

For Office Use Only

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Alaska Aquatic Farm Program Joint Agency Application – Part II

You are encouraged to submit a completed application as early in the filing period as possible. The current application form must be used and properly completed before state agencies can process your project. **An incomplete application will not be processed.** A checklist is included to assist you in meeting this requirement. The best way to facilitate the review of your application is to schedule a pre-application meeting with ADNR and ADF&G to discuss your project. The original application including attachments and all required fees must be delivered and present in the Alaska Department of Natural Resources office no later than April 30th.

- The project location is in: Southeast Alaska Southcentral Alaska
 Kodiak Alaska Peninsula Other
- This project is: First Time Application Renewal Application

A. APPLICANT INFORMATION

University of Alaska Southeast - Sitka

Name
N/A

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B. PROJECT DESCRIPTION

In the space provided below, please provide a general description of your proposed aquatic farm site and operations. This should be a narrative of your proposal that includes where your project will be located, overall size including any hardening area, all species you intend to culture, type of farm gear, equipment, support facilities, and associated housing to be used including size, number, and construction materials. Your narrative should match the rest of the application information you provide. If additional space is necessary, **please attach a separate document labeled "PROJECT DESCRIPTION"**. **Example information for project narrative can be found in Attachment I.**

PROJECT DESCRIPTION

DATE SUBMITTED: _____

Company Name

University of Alaska Southeast - Sitka Campus

Site Location [Include water body, distance from nearest community, any landmarks, general region of Alaska, and whether on state tidal and/or submerged lands or private. Provide enough information to understand where it is located.]

The proposed project is located in Sitka Harbor Channel, adjacent to Japonski Island on state tidelands and submerged lands within the City and Borough of Sitka. The site lies within a 2.09-acre (223.41 foot by 408 foot) tidelands parcel that the University of Alaska is in the process of leasing from the State of Alaska. This application seeks authorization only for a 40 foot by 130 foot, 0.12-acre project footprint to support a floating concrete pontoon (Mariculture Moorage Float) for workforce development and training, research, demonstration, communication, seed supply, and industry support. Associated infrastructure includes a screened seawater intake pipe with sash weights and a UV-treated effluent return line into Sitka Harbor Channel. Shore access is via University of Alaska-owned uplands on Japonski Island. ■■■■■

Site Dimensions, Acres for Each Parcel

Parcel 1 (Hatchery Tidelands Lease):

- Dimensions: 40 foot by 130 foot
- Lease Area: 0.12 acres
- Project Footprint: 0.12 acres (University of Alaska Southeast [UAS] Sitka Mariculture Moorage Float)

Total Acres of All Parcels

- Total Lease Area (tidelands parcel): 0.12 acres
- Total Project Footprint (this application): 0.12 acres

Species You Intend to Farm [Include scientific and common species name]

1. Beach Asparagus (*Salicornia* sp.), 2. Black Seaweed (*Pyropia abbotiae*), 3. Broad-ribbed Kelp (*Pleurophycus gardneri*), 4. Bull Kelp (*Nereocystis luetkeana*), 5. Cockle (*Clinocardium nuttallii*), 6. Dragon Kelp (*Eualaria fistulosa*), 7. Geoduck (*Panopea generosa*), 8. Giant Kelp (*Macrocystis pyrifera*), 9. Littleneck clam (*Leukoma staminea*), 10. Pacific Oyster (*Crassostrea gigas*), 11. Blue Mussel (*Mytilus edulis*), 12. California Mussel (*Mytilus californianus*), 13. Pinto Abalone (*Haliotis kamtschatkana*), 14. Giant Red Sea Cucumber (*Parastichopus californicus*), 15. Red Ribbon Dulse (*Devaleraea mollis*), 16. Ribbon Kelp (*Alaria marginata*), 17. Five-ribbed Kelp (*Costaria costata*), 18. Three-ribbed Kelp (*Cymathere triplicata*), 19. Red Spaghetti-Ogo (*Gracilaria pacifica*), 20. Sea Staghorn (*Codium fragile*), 21. Stiff Ribbon Dulse (*Palmaria hecatensis*), 22. Spaghetti Kelp (*Chorda filum*), 23. Split Kelp (*Hedophyllum nigripes*), 24. Sea Lettuce (*Ulva* sp.), 25. Sieve Kelp (*Agarum* sp.), and 26. Sugar Kelp (*Saccharina latissima*).

Culture Method [Describe operation activities to be done onsite such as outplanting of seedstock, husbandry techniques to be used (culling, sorting, washing, etc.), maintenance and monitoring activities, management of fouling organisms and incidental species, predator control measures, and schedule of activities such as timing of outplanting seeded lines or adding seedstock into trays, etc. Describe what methods you plan to use based on the definition in [5 AAC 41.400\(6\)](#). "Culture" means to use or the use of methods to manipulate the biology and the physical habitat of a desired species to optimize survival, density, growth rates, uniformity of size, and use of the available habitat, and to efficiently produce a product suitable for a commercial market.]

All culture gear would be housed on the 40 foot by 130 foot floating concrete pontoon (Mariculture Moorage Float).

