Received: 4.8.22 Revised: 4.25.22 Revised: 5.24.22 Revised: 6.27.22 Complete: 8.15.22

EXPERIMENTAL LEASE APPLICATION

1. APPLICANT CONTACT INFORMATION

Applicant	Colby Davidson		
Contact Person	Colby Davidson		
Address	100 Bartlett Road		
City	Bremen		
State, Zip	ME		
County	04551		
Telephone	(541) 207-2136		
Email	PandionKelpCo@gmail.com		
Payment Type	\Box Check (included) \boxtimes 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	Bremen		
Waterbody	Muscongous Bay		
General Description (e.g. south of B Island)	East side of Hog Island		
Lease Information			
Total acreage (4-acre maximum) and lease term (3-year maximum) requested	3.89 acres		
Type of culture (check all that apply)	 Bottom (no gear) Suspended (gear in the water and/or on the bottom) Net Pen (finfish) 		
Is any portion of the proposed lease site above mean low water?	□ Yes ⊠ No		

Note: If you selected yes, you need to complete the steps outlined in the section titled: "17. Landowner/Municipal Permission Requirements".

3. GROWING AREA DESIGNATION

Directions: Information for growing area designations can be found here:

https://www.maine.gov/dmr/shellfish-sanitation-management/closures/index.html

Growing Area Designation (e.g. "WL"):	WS
Growing Area Section (e.g. "A1"):	Inset C

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: <u>DMRPublicHealthDiv@maine.gov</u>

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 or juveniles	Maximum number (or biomass) of organisms you anticipate on the site at any given time
1.	latissima	I Shady Lane Falmouth, ME.	0-19,800 wet lbs. depending on the time of year and growing season.
2.	angustissima	I Shady Lane Falmouth, ME.	0-19,800 wet lbs. depending on the time of year and growing season.
3.			
4.			
5.			

B. Do you intend to possess, transport, or sell whole or roe-on scallops? \Box Yes \boxtimes No

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

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: <u>DMRPublicHealthDiv@maine.gov</u>

5. VICINITY MAP

SEE "VICINITY MAP" (PG. 29)

6. BOUNDARY DRAWING

SEE "BOUNDARY DRAWING" (PG. 30)

COORDINATE DESCRIPTION (PG. 30)

- NNW -69.413721 43.978742 Degrees
- ENE -69.412555 43.978340 Degrees
- SSE -69.413411 43.977116 Degrees
- WSW -69.414573 43.977521 Degrees

TOTAL AREA:

• 3.9 ACRES

SIDE LENGTH:

• 500' X 330'

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): \Box Scientific Research \boxtimes Commercial Research

Please note:

a) Scientific research is 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.

To determine the viability of a lease design with removable tackle and to determine the viability of growing kelp in this area

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

Kelp will be seeded into horizontal long lines in the fall. The kelp will be checked on a weekly basis throughout the winter to measure its quality and growth. The kelp will be harvested in the spring, prior to June 1st.

D. What months will the proposed activities (i.e. seeding, tending, and harvesting) occur? November 1st to June 1st

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

Seeding should take no more than a week total. I will not work outside normal daylight hours except in the event of an emergency.

Harvest should take no more than a week total. I will not work outside normal daylight hours except in the event of an emergency.

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

I will check the site and monitor the kelp on a weekly basis from November 1st to June 1st

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

I will harvest using a lobster style boat with mounted reels that hoist the kelp out of the water for harvesting

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.

From June 1st to November 1st only the corner markers, mooring blocks, chain connecting the mooring blocks, four (4) mooring lines, and four (4) mooring balls will remain on site.

All of the removed gear will be stored on land.

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?

During the seeding I will use a small Carolina skiff or lobster style boat to plant the kelp.

During grow out I will use a small Carolina skiff or lobster style boat to check the kelp.

During harvest I will use a small Carolina skiff or lobster style boat to harvest the kelp.

J. Please provide details on any predator control techniques you plan to employ, including the use of bird deterrents. Will you use commercially available or custom equipment? If commercially, available equipment, please include the brand and model names. If custom equipment, please attach a detailed schematic that includes the dimensions, materials, and function of the equipment.

