Received 02.07.22
Revised: 03.02.22
Complete: 03.04.22

EXPERIMENTAL LEASE APPLICATION

1. APPLICANT CONTACT INFORMATION

Applicant	Southern Maine Sustainable Shellfish LLC
Contact Person	Michael Masi
Address	3 Old Sewall Farm Road
City	York
State, Zip	Maine, 03909
County	York
Telephone	(603) 969-3395
Email	mmasi.smss@gmail.com
Payment Type	x Check (included) ☐ Credit Card

Note: The email address you list here will be the primary means by which we will contact you. Please provide an email address checked regularly. If you do not use email, please leave this blank.

2. PROPOSED LEASE SITE INFORMATION

Location of Proposed Lease Site	
Town	York
Waterbody	York River
General Description (e.g. south of B Island)	Roughly 0.6 miles west of Sewall's Bridge and across from the golf course.
Lease Information	
Total acreage (4-acre maximum) and lease term (3-year maximum) requested	0.97 Acres
Type of culture (check all that apply)	☐ Bottom (no gear) X Suspended (gear in the water and/or on the bottom) ☐ Net Pen (finfish)

(1)

Is any portion of the proposed lease site above mean low water?	☐ Yes X No **Note:** If you selected yes, you need to complete the steps outlined in the section titled: "17. Landowner/Municipal Permission Requirements".

3. WATER QUALITY

Directions: Water Quality Information can be found here: *http://www.maine.gov/dmr/shellfish-sanitation-management/closures/pollution.html*

Pollution Area (e.g. "19-A"):	3-A
Pollution Area Section (e.g. "B.2". or "none"):	B.1
Water Quality Classification (e.g. approved, restricted, etc.):	Restricted

Note: If you are proposing to grow molluscan shellfish in waters classified as anything other than open/ approved, you will need to contact the Bureau of Public Health to discuss you plans at the following email: DMRPublicHealthDiv@maine.gov

Mike,

Public Health discussed your intention to depurate from an experimental lease with staff in the Aquaculture program and the Hearings Examiner. The path forward will likely be to condition the proposed lease to include specific language related to the sale of product from your lease to a certified depuration facility. As you work through the leasing process this added language will be discussed with you by the appropriate staff members. Thank you for reaching out to Public Health to discuss your intentions.

Bryant Lewis

ME Department of Marine Resources

Growing Area West Program Supervisor

4. GENERAL LEASE INFORMATION

A. Please complete the table below and add additional rows as needed.

Name of species to be cultivated (include both common and scientific names):	**Name and address of the source of seed stock, juveniles, smolts, etc., to be cultivated:**
1. American Oysters, *Crassosterea virginica*	Muscongus Bay Aquaculture, PO Box 204, Bremen, Maine Mook Seafarm, 321 State Route 129, Walpole, Maine 04573 Spinney Creek Shellfish, 27 Howell Drive, Eliot, Maine 03903 (American Oyster may be sourced from the Spinney Creek Lease if allowable by DMR)
2. European Green Crab, *Carcinus maenas*	Pre-molt Green Crabs will be collected from the York River or Braveboat Harbor (York, ME).

B. Do you intend to possess, transport, or sell whole or roe-on scallops? ☐ Yes X No

If you answered "yes" please contact the Bureau of Public Health to discuss your plans at the following email: DMRPublicHealthDiv@maine.gov

Note: If you are proposing to grow molluscan shellfish, this application also serves as your written operational plan as required in the National Shellfish Sanitation Program (NSSP) Model Ordinance Chapter 2, and must be maintained in your files. If you wish to submit an operational plan separate from this application, please contact: DMRPublicHealthDiv@maine.gov

7. RESEARCH PROGRAM AND OPERATIONS

Directions: If you are cultivating more than one species, you will need to provide the below information for <u>each</u> species. Please attach a separate page if needed.

A. Type of study **(check one):** ☐ Scientific Research **X** Commercial Research

Please note:

a) Product grown on experimental leases for scientific research cannot be sold. Results of scientific research are not kept confidential.

b) Experimental leases for commercial research are not renewable. Results of commercial research are kept confidential.

B. What is the purpose of the study? If scientific, please include a detailed study design.
American Oyster…The purpose of this study is to determine which cultivation practices yield the fastest growth and most desirable American oyster at our proposed location in the York River. On our lease we plan to utilize various grow-out gear and methods including floating cages and bottom cages.

C. Describe the general culture process for each species proposed.
Oyster seed will be place in oyster bags of appropriate mesh size. Throughout the grow-out process, the mesh sizes and density of oysters will be changed to achieve maximum growth. We will monitor the growth, shape, and taste of oysters grown in our various gear types and locations to see what methods are best for our lease.

D. What months will the proposed activities (i.e. seeding, tending, and harvesting) occur?
Cultivation activities will occur year round for the American Oysters. We expect seeding to occur in either late June or July. Tending of oysters and gear will occur throughout the growing season (roughly April-December). Floating gear will be sunk or removed by December. Market sized oysters will be harvested from bottom cages throughout the year.

E. How often will you be at the site during seeding and harvesting periods?
We expect to be at the site a minimum of twice a week during the growing season (April-December) to work with the oysters. Winter harvesting will depend on demand, however, we hope to be harvesting once every couple weeks from December-April.

F. How frequently will you visit/tend the site for routine maintenance (i.e. flipping cages, etc.)?
We expect to tend the site a minimum of twice a week for routine maintenance associated with oyster cultivation. Flipping floating cages will occur approximately once every three weeks. Defouling cages, bags, and lines will occur roughly once every three weeks or as needed.

G. Describe the harvesting techniques you will use. If you plan on using a drag, please provide the dimensions.
Harvesting of American Oysters will be by pulling bags from cages by hand. Then sorting out the market sized oysters.

H. Describe any overwintering or "off season" plans for the site. For example, will you remove gear from the site and/or deploy gear in different areas within the proposed site? Please include where gear or product will be located if moved from the site.

Floating oyster ranches will be sunk to the bottom for overwintering. Bottom cages will likely stay on site for the winter. Any gear that is not in use, in winter or other times of the year, will be stored at the wharf at Sewall's Dock or our homes.

I. What type of machinery (e.g. generator, drag, grading equipment, etc.) will you be using on the site? When and how often will the machinery be used?
No machinery will be used. Harvesting and defouling will be done by hand.

J. Please provide details on any predator control techniques you plan to employ.
We plan to use vexar oyster bags in all of our surface and bottom cages.

K. Suspended culture gear can attract birds that roost on the gear and defecate, potentially creating a pollution source impacting shellfish held within the gear. In order to comply with the National Shellfish Sanitation Program (NSSP) Model Ordinance (MO), DMR is requiring that applications for the suspended culture of shellfish include a description of mitigation or deterrent measures to minimize the potential pollution impacts of birds at the proposed site. If appropriate, include sketches or photos that clearly depict those measures put into practice.

Examples may include:

- Submerging suspended gear and associated product at a depth sufficient to deter roosting for two weeks before harvest
- Attaching physical deterrents (i.e. zip ties) to gear
- The site is proposed for the culture of seed only
- The site is proposed for the culture of adductor-only scallops (i.e. no other shellfish species would be grown on the site)
- Proposed gear would always be suspended below the surface of the water at a depth sufficient to deter roosting (i.e. as is common for scallop lantern nets)

1. Only seed and year one oysters will be held in Oystergro floating cages.
2. Our harvest will be taken from 8-bag bottom cages that will be placed in the deepest area of the proposed lease. These will be in water of approximately 4-6 feet at MLW.
3. Our harvest will be sent to Spinney Creek for depuration before going to market.
4. Suspended gear will be submerged before the recreational harvest of soft shell clams is permitted in December. Recreational harvest of soft shell clams is permitted 0.6 miles east of the proposed lease in an area of the York River classified as "conditionally approved".

7. RESEARCH PROGRAM AND OPERATIONS

Directions: If you are cultivating more than one species, you will need to provide the below information for <u>each</u> species. Please attach a separate page if needed.

A. Type of study **(check one):** ☐ Scientific Research **X** Commercial Research

Please note:

a) Product grown on experimental leases for scientific research cannot be sold. Results of scientific research are not kept confidential.

b) Experimental leases for commercial research are not renewable. Results of commercial research are kept confidential.

B. What is the purpose of the study? If scientific, please include a detailed study design.

Green Crab…
We would like to commit a portion of our lease to molting green crab to sell as soft shell crab. We believe an aquaculture lease allows for the space necessary to "shed out" commercially significant quantities of soft shell green crabs. Soft shell green crab represent a potentially lucrative fishery that would also have tremendous ecological benefits. Much of the work around establishing this potential fishery has been done by Gabriela (Gabby) Bradt from NH Sea Grant/UNH Cooperative Extension. Gabby has taught us how to identify pre-molt and imminent molt crabs and has been a fantastic resource. To date no one has attempted to harvest and shed out green crab at the scale we are hoping to achieve. Our 2021 experiments in trapping and molting green crabs have led us to believe that a commercial fishery is feasible. We have verbal agreements with 8 restaurants who would like to sell our product but will requires a minimum of 20 per day to put green crab on the menu.