The following provides a summary of information included in the Project's Basic Management Plan (BMP). The hatchery would utilize a multi-tiered system that integrates indoor and outdoor culture methods for shellfish, echinoderms, abalone, clams, and aquatic plants. Conditioning, spawning, and larval rearing would occur in heated, filtered seawater using flow-through tanks and specialized rearing systems. Microalgae produced on site would provide feed for all cultured species. Seaweed propagation would use light- and nutrient-controlled aquaria and shallow trays with substrate-specific settlement. [REDACTED]

Seed supply produced will benefit shellfish and seaweed farms in Southeast Alaska and will also be outplanted on small education and research-based farms. The facility would be established as a modest source of shellfish seed, kelp and seaweed starts, and as a training hatchery to assist in the security of seed supply for Alaskan farmers.

Culture Gear and Equipment (Type, Size, Number, Configuration, Material, and Anchoring System) [If more than one parcel, indicate what parcel specific gear will be located on. If more than one species, indicate gear to be used for each. Gear includes any structure that holds or protects the organism like trays, tiers of lantern nets, Vexar bags, OysterGro system, grow-out submerged longlines, predator netting, longlines, buoys, depth control systems, etc. Include approximate installation schedule, or if and what gear will remain installed year-round etc.]

Microalgae Production:

For microalgae, Pure Biomass bag systems (25–900 liter [L]) would hold the algae. Kalwall tubes, CO₂ injection, LED lighting would be used to encourage growth, ultrafiltration (0.02 micron) would be used, and continuous/batch feeding systems would be used.

Larval Rearing Systems:

The larvae for all bivalve/echinoderms would be reared in 5,500 L larval tanks, 1,300 L fiberglass upweller/downweller tanks, bottle fluidizers, insulated totes, and slow-rate sand filters.

Broodstock Conditioning:

Broodstock for all bivalve/echinoderm species would be contained in flow-through fiberglass tanks with controlled heating/cooling and feeding systems.

Seaweed Culture:

Seaweed macroalgae would be contained in 20-gallon aquaria, shallow trays (up to 50 gallons), planted on PVC spools with nylon string, over oyster shell/glass substrates, and nutrient dosing systems.

Sanitation Equipment:

To sanitize the above, autoclaves, chlorine/bleach baths, UV sterilizers, and multi-stage filtration (sock filters, UV filters, bag filters) would be used.

Anchoring System:

The hatchery barge will be moored alongside the floating dock using fixed steel connection brackets at the ends of steel strut system. Each fixed strut will have a connection point on the barge using steel bolts sleeved or embedded into the concrete barge. The connection plates will be mounted to the 130' side of the barge and are spaced near either end of the barge to provide the greatest positional stability for the system. The connection brackets contain rubber cylinders to allow for both energy absorption and angle changes as the barge and strut system move through the tide cycles. Since this system is not anchored to the seabed, there is minimal movement compared to an anchored system.

[REDACTED]

Seed Acquisition Plan (Commercially produced and/or wildstock) [Commercially produced juveniles or seed stock must be obtained from an approved seed source. Do you intend to collect wildstock juveniles or natural set organisms for direct culture on your proposed site? Yes/No. If yes, describe collection methods (applicable for indigenous species: i.e. mussels, scallops, abalone, natural set aquatic plants, etc. This does not refer to broodstock collection on behalf of hatcheries for propagation. If increasing number of acquisitions per year, indicate projected amounts per year. Aquatic plant species can be combined into total feet of line per year.]

Shellfish and Abalone: Broodstock are conditioned in-house, with spawning induced through temperature, food shock, or strip spawning. For oysters, eyed-larvae may also be imported to supplement production.
Geoduck, Cockle, Littleneck Clams: Broodstock are acquired seasonally, conditioned, and spawned in hatchery tanks.
Sea Cucumber and Abalone: Juveniles may be sourced from Alutiiq Pride Marine Institute or similar partners before hatchery propagation.
Seaweed: Broodstock is collected from approved wild areas under permit and treated per species-specific protocols before spore or fragment propagation.
Stock Separation: Strict separation is maintained by drift zone and/or collection site; equipment sterilization is required between groups.

Harvest Equipment and Method [Describe harvest equipment and methods to be used, activities to be done onsite, and schedule of harvest of aquatic farm product. If more than one species, include harvest information for each species or group of species like macroalgae if the harvest information is the same.]

Shellfish Seed:

Juveniles are screened, sieved, and transferred from downwelling to upwelling systems, then to sand filters or outdoor upwellers until ready for transfer to growers. Target seed size ranges from 2–10 millimeters (mm) depending on species.

Sea Cucumbers and Abalone:

These species would be harvested from nursery tanks and totes once juveniles reach target size (3 to 7 mm). They would then be transferred to settling plates to aid larval settlement.

Seaweed:

Plants on nylon spools, netting, or substrates with settled sporophytes would be removed from tanks, decontaminated as needed, and prepared for out-planting at the 1–5 mm juvenile stage.