I will not use predator control techniques.

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
A) Lobster Fishing
B) May-October
C) High Frequency
D) Within 100ft
2. Recreational Fishing
I have not observed this activity
3 . Boating Activities (please also include the distance to any navigable channel(s) from
your proposed site at low water)
Closest navigational channel (due East) is over 1,000 ft away.
Closest navigational channel (dde East) is over 1,000 it away.
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.)
I have not observed this activity
5. Other uses (kayaking, swimming, etc.)
A) Kayaking
B) May – September

C) Very infrequent

D) Within 100ft

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.

Yes. There are no private docks, moorings, or other access points within 1,000 feet of the proposed lease location. The docks belong to Hog Island Audubon. The distance is approximately 880 feet away from the SSW corner of the lease.

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. There are no public beaches, parks, or docking facilities within 1,000 feet of the proposed lease location.

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: <u>https://www.maine.gov/dmr/aquaculture/leases/index.html</u>

Yes, there are other LPAs within 1,000 feet of my proposed lease.

• ESNY121

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.

Only during growing season

- A) Commercial fishing (Lobster), Recreational Fishing (Lobster, marine fishes) -These activities are likely to get tangled in the permanently installed gear, causing expensive, time consuming damage to the aquaculture system
- B) Recreational watersports (Kayaking, swimming, paddle boarding, canoeing, boating, etc.) *-These activities are likely to get tangled in the permanently installed gear, causing*

expensive, time consuming damage to the aquaculture system

- C) Nov 1^{st} May 1^{st}
- D) Within boundaries of lease

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 approximate depths at mean low tide are 27-34ft

B. What are the approximate depths at mean high water?

The approximate depths at mean high tide are roughly 37-44ft

C. Provide the approximate current speed and direction during the ebb and flow.

2-4 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.)?

Rocky/sandy bottom. Resides along a ledge.

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

Flat to low gradient, no change through specified area.

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?

I have not observed any specific organisms in the area I intend to grow kelp. According to the DMR aquaculture web map, there are no eelgrass beds or migratory bird nesting sites in or near my aquaculture farm.

4. Are there shellfish beds or fish migration routes in the surrounding area? If so, please describe.

There are no known shellfish beds or fish migration routes in the surrounding area, based on personal observation.

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.

Sand/rock bottom, rockweed present – nearer to shore, not in growing area. No eelgrass near shore. No eelgrass has been observed in the area I intend to install my farm. Date of observation: 05/16/21

6. Describe the general shoreline and upland characteristics (rocky shoreline, forested, residential, etc.)

Island; Rocky shore, pine forest, little to no aquatic vegetation, not inhabited

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

 \Box Yes \boxtimes 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: <u>https://www.maine.gov/ifw/fish-wildlife/endangered-threatened-species/essential-wildlife-habitat/index.html</u>

If a project is located within an Essential Habitat, applicants are strongly encouraged to contact the MDIFW Environmental Review Coordinator (<u>John.Perry@maine.gov</u>, 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.)?

 \Box Yes \boxtimes 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	Species that will be grown using this gear type
Styrofoam Buoys (depth control buoys)	13"x6"	November 1 st to June 1 st	207 buoys	Sugar kelp Skinny kelp
Sink rope for depth control buoys	3/8" diameter 7' long	November 1 st to June 1 st	207 lengths	Sugar kelp Skinny kelp
Small cement weight (for depth control buoys)	6" tall 6" long	November 1 st to June 1 st	207 weights	Sugar kelp Skinny kelp
Long line	7/6" diameter by 300' long	November 1 st to June 1 st	6,900' of line	Sugar kelp Skinny kelp
Hard-Shell go deep (end of long line marker buoys)	22"x7.25"	November 1 st to June 1 st	22 buoys	Sugar kelp Skinny kelp
Sink rope for (end of line marker buoys)	1/2" diameter long 7' long	November 1 st to June 1 st	22 lengths	Sugar kelp Skinny kelp
Bridle line	1/2" diameter long 440' long	November 1 st to June 1 st	2 lengths of 440' (880' total)	Sugar kelp Skinny kelp
Mooring markers (hard- shell variety)	16" diameter	Year-round (4) November 1 st to June 1 st (24)	24 buoys	Sugar kelp Skinny kelp
Mooring line	1" diameter by varying lengths depending on depth of mooring	Year-round (4) November 1 st to June 1 st (24)	24 mooring lines	Sugar kelp Skinny kelp
Mooring (cement block)	2'x2'x4'	Year-round	24 moorings	Sugar kelp Skinny kelp
Mooring staple	3 links of 1" diameter chain	Year-round	24 staples	Sugar kelp Skinny kelp
Chain connecting moorings	¹ /4" diameter 440' long	Year-round	2 lengths of 440' (880' total)	Sugar kelp Skinny kelp
shackles	1 1/4"	November 1 st to June 1 st	24 shackles	Sugar kelp Skinny kelp