There are many experiments still required to learn the most efficient methods for shedding out green crabs and we would utilize our lease to conduct many of these experiments. We plan take data on temperature, salinity, and light levels via HOBO data loggers to identify the specific conditions that are most likely to result in molting. Subsequently, we would like to experiment with different "condo" sizes and sorting strategies to maximize efficiency.

C. Describe the general culture process for each species proposed.

Green crab will be harvested from the York River or Braveboat Harbor. They will be stored in lobster crates before being sorted. Any pre-molt crabs will be sorted out and then placed in specifically designed crab trays or "condos" which are then stored in lobster crates. The crab trays will have partitions between each of the crabs because a freshly molted (soft-shelled) crab would quickly be consumed by other crabs.

Once crabs have be placed into the crab condos they would be floated in the lobster crates in the location where the Oystergro floating cages would typically occupy on the lease. The crabs will be checked and the recently molted soft-shell crabs will be harvested once or twice a day. This frequency of harvest is mandatory as the shells of molted crabs will begin hardening soon after molting if left in the water. Once removed from the water the shell stops hardening. Soft shell green crab can be stored in a refrigerator packed in seaweed for a week or more.

All inter-molt crabs (those deemed unlikely to molt) and any crabs that do not molt in the condos will be removed from the site. These crabs will be sold to the bait market (Southern Maine Crabs), dog food companies, or composted. No green crabs will be release back into the environment.

D. What months will the proposed activities (i.e. seeding, tending, and harvesting) occur?

Collecting, sorting, holding, and harvesting male green crab will occur in May and June. Collecting, sorting, holding, and harvesting female green crab will occur in August and September.

E. How often will you be at the site during seeding and harvesting periods?

A minimum of once a day to check if any crab have molted. It takes less than two minutes to work through a lobster crate of green crab condos. We estimate that it would take just over an hour to process 60 crates of crabs.

F. How frequently will you visit/tend the site for routine maintenance (i.e. flipping cages, etc.)?

See above. The seasons for both the male and female molts are fairly short (two months) and therefore fouled gear does not seem to be an issue. The maintenance is simply harvesting the soft shells and restocking the trays with pre-molt crabs.

G. Describe the harvesting techniques you will use. If you plan on using a drag, please provide the dimensions.

Harvesting will be done by hand. The harvester will simply open the crate and pull out the trays. Any of the individual compartments that appear to have two crabs will actually be a soft-shell crab and its discarded molt (exoskeleton). The discarded molt is tossed back into the environment while the soft shell crab is placed in a container to be brought into cold storage or to market. The now empty compartment in the condo is filled with another pre-molt green crab.

H. Describe any overwintering or "off season" plans for the site. For example, will you remove gear from the site and/or deploy gear in different areas within the proposed site? Please include where gear or product will be located if moved from the site.
There will be no overwintering of green crab. All green crab gear will be taken off the site by late September and stored at the wharf at Sewall's bridge or our homes.

I. What type of machinery (e.g. generator, drag, grading equipment, etc.) will you be using on the site? When and how often will the machinery be used?
No machinery will be used. Harvesting will be done by hand.

J. Please provide details on any predator control techniques you plan to employ.
We are essentially housing the number one predator. The lobster crates protect any other predators from getting in and, equally important, they prevent our predators from getting back into the environment.

K. Suspended culture gear can attract birds that roost on the gear and defecate, potentially creating a pollution source impacting shellfish held within the gear. In order to comply with the National Shellfish Sanitation Program (NSSP) Model Ordinance (MO), DMR is requiring that applications for the suspended culture of shellfish include a description of mitigation or deterrent measures to minimize the potential pollution impacts of birds at the proposed site. If appropriate, include sketches or photos that clearly depict those measures put into practice.

Examples may include:

- Submerging suspended gear and associated product at a depth sufficient to deter roosting for two weeks before harvest
- Attaching physical deterrents (i.e. zip ties) to gear
- The site is proposed for the culture of seed only
- The site is proposed for the culture of adductor-only scallops (i.e. no other shellfish species would be grown on the site)
- Proposed gear would always be suspended below the surface of the water at a depth sufficient to deter roosting (i.e. as is common for scallop lantern nets)

We will look into physical deterrents if this is required for green crab. Attaching zip ties to the lobster crates would be the simplest way we could attempt to deter birds.

8. EXISTING USES

Directions: Describe the existing uses of the proposed area. Please include the amount of activity, the time of year the activity occurs, frequency, and proximity to the lease site.

A. Describe the existing uses of the proposed area in questions A.1 through A.5 below. Please include the a) type b) time of year c) frequency, and d) proximity to the lease site for each existing use.

1. Commercial Fishing

Commercial fishing boats tie up on the east side of Sewall's Bridge approximately 0.6 miles east of the proposed site. These lobster boats are active year round. There is no commercial fishing within the York River.

2. Recreational Fishing

Recreational fishing occurs in the York River from May-October primarily for stripers. Fishing is infrequent on site and occurs throughout the York River.
3. Boating Activities (please also include the distance to any navigable channel(s) from your proposed site at low water)
Recreational boating is common on the York River from May-September. The lease site is approximately 150 ft to the center of the channel. Sewall's bridge limits the time and size of boats that access this segment of the river. Typically it is used by smaller boats and skiffs.
4. Ingress and egress (i.e. coming and going) of shorefront property owners within 1,000 feet of the proposal (e.g. docks, moorings, landing boats on shore, etc.)
Three riparian docks are located near the proposed site. Ingress/egress is not affected.
5. Other uses (kayaking, swimming, etc.)
Kayaks and paddle boards often pass by the proposed site.

B. Are there private docks, moorings, or other access points within 1,000 feet of the proposed lease? If yes, please include approximate distance from proposed lease.
There are three private docks located within 1000ft of the proposed lease. Dock #1 is approximately 475 feet from the site. Dock #2 is approximately 675 feet from the site. Dock #3 is approximately 850 feet from the site.

C. Are there public beaches, parks, or docking facilities within 1,000 feet of the proposed lease site. If yes, please describe and include approximate distances from proposed lease.

No.

D. Are there any Limited Purpose Aquaculture (LPA) licenses or aquaculture leases within 1,000 feet of your proposed lease site? If yes, please list their acronyms below.

Current and pending aquaculture leases and active LPA licenses may be found here: https://www.maine.gov/dmr/aquaculture/leases/index.html

No.

9. CURRENT OPERATIONS

Directions: If a question does not pertain to your proposed operations, please write "**not applicable**" or "**N/A**."

A. Describe your existing aquaculture operations, including the acronyms of all active leases and/or licenses.

N/A

B. What are your plans for any existing leases and/or Limited Purposed Aquaculture (LPA) licenses if the lease is granted? Will any existing leases and/or Limited Purpose Aquaculture (LPA) licenses be relinquished if the lease is granted? If so, please indicate which ones.

N/A

10. EXCLUSIVE USE

If your lease is granted, what activities would you request be excluded from occurring within the boundaries of the lease site? In your answer please address applicable commercial and recreational fishing, boating activities, and other activities you listed in the 'Existing Uses' section of this application.
To enhance navigability we have allowed 20' between rows of floating shellfish gear and we welcome kayakers and paddlers. However, we ask that our gear not be handled, and that no gear or shellfish are removed. Recreational fishermen may fish in the vicinity but in order to avoid entanglement of fishing hooks and lures, we suggest that recreational fishermen do not cast within the boundaries of the lease. We ask that recreational boaters do not enter the lease area as submerged gear could be a hazard on portions of the lease at low tide.

11. ENVIRONMENTAL CHARACTERIZATION

Directions: Using your knowledge of the area, describe the environment of the proposed lease site. Be sure to include units of measurement in your answers (i.e. feet, cm/s).

A. What are the approximate depths at mean low water?
The shore edge of the proposed lease is 2 ft deep and 6 ft deep on channel edge.

B. What are the approximate depths at mean high water?
The shore edge of the proposed lease is 12 ft deep and 16 ft deep on channel edge.

C. Provide the approximate current speed and direction during the ebb and flow.
Currents predominantly flow westerly on the incoming tide and easterly on the ebb tide. The proposed lease is located in a small cove so some eddying is observed. The current is strongest on the outgoing tide in the western side of the proposed lease near the large rock. The current may reach speeds of 3-4 knots on a spring tide. A measurement of the current speed at mid-tide, in the middle of the proposed lease, yielded a current of 2 knots.

D. The following questions (D.1 through D.6) may be answered in writing or by submitting a video. If you plan to submit a video, please contact the Department prior to video collection.

1. What are the bottom characteristics (mud, sand, gravel, rock, ledge or some mix, etc.)?

The bottom is characterized by sand, gravel, rock, and shell material.

2. Describe the bottom topography (flat, steep rough, etc.).

The bottom topography is largely flat with a slope of approximately 4 ft of vertical change over 125 ft of horizontal distance.

3. Describe marine organisms by species or common names. Based on your personal observations or other sources of information, are these species abundant, common, or rare?

Organisms commonly found in the proposed site include European Oysters (abundant), Blue Mussels (common), and European Green Crab (abundant). Striped Bass and Winter Flounder are rarely found as well as other migrating fish.