Support Facilities (Type, Size, Number, Configuration, Material, and Anchoring) [Support facilities include caretaker facility, storage rafts, work rafts, processing rafts, etc.]

The project would utilize a single, permanently moored barge (40 foot by 130 foot) designed and constructed specifically for shellfish hatchery and educational operations, known as the UAS Sitka Mariculture Moorage Float, secured from Oceans Alaska Marine Science Center in Ketchikan. The barge hull is reinforced concrete with a rigid polystyrene foam core, topped by a two-story wood structure on a 3-foot-high cement curb foundation. The lower level provides open space for hatchery and rearing tanks, nursery racks, algae and filter tanks, and other aquaculture equipment, with forward areas containing a workshop, restroom, chiller, and storage. The upper level includes office space, a kitchen/lab, electrical room, storage mezzanine, and a clean laboratory area.

The Mariculture Moorage Float is equipped with freshwater and ballast tanks, full electrical and plumbing systems, pumps, alarms, heating/cooling, and a wide range of hatchery and laboratory equipment, including upwell/downwell units, a pasteurizer, microscopes, UV sterilization equipment, and an autoclave. Deck gear includes a davit with electric hoist, bullrails, guards, and drainage systems that are designed for safe marine operation.

The Mariculture Moorage Float would be permanently anchored with heavy mooring lines and ballast systems to maintain stability. The vessel operates as a fully functional marine science and hatchery facility, maintained in very good to excellent condition, and is capable of supporting all project-related activities on-site. [REDACTED]

Access to and from Site [Include nearest community, transportation type used and how many times traversing back and forth]

The Mariculture Moorage Float would be moored at a floating dock on Japonski Island, adjacent to the UAS Sitka Campus. Access from the nearest community is by road to the campus area, followed by an approximately 80-foot walk along the floating dock gangway to reach the barge. Personnel and materials would be transported to the barge via this dock, with routine trips occurring multiple times per day during hatchery operations for staff, equipment, and supplies. Small service boats may also be used for equipment transfer when needed. The barge's permanent mooring and the dock connection would provide stable, safe access under typical tidal and weather conditions. [REDACTED]

Storage Location of Equipment and Gear When Not in Use [Include whether on private lands and nearest community]

All equipment and gear associated with hatchery and educational operations would be stored on the Mariculture Moorage Float when not in use. The barge provides dedicated storage areas on both the lower and upper levels, including a mezzanine storage space, utility rooms, and equipment racks [REDACTED]. The storage areas are fully within the vessel's structure, which would be moored at the floating dock on Japonski Island, adjacent to the UAS Sitka Campus. All storage would occur on private lands within the campus grounds, approximately 1.5 miles from the community of Sitka. Equipment would be maintained and secured year-round, ensuring it is protected from weather, tides, and unauthorized access.

C. PROJECT OPERATION PLAN

1. How will support facilities, culture gear and anchoring systems be maintained?

- a. How often, in days per month, do you intend to monitor your site for things such as adequate anchoring, disease, exotic species settlement, fouling, gear drift, snow load, wind damage, vandalism, etc.?

Growing season 12 months/ all year(days/month) **Off months** 20 days per month (days/month)

- b. How will you keep the gear and shellfish free of fouling organisms (hot-dip, air dry, pressure washing, etc.)?

The barge and equipment will be kept free of fouling organisms through routine diving inspections, physical cleaning, and periodic pressure washing.

- c. How will you manage reduction of competing species over the course of operations (relocate sea stars, grow-out cages, or other possible protection from competing species)?

The hatchery operations occur within the controlled environment of the barge, which protects shellfish from competing species such as sea stars. No additional grow-out cages or relocations are required.

- d. If you intend to use predator netting, how long will you keep netting over your product?

N/A (months)

- e. If using predator netting, how will you minimize impacts on non-target species, including seabirds, seals, sealions, walrus and whales?

Because predator netting will not be used, there are no impacts to seabirds, seals, sea lions, walrus, or whales.

2. Projected Harvest Rotation Consistent with Life History

- a. How often do you intend to harvest your product by species?

Harvest schedules will follow species-specific protocols as outlined in the BMP.

- b. Do you plan on utilizing density manipulation by culling or redistribution?

Density adjustments, including culling or redistribution, will be conducted according to BMP guidance for each species as needed to maintain healthy growth and minimize competition.

c. What techniques will be used to optimize growth or condition of product?

Growth optimization techniques, such as appropriate stocking densities, water quality management, and routine monitoring, will be implemented as described in the BMP.

3. Acquisition of hatchery or wild seed

a. Will you use a certified or approved shellfish seed source(s)? **Yes** **No**

b. Will you use an Alaska kelp hatchery? **Yes** **No**

c. How do you intend to collect wild seed? (Applicable for indigenous species: i.e. clams, natural set kelp, invertebrates, etc.)

Wild seed collection will only occur under an approved stock acquisition and transport permit.

4. Describe how operation of the aquatic farm will improve the productivity of species intended for culture not covered by the previous questions (examples: predator exclusion, reduction of competing species, density manipulation by culling/redistribution, importing natural or hatchery seed, program harvest to optimize growth/condition and habitat improvement)?