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.).

-See "Gear drawing- depth control buoys" attached: page 26

-See "Gear drawing- sink rope for depth control buoys" attached: page 26

-See "Gear drawing- small weight for depth control buoys" attached: page 26

-See "Gear drawing- long line" attached: page 26

-See "Gear drawing- end of long line marker buoy" attached: page 27

-See "Gear drawing- sink rope for end of long line marker buoy" attached: page 27

-See "Gear drawing- bridle line" attached: page 27

-See "Gear drawing- mooring marker" attached: page 27

-See "Gear drawing- mooring line" attached: page 28

-See "Gear drawing- mooring" attached: page 28

-See "Gear drawing- mooring staple" attached: page 28

-See "Gear drawing- Chain connecting moorings" attached: page 28

-See "Gear drawing- Shackle" attached: page 29

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.

 \boxtimes Yes \Box 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 <u>labeled</u> 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 <u>Riparian Landowner List</u> (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: <u>https://www.maine.gov/dmr/aquaculture/forms/documents/RiparianDetermination.pdf</u>
- 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 🛛 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?

Via boat or kayak from our home address, 100 Bartlett Road Bremen, ME 04551 (**See Vicinity Map, pg. 29**)

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.

Bremen TOWN OF:

MAP #	LOT #	Landowner name(s) and address(es)	
2	001	State OF Maine Augusta ME 04330	
1	13	National Autilibon Society POBOK 6009 Felmouth ME: 04105	

Please use additional sheets if necessary and attach hereto.

CERTIFICATION

Lelanic Fendleton, Town Clerk for the Town of Bremen and lot numbers are those listed in 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: MUMARAM DATE: 5/24/2022

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 <u>only</u> certifies that the information is correct according to the Town's records. Once you have completed the form, <u>ask the Town Clerk to complete the certification section below.</u> If riparian parcels are located within more than one municipality, provide a separate, tax map and certified riparian list for each municipality.

TOWN OF: Bremen

MAP #	LOT #	Landowner name(s) and address(es)	
002	002	State of Maine Augusta ME 04330	

Please use additional sheets if necessary and attach hereto.

CERTIFICATION

I, <u>New Wey Mind</u>, Town Clerk for the Town of <u>Brunch</u> 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.

4/7/2022 DATE: SIGNED

15. ESCROW ACCOUNT OR PERFORMANCE BOND

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
\boxtimes	>400 square feet of gear/structure, no discharge	\$5,000.00*
	Gear/Structure, discharge	\$25,000.00

Check the category that describes your operation:

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

I, (*printed name of applicant*) _____Colby Davidson_____ have read DMR Aquaculture Regulations 2.64(12)(B)) and if this proposed lease is granted by DMR I will either open an <u>escrow account</u> or obtain a <u>performance bond</u>, depending on the category of lease.

<u>05/19/2022</u> Date

Applicant Signature *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*) __COLBY DAVIDSON_ 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_Aa performance bond, depending on the category of lease.

_05/19/2022____ Date

Applicant Signature *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.

