN OF FALMOUTH, MA
Great Pond Targeted
Watershed Management

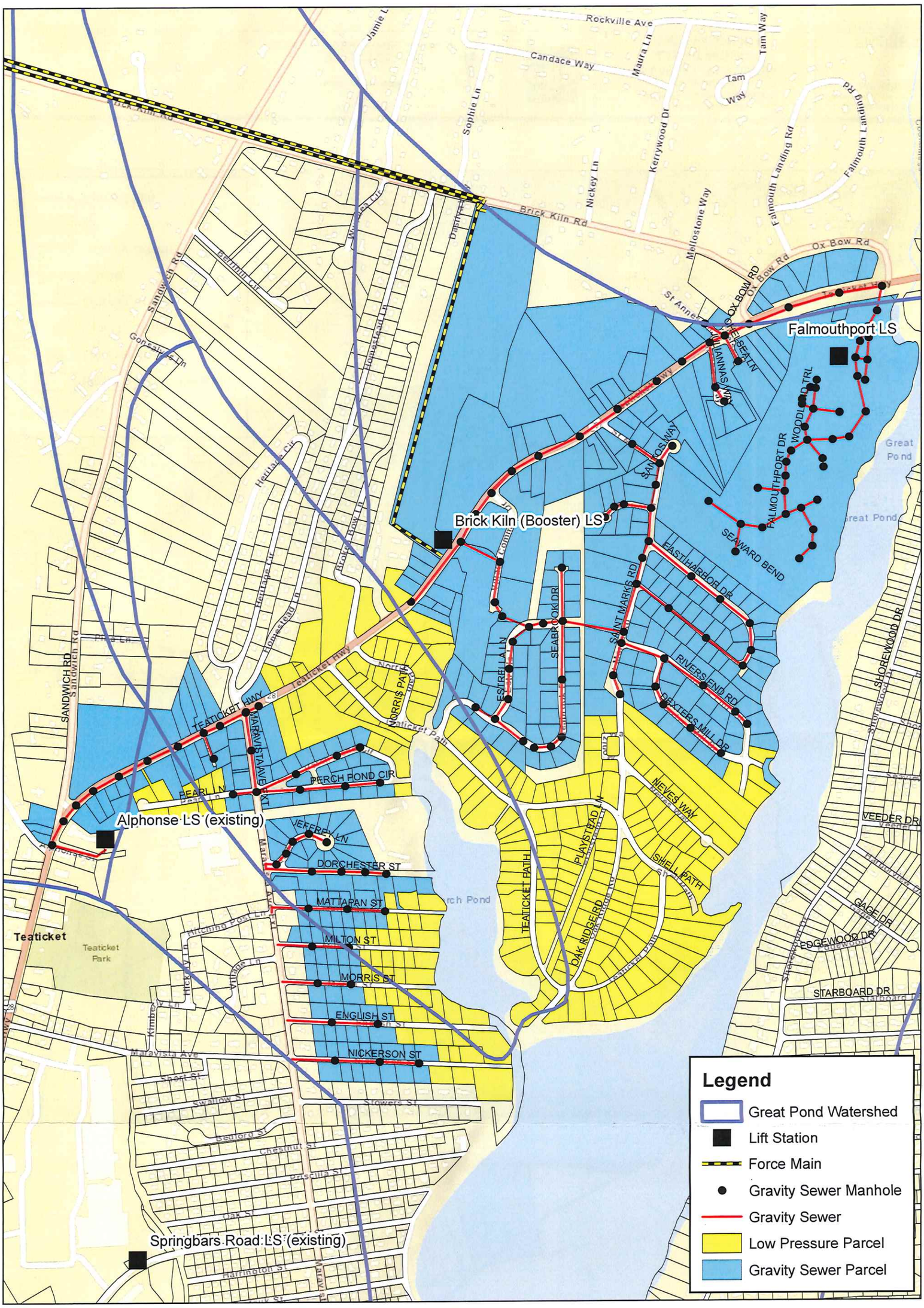
TASA PARCELS IN THE
GREAT POND WATERSHED

Project No. 11153041
Revision No. -
Date 06/06/2022

FIGURE 2-1

C:\data\Falmouth\New Folder\Figure ES-4.mxd
Print date: 06 Jun 2022 - 07:56

Data source: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community. Created by: jobrien



Paper Size ANSI B

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Feet

Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane Massachusetts Mainland FIPS 2001 Feet

N

GHD

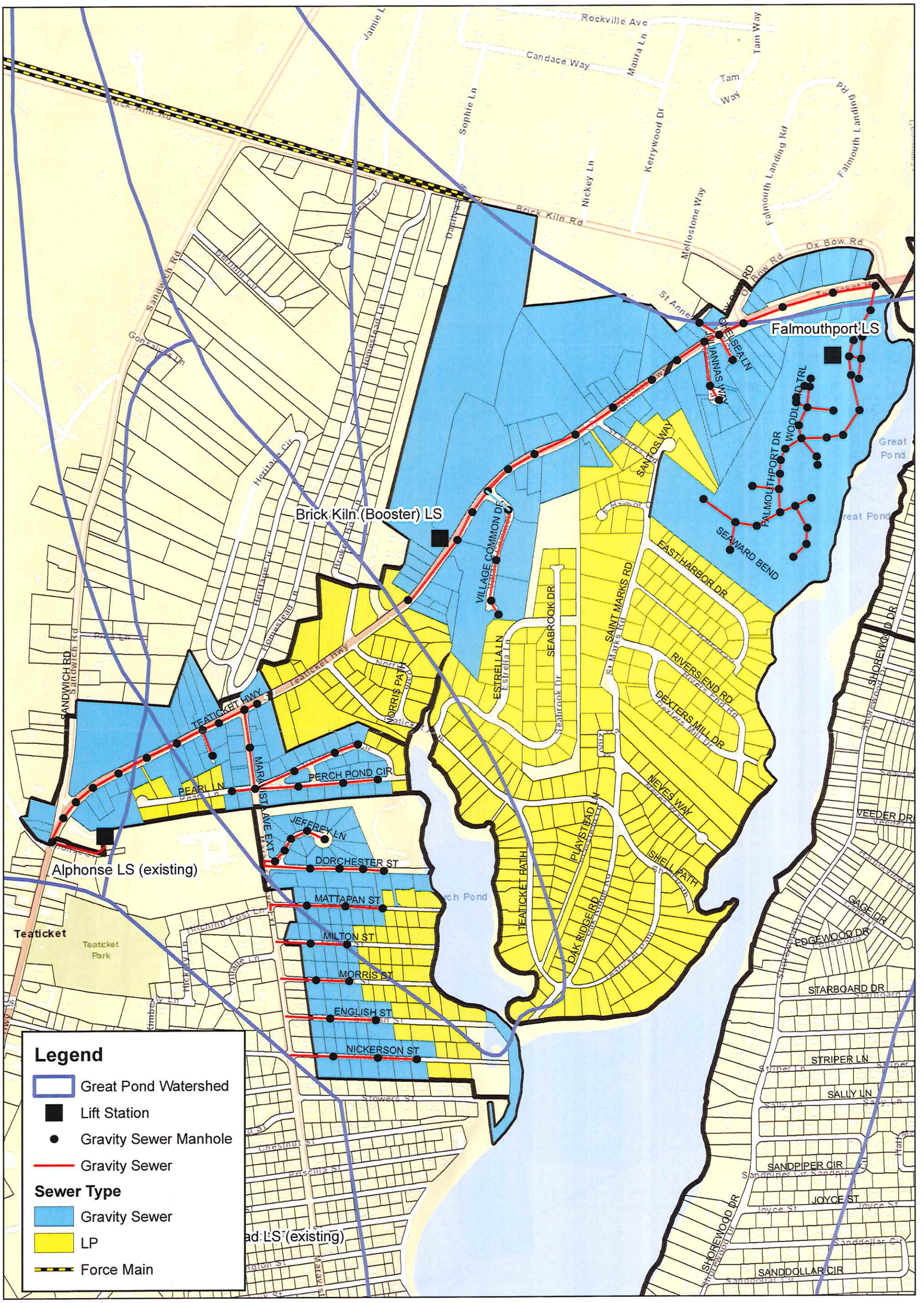
Town of Falmouth, MA
Great Pond Targeted Watershed Management Plan

TASA AREA 1 - CONCEPTUAL LAYOUT WITH 4 SEWER EASEMENTS

Project No. 11153041
Revision No. -
Date 06/02/2022

FIGURE 4-1

C:\data\Falmouth\New Folder\Figure 4-1.mxd
Print date: 02 Jun 2022 - 08:32



Paper Size ANSI B

0 300 600

Feet

Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane Massachusetts Mainland FIPS 2001 Feet

N

GHD

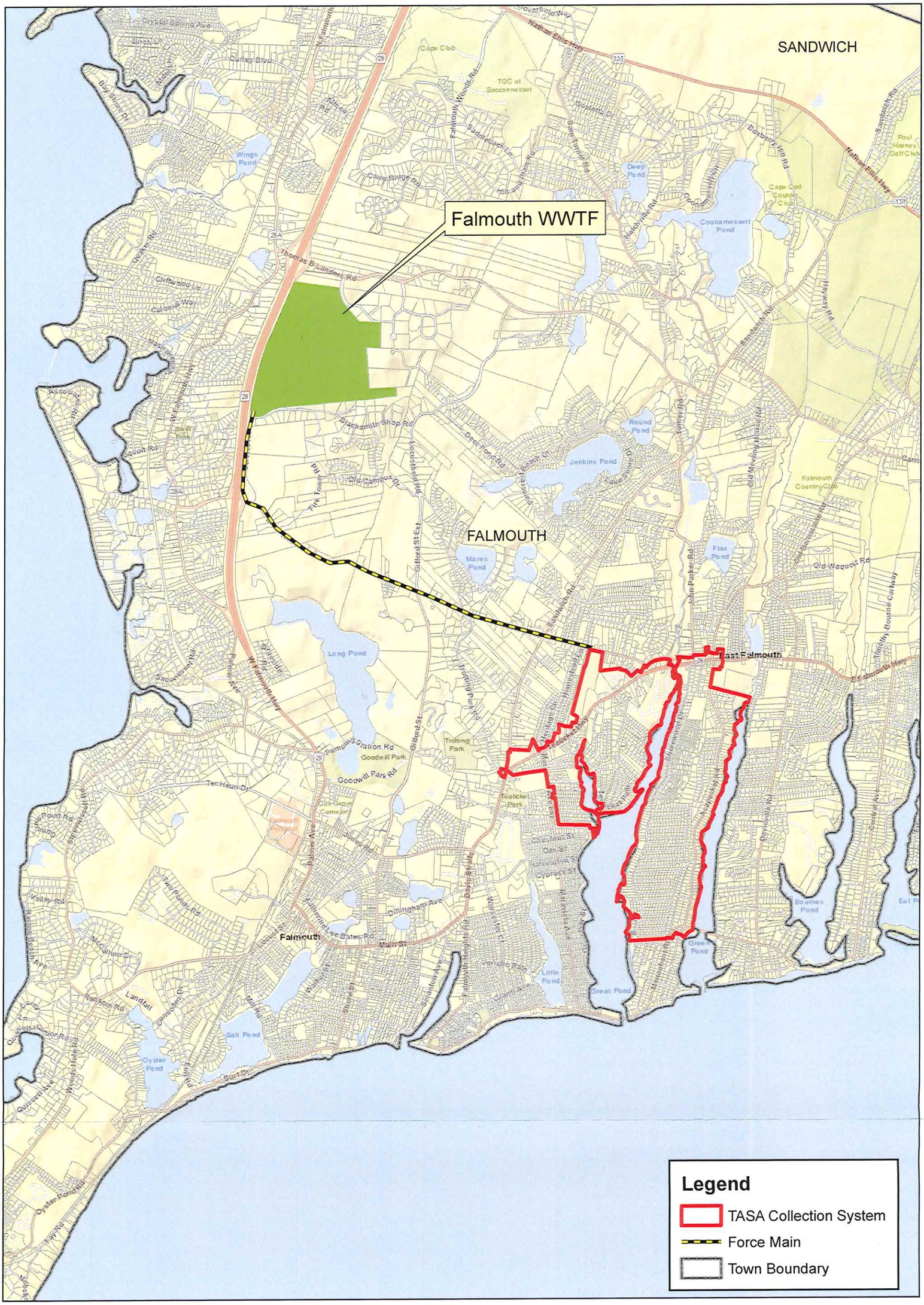
Town of Falmouth, MA
Great Pond Targeted Watershed Management Plan

TASA AREA 1 - CONCEPTUAL LAYOUT WITH NO SEWER EASEMENTS

Project No. 11153041
Revision No. -
Date 06/02/2022

FIGURE 4-2

C:\data\Falmouth\New Folder\Figure 4-2.mxd
Print date: 02 Jun 2022 - 08:37



Paper Size ANSI B

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Feet

Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane Massachusetts Mainland FIPS 2001 Feet

N

GHD

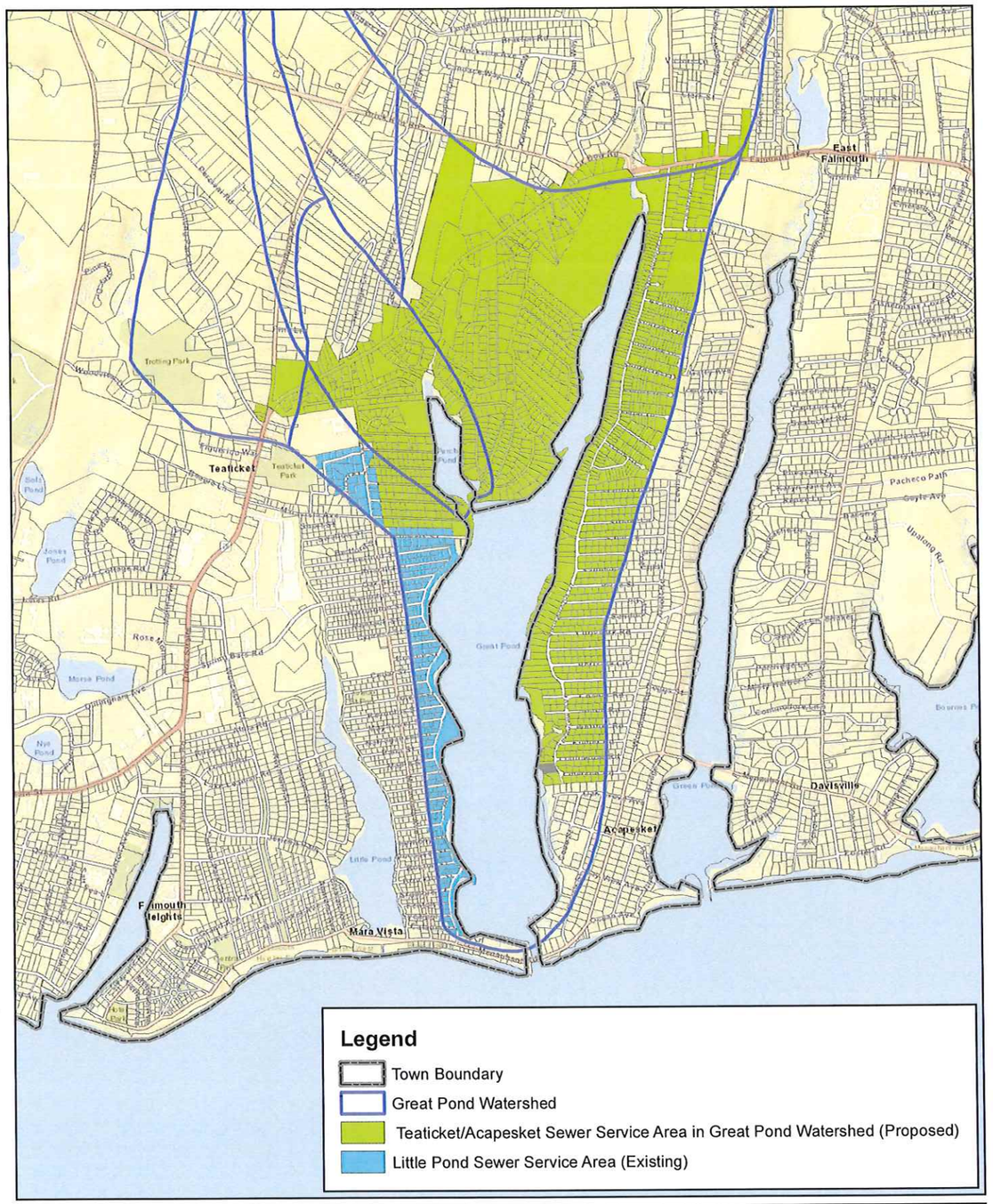
Town of Falmouth, MA
Great Pond Targeted Watershed Management Plan

TASA COLLECTION SYSTEM AND FORCE MAIN ROUTE

Project No. 11153041
Revision No. -
Date 06/02/2022

FIGURE 4-3

C:\data\Falmouth\New Folder\Figure 4-3.mxd
Print date: 02 Jun 2022 - 12:02



Paper Size ANSI A

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Feet

Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane Massachusetts Mainland FIPS 2001

N

GHD

TOWN OF FALMOUTH, MA
Great Pond Targeted
Watershed Management

SEWERED PARCELS IN GREAT POND WATERSHED
LITTLE POND SEWER SERVICE AREA
(EXISTING) AND TEATICKET/ACAPESKET
STUDY AREA (PROPOSED)

Project No. 11153041
Revision No. -
Date 06/13/2022

FIGURE 5-1

C:\data\Falmouth\New Folder\Figure 5-1.mxd
Print date: 13 Jun 2022 - 11:31

Data source: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community. Created by: jobrien


GHD

BUSINESS

2. Report – Transportation Committee (15 minutes)

Falmouth Transportation Committee

Annual Report of the Transportation Committee to the Select Board FY-22 (Approved unanimously by the Committee at its meeting June 9, 2022)

Committee name: The Select Board changed the name of the Committee from "Transportation Management Committee" to "Transportation Committee" in August of 2021.

Membership: Rhona Carlton Foss joined the Committee as the representative of the Commission on Disabilities. She brings both passion and expertise to the Transportation Committee. Otherwise, the Committee's membership remained the same – Paul Dreyer, Planning Board representative; Chris McGuire, Bicycle and Pedestrian Committee representative; Ralph Herbst, Alison Leschen (vice chair) and Ed DeWitt (chair). The Select Board did not fill the outstanding vacancy (4th at large member) during the entire year.

Year in review: The Committee managed to get a fair amount accomplished. Here is a sampling of those accomplishments.

1. The Committee takes credit for getting the Steamship Authority and the City of New Bedford and specifically the new Port Director to start discussing freight operations to the island from the port. Unfortunately, the Port Director has now resigned.
2. At the urging of the Committee, the Steamship Authority created a grants manager position. One of our first recommendations was for the Authority to seek grant funding the Committee identified to study a 21st century freight operation.
3. Working with MassDOT, the Committee identified the first and best step for dealing with speeding in the Woods Hole corridor was radar speed signs. The signs were ultimately approved by Town Meeting (petition article).
4. The Committee cast light on what it determined to be a questionably managed Ferry Embarkation Fee Fund. Last fall the Committee offered policy recommendations to improve overall management and transparency; to date the Select Board has not considered the recommendations.
5. The Committee identified more than 1,350 vehicles that likely should be paying excise tax to the Town. We identified a first and best step to begin collecting the revenue. We also followed up with a recommendation to track effectiveness.
6. The Committee investigated and presented to the DPW a pavement management system used by other communities that both improves overall pavement quality and reduces long term maintenance costs.
7. Working with the CCRTA, Falmouth will now be considered for a state-of-the-art electronic wayfinding signage system.
8. After meeting with a working group from the Chamber of Commerce on downtown parking and access, the Committee decided to focus on wayfinding improvements and standardization. We recommended a working group approach of stakeholders and identified an available grant (mirroring what the town of Orleans has done). Despite a

unanimous vote by the Select Board to follow the Committee's wayfinding recommendations, no progress has taken place.

9. Early on the Committee reported on the lack of resources provided to the Complete Streets Policy and Program. Our follow-up and perseverance led to the fall Town Meeting appropriating funds for this important program (petition article).
10. The Committee sees the integration of Complete Streets and Safe Routes to School programs as the top priority for both programs. We have begun facilitating discussion and cooperation between the School Department and the DPW.