The UAS Sitka Hatchery enhances productivity by producing high-quality shellfish seed and kelp starts for Alaska aquatic farmers. It provides a controlled environment that protects stock from predators and competition, supports applied research and demonstration projects, and offers hands-on training to build a skilled workforce. These activities strengthen local aquaculture, improve seed availability, and help sustain and grow the state’s mariculture industry.

D. PROJECT LOCATION

1. Coordinates

Please provide latitude and longitude coordinates for each corner of each parcel at the proposed farm site. Identify each parcel to be used. For example, Parcel 1 - growing area, Parcel 2 - hardening area, etc. Latitude and longitude coordinates must be in **NAD83 datum using degrees and decimal minutes format to the nearest .001 minute (Example: Longitude -133° 17.345)**, obtained using a Global Positioning System (GPS). If you are applying for more than three parcels or your proposed parcels have other than four corners, please provide those coordinates in your project description or on a separate sheet.

Parcel 1: Mariculture Float (e.g. Grow-out Area)	NE Corner	No. 1: Latitude	<u>57° 03.175' N</u>	Longitude	<u>135° 21.011' W</u>
	SE Corner	No. 2: Latitude	<u>57° 03.156' N</u>	Longitude	<u>135° 21.011' W</u>
	SW Corner	No. 3: Latitude	<u>57° 03.156' N</u>	Longitude	<u>135° 21.047' W</u>
	NW Corner	No. 4: Latitude	<u>57° 03.175' N</u>	Longitude	<u>135° 21.047' W</u>

Parcel 2: (e.g. Hardening Area)	NE Corner	No. 1: Latitude	_____	Longitude	_____
	SE Corner	No. 2: Latitude	_____	Longitude	_____
	SW Corner	No. 3: Latitude	_____	Longitude	_____
	NW Corner	No. 4: Latitude	_____	Longitude	_____

Parcel 3: (e.g. Support Facility Area)	NE Corner	No. 1: Latitude	_____	Longitude	_____
	SE Corner	No. 2: Latitude	_____	Longitude	_____
	SW Corner	No. 3: Latitude	_____	Longitude	_____
	NW Corner	No. 4: Latitude	_____	Longitude	_____

2. Site Size

Please use the following formula to compute area. For more complex parcel shapes, you may wish to use the Measure Area tool in Alaska Mapper found at <https://mapper.dnr.alaska.gov/>. If you are applying for more than three parcels or your parcels are not rectangular, you may provide this information in the project description or on a separate sheet.

- To compute the total area (sq. ft), multiply the width (ft) by the length (ft) of Parcel 1. The outside length and width of the Parcel **must include your anchors and anchoring system plus any scope**.
- Divide the area (sq. ft) of Parcel 1 by 43,560, to convert the area from sq. ft to acres.
- Repeat for each separate Parcel of your proposed farm site.
- Add the acreage of each Parcel to get the total tideland acreage for your proposed farm site.
- Write the Total Acreage on the line where indicated.
- Note that the number of acres must correspond to your farm site maps and drawings.

Parcel 1: 40 feet (x) 130 feet = 5,200 square feet (÷) 43,560 = 0.12
 (Width of Parcel 1) (Length of Parcel 1) (Area) (Acres)

Parcel 2: _____ feet (x) _____ feet = _____ square feet (÷) 43,560 = _____
 (Width of Parcel 2) (Length of Parcel 2) (Area) (Acres)

Parcel 3: _____ feet (x) _____ feet = _____ square feet (÷) 43,560 = _____
 (Width of Parcel 3) (Length of Parcel 3) (Area) (Acres)

How many total acres of state-owned tidelands are you applying for (add all parcel acres): 0.12
 (Total Acreage)

If you are also applying for state owned uplands for support facilities, how many total upland acres? 0
 (Total Upland Acreage)

3. Maps and Diagrams

Provide copies of maps and diagrams including general and detailed location maps, site plan map (an overview), cross-sectional diagram and detailed drawings. If the project has multiple parcels, you must provide maps of each parcel. Copies of the maps and drawings should be no larger than 8½" x 11" (standard letter size). Examples are provided at the end of the application.

A list of mapping resources is provided below:

Alaska Mapper	https://mapper.dnr.alaska.gov/
Alaska Ocean Observing System Mariculture Map	https://mariculture.portal.aos.org/
NOAA Nautical Charts	www.charts.noaa.gov
ShoreZone Mapping System	https://www.fisheries.noaa.gov/alaska/habitat-conservation/alaska-shorezone
Catalog of Anadromous Streams	https://www.adfg.alaska.gov/sf/sarr/awc/

*Be sure to include a legend box on all maps and diagrams you provide with your application with the following information:

FORMATTING

Figure No. and Title
Applicant Name (Business Name)
Waterbody
Area/Region
Today's Date

LEGEND BOX EXAMPLE

Figure 1 Detailed Location Map
Alaska's Best Oysters
Jerryton Bay
East of Prince of Wales Island, Southeast AK
March 30, 2012