4. Are there shellfish beds or fish migration routes in the surrounding area? If so, please describe.
There exists a currently unproductive sandbar/mudflat east the proposed site. Historically this area held soft shelled clams. The entire York River is a migration route for Gulf of Maine species that spawn in estuaries.
5. Describe the presence and extent of submerged aquatic vegetation, i.e. eelgrass, within the proposed lease area. Please include the date of this observation along with the method of observation. If submerged aquatic vegetation is observed, please also describe the abundance below and sketch the limits of the beds in the vicinity map.
No submerged aquatic vegetation can be found in the proposed lease area. This was observed by surveying the proposed lease area from a skiff at low tide on Nov. 12th, 2021. To the best of our knowledge the nearest eelgrass beds are located in the salt pond by the Stage Neck Inn and in the entrance to York Harbor over a mile away.
6. Describe the general shoreline and upland characteristics (rocky shoreline, forested, residential, etc.)
Shoreline is forested with hayfields set in the uplands. The shoreline on the opposite side of the river is a golf course.

E. Is your proposed lease located within a Maine Department of Inland Fisheries and Wildlife designated Essential Habitat?

☐ Yes **X** No

Note: The location of Essential Habitats in the State of Maine, along with information on how projects within these areas are reviewed, can be found here: https://www.maine.gov/ifw/fish-wildlife/wildlife/endangered-threatened-species/essential-wildlife-habitat/index.html

If a project is located within an Essential Habitat, applicants are strongly encouraged to contact the MDIFW Environmental Review Coordinator (John.Perry@maine.gov, phone: 207-287-5254) prior to application submission.

F. Will your operations discharge anything into the water such as feed (pellets, kelp, etc.) or chemical additives (therapeutants, chemical treatments, etc.)?

☐ Yes **X** No

Note: If you answered yes, you must submit a video of the bottom using a method prescribed by the Department. **The video must be filmed between April 1 and November 15.** If a discharge is proposed you will also need to obtain a Maine Department of Environmental Protection (DEP) discharge permit. For information on this permit please contact DEP's Wastewater Licensing Program (Gregg.wood@maine.gov, 207-287-7693). Further sampling may be required by DMR, or DEP, depending on the characteristics of the site or the proposed activities.

12. STRUCTURES *(if applicable)*

If your operations require the use of cages, nets, ropes, trays, or any object (structure) other than the organism to be grown directly on the bottom or buoys to mark the corners of the lease site, you must submit an **Overhead View** and **Cross-Section View** of your gear plans. It is important to note that, unlike Limited Purpose Aquaculture (LPA) Licenses, experimental and standard leases require that all gear, including moorings, must be located within the proposed lease boundaries.

Note: You may embed the gear plans, or attach them to the end of your application. If you attach the plans, please label them according to the instructions provided below.

A) **Overhead View** (please label this "Overhead View"):

Directions: All dimensions need to labeled with the appropriate units (i.e. 10ft, 10in)

- Show maximum layout of gear including moorings.
- Show dimensions of entire gear layout
- Show approximate spacing between gear.
- Show lease boundaries and the location of proposed markers on all drawings.

B) Cross-Section View (please label this "Cross Section View"):

Directions: The cross-section view must show the following:

- The sea bottom
- Profile of gear in cross-section as it will be deployed
- Label gear with dimensions and materials
- Show mooring gear with mooring type, scope, hardware, and line type and size
- Water depth at mean high and mean low water

Note: Please include an additional Cross Section View, depicting the elements listed above, if there will be seasonal changes to gear layout (i.e. over wintering).

C) Gear Description

Directions: List and describe each individual gear type that you will use in the table below.

Specific Gear Type *(e.g. soft mesh bag)*	**Dimensions** *(e.g. 16"x20"x2")*	**Time of year gear will be deployed** *(e.g. Spring, Winter, etc.)*	**Maximum amount of this gear type that will be deployed on the site** *(i.e. 200 cages, 100 lantern nets, etc.)*	**Species that will be grown using this gear type**
Corner markers, floats and anchors	18" yellow polyball anchored with 6" diameter helix anchor by 4'H x 3/4" diameter shaft, galvanized. 2:1 scope on 1/2" chain and 5/8" rope.	Year 'round	4 corner markers, 4 anchors with associated chain and rope.	American Oysters Green Crab
Mesh oyster bags	36"L x 18"W x 3"H	Year 'round	1,572 bags	American Oysters
OysterGro Floating cage (oyster ranch)	41.5"L x 36"W x 22.3"H	Year 'round. Surface through the growing season, on bottom in winter.	78 cages (312 bags)	American Oysters
6-bag oyster bottom cage (oyster condo)	45"L x 36"W x 16"H	Year 'round	90 cages (540 bags)	American Oysters
8-bag oyster bottom cage (oyster condo)	45"L x 36"W x 22½"H	Year 'round	90 condos (720 bags)	American Oysters
Longlines with ganglion lines and toggles	100' x 5/8" pot warp (includes 1/2" gangion lines with 4" x 1" PVC pipe toggles)	Year 'round	6 long lines	American Oysters Green Crab
Anchors with chain for long lines	~24' x 1/2" galvanized chain and 6" diameter helix anchor by 4'H x 3/4" diameter shaft, galvanized.	Year 'round	8 helix anchors with chain	American Oysters Green Crab
Long link tensioner floats with rope for attachment to chain	18' diameter black polyball with 3 ft of 5/8" rope.	Growing season April through early December	12 floats	American Oysters Green Crab
Custom Green Crab Trays	26"L x 17W x 4.5"H	May-June and perhaps in August-September	180 Trays	Green Crab
Lobster Crates	32"L x 20W x 15.25"H	May-June and perhaps in August- September	60 crates	Green Crab

D) Gear Drawing (please label this "Gear Drawing").

Directions: Include a drawing of an individual piece of gear for each of the gear type(s) you plan to use. The drawing(s) needs to depict the length, width, and height of each gear type with appropriate units referenced (i.e. 10in, 10ft, etc.).

13. MARKING

Will you be able to mark your site in accordance with DMR regulations, Chapter 2.80? In part, this requires marker buoys which clearly display the lease ID and the words SEA FARM to be located at each corner of the lease. X Yes ☐ No If you answered no, explain why and suggest alternate markings.

Note: If a lease is granted, you will also be required to mark the site in accordance with appropriate US Coast Guard Regulations. If you have questions about US Coast Guard regulations contact: 1st Coast Guard District, Aids to Navigation Office.

14. RIPARIAN LANDOWNERS AND SITE ACCESS

A. If your lease is within 1,000ft of shorefront land (**which extends to mean low water or 1,650 ft. from shore, whichever is less, according to NOAA charts**), the following supporting documents are required:

1. A labeled copy of a tax map(s) depicting the location of the proposed lease site and including the following elements:
   - Label the map "Tax Map: Town of (name of town)."
   - Legible scale
   - Tax lot numbers clearly displayed
   - The boundaries of the proposed lease

2. Please use the Riparian Landowner List (included on the next page) to list the name and address of every shorefront landowner within 1,000ft of the proposed lease site. Have the tax collector or clerk of the municipality certify the list. Refer to the riparian determination guidance document to ensure all riparian landowners are included:

https://www.maine.gov/dmr/aquaculture/forms/documents/RiparianDetermination.pdf

3. If any portion of the site is intertidal you need to complete the steps outlined in "17. Landowner/Municipal Permission Requirements".

B. Will your access to the lease area be across riparian land?
☐ Yes X No

Note: If you selected yes, you will need to complete the landowner permission requirements included in "17. Landowner/Municipal Permission Requirements" of this application.

C. How will you access the proposed site?
We have a skiff located at the dock by Sewall's Bridge.

RIPARIAN LANDOWNER LIST

*THIS LIST MUST BE **CERTIFIED** BY THE TOWN CLERK*

On this list, please include the map number, lot number, and the current owners' names and mailing addresses for all shorefront parcels within 1,000 feet of the lease site. It is the applicant's responsibility to assemble the information for the Town Clerk to certify. The Town Clerk *only* certifies that the information is correct according to the Town's records. Once you have completed the form, ask the Town Clerk to complete the certification section below. If riparian parcels are located within more than one municipality, provide a separate, tax map and certified riparian list for each municipality.

TOWN OF: **York**

MAP #	LOT #	Landowner name(s) and address(es)

0087 211	0069-A 53	Genievieve A. Morgan et. al. 300 Southside Road York, ME 03909 134 Vaughn St Portland, ME04102
0068 211	0014 51	Leslie M. Fraser 230 Southside Road York, ME 03909 26Mansfield Street Framingham, MA 01702 PO Box 306 York, ME 03909
0068 211	0009 49	John and Margaret Campbell 220 Southside Road York, ME 03909 13 Geneva Road Andover, MA 01810
0068 211	0008 37	David L./Maria D. Iannuzzi 10 River Meadow Lane Ext. York, ME 03909 104 Fletcher Road Belmont, MA 04096
0068 211	0007 35	Stephen R Barth and Diane Q. Shayne 6 River Meadow Lane Ext. York, ME 03909
0068 211	0006 33	Seventh Green LLC 4 River Meadow Lane Ext. York, ME 03909
0068 210	0004 115	Paula D. Sewall 11 River Meadow Lane Ext. York, ME 03909
0075 210	0002 95	Blaisdell Reality LLC 161 Southside Road York, ME 03909
0061 104	0017 11	York Golf and Tennis Club 62 Organug Road York, ME 03909

Please use additional sheets if necessary and attach hereto.