Continuing works in progress:

1. Improved use of the Ferry Embarkation Fee Fund to better mitigate ferry impacts upon the Town.
2. Alternative freight systems to Martha's Vineyard.
3. Stormwater management.
4. Excise tax collection from SSA parking lots – improved accounting.
5. Cape Cod bridge replacement – identifying Falmouth's interests.
6. Comprehensive wayfinding.
7. Critically evaluating Complete Streets.
8. Identifying what studies by transportation consultants have not been implemented.
9. Increased and better use of transportation-related grants.
10. Improve communication/coordination with relevant Town staff working on grant proposals.
11. Walkable/bikeable villages and schools.

BUSINESS

3. Update on Curbside Trash and Recycling Collection (5 minutes)

MEDIA RELEASE

June 23, 2022

Falmouth Contract for Curbside Collection of Trash and Recycling Assigned to Waste Connections

Republic Services requested and received consent from the Town of Falmouth to assign the Town of Falmouth contract for municipal curbside collection of trash and recycling to Waste Connections effective July 1st of this year.

Waste Connections has acquired Nauset Disposal based in Orleans as well as E.L. Harvey based in Westborough, Massachusetts. Nauset Disposal provides trash and recycling collection to many individual residents and businesses throughout the Cape. Nauset will provide a local call center based in Cape Cod. E.L. Harvey provides municipal curbside collection to a number of cities and towns in southeastern Massachusetts. In combination, these subsidiaries of Waste Connections provide a pool of drivers and equipment within southeastern Massachusetts that it can draw upon to supplement the Falmouth operation when needed.

"At a meeting with the principals of Nauset Disposal and E.L. Harvey, we were assured that they will immediately be able to deploy the number of trucks and drivers required to complete daily pick-ups of trash and recycling," said Acting Town Manager Peter Johnson-Staub. "There is reason to believe Waste Connections will be better able to provide the consistent service the Falmouth contract requires than Republic Services has been able to deliver during the pandemic," he continued.

"We hope Falmouth residents will see an immediate improvement in the consistency of trash and recycling collection service," said Public Works Director Peter McConarty. "We will closely monitor the performance of the new operator in the coming months and enforce the requirements of the contract if any problems arise," he continued.

The new operator, Waste Connections, has acquired the Republic Services trucks used to serve the Falmouth households so residents will continue to see trucks with the Republic Services label on the trucks in the months ahead. Ultimately, these trucks will be rebranded to reflect the change to Waste Connections - Nauset Disposal.

Prior to July 1, 2022, Nauset Disposal will provide a dedicated phone number for Falmouth residential customers to use to report service issues. This number will also be posted on the Town website at https://www.falmouthma.gov/968/Curbside-Trash-Recycling.

For More Information:

Peter Johnson-Staub
Acting Town Manager
townmanager@falmouthma.gov
508-495-7320

BUSINESS

4. Act on application for approval of Local Initiative Plan to create one affordable rental unit located at 462 Teaticket Highway, East Falmouth (5 minutes)

Community Support Narrative, Project Description and Documentation

Please provide a description of the project, including a summary of the project's history and the ways in which the community fulfilled the local action requirement.

See ATTACHED SITE PLAN Approval for Project Description

See ATTACHED NARRATIVE of Community Support

Signatures of Support for the Local Action Units Application

Chief Executive Officer:
defined as the mayor in a city and the board of selectmen in a town, unless some other municipal officer is designated to be the chief executive officer under the provisions of a local charter

Signature:_____

Print Name:_____

Date:_____

Chair, Local Housing Partnership:
(as applicable)

Signature:_____

Print Name:_____

Date:_____

Municipal Contact Information

Chief Executive Officer
Name NANCY TAYLOR
Address 59 TOWN HALL SQUARE FALMOUTH MA 02540
Phone 508-495-7325
Email NANCY.TAYLOR@FALMOUTHMA.GOV

Town Administrator/Manager
Name PETER JOHNSON-STAUB
Address 59 TOWN HALL SQUARE FALMOUTH MA 02540
Phone 508-495-7325
Email TOWNMANAGER@FALMOUTHMA.GOV

City/Town Planner (if any)
Name JED CORNOCK
Address 59 TOWN HALL SQUARE FALMOUTH MA 02540
Phone 508-495-7481
Email JED.CORNOCK@FALMOUTHMA.GOV

City/Town Counsel
Name MAURA O'KEEFE
Address 157 LOCUST STREET FALMOUTH MA 02540
Phone 508-548-8800
Email TOWNCOUNSEL@FALMOUTHMA.GOV

Chairman, Local Housing Partnership (if any)
Name
Address
Phone
Email

Community Contact Person for this project
Name KIMBERLY FISH HOUSING COORDINATOR
Address 59 TOWN HALL SQUARE FALMOUTH MA 02540
Phone 508-495-7344
Email KIM.FISH@FALMOUTHMA.GOV

The Project

Developer: Daniel C. Maclone

Telephone and Email: maclone7@aol.com 774-836-5550

Project Site: 462 Tenticket Highway

Address: Unit B

Is your municipality utilizing any HOME or CDBG funding for this project? Yes _____ No X

Local tax rate per thousand $ 8.05 For Fiscal Year 2022

Site Characteristics: proposed or existing buildings by design, ownership type, and size.

Project Style	Total Number of Units	Number of Units Proposed for Local Action Units Certification
Detached Single-family house		
Row house/townhouse		
(Duplex) with detached Garage Unit above	3	1
Multifamily house (3+ family)		
Multifamily rental building		
Other (specify)		

Unit Composition

Type of Unit: Condo Ownership Fee Simple Ownership Rental	# of Units	# of BRs	# of Baths	Gross Square Feet	Livable Square Feet	Proposed Sale Prices/ Rent	Proposed Condo Fee
Affordable:	1	1	1			1344 -	Tenant Pays Utilities
Market:	1	1	1			1700	
	1	3	1			2100	

Falmouth Planning Board
59 Town Hall Square, Falmouth, MA 02540
Telephone: 508-495-7440 Fax: 508.495.7443 email: planning@falmouthma.gov

February 9, 2022

Gary Street, Acting Building Commissioner
Falmouth Town Hall
59 Town Hall Square
Falmouth, Massachusetts 02540

Re: Site Plan Review Decision – Nick Mirrione, Mirrione Realty, LLC
462 Teaticket Hwy
34 04 028 001

Dear Gary,

At its meeting on February 8, 2022, the Planning Board voted the application of Nick Mirrione of Mirrione Realty, LLC, for the construction of a one-bedroom rental dwelling unit above an existing garage located at 462 Teaticket Highway (Route 28), under §240-12.2 Site Plan Review of the zoning bylaw for a plan entitled: *"Site Plan for #462 Teaticket Highway Prepared for Valued Home Improvement in Falmouth,"* , scale 1"=10', dated November 17, 2021, revised February 4, 2022, prepared by Falmouth Engineering, with the following:

FINDINGS:

The applicant is proposing to build a one-bedroom rental dwelling unit above an existing garage with a total of 5 parking spaces located at 462 Teaticket Highway (Route 28). One of the units on the property will be an affordable dwelling unit as required in §240-6.6 and defined in §240-3.3 of the zoning bylaw.

The 11,412 square foot parcel with 80 feet of frontage along Teaticket Highway, created through an ANR endorsement by the Planning Board in 1967, is located in the General Residence (GR) zoning district and the Coastal Pond (Great Pond) Overlay District.

According to §240-11.2B, the current minimum lot dimensions "shall not apply to any residential lot shown on a plan endorsed by the Planning Board as of April 2, 1984, if the lot conforms to the Bylaw requirements on that date." Therefore, considering the lot was created in 1967 and the minimum dimensions were met at that time, there are no current lot area, width, or frontage issues (related to Site Plan Approval) with this proposal.

The addition of the one-bedroom dwelling unit to a property already containing a two-family structure is allowable in the General Residence (GR) district as a "Multi-family use", which is defined as "any combination of dwellings, as defined, on a single lot resulting in 3 or more dwelling units, at least one of the units being affordable."

The property has an existing five-bedroom septic system that will accommodate this proposed additional dwelling unit.

The Town of Falmouth Engineering Division, Health Department, and Zoning Board of Appeals reviewed and commented on the above-mentioned site plan and the Planning Board finds that the applicant has adequately addressed all comments.

The Planning Board's review does not include Building Code review and the Board defers to the Building Commissioner as to issues related to Building Code & Zoning.

The Planning Board considered the above-referenced referrals and the applicant's response in this matter, the Board will condition its decision accordingly.

The Board finds that the information provided by the Applicant conforms to all the requirements and findings pursuant to §240-12.2 of the zoning bylaw.

WAIVERS:

- §240-14.3B Landscape Plan Required: To waive the landscape plan submittal requirement.

CONDITIONS:

1. The plan shall be constructed as approved. Any changes shall be reviewed by the Planning Board to determine if a modification of this decision is necessary. Pursuant to §240-2.1C(2) of the zoning bylaw, no permit for full or partial occupancy shall be issued until the Planning Board is satisfied that the conditions of this approval and predecessor approvals have been met.
2. The project shall not direct any stormwater runoff to public property, abutters, or public right of ways.
3. Upon completion of construction, the Applicant shall post the address for this residence per §99-1 Affixing of legible numbers required; time limit for compliance.
4. Prior to the issuance of an occupancy permit, a deed restriction, covenant, or other suitable instrument, acceptable to and enforceable by the Town, shall be recorded with the land records at the Barnstable County Registry of Deeds that restricts the leasing of one of the units on the property to households with an income 80 percent or less of the Barnstable County area median income, adjusted for household size, as determined by the U.S. Department of Housing and Urban Development (HUD) or other acceptable method to the Board and further at a rent not to exceed 30 percent of said median income.

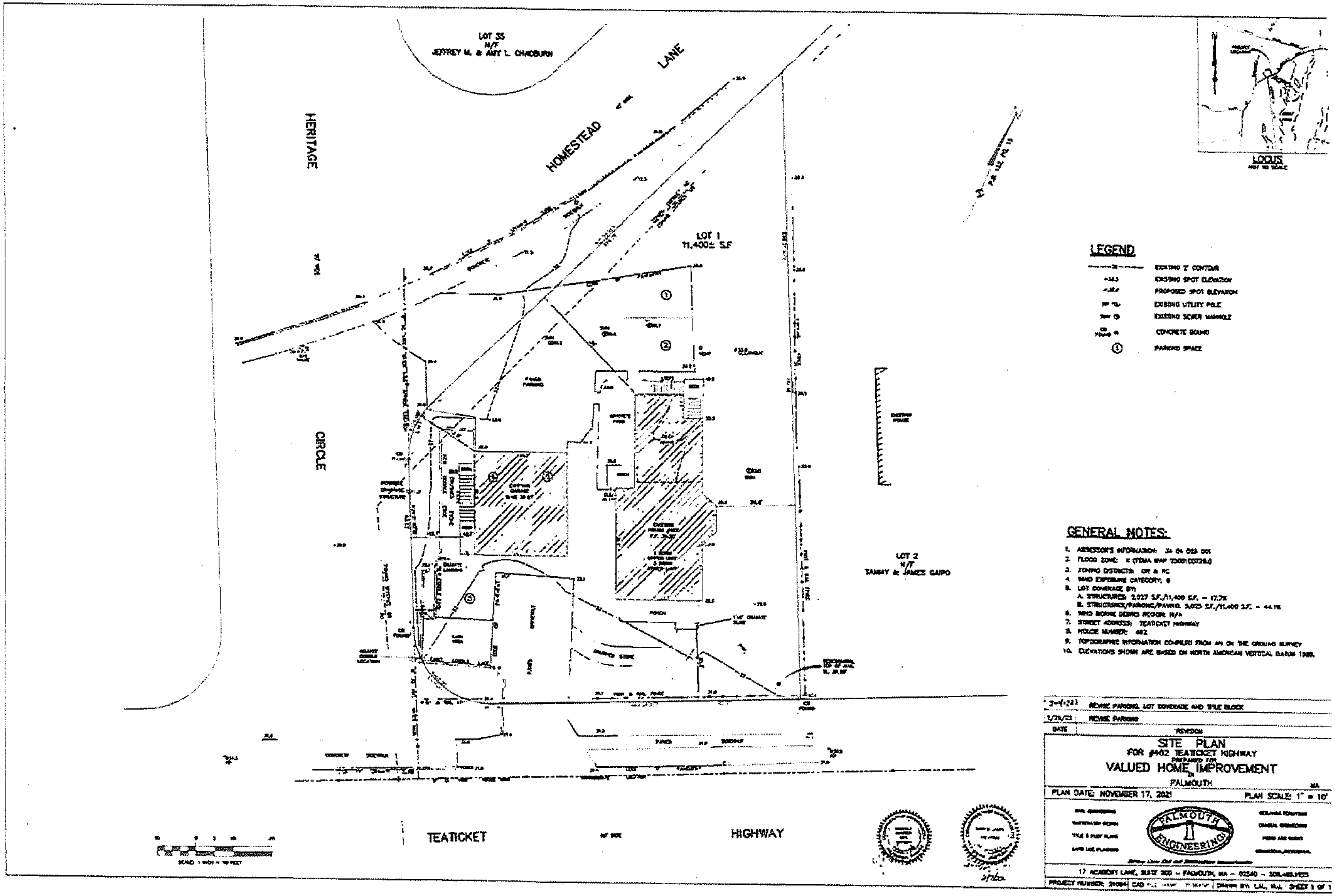
5. The applicant shall engage a third-party Monitoring Agent for the marketing, rental, and future monitoring of the affordable dwelling unit to ensure it can be added to the town's Subsidized Housing Inventory (SHI) as a Local Action Unit under the Local Initiative Program (LIP). This affordability restriction shall run with the land and remain in effect in perpetuity. The request to have the unit be added to the Town's Subsidized Housing Inventory (SHI) must be submitted by the applicant or their designee to the Massachusetts Department of Housing and Community Development, with a copy sent to the Town of Falmouth Housing Coordinator.

Sincerely,

Jed C Gk

Jed Cornock, AICP
Assistant Town Planner

cc: Applicant


LOT 35
N/F
JEFFREY M. & AMY L. CHADBURN
HOMESTEAD LANE
HERITAGE CIRCLE
LOT 1
11,400± S.F.
LOT 2
N/F
TAMMY & JAMES GAIPO
TEATICKET HIGHWAY
LOCUS
LEGEND
GENERAL NOTES:
SITE PLAN
FOR #462 TEATICKET HIGHWAY
VALUED HOME IMPROVEMENT
FALMOUTH
MA
PLAN DATE: NOVEMBER 17, 2021
PLAN SCALE: 1" = 10'
FALMOUTH ENGINEERING
SHEET 1 OF 1

COMMUNITY SUPPORT NARRATIVE
462 TEATICKET HIGHWAY

The Town of Falmouth has created a section in their by-law under sub section 240-12.2 Site Plan Review, that allows multi-family uses in the general residence district. This use is allowed by right under site plan approval rather than having to apply for a special permit or a comprehensive permit. One of the units is required to be affordable per sub section 240-6.6 and as defined in sub section 240-3.3.

This local action requires that the new unit meet the requirements of a local action unit (LAU) and that it will be approved for inclusion in the subsidized housing inventory.

MHP's definition of an LAU (2018)
Local Action Units (LAUs) are affordable housing units created as a result of an intentional action taken by a community, without a comprehensive permit, and which meet the requirements for inclusion on the Subsidized Housing Inventory (SHI).

Falmouth Planning Board
59 Town Hall Square, Falmouth, MA 02540
Telephone: 508-495-7440 Fax: 508.495.7443 email: planning@falmouthma.gov

February 9, 2022

Gary Street, Acting Building Commissioner
Falmouth Town Hall
59 Town Hall Square
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The Planning Board's review does not include Building Code review and the Board defers to the Building Commissioner as to issues related to Building Code & Zoning.

The Planning Board considered the above-referenced referrals and the applicant's response in this matter, the Board will condition its decision accordingly.

The Board finds that the information provided by the Applicant conforms to all the requirements and findings pursuant to §240-12.2 of the zoning bylaw.

WAIVERS:

- §240-14.3B Landscape Plan Required: To waive the landscape plan submittal requirement.

CONDITIONS:

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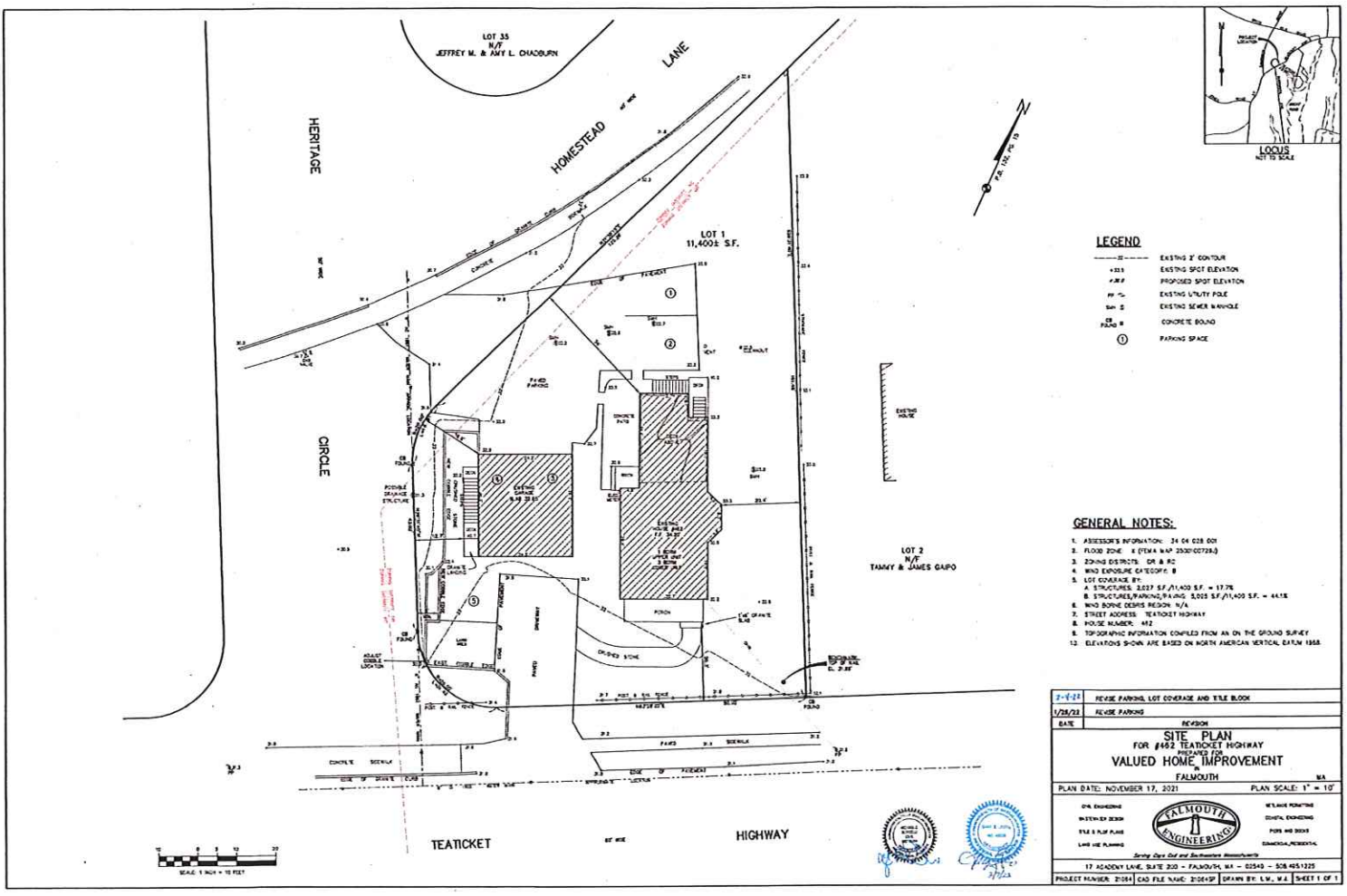
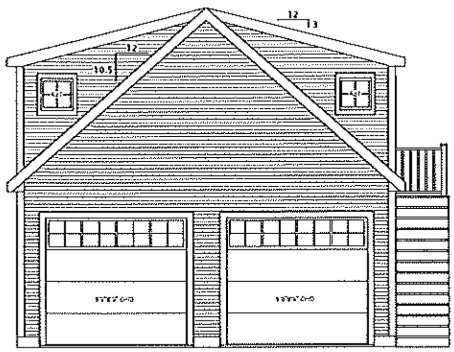
Sincerely,