- a. **General Location Map** - This map is a larger scaled map showing larger surrounding area with less detail (See Attachment 2, Figure 1). Use a USGS Topographic quadrangle map (scale: 1" = one mile (1:63,360)) and label it "Figure 1" and show the following information:
- USGS Map Name (e.g. Craig B-4) Sitka A-5 SE
 - General location of the farm site
 - Distance (in nautical miles), and direction (arrow) of the site from the nearest community
 - A directional arrow identifying North
 - Scale
 - Legend box (example on previous page)
- b. **Detailed Location Map** - This map is a smaller scaled map showing more detail (See Attachment 2, Figure 2). Use a National Oceanic and Atmospheric Administration (NOAA) navigational chart and label it "Figure 2" and show the following information:
- NOAA Chart No. 17327
 - Boundaries of each farm area parcel and clearly label all corners (NE, SE, SW, and NW)
 - Directional arrow identifying North
 - Scale on map
 - Legend box (example on previous page)
 - If uplands area is proposed:
 - Location and type of use (e.g. housing, storage shed, etc.)
- c. **Site Plan Map** - Draw an overhead view of the farm area parcel(s) and surrounding area (See Attachment 2, Figures 3 and 4). Label it "Figure 3" and show the following information:
- All in-water structures and anchoring systems (All anchoring systems and anchor scope have to be inside the farm parcel boundary)
 - All equipment and support facilities with dimensions (in feet)
 - Areas of eelgrass beds (intertidal zone)
 - Areas of kelp beds (subtidal zone)
 - Fuel and chemical storage
 - Nearby anadromous streams (fish)
 - Distance between all facilities, gear or equipment on the proposed farm site
 - Legend box (example on previous page)
- d. **Cross-Sectional Diagram(s)** - Provide Cross-Sectional Diagram(s) of all support facilities, equipment, and gear showing their placement and anchoring systems (See Attachment 2, Figure 5). Note that more than one diagram may be required. Label it "Figure 5" (and so on) and show the following information:
- Distance from bottom of gear to ocean bottom at mean lower low tide
 - If suspended or on-bottom culture:
 - water depth at low tide
 - major on-bottom physical features (sand, mud, silt, clay, bedrock, cobble, shells, rockweed, algae/seaweed) and contours
 - Dimensions of the anchoring configuration and poundage
 - Scale
 - Legend box (example on previous page)
- e. **Detailed Drawing(s)** - Provide Detailed Drawing(s) of all support facilities, equipment, and gear (See Attachment 2, Figure 5). Note that more than one diagram may be required. Label and show the following information:
- Draw and label the dimensions (length/width/height) of all proposed gear and equipment
 - Legend box (example on previous page)

E. SITE SUITABILITY – PHYSICAL AND BIOLOGICAL CHARACTERISTICS

1. Is the proposed location protected from severe storms, strong currents, winter ice, etc. and if not, is the farm designed for extremes?
Yes **No** Additional Information Protected Sitka Harbor site; barge built/anchored to withstand storms.
2. Does your site have suitable water exchange for species of culture? **Yes** **No**
3. Are water temperatures suitable for proposed species of culture? **Yes** **No**
(Note: temperatures > 60° and < 31° F may pose problems such as Vibrio bacteria contamination or icing.)
4. Is there any significant freshwater influence near the farm? **Yes** **No**
(Note: freshwater may impact shellfish growth and/or survival or carry fecal coliform or other pollutants)
5. Is the salinity concentration at your proposed farm site appropriate for species of culture? **Yes** **No**
6. Have you monitored the phytoplankton (microalgae) abundance and types during the main grow-out season?
Yes **No** **If yes, findings:** Operations will follow best management practices to avoid harmful algal blooms.
(Note: shellfish depend on phytoplankton for food, but harmful phytoplankton can prevent harvest/sales.)
7. Have you monitored suspended sediments or turbidity (e.g. water clarity/transparency using a secchi disc) at your proposed farm site? **Yes** **No** **If yes, findings:** Secchi depth = 5 meters (April 15, 2023).
(Note: This is used as rough check for microalgae densities, run-off, and glacial silt (milky- grey color).)
8. For on-bottom culture, are the bottom characteristics suitable for the proposed species? **Yes** **No**
Substrate and vegetation? N/A. The project is based on floating/suspended culture.
9. For on-bottom culture, how will bottom characteristics be made suitable if not already?
N/A
10. For suspended culture, is the water depth sufficient to prevent gear from grounding and impacting the benthos under floating structures? Depth of Gear (in ft): 6.5 Water depth at low tide (in ft): 12
11. Is your proposed site more than 300 ft from an anadromous fish stream? **Yes** **No**
12. Are you aware of any eelgrass or kelp beds on or near your proposed farm site? **Yes** **No** If yes, describe:
N/A. See Attachment 1, Figure 3b-Kelp Presence & Oil Persistence.
13. For farming using on-bottom culture methods, is there insignificant wild stock of the species to be cultured on the proposed farm site? (Reference 5 AAC 41.235) **Yes** **No** Additional information
N/A
14. Are there existing uses near your proposed farm site such as boat traffic, existing fisheries or a sensitive area as listed in section C of Part 1, etc. that may be impacted by the farm operation? **Yes** **No** If yes, describe how your farm can be sited to mitigate conflicting uses?