CERTIFICATION

I, Lynn Osgood, Town Clerk for the Town of York certify that the names and addresses of the property owners listed above, as well as the map and lot numbers, are those listed in the records of this municipality and are current as of this date.

SIGNED: Lynn Osgood DATE: 3/2/2022

15. ESCROW ACCOUNT OR PERFORMANCE BOND

Check the category that describes your operation:

Check Here	Lease Category	Amount of Required Escrow or Performance Bond
☐	**No gear/structure, no discharge**	None
☐	**No gear/structure, discharge**	$500.00
☐	**≤ 400 square feet of gear/structure, no discharge**	$1,500.00
X	**>400 square feet of gear/structure, no discharge**	$5,000.00*
☐	**Gear/Structure, discharge**	$25,000.00

*DMR may increase the bond/escrow requirements for leases with more than 2,000 feet of structure.

I, (*printed name of applicant*) _Michael Masi__ have read DMR Aquaculture Regulations 2.64(10) (D) and if this proposed lease is granted by DMR I will either open an escrow account or obtain a performance bond, depending on the category of lease.

Applicant Signature 2/1/2022 **Date**

***Note:** Add title if signing on behalf of a corporate applicant.*

ADDITIONAL APPLICANTS: Each applicant must sign this section indicating that they will open an escrow account or obtain a performance bond. Use the space below for additional persons listed on the application. You may attach additional pages, if necessary.

I, (*printed name of applicant*) ____Samuel Sewall____ have read DMR Aquaculture Regulations 2.64(10)(D) and if this proposed lease is granted by DMR I will either open an escrow account or obtain a performance bond, depending on the category of lease.

Applicant Signature 2/1/2022 **Date**

***Note:** Add title if signing on behalf of a corporate applicant.*

16. APPLICANT SIGNATURE PAGE

I hereby state that the information included in this application is true and correct. I have also read and understand the requirements of the Department's rules governing aquaculture and the application instructions pertaining to the experimental lease process.