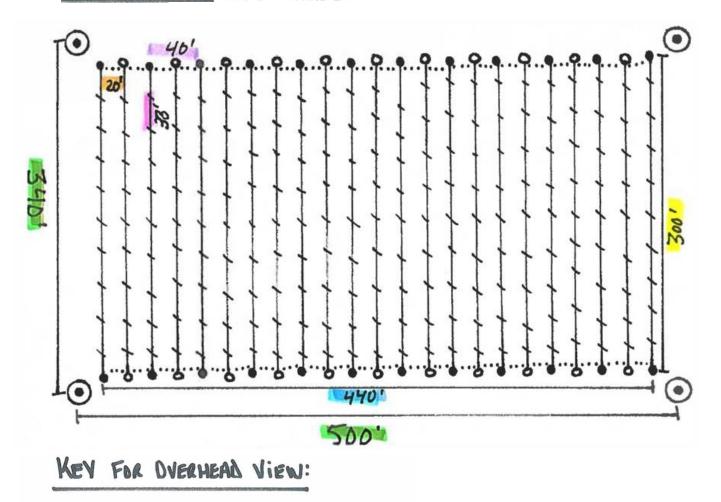
Printed name: Colby Davidson	
Title (<i>if corporate applicant</i>): Owner	
Signature:	Date: 05/19/2022

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:

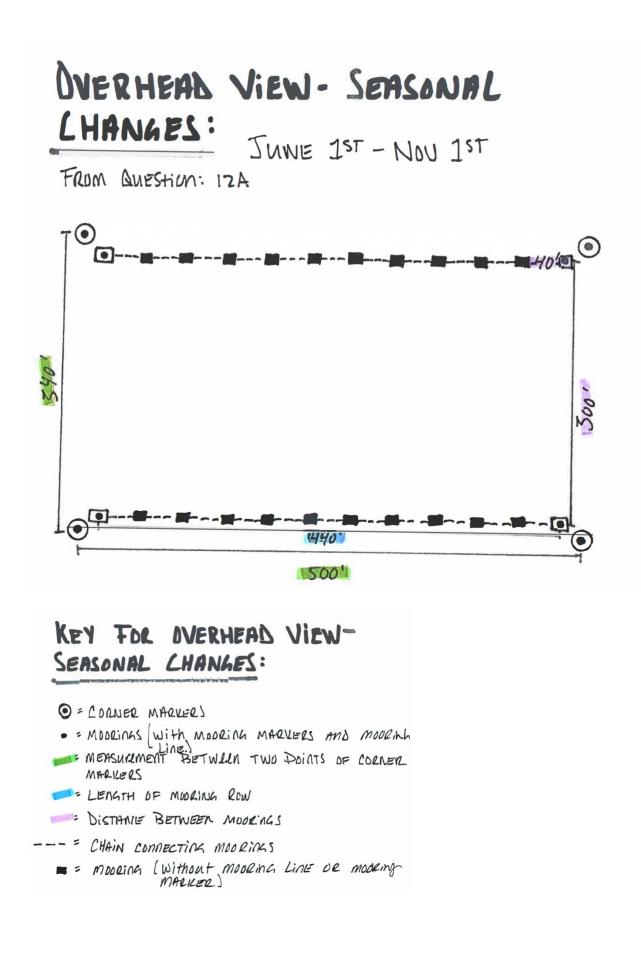
- All applicants must sign and date this page. Please use the space below, if additional signatures are required.
- Corporate applicants, please be sure to include the title (i.e. President, Treasurer, etc.) of the individual(s) signing on the company's behalf.