The Mariculture Moorage Float is located in the Sitka Harbor Channel, which has high levels of existing vessel traffic, commercial fishing, sightseeing, and tourism. Conflicts would be mitigated by siting the barge within a protected zone surrounded by wave attenuators to reduce navigational interference and maintain a defined project footprint.

F. KNOWN EXISTING USES

Please check the boxes below, to indicate existing human and/or wildlife uses observed or known to exist at or within one mile of the proposed farm site. Indicate the locations of these existing uses on the Site Plan Map if specific locations are known (refer to page 8, Section 3c).

- | | |
|---|---|
| <input type="checkbox"/> mining | <input type="checkbox"/> other aquatic farm projects |
| <input type="checkbox"/> timber harvest or transfer | <input checked="" type="checkbox"/> commercial fishing |
| <input checked="" type="checkbox"/> residential use | <input checked="" type="checkbox"/> sport fishing |
| <input checked="" type="checkbox"/> harbor development | <input type="checkbox"/> salmon hatcheries |
| <input checked="" type="checkbox"/> sheltered boat anchorage | <input type="checkbox"/> hunting |
| <input checked="" type="checkbox"/> seaplane landing | <input checked="" type="checkbox"/> seafood processing plant |
| <input checked="" type="checkbox"/> commercial lodges | <input checked="" type="checkbox"/> upland access route(s) areas, bear trails, etc. |
| <input checked="" type="checkbox"/> sightseeing | <input type="checkbox"/> wildlife use, (e.g. shorebirds, sea mammal haul-outs) |
| <input checked="" type="checkbox"/> recreation | <input type="checkbox"/> subsistence; list species and frequency |
| <input checked="" type="checkbox"/> tourism | |
| <input checked="" type="checkbox"/> historical/cultural/archaeological site | |



- navigational channels: Sitka Harbor Channel is a busy navigational corridor with heavy vessel traffic.
- other; list The U.S. Coast Guard conducts regular operations in Sitka Harbor Channel.

G. SUPPORT FACILITIES

1. Personnel/Caretaker Housing (additional annual fees apply)

Are you proposing any personnel/caretaker housing? **Yes** **No**

If yes, the proposed size will be: _____ (Width) _____ (Length) _____ (Height)

Please attach diagrams/drawings with labels clearly showing the Personnel/Caretaker housing.

Note: you may stay a maximum of 14 consecutive days at your site on state-owned uplands or tidelands without applying for personnel/caretaker housing.

2. Enclosed Processing Facility

Are you proposing any enclosed processing facility? **Yes** **No**

If yes, the proposed size will be: _____ (Width) _____ (Length) _____ (Height)

Please be sure the processing facilities are included in the maps and diagrams described in the Maps and Diagrams section above.

3. Upland Property

Do you currently own or lease upland property adjacent to, or near, the proposed farm site that you plan to use in conjunction with your proposal? **Yes** **No** **If yes**, attach a copy of ownership deed or lease.

If you are the adjacent upland owner, are you applying for a preference right under 11 AAC 63.040(f)?

Yes **No**

H. CITY AND BOROUGH CONTACTS

1. City/Borough Authorization

If you are applying within a city or borough, please contact the appropriate authority as additional authorizations may be required from them. Please provide the name, address, and telephone number of the person(s) you contacted and list any required authorizations.

CITY/BOROUGH	PHONE	CONTACTED?
<input type="checkbox"/> City of Cordova	907-424-6220	Yes <input type="checkbox"/> No <input type="checkbox"/>
<input type="checkbox"/> City of Klawock	907-755-2261	Yes <input type="checkbox"/> No <input type="checkbox"/>
<input type="checkbox"/> City and Borough of Wrangell	907-874-2381	Yes <input type="checkbox"/> No <input type="checkbox"/>
<input type="checkbox"/> City of Craig – Planning & Zoning	907-826-3275	Yes <input type="checkbox"/> No <input type="checkbox"/>
<input type="checkbox"/> City and Borough of Juneau – Permit Center	907-586-5252	Yes <input type="checkbox"/> No <input type="checkbox"/>
<input checked="" type="checkbox"/> City and Borough of Sitka – Planning & Community Development	907-747-1814	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<input type="checkbox"/> City of Thorne Bay	907-828-3380	Yes <input type="checkbox"/> No <input type="checkbox"/>
<input type="checkbox"/> City and Borough of Yakutat – Planning & Zoning Commission.....	907-784-3323	Yes <input type="checkbox"/> No <input type="checkbox"/>
<input type="checkbox"/> Kenai Peninsula Borough – Land Management Division.....	907-714-2205	Yes <input type="checkbox"/> No <input type="checkbox"/>
<input type="checkbox"/> Kodiak Island Borough – Community Development	907-486-9363	Yes <input type="checkbox"/> No <input type="checkbox"/>
<input type="checkbox"/> Lake and Peninsula Borough – Community Development.....	907-246-3421	Yes <input type="checkbox"/> No <input type="checkbox"/>
<input type="checkbox"/> Aleutians East Borough – Permitting.....	907-383-2699	Yes <input type="checkbox"/> No <input type="checkbox"/>
<input type="checkbox"/> Ketchikan Gateway Borough – Planning & Community Development	907-228-6610	Yes <input type="checkbox"/> No <input type="checkbox"/>
<input type="checkbox"/> Haines Borough	907-766-6401	Yes <input type="checkbox"/> No <input type="checkbox"/>

Type of Authorization required by City or Borough: Construction permit. Process will begin in September 2025.