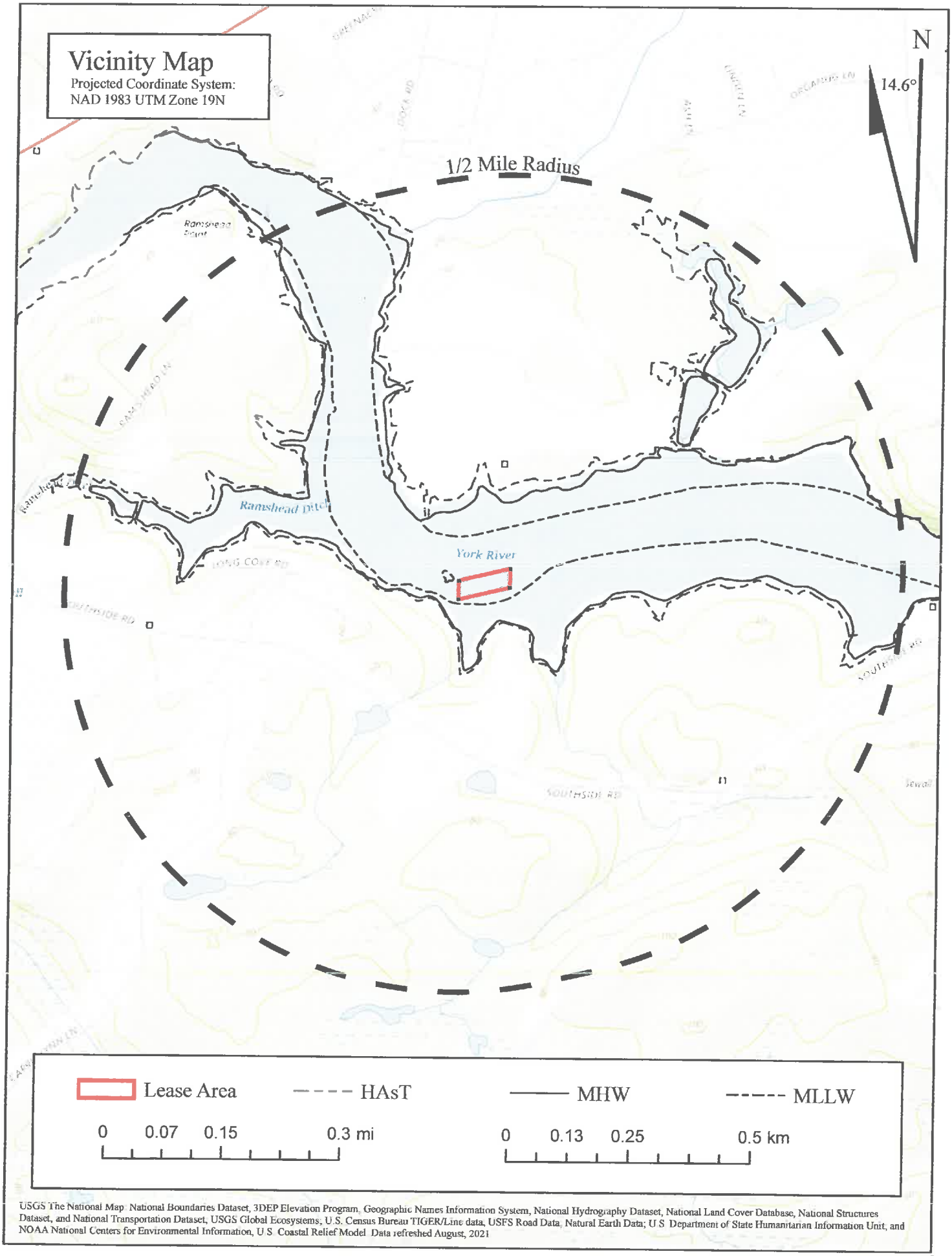
Printed name: _____Michael Masi_____

Title (*if corporate applicant*): _____Co-president_____

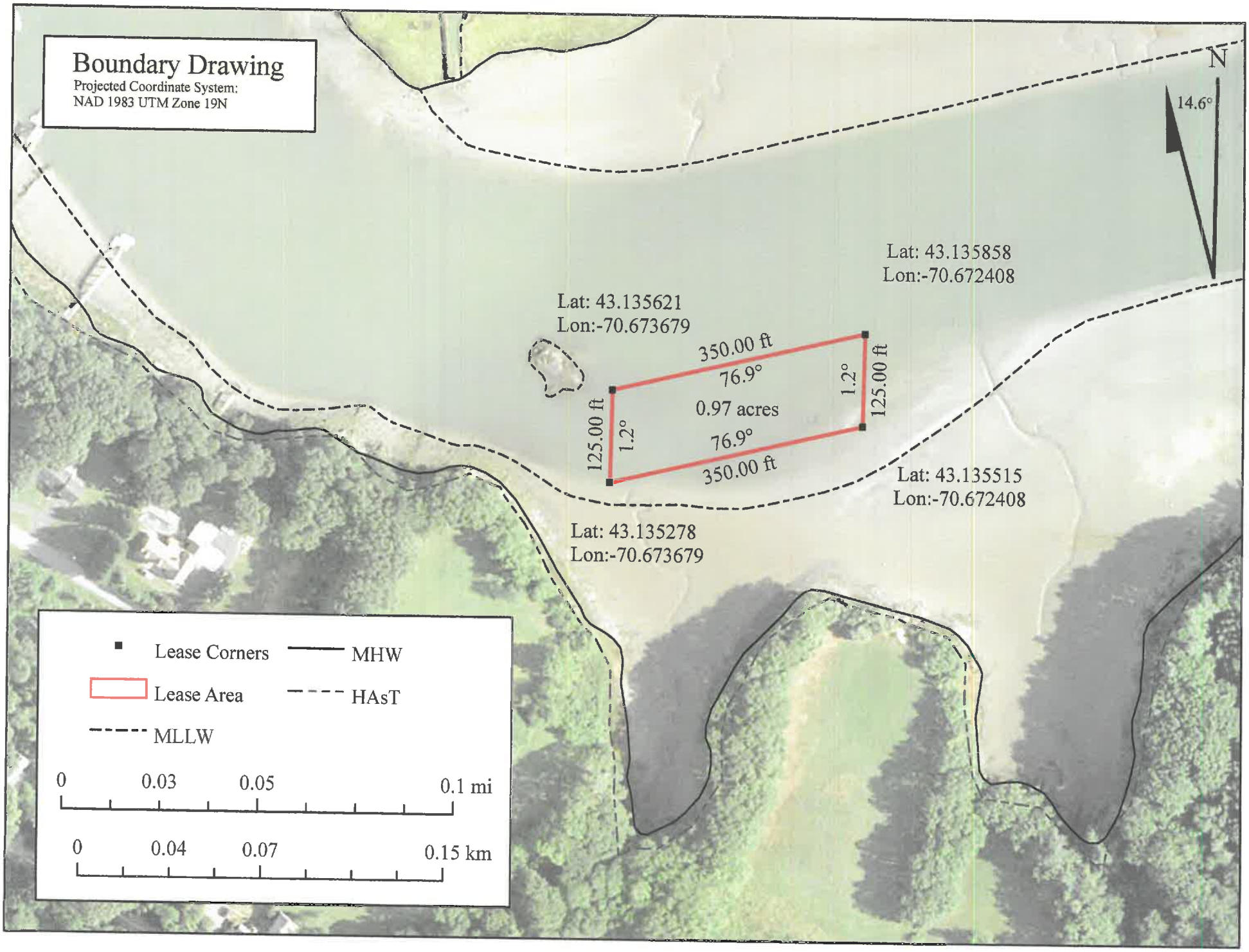
Signature: _____ Date: 2/1/2022

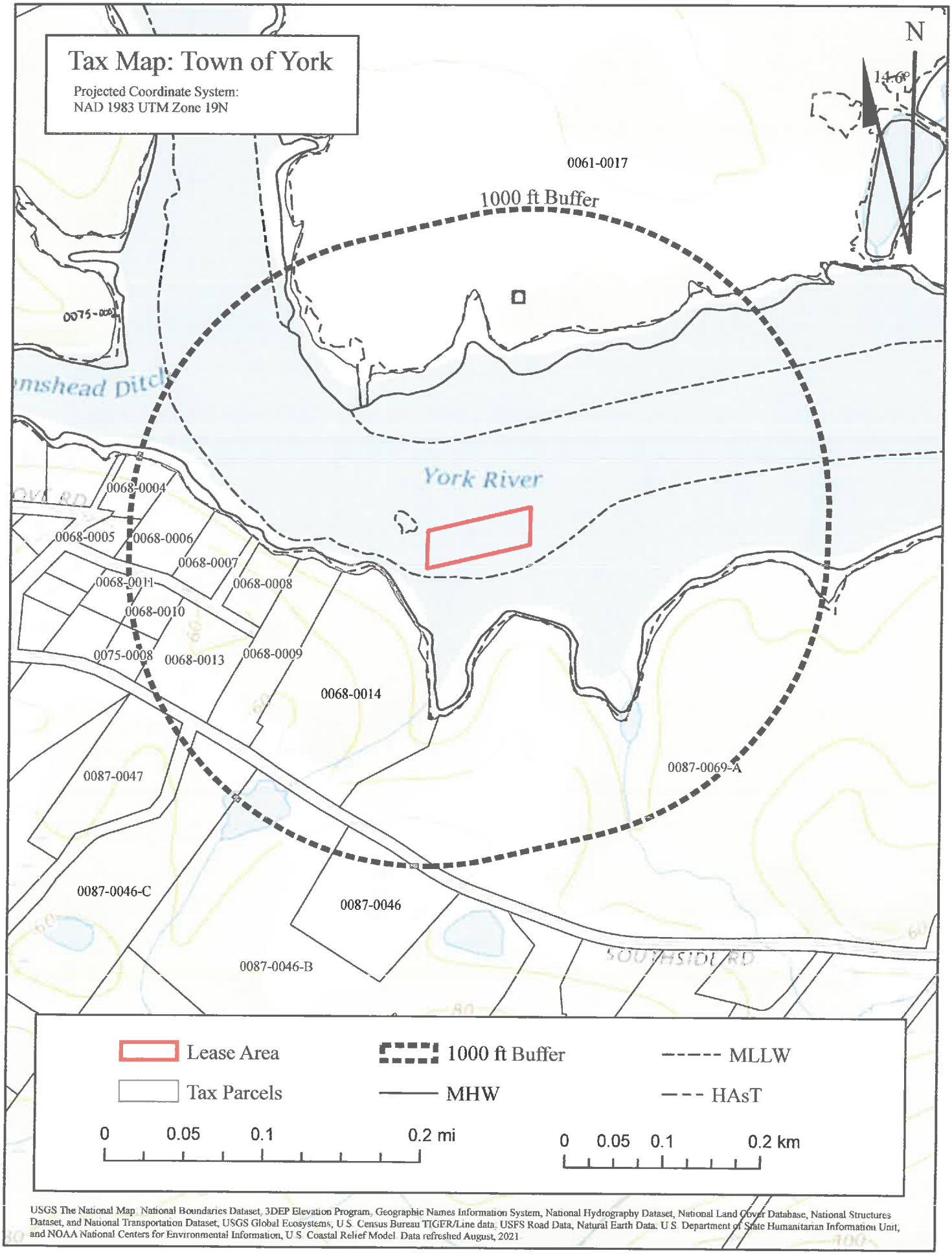
18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than $10,000 or imprisoned not more than five years or both.

Note:



USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset, USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data, USFS Road Data, Natural Earth Data; U.S. Department of State Humanitarian Information Unit, and NOAA National Centers for Environmental Information, U.S. Coastal Relief Model. Data refreshed August, 2021

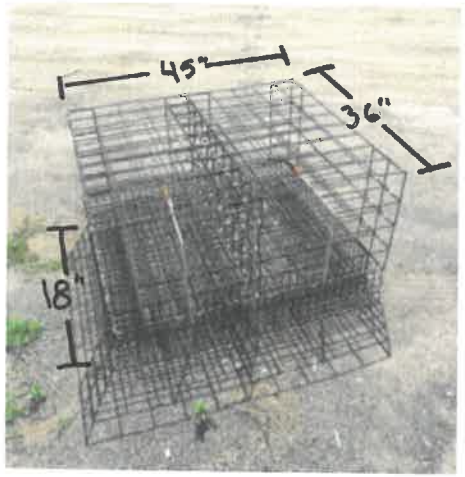

Boundary Drawing
Projected Coordinate System:
NAD 1983 UTM Zone 19N
N
14.6°
Lat: 43.135858
Lon:-70.672408
Lat: 43.135621
Lon:-70.673679
350.00 ft
76.9°
0.97 acres
1.2°
125.00 ft
125.00 ft
1.2°
76.9°
350.00 ft
Lat: 43.135515
Lon:-70.672408
Lat: 43.135278
Lon:-70.673679
Lease Corners
MHW
Lease Area
HAsT
MLLW
0
0.03
0.05
0.1 mi
0
0.04
0.07
0.15 km



USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road Data, Natural Earth Data; U.S. Department of State Humanitarian Information Unit; and NOAA National Centers for Environmental Information, U.S. Coastal Relief Model. Data refreshed August, 2021

Gear Drawings

Oyster Gear

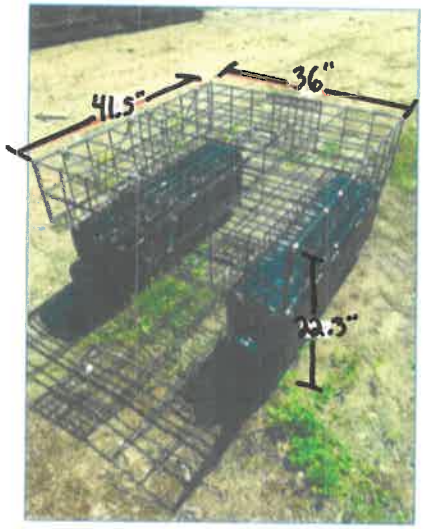


6-bag Oyster Bottom Cage, Squared Bags

45"L x 36"W x 18"H

Shore side of proposed lease. Cages will be free standing and placed in 3 groupings. Each grouping will consist of 30 cages arranged in three rows of 10 condos. Rows of cages will be 6 ft apart. Approximately 9 ft of space will exist between cages within each row. They will be stocked, defouled, and maintained at low tide.

Maximum of 90 Condos

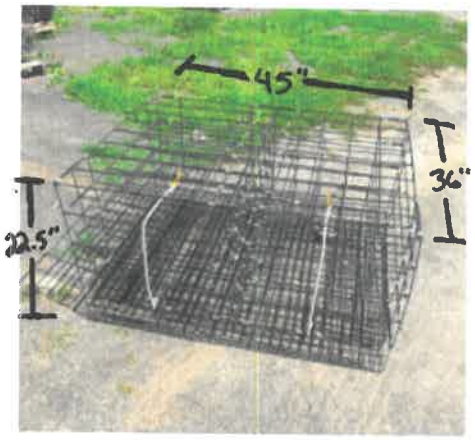


4-bag Oyster Ranch, Squared Bags

41½"L x 36"W x 22.3"H

Middle section of proposed lease. Ranches (cages) will be secured to long lines via gangion lines. 13 ranches will be placed on six, 100ft long lines. Ranches (cages) will be approximately 7 ft apart on center.

Maximum of 78 Ranches



8-bag Oyster Bottom Cage, Squared Bags

45"L x 36"W x 22½"H

Channel side of proposed lease. A line and toggle will be attached to each cage for hauling. Cages will be arranged in three groupings of 30 cages. Groupings will be arranged in four rows of seven or eight cages per row. Fifteen feet of spacing will exist between rows and cages will be approximately 12.5 feet apart within each row.

Maximum of 90 Condos

Gear Drawings

Green Crab Gear

Green Crab Condo

32" L, 20" W, 15.25" T

Middle section of proposed lease from late May through early July. Green crab condos will be substituted for oyster ranches. Essentially a floating lobster crate with 3 custom crab trays inside.