Jed C Cornock, AICP
Assistant Town Planner

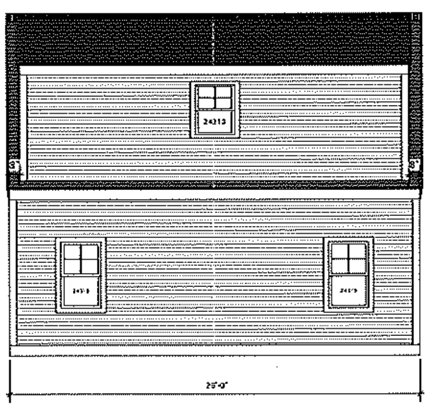
cc: Applicant


LOT 35
N/F
JEFFREY M. & AMY L. CHADBURN
HERITAGE
CIRCLE
HOMESTEAD
LANE
LOT 1
11,400± S.F.
LOT 2
N/F
TAMMY & JAMES GAIPO
TEATICKET
HIGHWAY
LOCUS
NOT TO SCALE
LEGEND
EXISTING 2' CONTOUR
EXISTING SPOT ELEVATION
PROPOSED SPOT ELEVATION
EXISTING UTILITY POLE
EXISTING SEWER MANHOLE
CONCRETE BOUND
PARKING SPACE
GENERAL NOTES:
1. ASSESSOR'S INFORMATION: 24 04 028 001
2. FLOOD ZONE: X (FEMA MAP 25001C0728J)
3. ZONING DISTRICTS: OR & RC
4. WIND EXPOSURE CATEGORY: B
5. LOT COVERAGE BY:
A. STRUCTURES: 2,027 S.F./11,400 S.F. = 17.7%
B. STRUCTURES/PARKING/PAVING: 5,005 S.F./11,400 S.F. = 44.1%
6. WHO BORNE DEEDS REGION: N/A
7. STREET ADDRESS: TEATICKET HIGHWAY
8. HOUSE NUMBER: 462
9. TOPOGRAPHIC INFORMATION COMPILED FROM AN ON THE GROUND SURVEY
12. ELEVATIONS SHOWN ARE BASED ON NORTH AMERICAN VERTICAL DATUM 1988
2-4-22 REVISE PARKING, LOT COVERAGE AND TITLE BLOCK
1/28/22 REVISE PARKING
DATE REVISION
SITE PLAN
FOR #462 TEATICKET HIGHWAY
PREPARED FOR
VALUED HOME IMPROVEMENT
IN
FALMOUTH MA
PLAN DATE: NOVEMBER 17, 2021 PLAN SCALE: 1" = 10'
FALMOUTH ENGINEERING
17 ACADEMY LANE, SUITE 200 - FALMOUTH, MA - 02540 - 508.495.1225
PROJECT NUMBER: 21084 CAD FILE NAME: 21084SP DRAWN BY: L.M., M.A. SHEET 1 OF 1

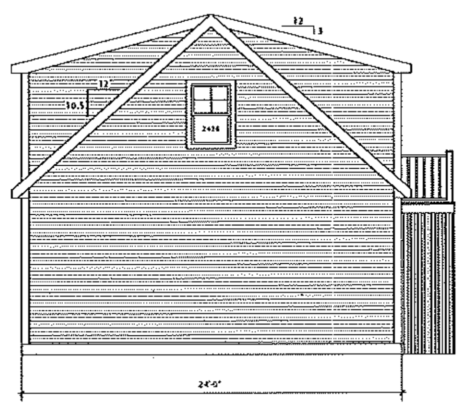


FRONT

RIGHT



LEFT



REAR

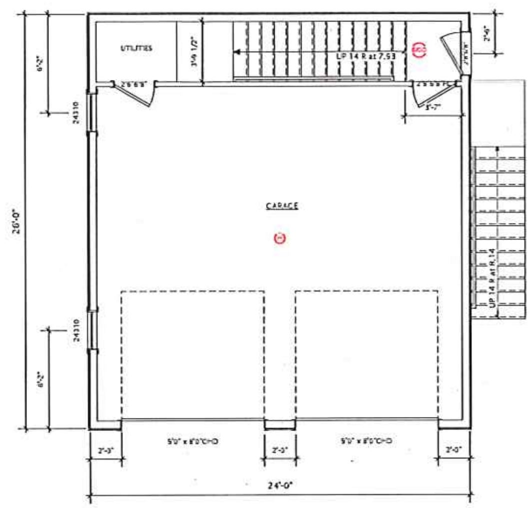
Bourque Project Services LLC

Studio with Garage

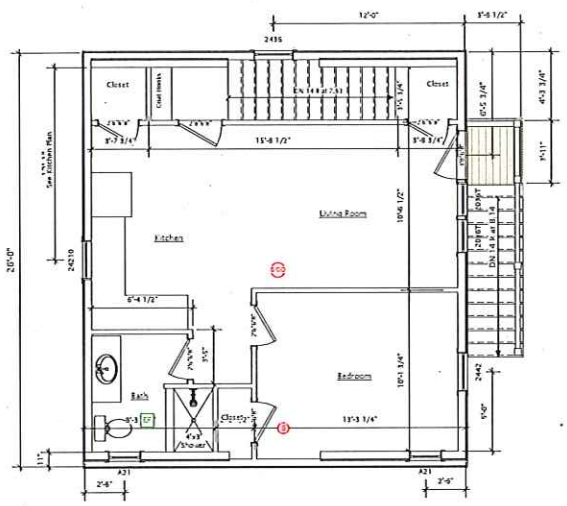
ELEVATIONS

1/4" = 1'0"

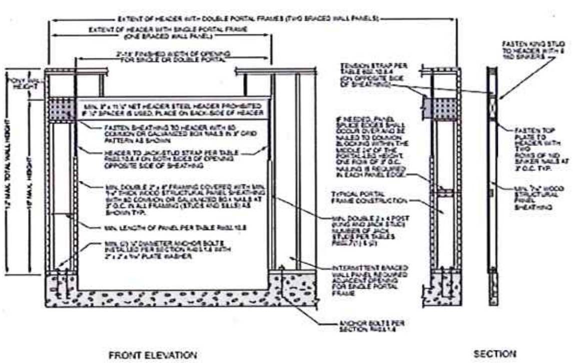
A1



Garage Level



Studio Level



1 GARAGE DOOR PORTAL FRAME
NTS

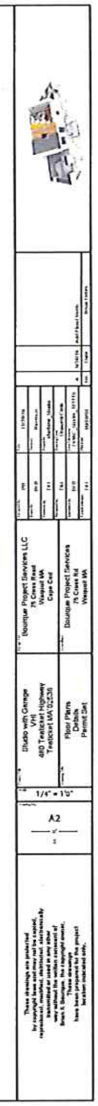
Floor Plan Notes

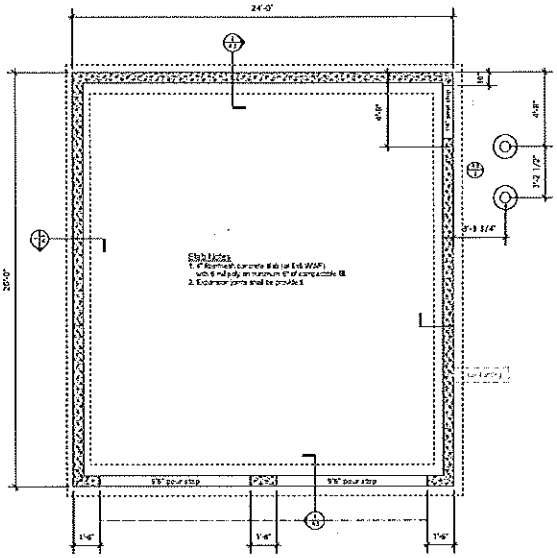
1. FRAMING CORNERS SHALL ALLOW FOR CAVITY INSULATION.
2. BLOCKING TO RECEIVE INTERIOR PARTITIONS SHALL ALLOW FOR CAVITY INSULATION.
3. COORDINATE ALL ACCESS DOORS/ PANELS AND DETAILS TO ATTIC SPACES WHERE REQUIRED WITH THE DESIGNER.
4. UNLESS OTHERWISE SPECIFIED, DOOR AND WINDOWS ARE CENTERED BETWEEN WALLS and/or MILLWORK, OR A MINIMUM 4-1/2 OFF ADJACENT WALLS.
5. WINDOWS ARE ANDERSON 400 SERIES. WINDOW STUD POCKETS ARE 3'.
6. ALL ROOF VENTS SHALL BE BLACK ABS PLASTIC, LOCATIONS AS DIRCECTED BY THE G.C.
7. COORDINATE FINAL DOWNSPOUT LOCATIONS WITH THE G.C.
8. DIMENSIONS ARE FROM ROUGH FRAME, INTERIOR OR EXTERIOR, OR CENTER OF WALL WHEN CHAINED.
9. SEE ALL NOTES ON ALL DRAWINGS.
10. (S) Photo-Electric Smoke Detector

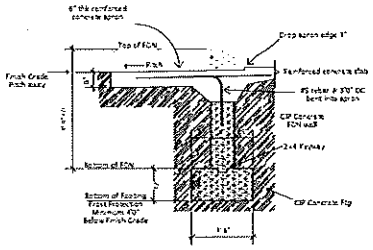
(SCO) Combination Photo-electric Smoke Detector & Carbon Monoxide Detector

(H) Heat Detector

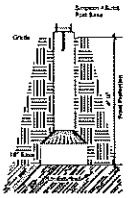
EF Exhaust Fan



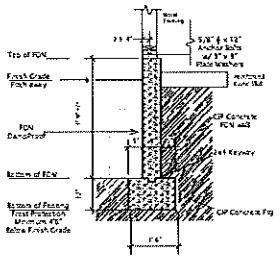




1 CONCRETE FDN
1/2" = 1' 0"



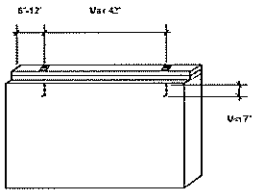
2 PIER FOOTING
1/2" = 1' 0"



3 CONCRETE FDN
1/2" = 1' 0"

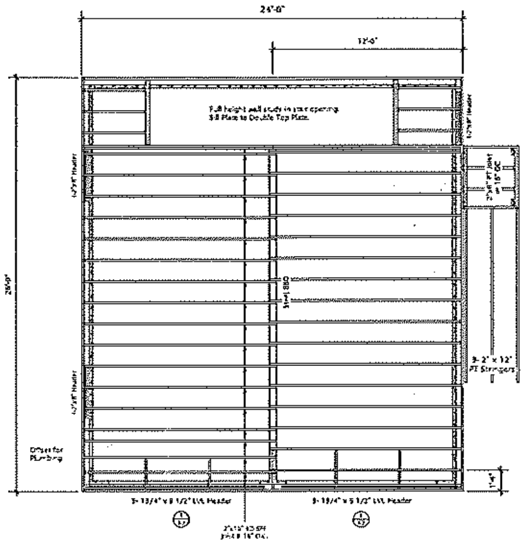
FOUNDATION NOTES

1. GENERAL CONTRACTOR TO VERIFY ALL GRADES AND ELEVATIONS AS PROVIDED ON SITE PLAN PREPARED BY J DOYLE ASSOCIATES.
2. ALL FOOTINGS SHALL REST ON FIRM, NATURALLY OCCURING MEDIUM COARSE SAND HAVING A BEARING CAPACITY OF 1-1/2 TONS PER SQUARE FOOT. MECHANICALLY COMPACT BOTTOM OF ALL EXCAVATIONS BEFORE FORMING FOOTINGS.
3. ALL CONCRETE SHALL BE "READY MIX" TYPE, COMPLYING WITH ACI 301 AND 318 REFERENCES WITH A COMPREHENSIVE STRENGTH OF 3000 PSI AT 28 DAYS.
4. FOUNDATION WALLS SHALL EXTEND ABOVE THE ADJACENT GRADE A MINIMUM OF 6' AT ALL POINTS.

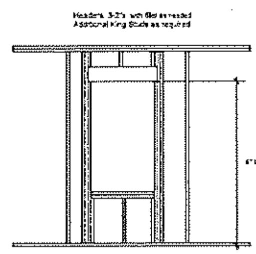


ANCHOR BOLT LOCATION
N.T.S.

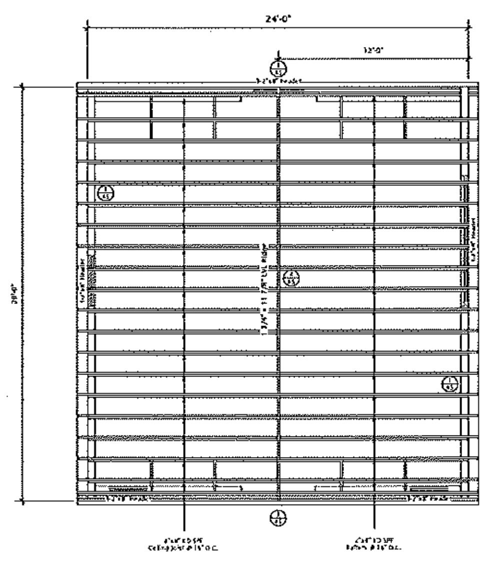
A3



FLOOR



TYP WINDOW OPENING
NTS



ROOF

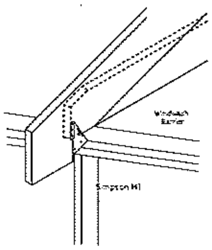
FRAMING NOTES

1. ALL FLOOR SHEATHING SHALL BE 3/4" TONGUE AND GROOVE "ADVANTECH VIP" SHEATHING PANELS, GLUED AND NAILED TO FLOOR JOIST. ALIGN NEW & EXISTING FLOORS.
2. ALL FLOOR AND CEILING FRAMING SHALL BE STRUCTURAL SELECT (f/b = 1,600; E = 1,500,000) SPF KILN DRIED
3. ALL ROOF FRAMING SHALL BE MINIMUM No. 2 GRADE (f/b = 1,000; E = 1,000,000) SPF KILN DRIED
4. ALL WALL, PARTITION, AND SIMILAR LIGHT FRAMING SHALL BE MINIMUM STUD GRADE (f/b = 600; E = 1,000,000) SPF KILN DRIED.
5. ALL PLYWOOD AND WOOD STRUCTURAL PANELS SHALL BE CLEARLY MARKED WITH THE APPROPRIATE APA CERTIFICATIONS.
6. ALL BUILT UP FRAMING SHALL BE GLUED AND NAILED.
7. ALL ENGINEERED LVL CONSTRUCTION DETAILS SHALL CONFORM TO THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
8. EXTEND ALL WOOD POSTS TO BUILT-UP FLOOR JOISTS, SOLID WOOD BLOCKING, WOOD GIRDERS, STEEL BEAMS, LVL BEAMS, OR WOOD SILL/ FOUNDATION BELOW AND PROVIDE FULL AND PROPER BEARING AND BLOCKING.
9. ALL SIMPSON STRONG-TIE PRODUCTS SHALL CONFORM TO MANUFACTURER'S INSTALLATION AND FASTENING INSTRUCTIONS. ALL SIMPSON PRODUCTS IN CONTACT WITH PRESSURE TREATED PRESERVED WOOD SHALL BE Z-MAX/ HDG OR G90 CONNECTORS.

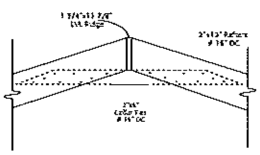
10.SPECICFICATIONS FOR STEEL PROVIDED BY OTHERS.

1/4" = 1'0"

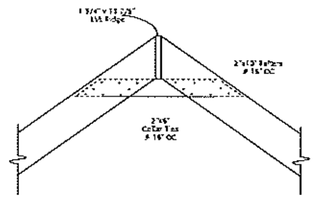
A4



1 RAFTER TIES
NTS



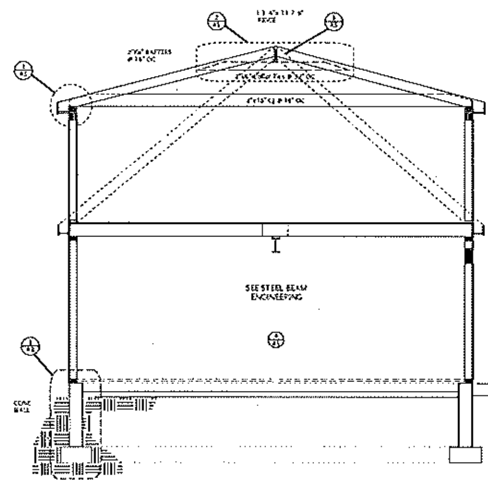
2 RIDGE
NTS



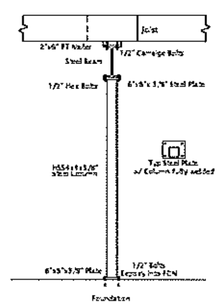
3 RIDGE
NTS

Construction Notes

1. TYPICAL NEW SILL: CONTINUOUS PRESSURE TREATED 2"X6" SILL ON FOAM SILL SEALER ON CONCRETE FOUNDATION WALL WITH 5/8" DIAMETER ANCHOR BOLTS AND 3"x3"x1/4" PLATE WASHERS
2. TYPICAL NEW FLOOR: 2"X10" JOIST @ 16" OC. ON 3/4" TONGUE AND GROOVE ADVANTECH FLOOR SHEATHING PANELS, GLUED AND NAILED. FINISH FLOOR AS SELECTED BY THE OWNER ON PLYWOOD UNDERLAYMENT IN THICKNESS AS REQUIRED TO ALIGN FINISH FLOORS.
   R-30 INSULATION
3. TYPICAL NEW EXTERIOR WALL: WOOD SHINGLES ON 15 lb. FELT UNDERLAYMENT PAPER ON 1/2" CDX PLYWOOD SHEATHING ON 2"x6" WALL STUDS @ 16" O.C. WITH 2-2"X6" TOP PLATE AND A 2"X6" BOTTOM PLATE. R-19 INSULATION.
   NOTE: 5/8 FC ON GARAGE BEARING WALLS.
4. TYPICAL NEW INTERIOR PARTITION: 2"X4" WALL STUDS @ 16" O.C. WITH 2-2"X4" TOP PLATE AND A 2"X4" BOTTOM PLATE. EXCEPT WHERE NOTED OTHERWISE.
   NOTE: SET SINGLE TOP PLATE OF NONBEARING INTERIOR PARTITIONS BELOW STRAPPING.
5. TYPICAL NEW CEILING: 2"X10" JOIST @ 16" OC. 1"X4" WOOD STRAPPING AT 16" O.C. 1/2 BLUEBOARD WITH SKIMCOAT PLASTER.
   R-49 INSULATION.
   NOTE: 5/8" FC ON GARAGE CEILING.
6. TYPICAL NEW ROOF: ASPHALT ROOF SHINGLES ON ROOF SHINGLE UNDERLAYMENT ON 5/8" CDX PLYWOOD SHEATHING, PROVIDE MINIMUM 36" WIDE "ICE & WATER" MEMBRANE AT ALL HIPS, VALLEYS, GABLE ENDS, EAVES, ROOF SLOPE TRANSITIONS, ROOF/ WALL INTERSECTIONS, THE ENTIRE AREA OF ROOFS WITH A SLOPE EQUAL TO OR LESS THAN 3 IN 12, AND WHERE OTHERWISE INDICATED ON THE DRAWING.
7. TYPICAL NEW EAVE/ SOFFIT: ROOF SHINGLE BASE COURSE ON ROOF SHINGLE UNDERLAYMENT PAPER ON CONTINUOUS "ICE & WATER" MEMBRANE EXTENDING UP THE ROOF 36" BEYOND THE OUTSIDE PLANE OF THE EXTERIOR WALL ON CONTINUOUS PRE-FINISHED ALUMINUM DRIP EDGE ON 1"X FASCIA, PROVIDE CONTINOUS 3/4" AIR SPACE . EAVE SOFFIT TO BE 1"X TRIM BOARD AND CONTINUOUS STRIP VENT.
8. SHEATHING: ALL FLOOR SHEATHING T BE NAILED 6" ON EDGE AND 12" IN FIELD. ALL ROOF SHEATHING TO BE NAILED 6" ON EDGE AN 6" IN FIELD. ALL WALL SHEATHING TO BE NAILED 6' ON EDGE AND 12" IN FIELD EXCEPT WHERE OTHERWISE NOTED.