I. WATER QUALITY INFORMATION – Department of Environmental Conservation

1. Do you plan to use a boat on your farm site? **Yes** **No** **If yes**, indicate the type of marine sanitation device. The hatchery barge would be connected to the upland UAS Sitka Campus sewer system.

2. If you plan to have personnel housing or caretaker facilities:
 Will wastewater be discharged from these facilities? **Yes** **No** **If yes**, what are the daily maximum and average discharge volumes? Maximum _____ Average _____

3. Were there any sources of past pollution at the site, such as a shore-based seafood processor, log transfer facility, industrial facility, oil spill contamination, or town or village? **Yes** **No** **Unknown**
If yes, identify:
 - a. The type of previous use (e.g. mine, village, seafood processor, oil spill).
 A search of the ADEC Contaminated Sites Mapper on September 29, 2025, revealed no past pollution documented at the site.

 - b. The last known date of use. N/A

 - c. The distance from site previously used to your proposed site.

4. Are you aware of any current potential sources of human or industrial pollution in the area? (e.g. sewage outfalls, oil contamination, industrial transfer facilities upland operations, boar harbors, etc.)

Yes **No** **If yes**, describe:

- a. The type of discharge(s).

Harbor boat channel with discharges from seafood processors and vessels

- b. The location and distance from your site.

Approximately 0.13 miles from proposed site.

- c. The name of the discharger(s), if known.

Known dischargers: Sitka Sound Seafoods, Seafood Producers Cooperative, Alaska Native Brotherhood Harbor, Thompson Harbor, Eliason Harbor.

5. Are you aware of any other planned development in the general area of your proposed site?

Yes **No** **If yes**, describe the planned development.

There is a planned U.S. Coast Guard dock expansion approximately 0.15 miles southeast of the proposed project. There is also a planned seaplane base located approximately 0.5 miles northwest of the site.

6. ADEC may request that you provide a map for certain projects to show the following information:

- a. areas of wastewater disposal systems, including both sewage and grey water discharge points (grey water means domestic wastewater from laundry, kitchen, etc., which does not contain human waste)
 - b. location of drinking water, including drinking water wells or other drinking water system sources (fresh water and salt water), within 200 feet of any proposed or existing wastewater disposal systems
 - c. location of solid waste storage and disposal sites (Note: you are encouraged to use existing permitted sites for the disposal of solid wastes. If there are not any existing permitted disposal sites in the area and they are necessary in your operation, you must contact the ADEC for authorization)
 - d. areas used for fuel and chemical storage
-

J. APPLICATION SIGNATURE BLOCK

AQUATIC FARM APPLICATION SIGNATURE AND PROGRAM CERTIFICATION STATEMENT

The information contained in this aquatic farm application is true and complete to the best of my knowledge and I certify that the proposed activity complies with and will be conducted in a manner consistent with all State and Federal Agency policies and regulations. I understand that modifications to the proposed activity may require additional review and that I may need to apply for additional authorizations.

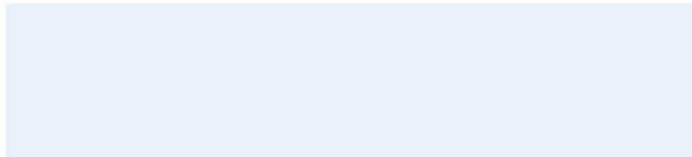
This certification statement does not provide authorization necessary to sell my product. I understand I must separately apply for and hold a Growing Area Certification and a Shellfish Harvester or Shellfish Dealer Permit from the Department of Environmental Conservation.

Printed Name Angela Jean Bowers



Signature of Applicant _____ **Date** 4/29/23

Printed Name Click or tap here to enter text.



Signature of Applicant _____ **Date** Click or tap to enter a date.

I have enclosed the application fee required under 11 AAC 05.230(d)(3)(A)

In submitting this form, the applicant certifies that he or she has not changed the original text of the form or any attached documents provided by the Division. This information is made a part of the state public land records and becomes public information under AS 40.25.110 and 40.25.120 (unless the information qualifies for confidentiality under AS 38.05.035(a)(8) and confidentiality is requested, AS 43.05.230, or AS 45.48). Public information is open to inspection by you or any member of the public. A person who is the subject of the information may challenge its accuracy or completeness under AS 44.99.310, by giving a written description of the challenged information, the changes needed to correct it, and a name and address where the person can be reached. False statements made in an application for a benefit are punishable under AS 11.56.210. In submitting this form, the applicant agrees with the Department to use "electronic" means to conduct "transactions" (as those terms are used in the Uniform Electronic Transactions Act, AS 09.80.010 - AS 09.80.195) that relate to this form and that the Department need not retain the original paper form of this record: the department may retain this record as an electronic record and destroy the original.