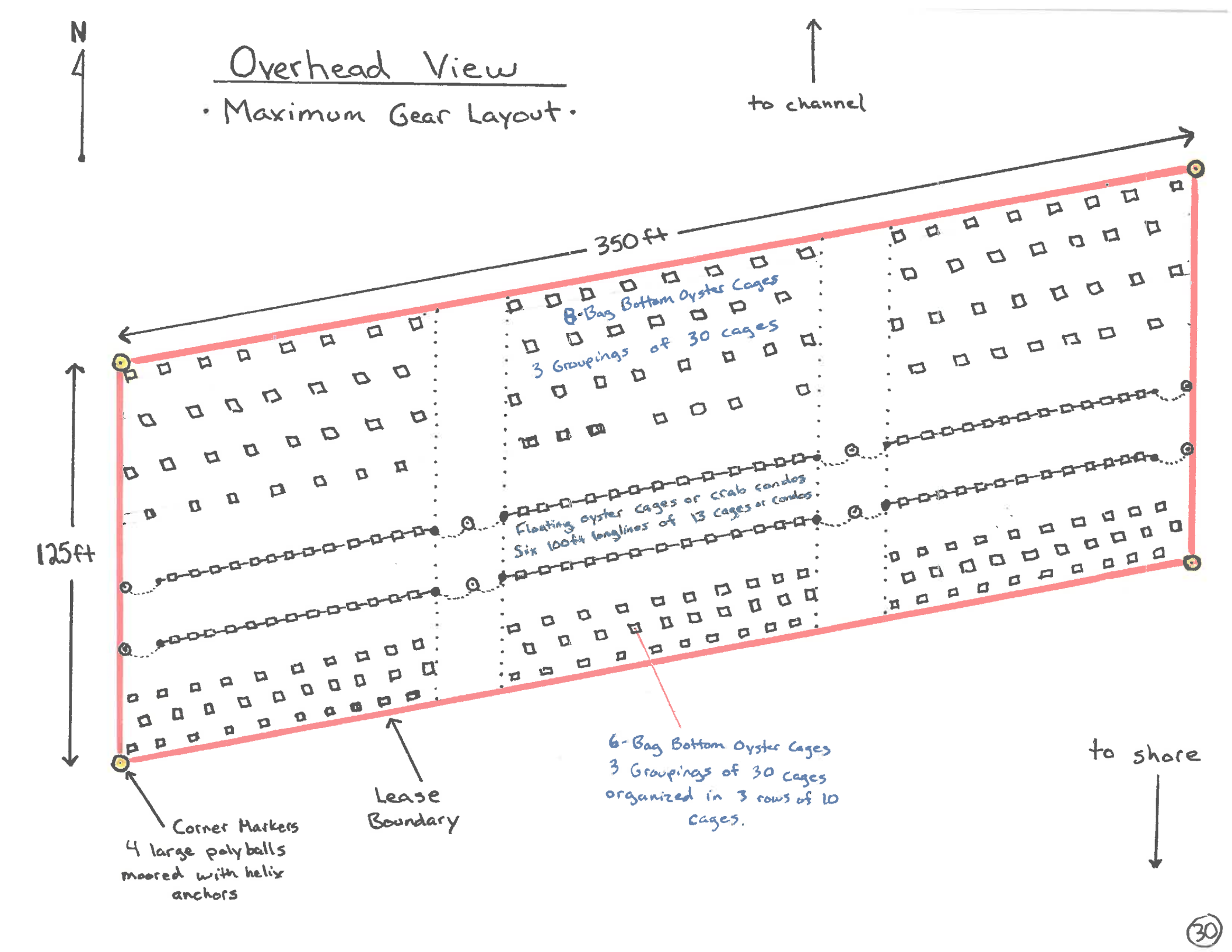
Maximum of 60 Crab Condos

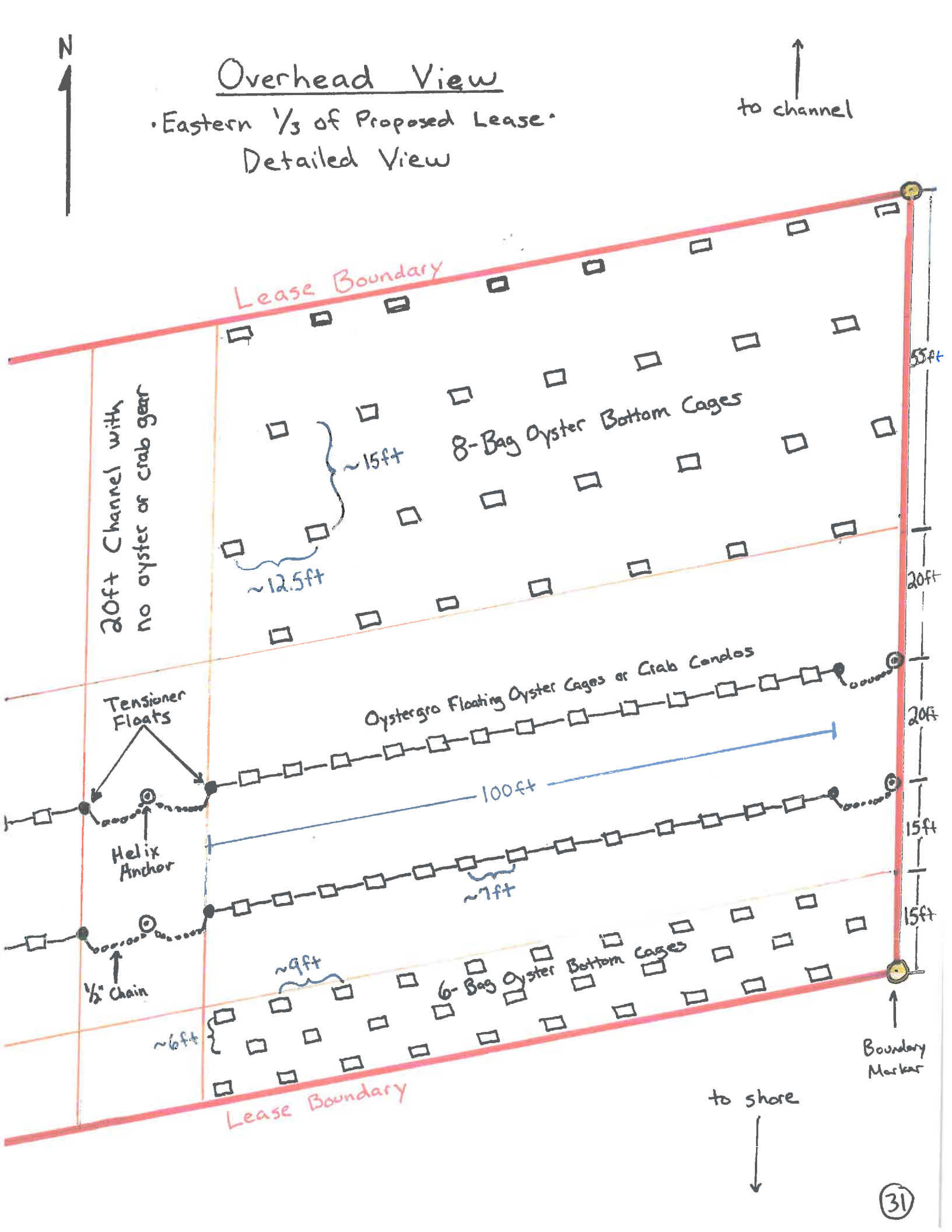
Green Crab Trays

26" L, 17" W, 4.5" T

Tray constructed from 1.5" coated wire mesh. A cut oyster bag is placed on the bottom. 4 inch drainage pipe cut to 4.25" form individual crab housings. A total of 24 crab housings per tray.

3 Trays per Lobster Crate


N
Overhead View
• Maximum Gear Layout •
to channel
350 ft
125 ft
8-Bag Bottom Oyster Cages
3 Groupings of 30 cages
Floating oyster cages or crab condos
Six 100ft longlines of 13 cages or condos
6-Bag Bottom Oyster Cages
3 Groupings of 30 cages
organized in 3 rows of 10
cages.
to shore
Lease
Boundary
Corner Markers
4 large polyballs
moored with helix
anchors