BUILDING SECTION
Scale: 1/4" = 1'-0"



4 STEEL CONNECTION
NTS

A5

CONSENT AGENDA

1. Licenses

    a. Application for a Change of Manager of a Lodging House License – Inn on the Square located at 40 North Main Street, Falmouth

LICENSE APPLICATION REVIEW

Restaurant/Business: Inn on the Square

Address: 40 North Main Street

License Type: Lodging House License

☐ New or Transfer of License _____

or

☐ Change of License Change of Manager

☒	Police	No objection
☒	Fire	No issues
☐	Building	
☒	Health	No issues
☐	Zoning	
☐	Planning	
☐	DPW	
☐	.	
☐	.	
☐	.	
☐	.	
☐	.	

NOTES:

TOWN OF FALMOUTH

Office of the Town Manager & Selectmen
59 Town Hall Square, Falmouth, Massachusetts 02540
Telephone (508) 495-7320

APPLICATION – RENEWAL APPLICATION
LODGING HOUSE LICENSE
M.G.L. Chapter 140, Sections 22 - 31
Fields outlined in RED are required

APPLICATION FOR NEW LICENSE: ☐ RENEWAL APPLICATION: ☑

NAME APPLICANT/OWNER: Inn on the Square, LLC

BUSINESS NAME: Inn on the Square *D/B/A*

BUSINESS ADDRESS: *(if different from Home Address)* 40 North Main Street

TOWN: Falmouth STATE: MA ZIP CODE: 02540

MAILING ADDRESS: *(if different)* 28 Jacome Way, Newport, RI 02842

MANAGER: *(if any)* James Carter

FID #: [redacted] EMAIL: *required* Jcarter@newporthotelgroup.com

TELEPHONE - Business: 757-637-5795 Home: [redacted]

NO. OF ROOMS: 75 NO. OF LODGERS: 300

BED & BREAKFAST: - YES/NO NO OWNER OCCUPIED: - YES/NO NO

TAX ATTESTATION: I certify under the penalties of perjury that the information provided in this application is true and that, to my best knowledge, I have filed all state tax returns and paid all state and local taxes as required under law. I understand that Licensees who fail to correct their non-filing or delinquency will be subject to license suspension or revocation:

5/9/22
DATE

SIGNATURE: OWNER or MANAGER

TOTAL TOWN OF Falmouth FEES: $45.00
LICENSE FEE: $35.00 FILING FEE: $10.00

CONSENT AGENDA

1. Licenses

   b. Approve application for a Special One-Day Wine & Malt Beverages License – Gray Matter Marketing – Cape Cod Brew Fest – Cape Cod Fairgrounds, 1221 Nathan Ellis Highway, East Falmouth on Saturday, September 24, 2022 from 2:00 – 5:30 pm.

LICENSE APPLICATION REVIEW

Restaurant/Business: Cape Cod Brew Fest

Address: 1221 Nathan Ellis Hwy.

License Type: One-Day Wine & Malt

- ☐ New or Transfer of License _____

or

- ☐ Change of License _____

- ☒ Police — No objection
- ☐ Fire
- ☒ Building — No opposition
- ☐ Health
- ☐ Zoning
- ☐ Planning
- ☐ DPW
- ☐ .
- ☐ .
- ☐ .
- ☐ .
- ☐ .

NOTES:

PAID
$25.00
CK# 1209

RECEIVED
JUN - 6 2022
SELECTMEN'S OFFICE

APPLICATION

SPECIAL ONE-DAY LIQUOR LICENSE FOR THE SALE OF ALCOHOLIC BEVERAGES

M.G.L.A. CHAPTER 138, SECTION 14

NAME OF APPLICANT: Matthew Gray

ADDRESS OF APPLICANT: 87 Col. Christopher Greene Rd, Portsmouth, RI 02871

NAME OF ORGANIZATION: Gray Matter Marketing

MAILING ADDRESS: 87 Col. Christopher Greene Rd, Portsmouth, RI 02871

TELEPHONE #: 401-318-2991 EMAIL: claire@graymattermarketing.com

LOCATION TO BE LICENSED-ADDRESS: Cape Cod Fairgrounds, 1221 Nathan Ellis Hwy, Falmouth, MA 02536

EVENT TITLE: Cape Cod Brew Fest APPROXIMATE # OF PEOPLE: 1900

DATE(S) OF EVENT: 09/24/2022 HOURS OF EVENT: 2-5:30pm

AUTHORIZED MANAGER OF ESTABLISHMENT EVENT: Matthew Gray

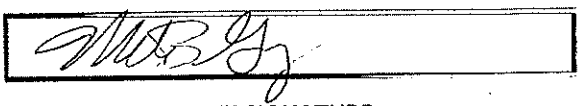
TYPE OF LICENSE:

1. WINE & MALT ☑ NON-PROFIT ☐ FOR PROFIT ☑
2. ALL ALCOHOLIC ☐ NON-PROFIT ONLY ☐

REQUIREMENTS check list:

1. ✓ Provide a narrative overview of the event including food service and security
2. ~~Certificate of non-profit status (if your organization is non-profit)~~ n/a
3. Certificate of liquor liability insurance; *1 MILLION PER OCCURANCE - $2 MILLION AGGREGATE*
4. Certificate of TIPS or other alcohol safety training for all persons handling alcohol Forthcoming
5. ✓ Floor plan of area where alcohol will be served and consumed, and security plan Forthcoming
6. Temporary Food Permit (Health Department) Forthcoming

05/25/2022
DATE


APPLICANT SIGNATURE

FEE: $25.00 PER DAY

$10.00 FILING FEE

Town of Falmouth Application Special One-Day License for the Sale of Alcoholic Beverages M.G.L.A. Chapter 138, Section 14

Narrative describing event

Gray Matter Marketing applying for Cape Cod Brew Fest on Saturday, September 24th, 2022 at Cape Cod Fairgrounds

The Cape Cod Brew Fest was started in 2014 as a fall celebration of craft beer in Falmouth. MA at the Cape Cod Fairgrounds. Since its inception, Gray Matter Marketing has organized this event and drawn a significant crowd ranging between 1400-2000 attendees. Gray Matter Marketing donates a portion of the proceeds to a local non-profit, the Barnstable County Agricultural Society.

In 2022 we expect to host about 1800 attendees, 75 breweries, and 5-6 food trucks. We will provide all relevant certificates for both alcohol safety (TIPS) and temporary food permits from vendors, as the lineup is confirmed. Vendors will be on site pouring 3 oz samples. Gray Matter Marketing will have security on site checking IDs, securing the premise, and providing crowd control as well as local police. This is a private, ticketed, and 21+ event. Gray Matter Marketing will provide a Certificate of Liquor Liability Insurance, as specified in the application, at the time needed before the event

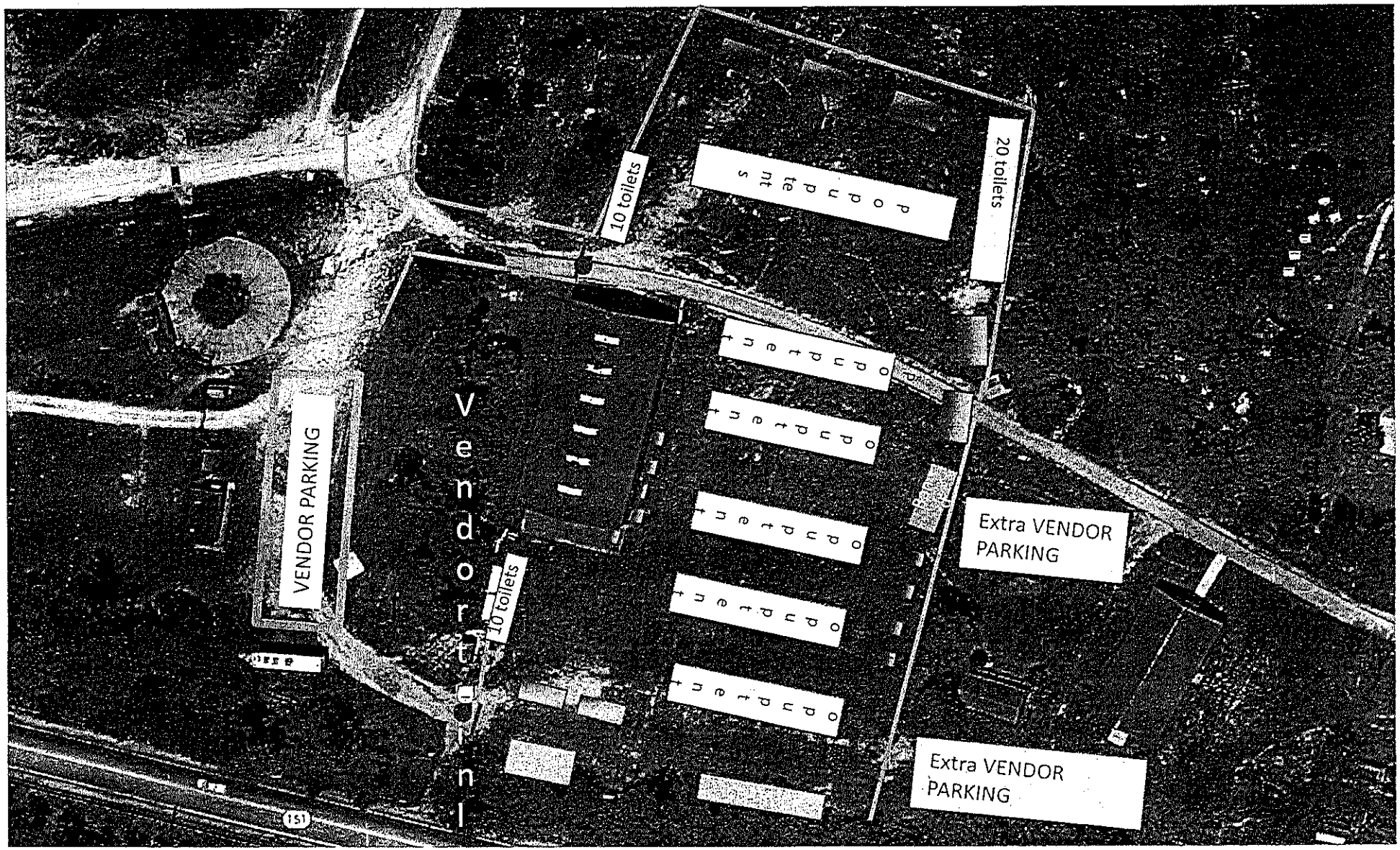
Food Trucks/Vendors

Security points

No Parking signs

Fencing

barricade



CONSENT AGENDA

1. Licenses

   c. Approve application for two Special One-Day Wine & Malt Beverages Licenses – Silver Beach Improvement Association - association tennis courts at the corner of West Avenue and Ocean View Avenue, North Falmouth– Saturday, August 6 and Saturday, August 27, 2022

TOWN OF FALMOUTH
Office of the Town Manager & Select Board
59 Town Hall Square, Falmouth, Massachusetts 02540

TO: **Select Board**

FROM: **Peter Johnson-Staub, Acting Town Manager** PJS

SUBJECT: **Silver Beach Improvement Association Special One-Day Wine & Malt Beverage Licenses**

DATE: **June 24, 2022**

The Select Board Office received an application from the Silver Beach Improvement Association for two Special One-Day Wine & Malt Beverage Licenses to allow service of alcohol at the Association tennis courts located at West Avenue and Ocean View Avenue on Saturday, August 6, 2022, and Saturday, August 27, 2022, from 5:30 pm to 10:30 pm. According to office records, these events have received annual approval since 2017 or earlier. In 2021, the Select Board Office and the Falmouth Police Department received reports of alcohol being carried by event guests from the enclosed tennis courts onto the public way and at the end of year event, into the adjacent premises, The Tea Room, where a private party was reported to be taking place. The Police Department recommends the Association hire a private security firm to control access to the tennis courts where alcohol is served. The Police Department also recommends that the Association set a limit on the number of drinks consumed and a system to monitor and control this limit. A wrist band system is one means of monitoring that could be used. I recommend the Special Licenses be awarded with the following conditions based on input from the Police Department and Town Counsel.

Recommended Motion:

I move that two Special One-Day Wine and Malt Beverages Licenses be awarded to the Silver Beach Improvement Association on August 6, 2022 and August 27, 2022 subject to the following conditions:

- Applicant shall set a limit on the number of drinks served to each person and retain a security company to control and monitor access to alcohol. The security company will also monitor persons who appear to be over served to prevent driving while impaired.
- Applicant shall check ID's to ensure that no one under 21 years old is served.

CC: Ed Dunne, Police Chief
Brian Reid, Police Captain

//Silver Beach One Day Wine-Malt Licenses 06-24-2022

LICENSE APPLICATION REVIEW

Restaurant/Business: Silver Beach Improvement Association

Address: Event at tennis courts at the corner of West & Ocean View Avenues

License Type: One-Day Wine & Malt

- ❑ New or Transfer of License _____

or

- ❑ Change of License _____

- ❑ Police Would not ordinarily object, however, concerns about reports of alcohol being carried by event guests from the enclosed tennis courts onto the public way and at the end of year event, into the adjacent Common Victualler Licensed premises, The Tea Room, where a private party was reported to be taking place and the repeated objections by residents of the neighborhood to a liquor license being issued to The Tea Room that the response to the application should be consistent with the response to The Tea Room
- ❑ Fire No objection
- ❑ Building Okay as long as event is not open to public
- ❑ Health
- ❑ Zoning
- ❑ Planning
- ❑ DPW

NOTES:

Proposed License Conditions:

- Applicant shall set a limit on the number of drinks served to each person and retain a security company to control and monitor access to alcohol. The security company will also monitor persons who appear to be over served to prevent driving while impaired.
- Applicant shall check !D's to ensure that no one under 21 years old is served.

PAID
$85.00
ck# 1111

TOWN OF FALMOUTH

Office of the Town Manager & Selectmen

59 Town Hall Square, Falmouth, Massachusetts 02540
Telephone (508) 495-7320
Fax (508) 457-2573

RECEIVED
JUN 1 2022
SELECTMEN'S OFFICE

APPLICATION
SPECIAL ONE-DAY LIQUOR LICENSE
FOR THE SALE OF ALCOHOLIC BEVERAGES
M.G.L.A. CHAPTER 138, SECTION 14

NAME OF APPLICANT: RONALD FERNANDES

ADDRESS OF APPLICANT: 192 CRYSTAL SPRING AVE NO. FALMOUTH

NAME OF ORGANIZATION: SILVER BEACH IMPROVEMENT ASSOC.

MAILING ADDRESS: P.O. BOX 792 NO FALMOUTH, MA 02556

TELEPHONE #: 508 254-0978

EMAIL: NEWSILVERBEACH @ GMAIL.COM

LOCATION TO BE LICENSED: CORNER OF WEST AVE & OCEAN VIEW AVE (ASSOCIATION ~~COURTS~~ COURTS)

TYPE OF EVENT: SOCIAL GATHERINGS

DATE(S) OF EVENT: ~~6/28~~, 8/6, 8/27

HOURS OF EVENT: 5:30 PM – 10:30 PM

APPROXIMATE # OF PEOPLE: 150

TYPE OF LICENSE: ALL ALCOHOLIC_____ WINE & MALT ✓

NON PROFIT ✓ FOR PROFIT_____

REQUIREMENTS:

1. ✓ Certificate of non-profit status (if your organization is non-profit)
2. ✓ Certificate of liquor liability insurance
3. ✓ Certificate of TIPS or other alcohol safety training
4. ✓ Floor plan of area where alcohol will be served and consumed, and security plan
5. Application for Temporary Food Permit (Health Department) NA

AUTHORIZED MANAGER/OFFICER OF ESTABLISHMENT: RONALD FERNANDES (TREASURER)
(PRINT NAME)

DATE 6/1/22

Ronald V. Fernandes
APPLICANT SIGNATURE

FEE: $25.00 PER DAY
$10.00 FILING FEE

BOARD OF SELECTMEN

Silver Beach Improvement Association

Request for 1 day liquor licenses on 8/6 and 8/27.

8/6 - Mid Summer shindig - Adults only party. We will have some type of music either DJ or live music. We're unsure at this time. Food is limited to purchased platters and desserts.

8/27 - Annual End of Year cookout. Family event. Hamburgers and Hot dogs served. DJ type music provided.

Alcohol security - To address a complaint made last year that people were walking with open alcohol containers between an event the association held at our tennis courts and an event at the Tea Room, the following will be instituted.

The only people at association events are members and their guests. We inform/remind our members of the event via "email blasts". We will note and remind our members that alcohol can not leave our tennis courts area. Second, we will have a member stationed at our entrance/exit gate to insure no one leaves our tennis courts with any alcohol.

Certificate of Completion

This Certificate of Completion of

eTIPS Concessions 3.0

For coursework completed on May 30, 2022
provided by Health Communications, Inc.
is hereby granted to:

Ronald Fernandes

Certification to be sent to:

Silver Beach Improvement Association
192 Crystal Spring Ave # 792
North Falmouth MA, 02556-2505 USA

HEALTH COMMUNICATIONS INC.

This document is not proof of TIPS certification. It signifies only that you have completed the course. Valid certification documents will be forwarded to you.

Ron Fernandes

From: **Penelope Fleming** [redacted]
Subject: Tips Certification
Date: May 31, 2022 at 11:19 AM
To: Ron & Debbie Fernandes [redacted]

PF

Attached is my certification for passing the exam for TIPS Certification.

Penny

Certificate of Completion

This Certificate of Completion of

eTIPS Off Premise 3.1

For coursework completed on May 31, 2022
provided by Health Communications, Inc.
is hereby granted to:

Penelope Fleming

Certification to be sent to:

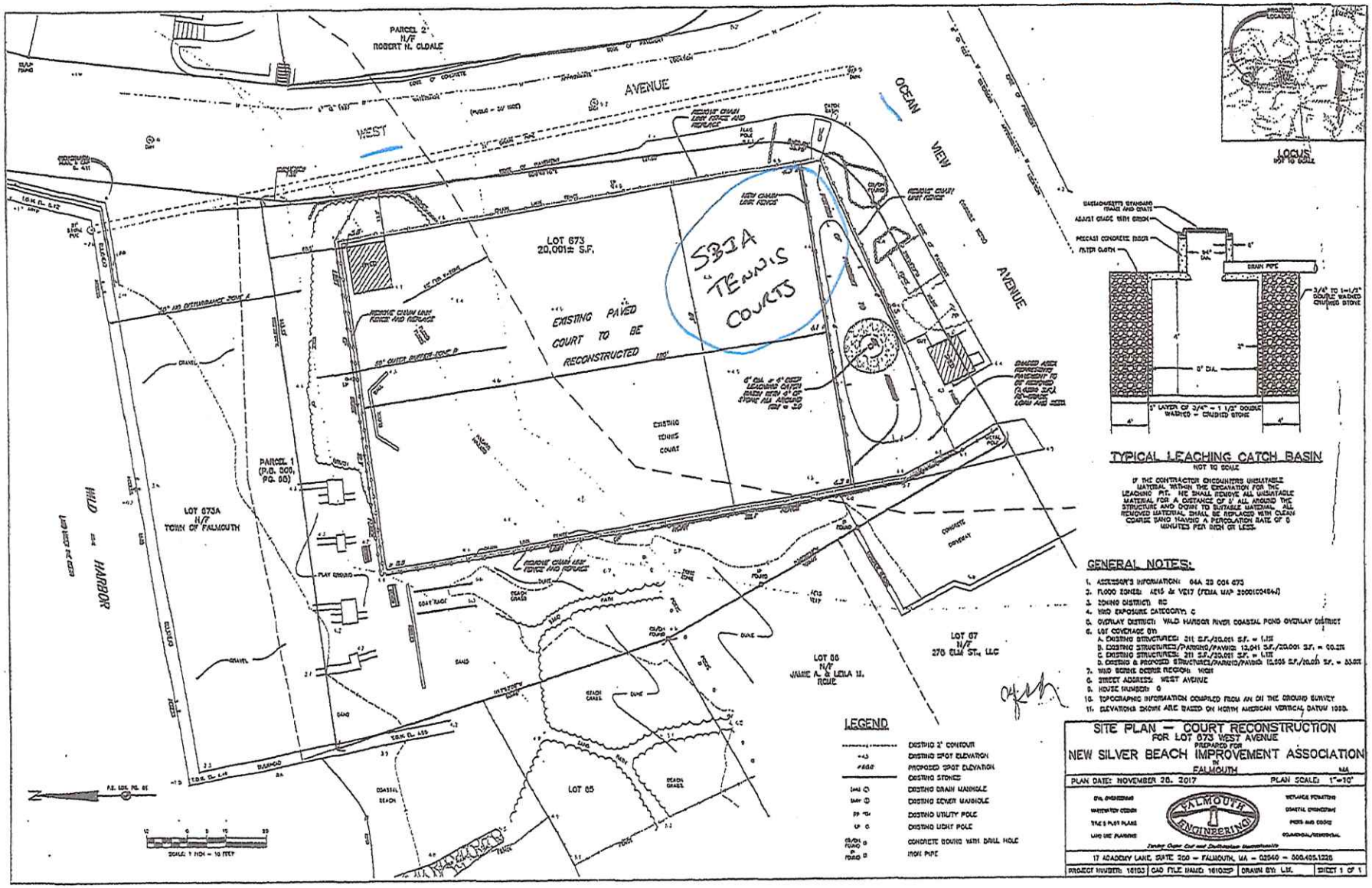
69 Silver Beach Ave
North Falmouth MA, 02556-2615 USA

HEALTH [illegible] INC.