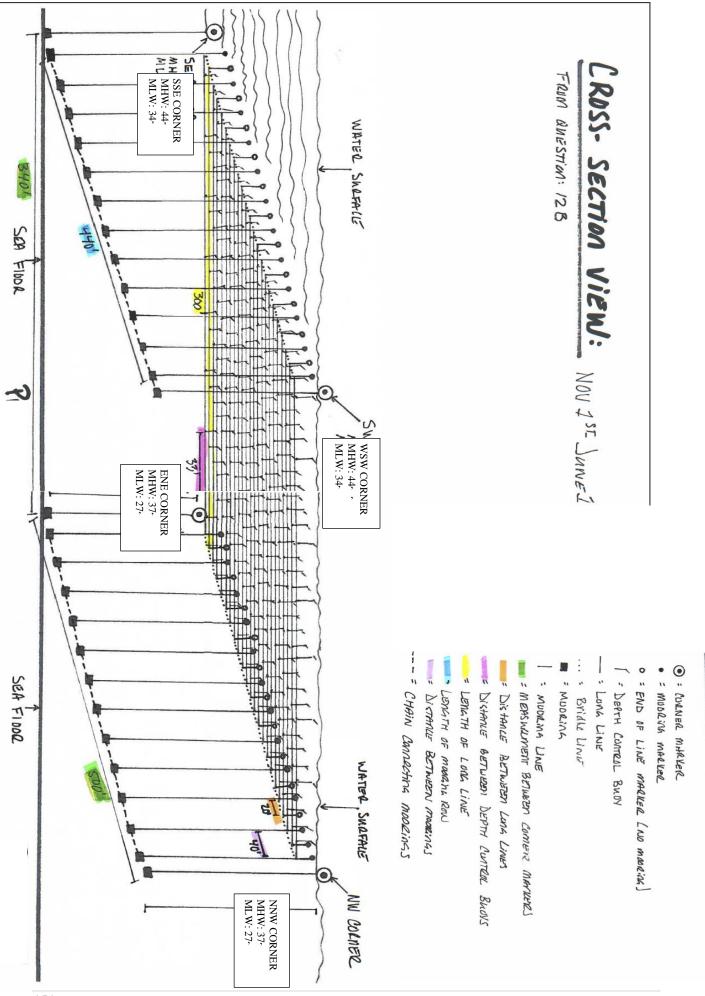
OVERHEAD VIEW: NON 1" - JUNE 1"



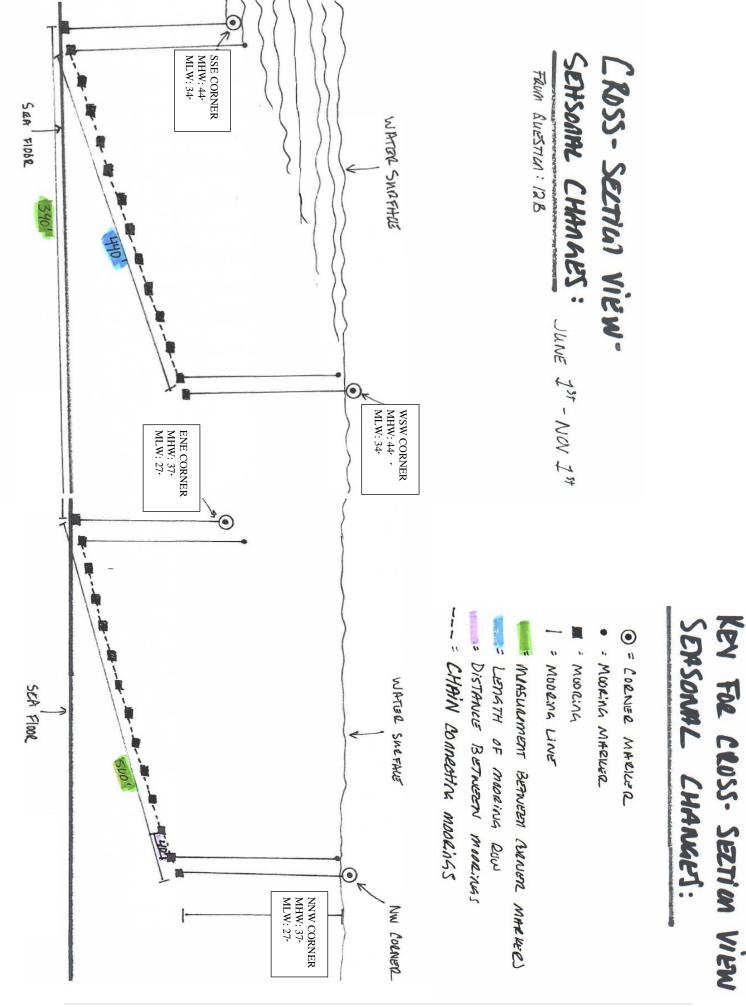
 COANER MARKERS
 MADRINGS WITH MOORING MARKERS
 DEPTH CONTROL BUDY
 LUNG LINE
 MCASUREMENT BETWEEN TWO POINTS OF COMPLE MARVERS
 HARD FLOAT MARKING END OF LONG LINE (NO MOORING)
 Bridle Line (Connecting Lines with MOORINGS TO LINES Without MODEINGS)
 DISTANCE BETWEEN DEPTH CONTROL BHOYS
 LENGTH OF LONG LINE
 LENGTH OF LONG LINE