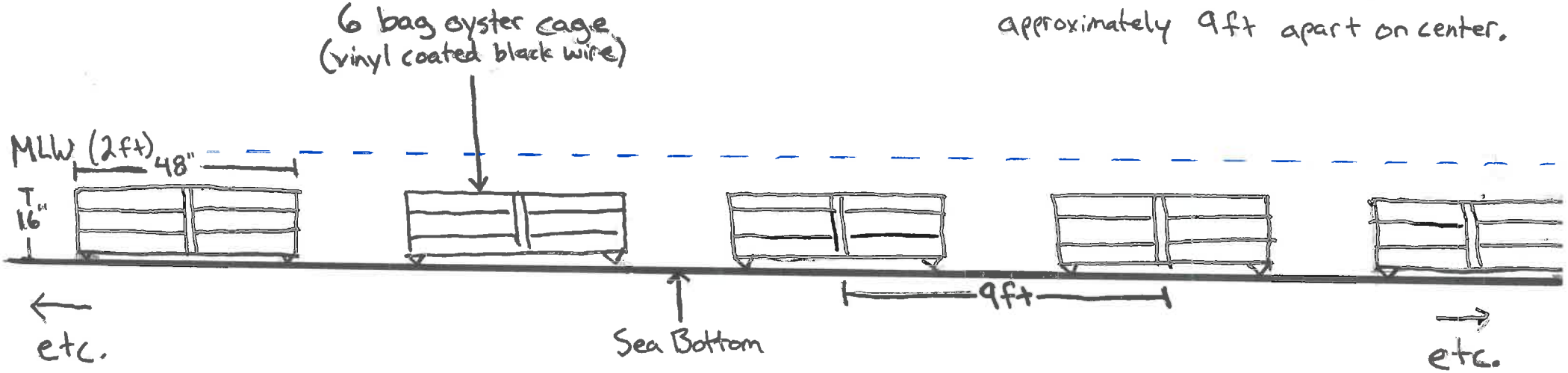

N
Overhead View
•Eastern 1/3 of Proposed Lease•
Detailed View
to channel
Lease Boundary
20ft Channel with no oyster or crab gear
~15ft
8-Bag Oyster Bottom Cages
~12.5ft
55ft
20ft
20ft
15ft
15ft
Tensioner Floats
Oystergro Floating Oyster Cages or Crab Condos
100ft
Helix Anchor
~7ft
½" Chain
~9ft
6-Bag Oyster Bottom Cages
~6ft
Boundary Marker
Lease Boundary
to shore

Cross Section View #1

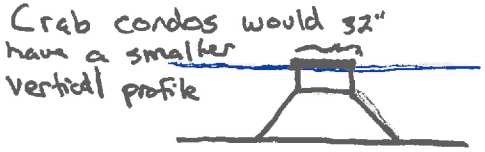
- Shore Section
- 6-bag bottom cages (condos)
  48" Long, 36" wide, 16" tall
- Year Round

-MHW-(12 ft)

* Bottom cages will be set in 3 groupings of 30 cages. Each grouping will consist of 3 rows of 10 cages approximately 100ft long. Rows will be placed 6ft apart on center. Cages w/in each row will be placed approximately 9ft apart on center.



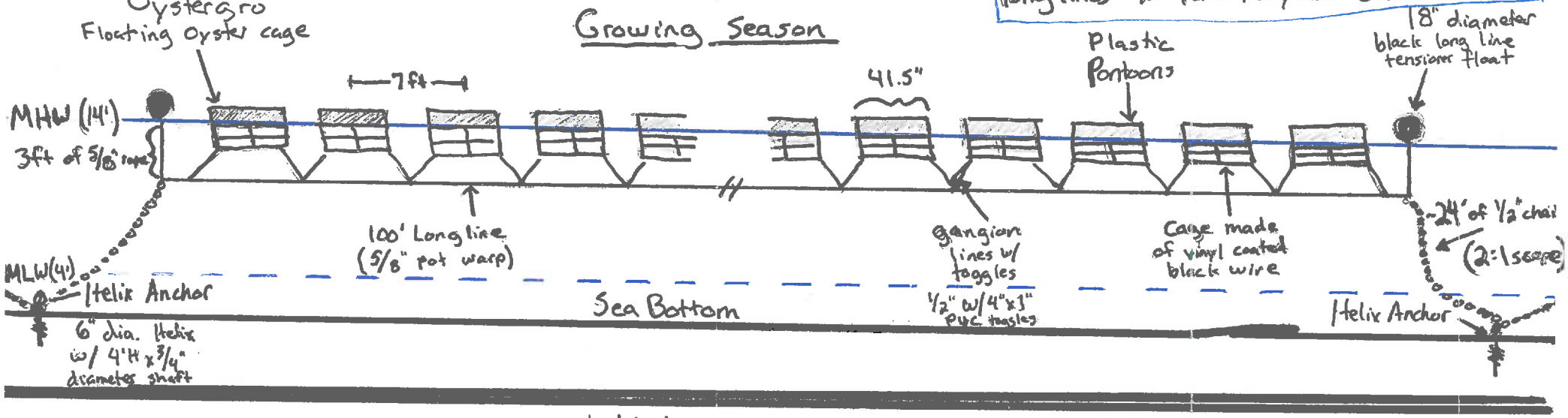
Cross Section View #2



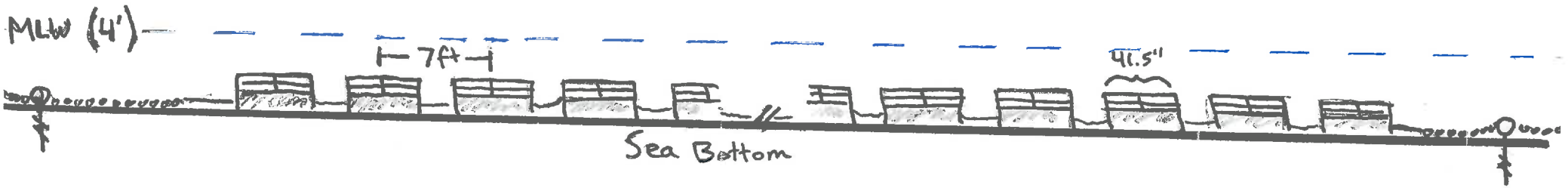
- Middle Third of Proposed Lease
- 6-Bag Floating Oyster Cage
  41.5" Long, 36" wide, 22.3" tall

* Crab condos will be substituted for oyster floating cages on certain longlines in late May and June.