[illegible] document is not proof of TIPS certification. It signifies only that you have completed the course. Valid certification documents will be forwarded to you.

PENNY FLEMING

PLACE EVENTS HELD AT: TENNIS COURTS BETWEEN WEST AVE AND OCEAN VIEW AVE OUTDOORS



CONSENT AGENDA

2. Administrative Orders

   a. Vote to accept a donation in the amount of $500.00 from David's Old Silver Swim, Inc. c/o Robert Catalano to the Beach Donations Account to fund the Dr. David Garber "Dare to be Great" Award given to a lifeguard during the annual banquet

Diane Davidson

From: Maggie Clayton
Sent: Sunday, June 12, 2022 1:04 PM
To: Diane Davidson
Cc: Peter Johnson-Staub; Brooke McMillan; Robert Catalano; Sue Harvey
Subject: Beach Donation - David's Old Silver Swim, Inc. 2022

Hi, Diane:

This is a written request to the Select Board to add an item on the 6/27 Meeting Agenda to include (1) vote to approve a donation in the amount of $500.00 from David's Old Silver Swim, Inc. c/o Robert Catalano to the Beach Donations Account, 28-632-5655-4830, to fund the Dr. David Garber "Dare to be Great" Award given to a lifeguard during our annual banquet.

Thank you in advance for your consideration of this request.

Best,

Maggie Clayton
Beach Superintendent
Town of Falmouth
(774)392-6900

CONSENT AGENDA

2. Administrative Orders

   b. Vote to accept a donation in the amount of $732.60 from the Old Stone Dock Association to the Beach Donations Account to fund the 14 window boxes for the Ellen T. Mitchell Bathhouse at 56 Surf Drive, and

Diane Davidson

From: Maggie Clayton
Sent: Saturday, June 11, 2022 7:17 PM
To: Diane Davidson
Cc: Peter Johnson-Staub; Brooke McMillan; Theresa Saunders
Subject: Beach Donation - Old Stone Dock 2022

Hi, Diane:

This is a written request to the Select Board to add an item on the 6/27 Meeting Agenda to include (1) vote to approve a donation in the amount of $732.60 from the Old Stone Dock Association to the Beach Donations Account, 28-632-5655-4830, to fund the 14 window boxes for the Ellen T. Mitchell Bathhouse at 56 Surf Drive installed on Wednesday, 5/25 and (2) vote to expend those funds for paying the Soares Flower Garden Nursery invoice dated 5/31 for 48 pink New Guinea impatiens, 32 blue scavola, and planting services.

Thank you in advance for your consideration of these requests.

Best,

Maggie Clayton
Beach Superintendent
Town of Falmouth
(774)392-6900

CONSENT AGENDA

2. Administrative Orders

   c. Vote to expend those funds for paying the Soares Flower Garden Nursery invoice dated 5/31 for 48 pink New Guinea impatiens, 32 blue scavola, and planting services

CONSENT AGENDA

2. Administrative Orders

   d. Appoint Onjalé Scott Price as liaison to Affirmative Action/Diversity Committee

Select Board
Committee Liaisons

COMMITTEES	Zylinski	Scott Price	Brown	Taylor	Patterson	RELATION	AUTHORITY	DAY	TIME	LOCATION	ROOM
Affirmative Action Committee						liaison		2nd Monday	7:00 p.m.	Town Hall	Small Conf. Room
Affordable Housing Committee		x				liaison		3rd Thursday	3:00 p.m.	Town Hall	Old Water Dept. Room
Agricultural Commission		x				liaison		Last Monday	6:30 p.m.	Town Hall	Small Conf. Room
Assembly of Delegates (Barnstable County)			x			member	elected				
Beach Committee			x			liaison	charter	3rd Wednesday	7:00 p.m.	Harbor Master's Office	180 Scranton Ave.
Bicycle and Pedestrian Committee	x					liaison		1st Wednesday	7:00 p.m.	Town Hall	Old Water Dept. Room
Board of Health	x					liaison	charter	Every other Monday	6:30 p.m.	Town Hall	Civil Defense Room
Cable Advisory Committee				x		liaison		3rd Monday	5:15 p.m.	FCTV	310 Dillingham Ave.
Cape Cod Regional Transit Authority					x						
Cape Cod Water Protection Collaborative			x			member					
Coastal Ponds Mgmnt. Committee (inactive)			x			liaison		1st Monday	7:00 p.m.	Harbor Master's Office	180 Scranton Ave.
Commission on Disabilities				x		liaison		2nd Thursday	2:30 p.m.	Gus Canty Rec.	All Purpose Room
Commission on Substance Use				x		liaison		4th Thursday	5:30 p.m.	Gus Canty Rec.	790 Main St.
Community Preservation Committee					x	liaison		2nd & 4th Thursday	7:00 p.m.	Sch. Adm. Bldg.	340 Teaticket Hwy.
Conservation Commission					x	liaison	charter	Every Wednesday	7:00 p.m.	Town Hall	Sel. Meet. Rm.
Council on Aging				x		liaison	charter	4th Thursday	4:00 p.m.	Senior Center	300 Dillingham Ave.
EDIC					x	member		2nd Tuesday	8:30 a.m.	Town Hall	Sel. Meet. Rm.
Edward Marks Building Advisory Committee			x			liaison		Thursday as notified	4:00 p.m.	Town Hall	CPC Conf. Rm.
Energy Committee	x					liaison		2nd Wednesday	8:00 a.m.	Town Hall	Small Conf. Room
Falmouth Housing Authority		x				liaison	elected				
Finance Committee					x	liaison	town meeting	Last Tuesday	7:00 p.m.	Sch. Adm. Bldg.	340 Teaticket Hwy.
Golf Advisory Committee		x				liaison		Wednesday as notified			
Historical Commission	x					liaison	charter	1st Tuesday	6:00 p.m.	Town Hall	Civil Defense Room
Human Services Committee		x				liaison	charter	1st Tuesday	4:30 p.m.	Town Hall	Sel. Meet. Rm.
Library Board of Trustees		x				liaison	elected	2nd Tuesday	6:45 p.m.	Main Library	300 Main Street
Planning Board			x			liaison	elected	Every Tuesday	6:30 p.m.	Town Hall	Sel. Meet. Rm.
Recreation Committee		x				liaison	charter	2nd Wednesday	7:00 p.m.	Gus Canty Rec.	790 Main Street
School Committee					x	liaison	elected	2nd & 4th Tuesday	6:30 p.m.	Sch. Adm. Bldg.	340 Teaticket Hwy.
Sign Review Committee (inactive)						liaison		2nd & 4th Wednesday	5:00 p.m.	Town Hall	Sel. Meet. Rm.
Solid Waste Advisory Committee	x					liaison		1st Tuesday	7:30 p.m.	Town Hall	Small Conf. Room
Town Building Committee (inactive)											
Transportation Management Committee								Thursday as notified	6:00 p.m.	Town Hall	Old Water Dept. Room
Veterans Council Committee				x		liaison		2nd Wednesday	4:00 p.m.	Town Hall	Civil Defense Room
Water Quality Management Committee								1st & 3rd Thursday	3:30 p.m.	Town Hall	Sel. Meet. Rm.
Waterways Committee			x			liaison	charter	1st Wednesday	7:00 p.m.	Harbor Master's Office	180 Scranton Ave.
Zoning Board of Appeals	x					liaison	charter	Every Thursday	6:30 p.m.	Town Hall	Sel. Meet. Rm.
Total	**6**	**7**	**7**	**5**	**6**						

Voted: 5/23/22

CONSENT AGENDA

2. Administrative Orders

   e. Approve Eversource petition to relocate 1 JO pole labeled 211/3 approximately 30' (feet) southwest towards pole 211/4. Pole to be relocated for customer at #58 Montauk Street.

Note: The petition was approved by the Public Hearing Officer, Nicholas Croft, at a hearing on June 9, 2022 at 2:00 p.m., memo attached.

Town of Falmouth
Department of Public Works - Engineering Division
416 Gifford Street, Falmouth, MA 02540
Office: 508-457-2543, Fax: 508-548-1537

Nicholas Croft, Engineering Technician nicholas.croft@falmouthma.gov

Date: June 10, 2022

To: Board of Selectmen

From: Nicholas Croft, Hearing Officer

Subject: **Eversource – Petition to install relocate a jointly owned utility pole on Montauk Street**

A petition was submitted by Eversource to relocate a JO-ES Utility Pole ±30' west to the property line between 54 & 58 Montauk Street.

The Engineering recommendation is to approve the request as submitted on Plan No. 7793931, W/O No. 7793931, dated April 14, 2022 with the stipulation that the proposed pole does not disturb any existing trees or underground utilities in the surrounding area. Please see letter of concern from neighbor at 54 Montauk Street.

Eversource Reminder: All Street Openings require a permit obtained from the Engineering Office.

Thank you,

Nicholas Croft
Engineering Technician
DPW Engineering Division

N:\SHARED-nmes-vf02\CIMAGE\BASELINS\FALL\FAL-MONTAUAA.dwg

Plan to accompany petition of EVERSOURCE ENERGY to relocate pole #211/3 30'± toward to pole #211/4 at 58 Montauk St.

39A 12 000 005
54 MONTAUK ST
N/F
CRIMLISK TRUSTEE
JANET T
JT CRIMLISK TR

39A 12 000 006
58 MONTAUK ST
N/F
WATERS ALAN
WATERS ROBERTA

39A 12 000 008
62 MONTAUK ST
N/F
YAUCKOES JOHN F
YAUCKOES MAUREEN C

NAD 1983

PROPOSED
JO–POLE
211/3

211/3 (JO–ES)
TO BE RELOCATED

211/2

30'±

EDGE OF PAVEMENT

APPROX. 190'±
TO MARAVISTA AVE.

MONTAUK ST

EDGE OF PAVEMENT

APPROX. R.O.W.

39A 11 000 118
53 MONTAUK ST
N/F
GARRY OLIVER
GARRY JOAN

39A 11 000 116
57 MONTAUK ST
N/F
DUMAIS JR TRUSTEE ROBERT P
RPD FAMILY NOMINEE TRUST

39A 11 000 112
63 MONTAUK ST
N/F
MIRAGLIOTTA VINCENT J

0 20 40
SCALE IN FEET

LEGEND

- ⊕ Proposed Hand Hole
- ⊕ Existing Hand Hole
- ● Proposed Pole
- ● Existing Pole
- Riser Pole

Proposed pole locations shown thus	⊕
Pole locations to be abandoned, shown thus	○
Proposed Anchor Guy shown thus	T
Proposed Hip Guy shown thus	T⊒
Proposed Underground location shown thus	——
Proposed Push Brace shown thus	⊕
Existing Pole location shown thus	●

C#
Ward # –
Work Order # 7793931
Surveyed by: –
Research by: N/A
Plotted by: TL
Proposed Structures: TL
Approved: T THIBAULT
P#

NSTAR ELECTRIC d/b/a EVERSOURCE
1165 MASSACHUSETTS AVE. DORCHESTER, MASS. 02125

Plan of #58 MONTAUK ST
FALMOUTH
Showing PROPOSED POLE LOCATION

Scale 1"=20' Date APRIL 14, 2022
SHEET 1 of 1

Police Reports . . .

Thursday, June 2

12:29 PM: Mark Pimental, 66, of Falmouth was arrested on Main Street for an outstanding arrest warrant issued out of the Falmouth District Court. Mr. Pimental was transported to the district court for arraignment without incident.

4 PM: Officers responded to a three-car crash with injuries on Palmer Avenue. None of the injuries were life-threatening. Both cars were towed from the scene. One of the operators was issued a warning for failure to use care and caution while stopping.

4:31 PM: Officers responded to an unwanted and disorderly man at the Old Silver Lounge. He was issued a no trespass order for the business.

Friday, June 3

1:03 AM: Officers responded to reports of a man on Main Street who was apparently intoxicated attempting to get on a scooter. The officers determined the man should not drive due to his intoxication and that he did not have an active driver's license. He was transported to a local hotel where he checked in for the night.

7:02 AM: A man reported waking up to a man asleep on his couch. The caller locked himself in the bedroom as instructed by dispatch until the police arrived. The officers determined that the man had entered and fallen asleep on the couch, confusing the home for his final destination while intoxicated. The homeowner did not press charges, and the man was transported away.

Sunday, June 5

12:29 AM: Reports came in of a truck crashing into mailboxes and a tree.

12:40 AM: Police officers responded to the Pier 37 Boathouse and helped security with two men who were causing problems and refusing to leave. The officers stood by while the parties arranged for transport and left.

Monday, June 6

12:52 PM: Officers responded to a breaking and entering at a Teaticket residence. Barnstable County Sheriff's Office Bureau of Criminal Investigation assisted. The incident is under investigation.

Tuesday, June 7

11:12 AM: Officers responded to the report of a vehicle crash with a deer in the area of the Speedway gas station. The officers found that the vehicle had sustained minor damage and was drivable. No injuries were reported by the occupants of the vehicle. The deer was found to have sustained life-threatening injuries. Marine & Environmental services were dispatched to remove the deer.

1:22 PM: A lumber truck became entangled in power lines on Sippewissett Road. The fire and police departments responded and the area was closed until Eversource could make the necessary repairs. The Department of Public Works provided signs and the school department was advised of possible bus route disruptions.

6:45 PM: The police and fire departments responded to a two-vehicle crash on Route 151 and Ashumet Road. There were no injuries reported and the cars were towed away. One of the operators was cited for failure to yield the right of way. Route 151 remained open while officers directed traffic around the crash.

7:01 PM: Police officers were dispatched to the area of Main Street and Academy Lane to assist with a reported structure fire. The officers closed Main Street from Walker Street to Town Hall Square and rerouted traffic.

Wednesday, June 8

9:46 AM: An officer reported a downed tree on power lines that created a fire on Thomas B. Landers Road. The Fire/Rescue Department and Eversource were dispatched to the scene. While in the area, a second report came in of an osprey nest on a nearby pole that was also on fire. Traffic was rerouted while Eversource dealt with the situation. The roadway reopened to traffic approximately two hours later.

From Falmouth District Court . . .

Thursday, June 2

Dispositions

Leona M. Kaitbenski, 56, Comanche Drive, Falmouth; violating a harassment prevention order on March 25, 2018, in Falmouth; violating a harassment prevention order, sufficient facts found but continued without a finding until November 20, 2022, defendant placed on administrative supervision, ordered to stay away and not contact the victim, ordered to pay $50 in fines.

Monday, June 6

Arraignments

Keith R. Strickland, 56, Meadow Haven Drive, Mashpee; malicious destruction of property less than $1,200 on May 3 in Falmouth; pretrial hearing set for June 30; released on personal recognizance.

Catherine O'Mahoney, 1970, Teaticket Highway, East Falmouth; operating a motor vehicle with a suspended license, operating without an ignition interlock device, no inspection sticker on May 28 in Mashpee; pretrial hearing set for July 8; released on personal recognizance.

Tuesday, June 9

Arraignments

Douglas M. Rose, 18, Old Barnstable Road, East Falmouth; operating a motor vehicle with a suspended license, negligent operation of a motor vehicle marked lanes violation, rate of speed exceeding posted limit on April 15 in Falmouth; pretrial hearing set for August 12; released on personal recognizance.

Christine Lamere, Harrison Street, Pawtucket, Rhode Island; third offense of shoplifting by concealing merchandise on December 21, 2018, in Falmouth; pretrial hearing set for July 21; ordered to stay away from Walmart; released on personal recognizance.

Dispositions

Milteer X. Hendricks, 19, Teaticket Highway, East Falmouth; assault with a dangerous weapon, affray, assault and battery with a dangerous weapon on October 9 in Falmouth; assault with a dangerous weapon, failure to prosecute, affray, failure to prosecute, assault and battery with a dangerous weapon, failure to prosecute.

Kristie L. Watts, 41, Alexander Booker Road, Falmouth; unregistered motor vehicle, uninsured motor vehicle, motor vehicle lights violation on April 14 in Falmouth; unregistered motor vehicle, not responsible; uninsured motor vehicle, to be dismissed upon the payment of $100 in court costs; motor vehicle lights violation, not responsible.

Raymond Aucoin, 19, Brick Kiln Road, East Falmouth; armed assault to murder, assault and battery with a dangerous weapon, affray on October 9 in Falmouth; armed assault to murder, nolle prosequi; assault and battery with a dangerous weapon, failure to prosecute; affray, failure to prosecute.

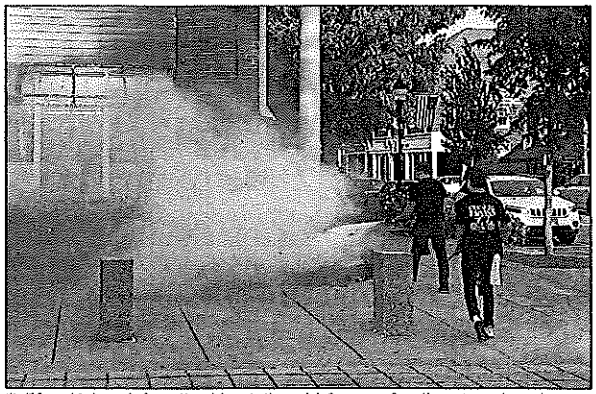
Raymond Aucoin, 19, Brick Kiln Road, East Falmouth; assault and battery with a dangerous weapon, affray on October 9 in Falmouth; assault and battery with a dangerous weapon, failure to prosecute; affray, failure to prosecute.

Lorreanna Rodrigues, 23, Anne Way, Brewster, unlicensed operation of a motor vehicle, state highway traffic violation on March 14 in Falmouth; unlicensed operation of a motor vehicle, to be dismissed upon the payment of $100 in court costs, state highway traffic violation, not responsible.

Wednesday, June 7

Dispositions

Francis P. O'Connor, 33, Durham Road, East Falmouth; marked lanes violation, operating under the influence of drugs, negligent operation of a motor vehicle, possession of a Class A drug, carrying a dangerous weapon on December 10 in Falmouth; marked lanes violation, not responsible; operating under the influence of drugs, sufficient facts found but continued without a finding until June 7, 2023, ordered to attend 24 D program, 45-day loss of license, ordered to pay $900 in fines; negligent operation of a motor vehicle, dismissed upon the request of the commonwealth; possession of a Class A drug, sufficient facts found but continued without finding until June 7, 2023, defendant placed on administrative supervision; carrying a dangerous weapon, dismissed upon request of the commonwealth.



Staff from Añejo apply fire extinguishers to the mulch fire across from the restaurant.

Fire Started In Shrubbery On Main Street

By NOELLE ANNONEN

Falmouth Fire/Rescue responded to a fire outside of Maxwell & Co off Main Street on Tuesday at approximately 7:01 PM.

Deputy Fire Chief Scott J. Thrasher said on Wednesday that the fire was called in by staff at Añejo Mexican Bistro. The fire started in a mulched area for shrubbery where cigarette butts were thrown. Staff from the restaurant responded to the fire with fire extinguishers. Deputy Chief Thrasher said that the staff initially knocked down the fire.

Deputy Chief Thrasher said that one fire engine was sent after the first call. But once multiple calls confirmed that the fire had spread to the structure, two more engines and a ladder were dispatched. The fire was extinguished by 7:16 PM.