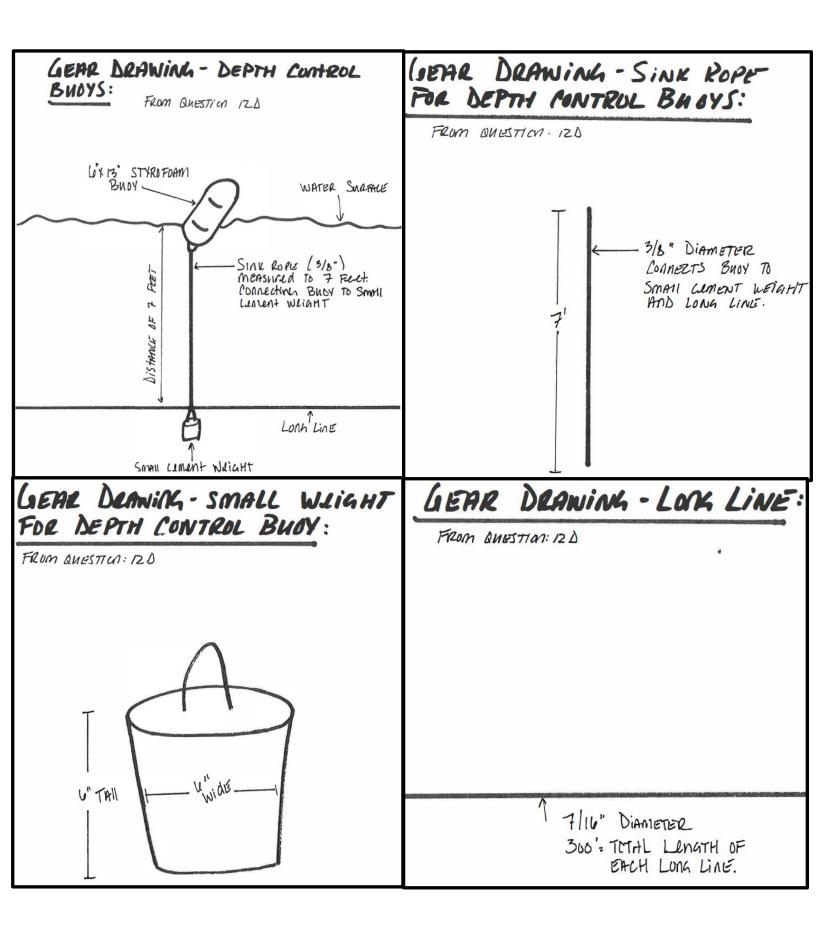
= Distance Between movernes

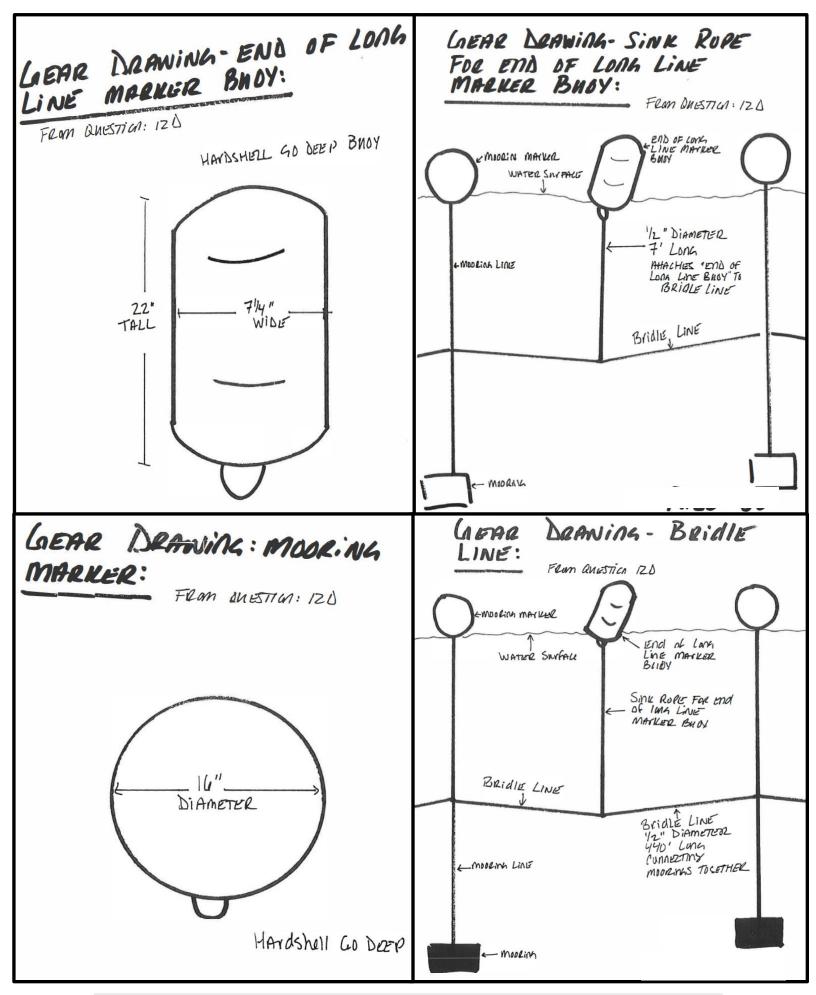