Growing Season

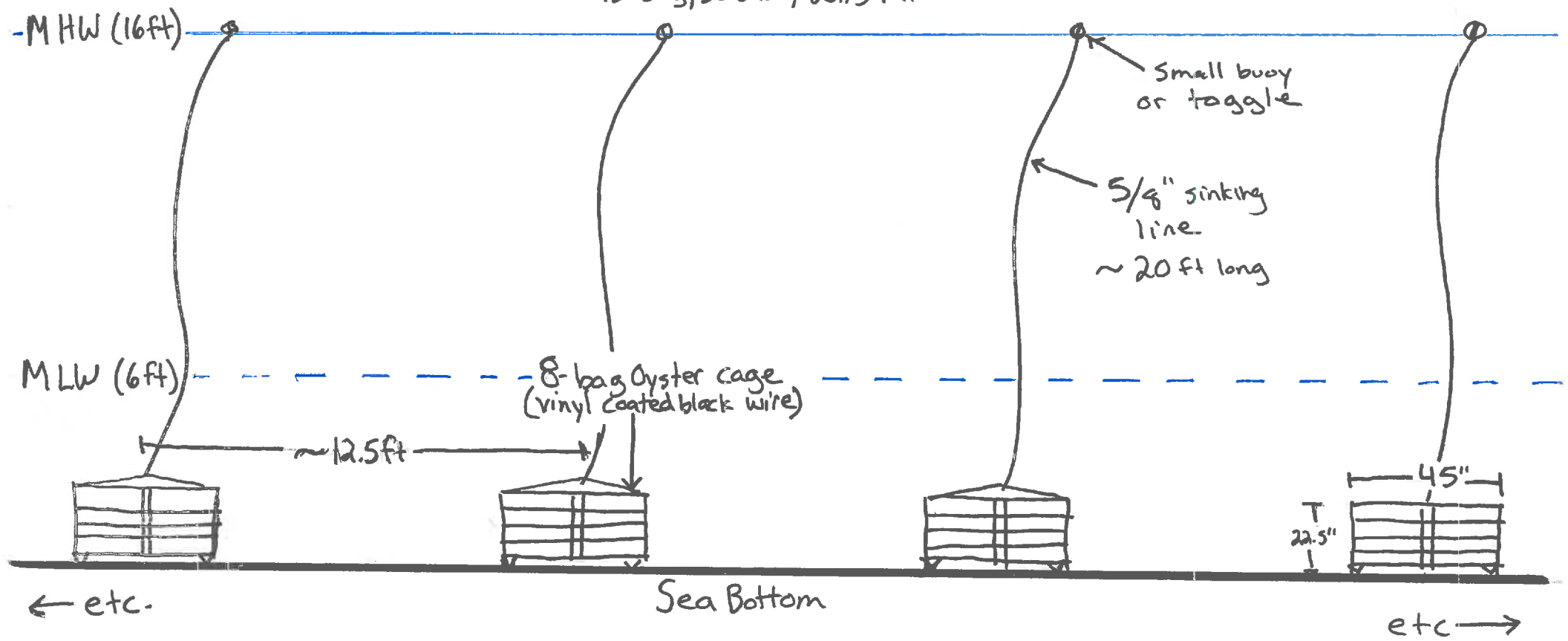


Winter



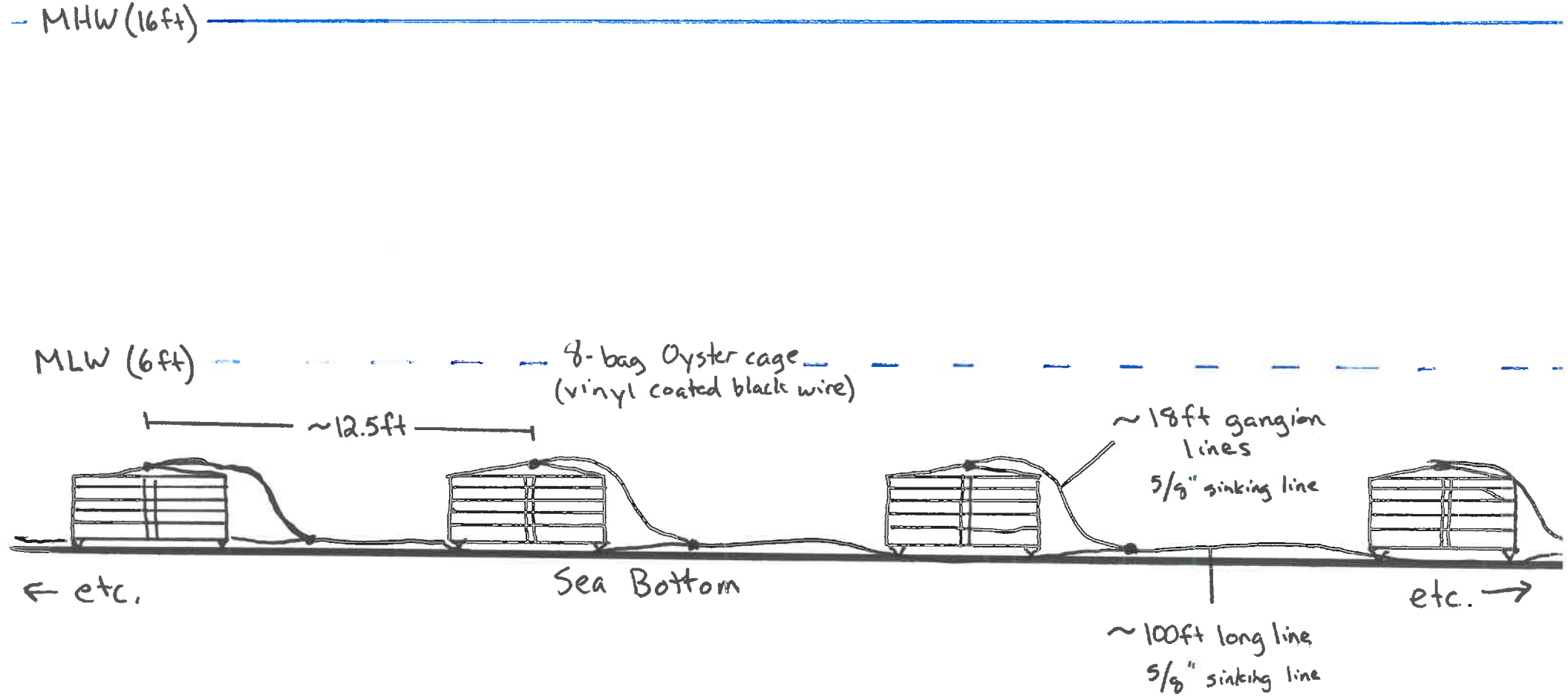
Cross Section View #3 (option 1 using small buoys and line to each cage)

- Channel section
- 8-bag bottom cages (condos)
  45" Long, 36" wide, 22.5" tall



Cross Section View #3 (option 2 using long line and gangions)

- Channel section
- 8-bag bottom cages (condos)
  45" long, 36" wide, 22.5" tall



MAINE
LIMITED LIABILITY COMPANY

STATE OF MAINE

CERTIFICATE OF FORMATION

File No. 20222040DC Pages 2
Fee Paid $ 175
DCN 2211792290001 DLLC
----FILED----------
06/25/2021

Julie L. Flynn
Deputy Secretary of State

A True Copy When Attested By Signature

Julie L. Flynn
Deputy Secretary of State

Pursuant to 31 MRSA §1531, the undersigned executes and delivers the following Certificate of Formation:

FIRST: The name of the limited liability company is:

Southern Maine Sustainable Shellfish, LLC

(A limited liability company name must contain the words "limited liability company" or "limited company" or the abbreviation "L.L.C.," "LLC," "L.C." or "LC" or, in the case of a low-profit limited liability company, "L3C" or "l3c" – see 31 MRSA 1508.)

SECOND: Filing Date: (select one)

☑ Date of this filing; or
☐ Later effective date (specified here): _____

THIRD: Designation as a low profit LLC (Check only if applicable):

☐ This is a low-profit limited liability company pursuant to 31 MRSA §1611 meeting all qualifications set forth here:

A. The company intends to qualify as a low-profit limited liability company;

B. The company must at all times significantly further the accomplishment of one or more of the charitable or educational purposes within the meaning of Section 170(c)(2)(B) of the Internal Revenue Code of 1986, as it may be amended, revised or succeeded, and must list the specific charitable or educational purposes the company will further;

C. No significant purpose of the company is the production of income or the appreciation of property. The fact that a person produces significant income or capital appreciation is not, in the absence of other factors, conclusive evidence of a significant purpose involving the production of income or the appreciation of property; and

D. No purpose of the company is to accomplish one or more political or legislative purpose within the meaning of Section 170(c)(2)(D) of the Internal Revenue Code of 1986, or its successor.

FOURTH: Designation as a professional LLC (Check only if applicable):

☐ This is a professional limited liability company* formed pursuant to 13 MRSA Chapter 22-A to provide the following professional services:

_____
(Type of professional services)

FIFTH: The Registered Agent is a: (select **either** a Commercial or Noncommercial Registered Agent)

☐ Commercial Registered Agent CRA Public Number: _____

_____
(Name of commercial registered agent)

☑ Noncommercial Registered Agent

HANNAH HAMILTON
(Name of noncommercial registered agent)

16A WOODBRIDGE ROAD, YORK, ME 03909
(physical location, not P.O. Box – street, city, state and zip code)

P.O. BOX 545 YORK, ME 03909
(mailing address if different from above)

SIXTH: Pursuant to 5 MRSA §105.2, the registered agent listed above has consented to serve as the registered agent for this limited liability company.

SEVENTH: Other matters the members determine to include are set forth in the attached Exhibit n/a, and made a part hereof.

****Authorized person(s)** **Dated** 06/ 14 /2021

(Signature of authorized person) Samuel Sewall
(Type or print name of authorized person)

(Signature of authorized person) Michael Masi
(Type or print name of authorized person)

*Examples of professional service limited liability companies are accountants, attorneys, chiropractors, dentists, registered nurses and veterinarians. (This is not an inclusive list – see 13 MRSA §723.7)

Pursuant to 31 MRSA §1676.1.A, Certificate of Formation **MUST be signed by at least one authorized person.

The execution of this certificate constitutes an oath or affirmation under the penalties of false swearing under 17-A MRSA §453.

Please remit your payment made payable to the Maine Secretary of State.

Submit completed form to: **Secretary of State**
Division of Corporations, UCC and Commissions
101 State House Station
Augusta, ME 04333-0101
Telephone Inquiries: **(207) 624-7752** Email Inquiries: CEC.Corporations@Maine.gov

MAINE DEPARTMENT OF MARINE RESOURCES
Aquaculture Division, 21 State House Station, Augusta, ME 04333-0021 (207) 624-6567

CORPORATE APPLICANT FORM
For Standard and Experimental Aquaculture Lease Applications

Corporations or partnerships that apply for aquaculture leases in the State of Maine must complete this form. Corporations must submit information as requested under A. Corporate Applicant. Partnerships must submit information as requested under B. Partnership Applicant.

A. Corporate Applicant

Note: You must attach a copy of the Articles of Incorporation (Inc.) or Certificate of Formation (LLC) to your application.

1. Name of Corporation: __Southern Maine Sustainable Shellfish LLC_____

2. Date of incorporation: ____6/25/2021____ State of incorporation: ___Maine_____

3. List the names, addresses, and titles of all officers:

Name	Address	Title
Michael Masi	110A Raynes Neck Road York, ME 03909	Co-president
Samuel Sewall	3 Old Sewall Farm Road York, ME 03909	Co-president

Please use additional sheets if necessary and attach to the application.

4. List the names and addresses of all directors/members:

Name	Address
Michael Masi	110A Raynes Neck Road York, ME 03909
Samuel Sewall	3 Old Sewall Farm Road York, ME 03909

Please use additional sheets if necessary and attach to the application.

5. Has the corporation, or any stockholder, director, or officer applied for an aquaculture lease for Maine lands in the past? ☐ Yes X No

If you selected "yes," please indicate who applied for the lease and the status of the application or lease.

6. List the names and addresses of all stockholders who own or control at least 5% of the outstanding stock and the percentage of outstanding stock currently owned or controlled by each stockholder.

Name	**Address**	**Percentage of Owned Stock**
Michael Masi	110A Raynes Neck Road York, ME 03909	50%
Samuel Sewall	3 Old Sewall Farm Road York, ME 03909	50%

Please use additional sheets if necessary and attach to the application.

7. List the names and addresses of stockholders, directors, or officers owning an interest, either directly or beneficially, in any other Maine aquaculture leases, as well as the quantity of acreage from existing aquaculture leases attributed to each such person based on the percentage of owned stock listed in question 6. If none, write, "None."

Name	**Address**	**Lease Acronym**	**Acreage**
None			

Please use additional sheets if necessary and attach to the application.

8. Has the corporation or any officer, director, member, or shareholder listed in item 5 above ever been arrested, indicted, convicted of, or adjudicated to be responsible for any violation of any marine resources or environmental protection law, whether state or federal?

☐ Yes X No

If you selected "yes", please provide details.