"The damage is mostly cosmetic," Deputy Chief Thrasher said.

The double-paned front glass window of the building was cracked, and a gutter was melted, but the exterior sides of the building are brick and were not damaged. Deputy Chief Thrasher said there was no interior damage.

"We were very lucky," Deputy Chief Thrasher said. "We were able to catch the fire early."

The chief said that firefighters checked the inside of the building for smoke and, finding none, the last unit cleared by 8:14 PM. He said that the businesses within the building are able to continue operating, thanks to minimal and solely exterior damage, but they will need to make some repairs.

Sally Alferes works at Añejo and told the Enterprise in an email on Wednesday that she was working on the patio of the restaurant when the fire started. She attributed the extinguishing of the fire to her friend and coworker Tim Delvin.

Falmouth Man Dies Following Crash

By NOELLE ANNONEN

Falmouth resident Peter Ray, 34, died Saturday, after his truck struck a utility pole in East Falmouth.

The Falmouth Fire Rescue Department responded to reports of an erratic pickup truck that crashed into several mailboxes in the Seacoast Shores Boulevard area on Saturday at approximately 12:29 PM, according to a press release.

While en route, the fire department received a second call that the truck had hit a utility pole and then a tree in the Edgewater Drive East and Hampden Road area, according to the news release. Fire department dispatch said Mr. Ray was the sole occupant of the truck and sustained traumatic injuries.

Rescuers arrived on the scene just before the police and began administering medical aid. A medical flight was requested for the high-priority patient, according to reports.

Fire department dispatch said the patient was not flown out of Falmouth. He was instead taken to Falmouth Hospital, where he died from his injuries.

The incident is under investigation by the Falmouth Police Department and the State Police Crash Reconstruction Team.

Democrats To Hold Meet And Greet With Candidates

The Falmouth Democratic Town Committee will host a meet and greet session with Democratic candidates running for election in key local races at its virtual meeting on Wednesday at 7 PM via Zoom.

County Commissioner Ron Bergstrom; Rob Galibois, candidate for Cape & Islands district attorney; and Donna Buckley, candidate for Barnstable County sheriff will share their goals, vision and ideas for the respective offices. There will be time for the public to ask questions of each candidate.

Also on the agenda, the committee will introduce plans for a coordinated Cape and Islands campaign to reelect state Senator Susan Moran (Plymouth & Barnstable District) and state Representative Dylan Fernandes (Barnstable, Dukes and Nantucket).

In addition, the town committee will share information on the process of "ballot curing" with its sister town committee in Collier County, Florida, including how to volunteer.

Experienced volunteers and newcomers alike will learn about opportunities to play an active role in the election process through canvassing, phone banking, postcard writing and other ways to support Democratic candidates in the 2022 elections.

The public is welcome to attend. To receive the link to the June 15 FDTC meeting, send an email to Scott_Simenas@comcast.net.

Legal Notices

TOWN OF FALMOUTH
PLANNING BOARD
PUBLIC MEETING NOTICE

APPLICANT: Bohler Engineering on behalf of the Town of Falmouth

Location: 578 Sandwich Road
Map 8 17 01 017 002

PROPOSAL: Site Plan Review application to construct a new fire station

DATE & TIME: Tuesday, June 28, 2022 at 6:30pm

PLACE: Falmouth Town Hall
59 Town Hall Sq
Falmouth, MA 02540

Documents may be viewed online at: https://www.falmouthma.gov/1327/Applications-Currently-Under-Review

By Order of the Planning Board

Paul Dreyer
Clerk Secretary

June 10 2022

Falmouth Zoning Board of Appeals

Notice of Public Hearing for

June 23, 2022

Notice is hereby given of the following Public Hearing @ 4:30pm and Open Meeting in the Select Board's Meeting Room, Town Hall on Thursday, June 23, 2022

Amended - Application #144-22 Michele C. Brandt, 95 Club Valley Drive, East Falmouth, Ma.: Applied to the Zoning Board of Appeals for a special permit pursuant to section(s) 240-9.5B(1) a (formerly 240-162) of the Code of Falmouth to allow a home occupation to operate a yoga studio. The subject property is 95 Club Valley Drive, East Falmouth, Ma

Files are available in the Board of Appeals Office at Town Hall for review by interested parties. Publication Dates: June 10, 2022 and June 17, 2022

June 10, 17, 2022

Town of Falmouth
Historical Commission
Public Meeting Notice

The Falmouth Historical Commission will hold a public meeting in accordance with the Falmouth Historic District Bylaw and M.G.L. Chapter 40C, on Wednesday, June 15, 2022 at 5:30PM via Zoom.Virtual Meeting to discuss the possibility of establishing a local historic district in the Crown Circle area and to hear community support or concern. Instructions and the meeting link for this specific meeting can be found at the following web address: www.falmouthma.gov/historical

On behalf of the Falmouth Historical

June 10, 2022

REQUEST FOR PROPOSAL

REAL PROPERTY

The Falmouth Retirement Board is seeking proposals from qualified property owners to lease and/or purchase a parcel of land, with buildings thereon with associated parking, within the Town of Falmouth, to use for the administrative offices of the Falmouth Contributory Retirement System. The option to lease office space shall be for a minimum term of 10 years with an option to extend the lease for an additional 10-year period. The Board has determined that the option to purchase is subject to M.G.L. Chapter 30B and Commonwealth of Massachusetts Regulations 840 C.M.R. - Public Employee Retirement Administration Commission (PERAC).

All respondents are hereby advised that any proposal selected shall be subject to: (1) formal approval by the Board in accordance with the specified evaluation criteria, including but not limited to, the best interests of the retirement system, (2) a written agreement, and (3) authorization of the engagement by PERAC. Additional terms of lease or purchase to be reasonably negotiated.

The RFP will be available on Monday, June 13, 2022. Completed original hard copies and electronic copies of the respondent's RFP's/responses must be received no later than 2:00 p.m. EST on Friday, August 5, 2022. Any bids submitted after this time will not be accepted. At its discretion, the Board reserves the right to cancel or reject in whole or in part any and all proposals in the best interest of the retirement system.

Requests for a copy of the RFP should be sent to:

Falmouth Retirement System
Attn: Frances M. Gemelas, Director
60 Dave Sheets, Suite 102
Falmouth, MA 02536

EMail: retire@falmouthmaretirement.gov

June 10, 17, 24, 2022

PUBLIC HEARING NOTICE

The Falmouth Select Board will hold a public hearing under Section 240-14.8 (Wetlands Regulations) of the Zoning Bylaws of the Town of Falmouth on Monday, June 27, 2022 at 7:30 p.m. in the Select Board Meeting Room, Falmouth Town Hall, 59 Town Hall Square, on the application of John P. Grassi, Sr. and Diane M. Grassi for permission to construct and maintain a private residential 4' x 32' pier with ten (10) 8' x 8' "T" and in and over the waters of Flax Pond. The proposed work also includes mitigation plantings and restoration resource area buffer on the property located at 23 Southview Way, East Falmouth, MA. Area affected is Flax Pond. Interested parties may review the file on this hearing at the Office of the Select Board.

Per Order of the
Select Board

June 10, 17, 2022

PUBLIC HEARING NOTICE

The Falmouth Select Board will hold a public hearing under Section 240-14.8 (Wetlands Regulations) of the Zoning Bylaws of the Town of Falmouth on Monday, June 27, 2022 at 7:30 p.m. in the Select Board Meeting Room, Falmouth Town Hall, 59 Town Hall Square on the application of Simon and Mary Strehlow for a permanent license to supersede existing interim license #4467 and to allow redevelopment of existing dock in the same location in the waters of Childs River located at 8 Esperanza Drive, East East Falmouth, MA. Area affected is Childs River. Interested parties may review the file on this hearing at the Office of the Select Board.

Per Order of the
Select Board

June 10, 17, 2022

PETITION FOR JOINT OR IDENTICAL POLE RE-LOCATIONS
WO#7793931

April 14, 2022

Barnstable County, Massachusetts
To the Select Board of Falmouth, Massachusetts.

NSTAR ELECTRIC COMPANY d/b/a EVERSOURCE ENERGY
VERIZON NEW ENGLAND INC.

request permission to locate poles, wires, cables and fixtures, including the necessary sustaining and protecting fixtures to be owned and used in common by your petitioners, along and across the following public way or ways:

Montauk Street, Falmouth
To relocate 1 JO pole labeled 211/3 approximately 30' (feet) southwest towards pole 211/4.
Pole to be relocated for customer at 58 Montauk Street.

Wherefore they pray that after due notice and hearing as provided by law, they be granted joint or identical locations for permission to erect and maintain poles, wires, and cables, together with such sustaining and protecting fixtures as they may find necessary, said poles to be erected substantially in accordance with the plan filed herewith marked plan#7793931 Dated April 14, 2022.

Also for permission to lay and maintain underground cables, conduits, wires, and necessary equipment in the above or intersecting public ways for the purpose of making connections with the poles and buildings as each may desire for distributing purposes.

Your petitioners agree to reserve space for one crossarm at a suitable point on each of said poles for the fire, police, telephone and telegraph signal wires belonging to the municipality and used by it exclusively for municipal purposes.

NSTAR ELECTRIC COMPANY
d/b/a EVERSOURCE ENERGY

By Jessica Elder
Right of Way Agent
Jessica S. Elder

VERIZON NEW ENGLAND INC.

By Daryl Crossman
Manager-Right of Way
Daryl Crossman 5/19/22

FORM OF ORDER FOR
PETITION FOR JOINT OR IDENTICAL POLE RELOCATION
WO#7793931

SELECT BOARD FOR THE TOWN OF FALMOUTH, MASSACHUSETTS.

Notice having been given and a public hearing held, as provided by law,
IT IS HEREBY ORDERED:
that NSTAR ELECTRIC COMPANY d/b/a EVERSOURCE ENERGY and
VERIZON NEW ENGLAND INC.
be and they are hereby granted joint or identical locations for permission to erect and maintain poles and their respective wires and cables to be placed thereon, together with such sustaining and protecting fixtures as said Companies may deem necessary, in the public way or ways hereinafter referred to, as requested in petition of said Companies dated the 14th day of April 2022.

All construction under this order shall be in accordance with the following conditions:
Poles shall be of sound timber and reasonably straight and shall be set substantially at the points indicated upon the plan marked sketch work order#7793931 Dated April 14, 2022 filed with said petition. There may be attached to said poles by said VERIZON NEW ENGLAND, INC. not to exceed 40 wires and 4 cables and by said NSTAR ELECTRIC COMPANY d/b/a EVERSOURCE ENERGY necessary wires, cables and fixtures
and all said wires and cables shall be placed at a height of not less than 18 feet from the ground at highway crossings, and not less than 16 feet from the ground elsewhere.

The following are public ways or parts of ways along which the poles above referred to may be erected, and the number of poles which may be erected thereon under this order:

Montauk Street, Falmouth	remove/relocate/install 1 new JO pole#211/3 approximately 30' feet southwest towards pole 211/4

One (1) JO Pole 211/3

Also that permission be and hereby granted to each of said companies to lay and maintain underground cables, conduits, wires, and necessary equipment in the above or intersecting public ways for the purpose of making connections with such poles and buildings as each may desire for distributing purposes.

I hereby certify that the foregoing order was adopted at a meeting of the Select Board for the Town of Falmouth, Massachusetts held on the 27th day of June 2022.

Phyllis A Downey
Clerk of Select Board

_____, Massachusetts _____ 2022.

Received and entered in the records of location orders of the Town of Falmouth
Book _____ Page _____.

Attest:

_____
Town Clerk

We hereby certify that on June 9 2022, at 2:00 o'clock, P M. at Falmouth Town Hall a public hearing was held on the petition of the

NSTAR ELECTRIC COMPANY d/b/a EVERSOURCE ENERGY
VERIZON NEW ENGLAND INC.

for permission to erect the poles, wires, cables, fixtures and connections described in the order herewith recorded, and that we mailed at least seven days before said hearing a written notice of the time and place of said hearing to each of the owners of real estate (as determined by the last preceding assessment for taxation) along the ways or parts of ways upon which the Companies are permitted to erect poles, wires, cables, fixtures and connections under said order. And that thereupon said order was duly adopted.

_____

_____

_____

_____

Select Board for the Town of Falmouth, Massachusetts _____

CERTIFICATE

I hereby certify that the foregoing is a true copy of a location order and certificate of hearing with notice adopted by the Select Board of the Town of Falmouth, Massachusetts, on the _____ day of _____ 2022, and recorded with the records of location orders of said Town, Book _____, Page _____.

This certified copy is made under the provisions of Chapter 166 of General Laws and any additions thereto or amendments thereof.

Attest:

_____

Town Clerk.

CONSENT AGENDA

2. Administrative Orders

   f. Approve request for variance to sign code §184-30C (Special Events) – Falmouth Fireworks Committee – temporary banner – Falmouth Heights – June 28 - July 5, 2022

6/27/2022

Falmouth Fireworks Committee – 4th of July Fireworks – Monday, July 4, 2022:

Request to hang a temporary banner, under §184-30C (Special Event), for a civic event on town property

Location: At the finish line in Falmouth Heights.

Length of Time: Tuesday, June 28, 2022 through Tuesday, July 5, 2022 (8 days)

Dimensions: 30' long x 4' high.

Diane Davidson

From: [redacted]
Sent: Monday, June 13, 2022 1:22 PM
To: Diane Davidson
Cc: [redacted]
Subject: Fw: Fireworks Banner
Attachments: ATT00001.txt; ATT00002.htm; ATT00003.txt; ATT00004.htm; 2019 Banner

Please note: forwarded message attached

From: [redacted]
To: jonathan.dickinson@falmouthma.gov
Cc: [redacted]
Subject: Fireworks Banner
Date: Mon, 13 Jun 2022 14:48:03 GMT

Good Morning Johnathan

I forwarded you a picture of our 2019 banner, Our banner for this year has not been delivered yet, but it is the same size as 2019. The Banner every year is at the finish line in the heights. It hangs from the ball field across to soprano's side. There will only be one banner 30 ft long x 4 ft high. We would like to have the banner up June 28 to July 5. Hamilton Tree is the company we have used for years to hang the banner.

Please let me know if you need any further information

Thank you
Carolyn

Falmouth Fireworks Committee Proudly Presents Our 39th Show

The 100th anniversary of the end of WWI in 1919, we celebrate REMEMBRANCE

STAGE SPONSORED BY

ConvenientMD URGENT CARE

SPONSORS: Liam Maguire's Falmouth Lumber M. Duffany Builders Sherriff Jim Cummings Roache Bros. Island Queen Falmouth Road Race McGourty Company PAL The Captain's Manor Inn Hamilton Tree & Landscape Martinho Electric Patriot Party Boats Green Pond Tackle & Marina James Scott Wrede, DO LLC

CONSENT AGENDA

2. Administrative Orders

   g. Approve request for variance to sign code §184-20 – Falmouth Rotary Club – off premise sandwich board promotional signs – June 28 – July 9, 2022

6/27/2022

Rotary Club of Falmouth Kids Day of Play – Saturday, July 9, 2022:

Request for off-premise promotional signage at the following locations:

1. TD Bank, Route 28 and Jones Road
2. Corner of Scranton Avenue and Route 28
3. Opposite Coffee Obsession, Queens Byway
4. Smitty's Ice Cream, East Falmouth
5. John Barrett Real Estate, East Falmouth
6. Deer Run Veterinary Clinic
7. Suzanne Glynn's office
8. Corner Route 151 and Sandwich Road
9. Route 151 by the Route 28 overpass
10. Smitty's Ice Cream, Route 28A, No. Falmouth

Length of Time: Tuesday, June 28, 2022 through Saturday, July 9, 2022 (12 days)

Dimensions: 2' x 3' = 6 sq. ft. (size within sign code)

The banner sign to be displayed on a table the day of the event is allowed as a special event sign, and is within the 8 sq. ft. sign size.

Diane Davidson

From: Michelle Royer [redacted]
Sent: Tuesday, June 21, 2022 10:52 AM
To: Diane Davidson
Cc: Navpreet Brolowski; William Kerfoot
Subject: Rotary Club Day of Play Event
Attachments: Sign Placement Locations for Rotary Club Day of Play (DOP).pdf

Diane,

Thank you for placing the Day of Play event on the June 23rd agenda of the Special Events Committee. We also submitted sign permit application which includes a banner sign at the Falmouth Library and sandwich signs for ten locations across town. Attached is a copy of the locations for the ten signs which should have been included with the sign permit application. Please place this on the agenda for approval at the June 27 Select Board, if needed.

Regards,
Bill Kerfoot

William B. Kerfoot, Ph.D.
President
Kerfoot Technologies, Inc.
766-B Falmouth Road
Mashpee, MA 02649
508-539-3002 Phone
508-539-3566 Fax
wbkerfoot@kerfoottech.com
www.kerfoottech.com

Sign Placement Locations for Rotary Club Day of Play (DOP)

1. TD Bank, Route 28 and Jones Road
2. Corner of Scranton Avenue and Route 28
3. Opposite Coffee Obsession, Queens Byway
4. Smitty's Ice Cream, East Falmouth
5. John Barrett Real Estate, East Falmouth
6. Deer Run Veterinary Clinic
7. Suzanne Glynn's office
8. Corner Route 151 and Sandwich Road
9. Route 151 by the Route 28 overpass
10. Smitty's Ice Cream, Route 28A, No. Falmouth

ROTARY CLUB OF FALMOUTH

KIDS FAIR

SATURDAY - JULY 9

(RAIN DATE: SATURDAY - JULY 16)

FALMOUTH MAIN LIBRARY LAWN

FALMOUTHDAYOFPLAY.COM

Town of Falmouth Sign Permit Application (rev. 9/10)

(508) 495-7470 Fax (508) 548-4290

For office use only:
BD Permit#: _____ **Fee*:** _____ **HDC App. #:** _____ **DRC App. #:** _____

*The Sign Permit Fee is $25.00 per sign, payable to the Town of Falmouth (special event and promotional signs under §184-30 are no charge) – please submit the required fee to the Building Department along with the completed sign permit application.

DATE: _____
STREET ADDRESS FOR PROPOSED SIGN(S): MAIN FALMOUTH LIBRARY GROUNDS - 300 MAIN ST, FALMOUTH, MA 02540
APPLICANT NAME: Navpreet Brolowski and Paul McCadam(on behalf of Rotary Club of Falmouth)
MAILING ADDRESS: 101 Geggatt Road, East Falmouth, MA (Brolowski Residence)
BUSINESS NAME: Rotary Club of Falmouth
BUSINESS OWNER: _____ **ADDRESS/PHONE:** 267-275-7082
PROPERTY OWNER: Town of Falmouth/ Library **ADDRESS/PHONE:** _____
CONTRACTOR / SIGN COMPANY: This sign has been used previously for several Rotary events in the Town.
ASSESSOR'S PARCEL ID: 38A 09 005 000 **ZONING DISTRICT:** PU

IS THE PROPOSED SIGN LOCATED WITHIN A LOCAL HISTORIC DISTRICT? Y / N
If YES, the applicant must first submit this application to the Historic District Commission (HDC) for their approval. See attached 'Town of Falmouth Sign Permit Process and Required Submittals' for a detailed description of the HDC requirements.

FREESTANDING SIGN(s) § 184-25; Projecting sign(s) § 184-35
List number and sizes of each sign that presently exist for each street frontage: _____
Area of proposed standing sign is: _____ x _____ =_____ square feet.
Do the frames, borders, etc. exceed 8 square feet in area? Y / N
The proposed standing sign will be set back from _____ street line _____ feet.

WALL SIGN(s) § 184-37; Awning(s) § 184-22
List number and sizes of each wall and roof sign that presently exist on building: _____
Size of proposed wall sign is: _____ x _____ =_____ square feet.
The lineal frontage of the wall supporting the sign is: _____ lineal feet.
The proposed sign will face _____ street/parking lot

ROOF SIGN(s) § 184-37
List number and sizes of each wall and roof sign that presently exist on building: _____
Size of proposed roof sign is: _____ x _____ =_____ square feet.
The wall that the sign will be above is: _____ lineal feet.

PROMOTIONAL/SPECIAL EVENT SIGN(s) § 184-30
Size of proposed sign is: 8 feet x 1 feet = 8 feet square feet.
Start date: 07/09/2022 ; End date: 07/09/2022 Total number of days that the sign will be displayed: 1 day

Approval is requested for the event rain date of 07/16/2022.