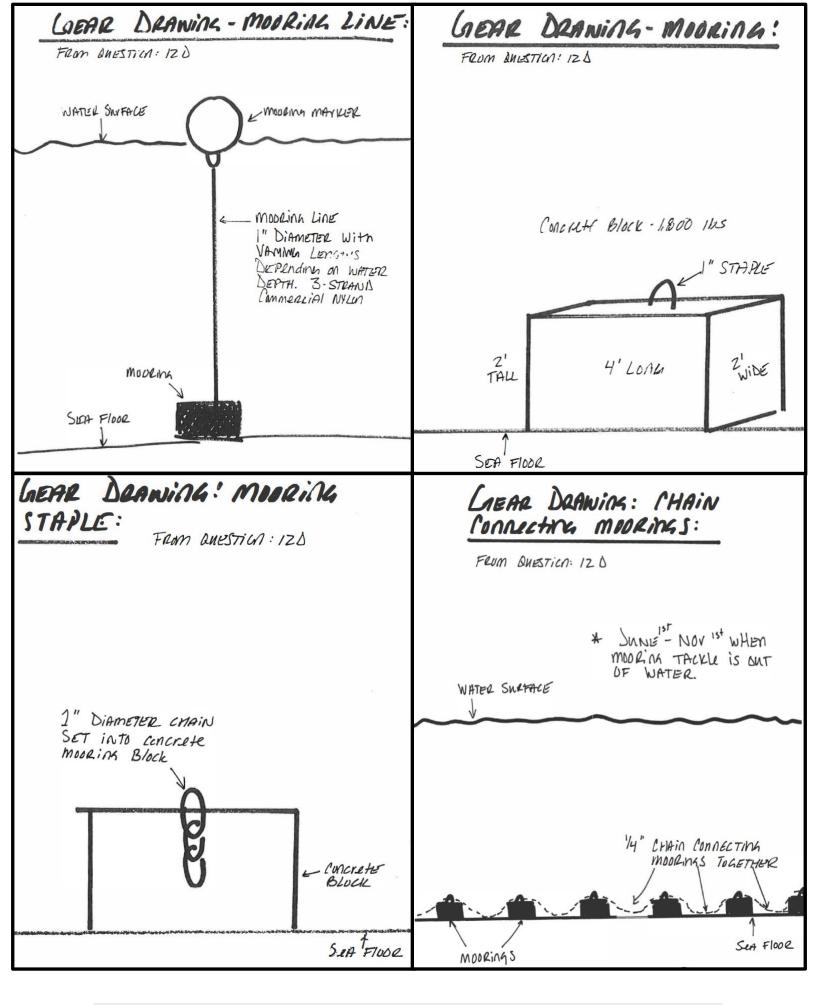


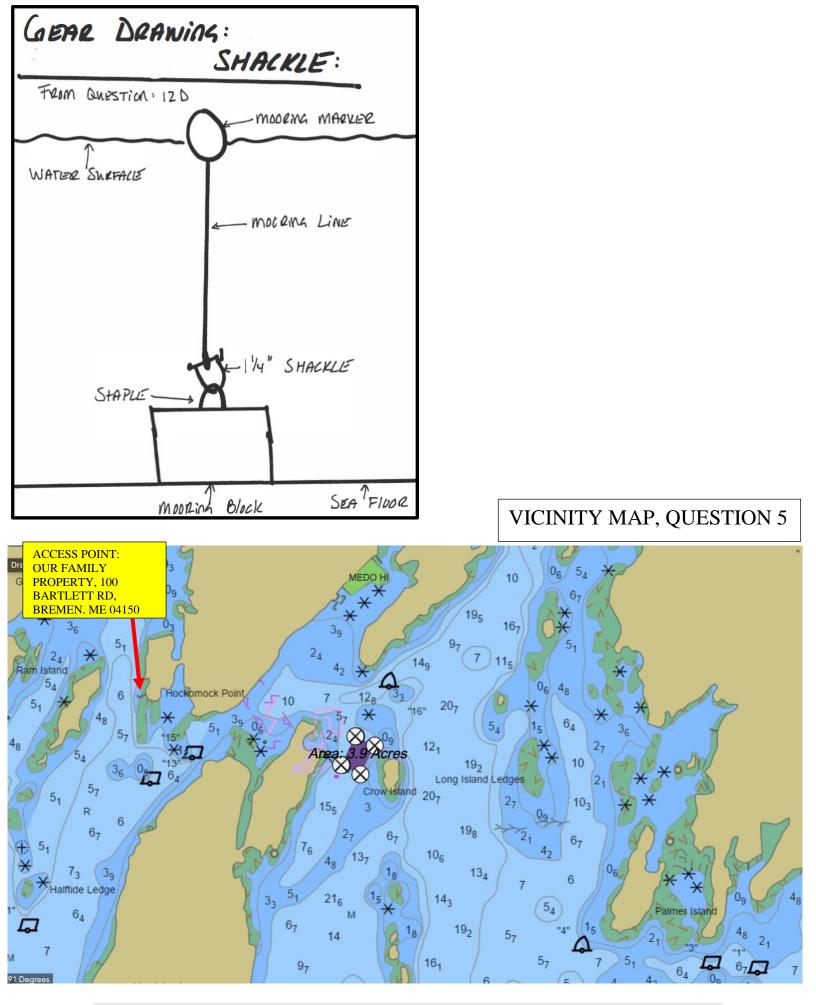
Key For cross- Section view:



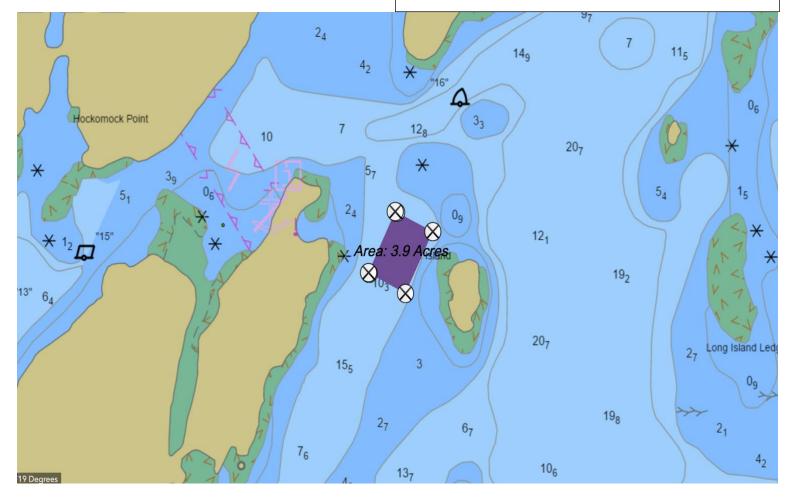








BOUNDARY DRAWING, QUESTION 6



COORDINATE DESCRIPTION, QUESTION 6