If the sign is eight (8) square feet or greater, this application must be submitted the Design Review Committee (DRC) for approval. See attached 'Town of Falmouth Sign Permit Process and Required Submittals' for a description of the DRC requirements.

OFF-PREMISES SIGN(s) § 184-32; VARIANCE § 184-20
The Board of Selectmen must approve all off-premise signs.
Proposed location: Previously Approved Locations for Rotary Club Size: 6 feet square feet.
Board of Selectmen *(Note: A copy must be attached)*

INSTRUCTIONS TO APPLICANT: (1) Attach a separate sheet with a site plan showing the location of the proposed sign on the lot as well as a sketch of the proposed sign with dimensions and the approximate appearance. **(2)** All signs in local Historic Districts must receive approval from the Historic District Commission (HDC) before the sign permit application is filed with the building department. **(3)** All applications for signs at a size of eight (8) square feet or greater that are located outside of local historic districts must be submitted to the Design Review Committee (DRC) for approval.

_____ 05/17/2022
Signature of Applicant **Date**

President
PAUL McCADAM

_____ _____ or _____ _____
Historic District Commission **Date** **Design Review Committee** **Date**
With the following conditions: _____

_____ _____
Building Commissioner/Inspector **Date**
With the following conditions: _____


FALMOUTH
ROTARY CLUB

CONSENT AGENDA

3. Review and Vote to Approve Minutes of Meetings

   - Public Session – May 12, 2022; June 6, 2022; June 13, 2022; June 21, 2022

TOWN OF FALMOUTH
SELECT BOARD
Meeting Minutes
THURSDAY, MAY 12, 2022 – 5:00 P.M.
SELECT BOARD MEETING ROOM
TOWN HALL
59 TOWN HALL SQUARE, FALMOUTH, MA 02540

OPEN SESSION

Present: Douglas C. Brown, Chair; Nancy R. Taylor, Vice Chair; Samuel H. Patterson; Megan English Braga; Onjalé Scott Price.

Absent: None.

Also Present: Julian M. Suso, Town Manager; Peter Johnson-Staub, Assistant Town Manager.

BUSINESS

1. **Discussion and possible vote on initiation of removal of the Town Manager by adoption of a Resolution by the Select Board pursuant to Section C5-10(A) of the Town of Falmouth Charter.**

The meeting was called to order by Mr. Brown, Chair at 5:02 p.m.

Mr. Brown announced that the Board will not entertain public comment and that this is a Select Board discussion. The chair felt that it had become clear at its last meeting that the relationship between the Town Manager and the Select Board was broken beyond repair.

Ms. English Braga read the agenda in its entirety to be included in the minutes:

> Town of Falmouth
> Select Board
> Agenda
> Thursday, May 12, 2022 – 5:00 P.M.
> Select Board Meeting Room
> Town Hall
> 59 Town Hall Square, Falmouth, MA 02540

The Select Board may discuss and vote appropriate action on any item listed on this Agenda unless a different disposition is noted.

5:00 p.m. ***OPEN SESSION***

BUSINESS

1. *Discussion and possible vote on initiation of removal of the Town Manager by adoption of a Resolution by the Select Board pursuant to Section C5-10(A) of the Town of Falmouth Charter.*
2. *Adjourn*

Douglas C. Brown, Chair
Select Board

The agenda was posted on Tuesday, May 10, 2022.

Chair Brown moved that the Select Board initiate the removal of the Town Manager pursuant to Section C5-10(A) of the Town of Falmouth Charter by adopting a resolution to remove the Town Manager because of his

failure to implement the goals and carry out the policies of the Select Board as required by Section C5-3(A) of the Town of Falmouth Charter. The adoption of this resolution shall serve to suspend the Town Manager pursuant to Section C5-10(B) of the Town of Falmouth Charter. I further move to invoke the provisions of Section C5-13(A) to authorize the Assistant Town Manager to perform the duties and responsibilities of the Town Manager until further action by the Select Board. Seconded by Mr. Patterson. All in favor by roll call vote: Ms. Scott Price-Aye, Mr. Patterson-Aye, Ms. English Braga-Aye, Dr. Taylor-Aye, Mr. Brown-Aye.

Chair Brown gave a copy of the above motion in hand to Mr. Suso.

Mr. Suso addressed the chair to inform him that members of the Board have been contacted by his attorney, for the record.

Ms. English Braga made a motion to adjourn. Seconded by Dr. Taylor. All in favor by roll call vote: Ms. Scott Price-Aye, Mr. Patterson-Aye, Ms. English Braga-Aye, Dr. Taylor-Aye, Mr. Brown-Aye.

Respectfully submitted,

Diane S. Davidson
Recording Secretary

TOWN OF FALMOUTH
SELECT BOARD
Open Session
Meeting Minutes
MONDAY, JUNE 13, 2022
SELECT BOARD MEETING ROOM
TOWN HALL
59 TOWN HALL SQUARE, FALMOUTH, MA 02540

The Select Board may discuss and vote appropriate action on any item listed on this Agenda unless a different disposition is noted. At the discretion of the Chair, agenda items may be taken out of order.

Select Board Present: Chair Nancy Taylor; Vice Chair Onjalé Scott Price; Sam Patterson; Doug Brown; Scott Zylinski.

Staff Present: Peter Johnson-Staub, Acting Town Manager; Maura O'Keefe, Town Counsel.

1. **Chair Taylor called the open session to order at 6:30 p.m. and motioned to convene the executive session M.G.L. c. 30A s. 21(a)(2) – To discuss strategy with respect to collective bargaining: DPW union and non-union personnel (COVID premium pay) M.G.L. c. 30A s. 21(a)(5) – To investigate charges of criminal conduct or to consider the filing of criminal complaints because to not go into executive session could prejudice ongoing negotiations. Mr. Patterson seconded the motion. It was followed by a roll call vote in Open Session to go into Executive Session for the purpose of discussing the above-listed items, and to return to Open Session after discussion. Roll Call Vote: Mr. Brown, aye; Mr. Patterson, aye; Ms. Scott Price, aye; Chair Taylor, aye; Mr. Zylinski, aye.**

2. The Select Board (Board) was in Executive Session and authorized the Acting Town Manage to pay $1,000 Covid-19 premium pay to each DPW union and non-union Town employee. The Board also considered filing criminal conduct charges during the executive session.

3. Pledge of Allegiance

JOINT MEETING – SELECT BOARD AND AFFORDABLE HOUSING COMMITTEE

Mr. Johnson-Staub thanked the Affordable Housing Committee (AFC), subcommittee, and Attorney Laura Moynihan for their research into items 1 and 2. The purpose of the tonight's meeting is to get more information, noting the staff still needs to research what needs to be done in order to implement the items and how they suggest doing it along with policy decisions that the Board will need to consider. This is an informational session.

Ed Curley, Chair Affordable Housing Committee, about a year ago Attorney Moynihan sent letters with these ideas, she has been working with Affordable Housing Member, presented the details of the program. They recommended the Board consider implementing these as another way to assist in affordable housing.

Ms. Scott Price thanked Mr. Curley for his nine years of service on the AFC, she is excited he will be around and still participating.

Attorney Moynihan volunteered with the working group formed by the AFC to come up with programs, a lot of the research based on what other towns do and came up with these two proposals. The two programs are distinct because 1. Creates units for subsidized housing inventory so the rules are driven by what the Department of Housing and Community Development (DHCD) would approve, it would be a Local Initiative Program (LIP). 2. Proposed it not for Subsidized Housing Inventory (SHI) or deed restricted units, DHCD approval is not needed, and the Town has more flexibility.

1. Home Opportunity Purchase Program (HOPP)
   Attorney Moynihan explained this program and made a PowerPoint presentation explaining this would be a grant program to qualified homebuyers to cover the difference between the sale price and existing market rate value of the home. Up to $250,000 for a 2, 3, or 4 bedroom home, the amount is what is recommended by DCHD. Income limits up to 80% Area Mean Income (AMI) and other affordable housing limits apply,

maximum $75,000 assets, preapproval, and funds for down payment. Once the home is purchased with the applicant's own first mortgage money and the Town's grant, at closing there is a deed rider put against the property and inclusion in the Town's SHI and restricted upon resale as an affordable housing unit. Maximum income limits were reviewed. First time homebuyer definition according to DHCD was reviewed. The grant really does need to be at $250,000 to get to a viable home price in this market. The buyers could be reimbursed for initial home inspections, property must be in reasonably good condition, a lottery process, selection of eligible applicants based on the number of grants deemed available. Set number of grants each year, perhaps three grants in the first year, the lottery process would be held after an application eligibility period. Applicant is deemed eligible by the monitoring agent, entered into the lottery, and then three people are picked, and they have 120 days to locate a home with an extension up to 90 days. It is unknown at this time if Falmouth residents would have to have been residents of Falmouth for some period of time. It is possible eligible applicants could include applicants from other communities, but the home would need to be in Falmouth. They would have to review with DHCD regarding a local preference pool. Applicant submitted by a deadline, applicant prequalified for the lottery, and preapproved for a mortgage. Maximum resale value of the home would be set similar to other homes with affordability in perpetuity, a resale calculator is included in the deed rider. FHA and VA loans would not be eligible because they do not accept the affordable housing deed riders that go with these programs. There are local banks on the Cape that accept the deed restrictions and will finance this type of transaction. The funding would come from the Affordable Housing Trust, created by the special legislation. Would have to work through a staff, what is available, what has been allocated, annually the Board would review how much they want to allocate for this program for the following year.

Home ownership program would be eligible for CPC funds, but Attorney Moynihan felt the account created with the special legislation would be appropriately used for houses already built. Since this legislation came about, this could give it some purpose as a municipal action because the Town itself is creating the units.

Mr. Patterson noted there are municipalities that are purchasing houses that exist with CPC funds.

Mr. Brown is concerned about a large amount of money for one applicant, the current senior living project is about $50,000 per unit, the benefit provided is to multiple families. He is in favor of identifying a special fund to keep the $4 million target. Attorney Moynihan noted if you look at the housing production plan the Board adopted, the Town is far behind with the home ownership part of it. Target goal of 56 units over 5 years, the plan talks about the impact of the workforce in the community; unable to have our workforce members buy a home in the community. In some cases, the cost of rent is more than the cost of a mortgage, so they are purchasing homes in other communities off cape.

In event of default, death, how do we protect quite a bit of money to one applicant.

Typical DHCD LIP rider would be the protection, recorded with the house upon closing. Standard provisions for default, potential sale; Town has right to first refusal, can find a buyer. The up to $250,000 seems like a lot, but it is $400,000 or so for construction of a home alone, not including acquisition costs of the land alone. DHCD representative noted it is a good deal for the community, to build these housing units would cost more than $250,000 per unit.

The Acting Town Manager explained that he wants to gauge the support of the Board for these concepts and DHCD wants to know that the Board supports the concepts. Mary Wagen, Housing Coordinator Yarmouth, have a buy down program, she said it is the quickest way the Town will get units on the SHI. It can take at least two years to build similar housing.

They did not do formal market research, looked at what is available and what has been sold in the market. In this kind of market, the market can change, you can have private sales, does not have to be a large home, there are many things that make it worth trying. They could do a market analysis with several agents to see what is available.

2. Down Payment/Closing Cost Assistance Program
   CPC funding limited to 100% AMI households.

Attorney Moynihan explained this program, does not have to be approved by the State, it is in-house. Bourne has a similar program, difference is that Bourne's is for down payment and closing cost assistance for affordable income units. Falmouth has a workforce housing crisis, need to keep the young people in the community and able to buy homes, bring in workers to fill positions, and give them the opportunity to buy in the community. This is for down payment and closing cost assistance, up to 120% of the AMI, household assets limited, principal residence only, applicants would work with a first mortgage lender and be eligible for the first mortgage. This would be up to 5% of the purchase price and no more than $30,000. Buyers contribute at least 1.5% purchase price, this would be a type of second mortgage security. Repaid if house sold within 5 years, loan to value ratio 90%, repayment could be in full if the house is sold at any time. A portion could also be forgiven on an annual basis.

An applicant would apply, submit their information to show they are income eligible, they receive a preapproval letter from the program administrator. Completed confirmation notice from the lender regarding first mortgage approval, copy of the mortgage commitment letter to the buyer, copy of the lender's good faith estimate, copy of the appraisal, and total loan to value of all loans. Closing documents and check from the Town go to the closing Attorney once the settlement statement is given to the administrator.

DHCD recommended for the HOPP program there be a professional lottery and monitoring agent that administers the program. For program 2 could be contracted out for someone to administer and run it. There is a regional planning commission at the State level where certain municipalities got together to hire monitoring agents to monitor their programs, one office, and towns pay a monthly fee. That would be great for Cape Cod because there are many monitoring contracts out there and maybe explore it further.

Karen Bissonnette, Executive Director of Falmouth Housing Trust, noted that $250,000 is a great deal of money, but it costs that much to build a house. The Affordable Housing Fund is giving $100,000 per unit, subsidy between that number and what the house is sold for is coming from philanthropy or from other State or Federal sources. The Town is not contributing all of that; the money is coming from somewhere. If this program happened, it would be great because the Town would be doing that project and they could use their funds to do additional homes. This money comes from several sources, ARPA funds, short term rental money, community impact fee. It costs that much money to build these houses, we should not wait, we have to do something else, have to step it up. People are desperate, this is the best bang for our buck.

Mr. Brown noted he agrees the costs are realistic but wonders about the efficacy to use Town funds and allocating so much to a single applicant when it is such a random luck thing.

Mr. Johnson-Staub said if the Board consensus for these programs is for staff to put time into the research of programs, the next step is for the Board to tell him whether they want to proceed with vetting one or both programs and then return to the Board with more information.

Ms. Scott Price likes both these programs, interested in the second program because rent in most cases is more than her mortgage. Some people can afford the rent but cannot save the money for a down payment on a home, there is a great need right now.

Chair Taylor likes the HOPP program. One of the Board's priorities is making housing affordable in Falmouth. Attorney Moynihan donated her time, presented the group's work, and she would like to look into it more closely. Committing to the process of looking closer at these two options that they have not seen before.

Mr. Patterson said both programs make a lot of sense, the ability to turn around units sooner, hope to look to other towns who implemented programs to find out their overhead costs and time investments to determine the impact to the Town and their staff.

Mr. Brown asked if consultant could do the research on grant opportunities, Mr. Johnson-Staub noted there may be some grants, though he likes to go after grants that have more payback then what it takes to get the grant.

Mr. Zylinski, said by doing it this way, the two years development time can be equated to money not spent and get something on the inventory more quickly.

Mr. Johnson-Staub would like to talk with the Housing Coordinator about working on these.

The Board supports the Town staff researching these items.

Attorney Moynihan said that the Town could start with just one or two grants, not the three she suggested. It is not about the recipient of the grant, it is about the house because the money goes to permanently restrict that house. The initial grant winner facilitates the purchase of the house, the benefit is that community gets that house and furthers the State mandated ten percent affordable housing unit goal. The Board decides how close they want to get to the ten percent goal. The $250,000 remains in the home because the home becomes permanently restricted, when that person decides to sell it, they have to notify the Town, the Town has opportunity to find new eligible buyer; the affordability is in perpetuity. The first owner, when they go to sell, there is a resale multiplier by the DHCD, the initial buyer will not get a windfall, they may get the money back from the capital improvements made to the home.

REGULAR MEETING

1. Proclamations
   a. Eagle Scout Edward "Ned" H. Heywood, Boy Scout Troop 40
   Mr. Patterson read the proclamation in the packet as a motion. Second Ms. Scott Price. Vote: Yes-5. No-0.

   b. Falmouth Station 150th Anniversary
   Mr. Patterson read the proclamation in the packet as a motion. Second Ms. Scott Price. Vote: Yes-5. No-0.

2. Recognition
   Mr. Brown recognized the D Day invasion of 70 years, the bravery showed on the battlefield was pretty incredible.

   Mr. Patterson said the Falmouth Rotary Club and Transitioning Warriors Group hosted a golf tournament at the Pocasset County Club and the funds will be used throughout the Town.

   Ms. Scott Price recognized Mr. Curley as Chair of the Affordable Housing Committee and thanked him for his service to the Town.

3. Announcements
   Falmouth Police Department is collecting baby formula, there is a drop box at the FPD.

   Open Ship for Sea Education Association, celebrating 50th anniversary this year, 6/24 10-noon ship open for tours.

   a. Beach Update
   Maggie Clayton, Beach Superintendent, reported opening dates for 7 days per week staffing and enforcement 6/26/22, hired additional parking attendants, all parking lots monitored by at least two staff members, continue sunset hours at Chapoquoit and Old Silver lots. Lifeguards, close to last year's numbers, in active hiring pattern, applications still open on the Town website, any questions about the job can be directed to the Department or her. Fully staffed, ten beaches, target number 57; currently 42 full time, 2 part time, and 2 signed up for certification courses, returners who are unable to commit to a schedule on their per diem substitute list. Parking attendant numbers to get to fully staffed, 37 full time, 8 part time, trying to be flexible with all applicants, accepting a 2-4 day commitment. Sticker sales at the bathhouse, processing online orders, they could not do what they are doing without the cooperation with other departments; Town Clerk's office, DPW, buoys to establish a swim area with MES, and constant open chain of communication with all department heads. They had a stranded dolphin at Old Silver this week, recognized the civilian response to active drowning situation at Menauhant on Saturday, man caught in rip tide, two civilians assisted,

others on beach called for EMS, nurse on the beach assisted as well. They will formally recognize those people at a later date, reminder to swim within your abilities and cognizant of the hazards re: boats and currents. Pre-season parking lot hours are posted on the website, newspaper. Three parking lots, Goodwill, Chappy, Old Silver closed at 9pm, Friday-Sunday nights in response to the initial 8pm on Memorial Day Weekend.

Public Comment: Barbara Schneider, received confirmation of two parents of lifeguards, their children getting paid at what the Beach Committee suggested setting the level at and also paid for rainy days. They did so much homework, wish they were not looking at a low number of guards. Hope in the future they can work closer together with those numbers.

b. "Open Ship" for Sea Education Association (SEA)

4. Public Comment

Robert Duggan, Falmouth Heights, Former Clerk ZBA, watched the Board's meeting and there was a statement made that he had not given a resignation letter when leaving the ZBA. He submitted the letter to the Town Manager's office, Chair of the Board, and Chair of ZBA. He was approached by someone in the public who saw the meeting and did not have the courtesy to provide notice to the Town.

TOWN MANAGER'S PRELIMINARY REPORT

MR. Johnson-Staub noted ZBA appointment needs to be revisited, there were 3 vacancies at the time of the Board meeting, but only two were advertised for the meeting, it was a timing issue. Two terms advertised, but they mistakenly listed all three positions, this is a regulatory board, so they are revisiting one appointment made for a term not advertised.

Tony Andrews Farm Lease, current lessee is asking the Town to extend the lease by a 15-year term, it is recommended for approval by the Agricultural Commission, and Board is the entity that enters the lease. He recommends board approval of that extension.

ARPA allocations, the Board allocated all ARPA funds presently allocated by the County to Falmouth, but because there is an application process for it, there are two items over budget and the County process to approve may not be in time to award the contracts re: bid.

COMMITTEE APPOINTMENTS

1. Vote to appoint committee member:
   - Zoning Board of Appeals (full member) until 6/30/22 – Susanne Murphy
     Term up 6/30/22, they will need to advertise this separately, there were two other terms advertised.

Mr. Patterson motion to appoint Susanne Murphy to a term ending 6/30/22. Second Ms. Scott Price. Vote: Yes-5. No-0.

BUSINESS

1. Andrews Farm lease extension **(10 minutes)**
   The farm is viable, Mr. Andrews is meticulous about maintaining the farm, has allowed community gardens to do a sublease on the property. The acquisition of the farm is working out well. Mr. Johnson-Staub recommended approval.

   Karen Schwalbe, Chair Agricultural Commission, the farm is meticulous, balance of local products at his farm, 15-year extension allows him to do some long-term planning.

   Mr. Patterson motion approval. Second Mr. Zylinski. Vote: Yes-5. No-0.

2. ARPA allocation correction (Town ARPA for Nye Park and Water Projects)
   Mr. Johnson-Staub is asking Board to reconsider for the $110,000 for Nye Park and $200,000 water treatment upgrades, be allocated from the direct federal government award and adjust wastewater treatment

upgrades. The total amount is increasing in order to fully allocate the county money. The drawdown of the county funds right away demonstrates they are ready to spend them. He will speak with Wastewater Superintendent Amy Lowell.

Mr. Patterson motion approval. Second Ms. Scott Price. Vote: Yes-5. No-0.

Art Market is looking for additional funding for their activities. Mr. Johnson-Staub noted there are a lot of things the Town can spend ARPA money on, capital projects are the focus.

CONSENT AGENDA

1. Administrative Orders
   a. Approve Eversource petition to install approximately 60' (feet) of conduit and cable under town road northwesterly starting at handhole 293/H2A and to install (1) new handhole labeled 293/H2A in public ROW on side of road at base of existing pole 293/2. This work is to be done to provide electric service to #8 Mast Road

   b. Approve Eversource petition to install approximately 38' (feet) of conduit and cable under town road and to install (1) new handhole labeled 1029/H3A in public ROW on side of road at base of existing pole 1029/3. This work is to be done to provide electric service to #17 Shoreview Avenue

   c. Approve Eversource petition to relocate 1 JO pole labeled 211/3 approximately 30' (feet) southwest towards pole 211/4. Pole to be relocated for customer at #58 Montauk Street.

   Mr. Brown thinks the person who sent the letter made valid points, already have a pole at the other corner of their lot. The Board would like more information to address the issues as outlined.

   Mr. Patterson motion to hold item c. Second Mr. Zylinski. Vote: Yes-5. No-0.

   Mr. Patterson motion approval of items a and b. Second Ms. Scott Price. Vote: Yes-5. No-0.

2. Review and Vote to Approve Minutes of Meetings
   a. Public Session
   May 23, 2022
   Mr. Patterson motion approval with edits and release for public access. Second Ms. Scott Price. Vote: Yes-5. No-0.

   May 26, 2022
   Mr. Patterson motion approval with edits and release for public access. Second Ms. Scott Price. Vote: Yes-5. No-0.

   b. Executive Session
   May 23, 2022
   Mr. Patterson motion approval with edits and not release for public access. Second Ms. Scott Price. Vote: Yes-5. No-0.

TOWN MANAGER'S SUPPLEMENTAL REPORT

Mr. Johnson-Staub reported the difficulties Republic Services is having with pickup, it is unacceptable, not something they take lightly and are seeking to address. As of 6/1/22 there is a new contract, with increased cost they have the ability to hire more staff.

Mayflower Wind (Mayflower) presentation had a lot of strong opposition to the proposed landfall and install of equipment. Lack of transparency in the process, at this time there is not much happening. Mayflower submitted a proposal with both a preferred and alternate location, Town retained consulting engineers to look at that, not complete designs and per direction of the Board they have pushed back on those locations. They are hoping this will not happen. The Board has addressed this appropriately and have announcement from Mayflower they are going to

change the plans from high voltage alternating current to high voltage direct current, which is a substantial change. The Board and staff are addressing this issue, waiting for updated designs.

Chair Taylor would like to be more careful on how they use language, it was presented that it is going to happen, it is just a question of how it will happen. Be careful how the Board presents, clear about the control the Board has about this project.

Mr. Brown would like to show the limited information that the Board has been privy to.

Mr. Patterson noted a number of citizens were concerned about noise; can one of the contractors working on the Town's behalf know about the effect on noise?.

Mr. Johnson-Staub stated the Town was notified by MA DEP proposing new septic system regulations to address nitrogen regulation, only received an outline of the proposed regulations, not a lot of details. DEP would like to meet with staff. This is about that process at this point it does not have hard deadlines, have to have a plan, it is fairly lenient on how quickly the plan is implemented. If the Town does not have a plan that it's implementing, there is an enforcement process.

Mr. Patterson said Andrew Gotleib gave a run down and status; official draft regulations will come out in Oct/Nov 2022 and driven by lawsuit against the State and Cape Cod, nitrogen loading into estuaries and fresh water ponds. This is broad, extensive, this will start pushing people with today's Title V systems to go to more innovative facilities or pushing for more wastewater treatment. Governor Baker has increased budget for wastewater treatment targeted to coastal communities like the Cape. If our projects can get closer to shovel ready, could tap into this and advance the wastewater treatment planning. Cape Cod Commission (CCC) Cape Summit will be held on 8/1/22 and 8/2/22.

Mr. Brown attended the CCC update on the fresh water pond initiative, they will create a database of water quality of all the freshwater ponds and committed to paying for the testing of the monitoring. Conservation Law Foundation original lawsuit was against DEP and CCC for not enforcing individual septic owners as target loads.

SELECT BOARD REPORTS
Ms. Scott Price and Mr. Zylinski attended the Day of Portugal 6/11/22.

DISCUSSION OF FUTURE AGENDA ITEM
Trash contract; are there ways to monitor, manage, and enforce. Mr. Johnson-Staub welcomes the Board's suggestions, may not need an agenda item to talk about it, he will keep the public and Board updated on the status.

Next regular business Board meeting will be on 6/27/22.

Next meeting is on 6/21/22 for a 1pm hearing.

Ms. Scott Price motion to adjourn. Second Mr. Patterson. Vote: Yes-5. No-0. .

Respectfully Submitted,

Jennifer Chaves
Recording Secretary

TOWN OF FALMOUTH
SELECT BOARD
Meeting Minutes
Open Session
TUESDAY, JUNE 21, 2022 – 12:00 P.M.
SELECT BOARD MEETING ROOM
TOWN HALL
59 TOWN HALL SQUARE, FALMOUTH, MA 02540

The Select Board may discuss and vote appropriate action on any item listed on this Agenda unless a different disposition is noted.

Select Board Present: Chair Nancy Taylor; Vice Chair Onjalé Scott Price; Sam Patterson; Doug Brown; Scott Zylinski.

Others Present: Town Moderator David Vieira; Attorney John Clifford representing Town Manager Julian Suso; Julian Suso; Attorney Robert Troy representing the Select Board

1. **Chair Taylor called the open session to order at 12 p.m. and motioned to convene the executive session under M.G.L. c.30A s.21(a)(2) – To discuss strategy with respect to contract negotiation with non-union personnel (Town Manager) because to not go into executive session could be detrimental. Mr. Patterson seconded the motion. It was followed by a roll call vote in Open Session to go into Executive Session for the purpose of discussing the above-listed item and to return to Open Session at 1 p.m. Roll Call Vote: Mr. Brown, aye; Mr. Patterson, aye; Ms. Scott Price, aye. Dr. Taylor, aye; Mr. Zylinski, aye.**

2. Chair Taylor reconvened the open session at 12:55pm.

3. Select Board presentation at public hearing to consider removal of Town Manager.
   Attorney Robert Troy reported they had an executive session, advised public they would return to open session. There are two matters: 1. procedure by which the Select Board (Board) will determine how it intends to comply with the provisions of the Charter in section C5-10E, which is the purpose of the hearing; to state to the public the reasons for the adoption of the resolution to initiate the process of the removal of the Town Manager. This can be done by individual members reading their reasons or Board members may provide him with their reasons and vote to authorize Chair Taylor to read each member's reasons that they provided to him. The members have not shared them with each other, have not deliberated about them.

   Mr. Brown motion to have Chair Taylor read the Board member's statements. Second Mr. Patterson. Roll Call Vote: Mr. Brown, aye; Mr. Patterson, aye; Ms. Scott Price, aye. Dr. Taylor, aye; Mr. Zylinski, aye.

   Under the Charter C5 section 10F for the board at a public Board meeting to announce the date of the hearing at which it is decided to remove or not remove the Town Manager. Charter request within 7 days of the hearing. Mr. Vieira suggested the Board announce a date for the hearing at which time the Board will decide if the Town Manager should be removed.

   Ms. Scott Price motion to schedule the hearing for Monday 6/27/22 at 6pm. Second Mr. Patterson. Mr. Brown, aye; Mr. Patterson, aye; Ms. Scott Price, aye. Dr. Taylor, aye; Mr. Zylinski, aye.

   Mr. Brown motion to adjourn the session. Second Mr. Patterson. Mr. Brown, aye; Mr. Patterson, aye; Ms. Scott Price, aye. Dr. Taylor, aye; Mr. Zylinski, aye.

1:00 p.m. PUBLIC HEARING

1. Pursuant to the Falmouth Town Charter section C5-10(C), the Falmouth Select Board will hold a public hearing to consider the removal of Town Manager Julian M. Suso on June 21, 2022 at 1:00 p.m. in the Select Board Meeting Room, Town Hall, 59 Town Hall Square, Falmouth, MA.

Public comment will not be accepted at this hearing.

David Vieira, Town Moderator, independent third party, is to Chair this hearing. He is the moderator/presiding officer.

Mr. Vieira received a packet from Attorney Troy regarding procedure, thoughts and witnesses they intend to call. Mr. Clifford did not respond after making a commitment to get back to Mr. Vieira prior to the hearing.

Attorney Clifford subpoena served to the Town on 5/31/22 and also submitted a public records request. He never received a response from the Town. He asked for what documents and information would be served by the Town; received no response which was requested by 6/13/22. Attorney Clifford reached out to Megan English Braga via email and asked her to be a witness, he received no response. Clifford reserves all rights pending information they learn today, he will call Julian Suso as a witness and may call other witnesses.

Mr. Vieira received email from Ms. English Braga and read the email in which she reported receiving a deficient subpoena via email to attend the hearing at the Fairhaven Town Hall.

Attorney Troy noted the Charter, unless it contravenes State law governs these proceedings. The only right the Board and Town Manager have is with respect to subpoena, no right to subpoena witnesses, only Town records. Town records are equivalent to public records, kept in accordance with State law. Records Access Officer is in charge of that process. Board decided to use Town Counsel services to identify the records and determine whether they are public records. 148 records came off the Town server that were determined to be public records. Additional information today, the Town and Board has complied 100% with the Charter requirements.

Attorney Clifford received some documents from Attorney O'Keefe, who made a good faith effort to comply with the public records request. Troy represents the Town in this matter which is why the subpoena was sent to Attorney Troy. They will object to anything used that was not part of the personnel file and records produced. The Charter says any and all Town records, a termination hearing is akin to the death penalty, Mr. Suso is on trial for his career and reputation; the idea that the Town would not produce the records used to determine termination.

Attorney Clifford described today's hearing process:

1. The Board will give reasons they will move forward.
2. Town Manager may respond to the reasons stated by the Board.
3. The Board and Town Manager will have power to call and cross examine witnesses and use records appropriately in the hands of the parties. Today is about looking at the reasons the Town is asking Mr. Suso to resign and the removal process. Then adjourn the hearing, the tribunal of the Board will convene next Monday night.
4. Attorney Troy provided the process, the Town suggests the Charter is clear and the type of hearing outlined by Mr. Clifford is not the process the Town used in its Charter. That process in the Charter was enacted by the Town, under Section E of the Charter, the only burden the Board has is to read aloud the reasons for removal. They have the option to call/cross examine witnesses and subpoena any Town records. The only Charter requirement in this hearing today is to read the reasons. The Board is not allowed to deliberate outside the public hearing process, he requested each member of the Board who voted to provide to him and no one else their reasons in which they voted to initiate the process of removal under the Charter and give the public right. The Board voted to authorize the Chair to read their individual statement that they each wrote, and no other member of the Board had knowledge of. This is the first time the public will hear these reasons.

Mr. Vieira said bifurcation that this is for public disclosure and response, it is also so the Mr. Suso can state his reasons in a public forum because the public has a right. The Board could change their mind, offer Mr. Suso a settlement or go to full hearing to decide whether to move forward with removal.

Attorney Clifford addressed the scope of the hearing, it was defined by the resolution voted by the Board; Mr. Suso failed to meet Board objectives and failed to conform to Town policies. For the Board to go back and now come up with more reasons in addition to what was stated in the resolution is absurd. This hearing is a sham if the Board is just going to air their reasons with no evidence; he should not be fired on what they think and should be based on evidence.

Chair Taylor read the following Board members' statements: Ms. Scott Price, Mr. Patterson, Chair Taylor, Mr. Brown.

Attorney Clifford read a prepared statement. Governing documents are the Charter and Mr. Suso's November 2021 employment contract. Over 11 years he has performed exceptionally well, bond rating increased to AAA, the Board wants to make a change, after a few discussions, Chair Taylor said there were three votes to fire him, the Board is now shocked that Mr. Suso in subsequent meetings was defensive, spoke out aggressively; however, his career was being threatened. There has not been a legally posted meeting to review the reasons for termination. On 3/18/22 the Chair Taylor told Mr. Suso she had three votes to fire him, he was either being threatened or Chair Taylor had violated the open meeting law.

Between November and March, Ms. English Braga applied for Town Counsel position with support of Chair Taylor. Ms. English Braga did not get the job, around that time things changed. November 2021 began the three year contract, the Board unanimously condemned Mr. Brown for threatening Mr. Suso's job in an email without any reason. In January 2022 he rejected Ms. English Braga's application for Town Counsel, he made decision to hire Attorney O'Keefe with former Town Counsel Frank Duffy and the HR Director.

In March 2022 Chair Taylor, Ms. English Braga, and Mr. Brown got together and decided Mr. Suso should be fired. The Town is bound to follow the Charter, the Board has already voted that Charter by having unlawful meetings in February and March deciding to fire him. Vote a resolution on a 5/12/22 Special Meeting; it needs to be held at a regularly scheduled meeting of the Board. The Board failed to respond to the subpoena allowed under the charter and have not provided documents that form the basis of their intent to terminate them. Ms. English Braga was invited to be a witness, she was aware of that despite any error in the notice, Attorney Clifford would like to ask her why she did not resign when applying for the job with the Town. Ms. English Braga should have excused herself because he was her boss, and she was applying for a job for which he would hire. Ms. English Braga said the Board was not limited to the 4 objectives voted in March 2022 when the new employment contract was signed. Mr. Suso responded to a very negative employment review, committed to improving, and working with the Board. Following his response, the Board discussed their concerns at a public meeting, he should have been able to respond in a public meeting. Ms. English Braga said she was inundated by calls complaining about Mr. Suso; she was copied on 9 emails in 2021, zero emails containing complaints about Mr. Suso were received in 2022. Attorney Clifford asked for text messages between Board members and received none. Mr. Brown threatened Mr. Suso with termination in 2021 and was admonished for doing so by the Board because it was a violation of the Town Charter. Mr. Brown apologized but gave Mr. Suso a poor performance review.

The Board violated the Charter; the employment agreement must be followed if the Board intends to terminate him, the only thing he can be held accountable for are those adopted by the Board. Three members gave meet or exceed on the objectives/goals. At the 5/9/22 Board meeting, Ms. Scott Price asked if the Board is limited to those four goals, Ms. English Braga offered her legal opinion that they are not held to those four goals only. Charter language addressing termination by the Town Manager, the Board needs to state reasons in a resolution and the Town Manager is entitled to a hearing on that.

Attorney Clifford noted it was the appropriate legal standard, what is inarguable is the reasons have to be true. The only thing before the Board is whether the reasons in the 5/12/22 resolution are true. He read the language that failure to implement goals and follow out policies of the Board. The Goals were reviewed in the 3/21/22 meeting and same meeting they approved and signed Mr. Suso's new three year employment contract. The Board has a list of 43 policies on the Town website, not one of these allegations alleges Mr. Suso violated or failed to carry out any of those 43 policies. The policies have definitions, goals and objectives have specific definition.

Mr. Suso publicly challenged this review, the Board called a meeting three days later and voted to terminate. According to Attorney Clifford, Falmouth is covered by insurance, if this goes to litigation, the insurance company will hire an attorney representing the Town. The insurance company will not cover the damages from Mr. Suso's contract and not more than 2 years' salary. Attorney Clifford objects to every reason stated by the Board because the time to have done that would have been at a regularly scheduled Board meeting when the Board could have presented these things and voted. That would have given Mr. Suso notice of their reasons, and he would have had a chance to offer a rebuttal. Attorney Clifford asked for all emails critical of Mr. Suso, Mr. Brown on 5/9/22 said it may not be true that there is public dissatisfaction with Mr. Suso, Attorney Clifford noted that less than twenty emails were sent to the Board complaining about Mr. Suso. There is no evidence to support widespread dissatisfaction. All other issues should have been in included in the resolution, should have notice, and evidence to support the allegations. Ms. Scott Price's performance review of Mr. Suso is mostly 4's-his performance was outstanding and some 3's, overall, she rated his performance as excellent, within a week of that evaluation she voted to terminate him. The reasons provided are outside the scope of resolution voted on 5/12/22.

Moderator noted the goals as written are not sufficient, more than one word goals are needed for the Town Manager, including what did the Board want accomplished, he read the four goals voted in March 2021.

Attorney Troy said the Board identified that in the resolution as the basis for proceeding with the process. The Charter needs to be looked at correctly. To the extent the Town Manager's contract is inconsistent with the Charter, it is legally annulled. The goals may be at every meeting, day to day objectives and goals, many times they are transmitted between the Town Manager and Board members. How the Board decides to define what the goals and policies are up to the Board. Did the resolution correctly identify the reasons the Board moved in this direction. The Charter talks about proposed removal in Section A, after Mr. Suso request the meeting, Section E says the reasons for removal should be read aloud. There is no evidentiary requirement by the Board, they do not have to prove to themselves the reasons are correct. Mr. Suso is given the opportunity to present witnesses. Reasons read aloud, Town Manager responds, the Town is not calling witnesses, and reserve the right to cross examine any witnesses. The burden is on Mr. Suso to try to persuade the Board to give him another chance. They provided all Town records that are public records. The Board members were asked to go to their individual accounts and produce any records, three members said there are no records. Chair Taylor gave all her records on her personal account to Town Counsel, which made determination of whether they were public records to be provided. 138 pages were provided, including Dr. Taylor's and given to an independent person. The new Town Counsel looked at them and gave then to Attorney Clifford. Attorney Clifford can go to public records to appeal her review. Mr. Suso's contract says exactly what he agreed to take, if the Board asked him to resign or after the hearing process, if three people decide to remove him, he is entitled to four months of compensation.

Attorney Clifford said the idea that Board members are not limited to the specific goals and objectives voted by the Board is incorrect. The idea that the Town Manager is responsible for individual directives by the individual board members is incorrect. The Board's actions are limited to a vote they took in a legally held meeting. He cannot respond to individual whims of five people to keep everyone happy. They act only legally in a Board meeting, if they want him to do something, all they need to do is to vote it. They signed a contract with guidance and advice of counsel, it does not conflict with the Charter. The Board vote on 5/9/22 was to terminate, if there was a violation, the compensation to the Town Manager is four months' pay.

Recess taken for five minutes.

Mr. Suso stated that he has been Town Manager for about 11 years, he has worked in local governments in more than one state for 45 years. At a 5/12/22 Board meeting the Board voted resolution that included his failure to implement their goals. The goals were wind turbine disposition, online permitting, implementation of the Sandwich Road Fire Station, and performance evaluations for major department heads. He accomplished all four of those goals. Minimum of 12 months from the time goals adopted to implement them, some may be in process and underway. 3 of 5 board members found he exceeded the goals. The voted and adopted Board policies are posted on the Town website, he reviewed all 43 policies, he is not violating the policies, he did not fail to implement any of those policies.

Cross exam of Mr. Suso:

Mr. Suso is familiar with the Charter language, the manager shall implement goals and carry out the policies of the Charter. Mr. Suso reviewed a document that Attorney Troy provided to him, noting it was from the Charter, and read from it.

Attorney Troy said the Charter does not limit the Board to a process. When Mr. Suso says he carried out the 43 goals on the website, does that meet the goal of the Charter. What about other policies?

Attorney Troy offered a hypothetical situation, if the board adopts through consensus at a public meeting, is this to be carried out by the Town Manager. Mr. Suso did not respond to the hypothetical situation presented and requested an actual example.

Attorney Troy noted that Mr. Suso refused to answer a hypothetical situation.

Attorney Clifford said that the Board accused Mr. Suso of not following their policy. Mr. Suso agreed if the Board votes for something to be done, the Town Manager must do that.

Whether a consensus of a non-voted opinion of a Board is binding on the Town Manager is still a question.

During the next hearing the tribunal will make a decision on what action they will take.

Attorney Troy said they will proceed to the next hearing.

Attorney Clifford stated he had nothing further to present at this hearing.

Mr. Vieira said the Board voted for the next hearing to take place on 6/27/22, Monday to convene the hearing required under their next steps.

Mr. Vieira adjourned the hearing.

Respectfully Submitted,
Jennifer Chaves
Recording Secretary