Attachment 1

Figure 1

General Location Map



U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY



SITKA A-5 SE QUADRANGLE
ALASKA - SITKA CITY AND BOROUGHS
7.5-MINUTE SERIES

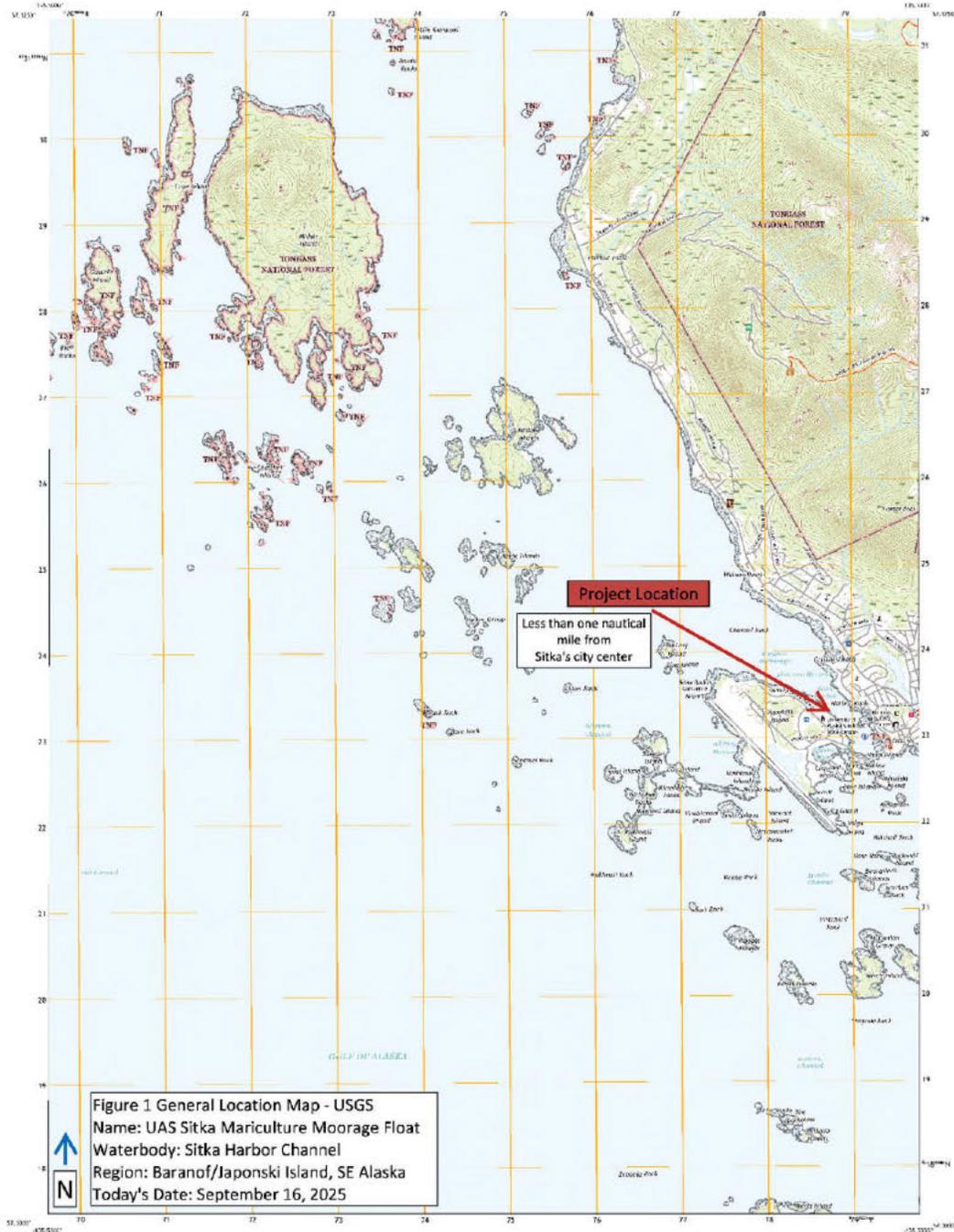
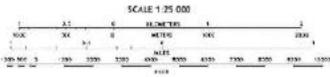
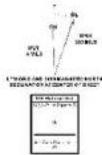


Figure 1 General Location Map - USGS
Name: UAS Sitka Mariculture Moorage Float
Waterbody: Sitka Harbor Channel
Region: Baranof/Japonski Island, SE Alaska
Today's Date: September 16, 2025

Produced by the United States Geological Survey
 as a result of a contract with the State of Alaska
 for the purpose of providing information to the State of Alaska
 for the purpose of providing information to the State of Alaska
 for the purpose of providing information to the State of Alaska

Scale: 1:25,000
 Date: 2025
 Author: USGS
 Title: UAS Sitka Mariculture Moorage Float



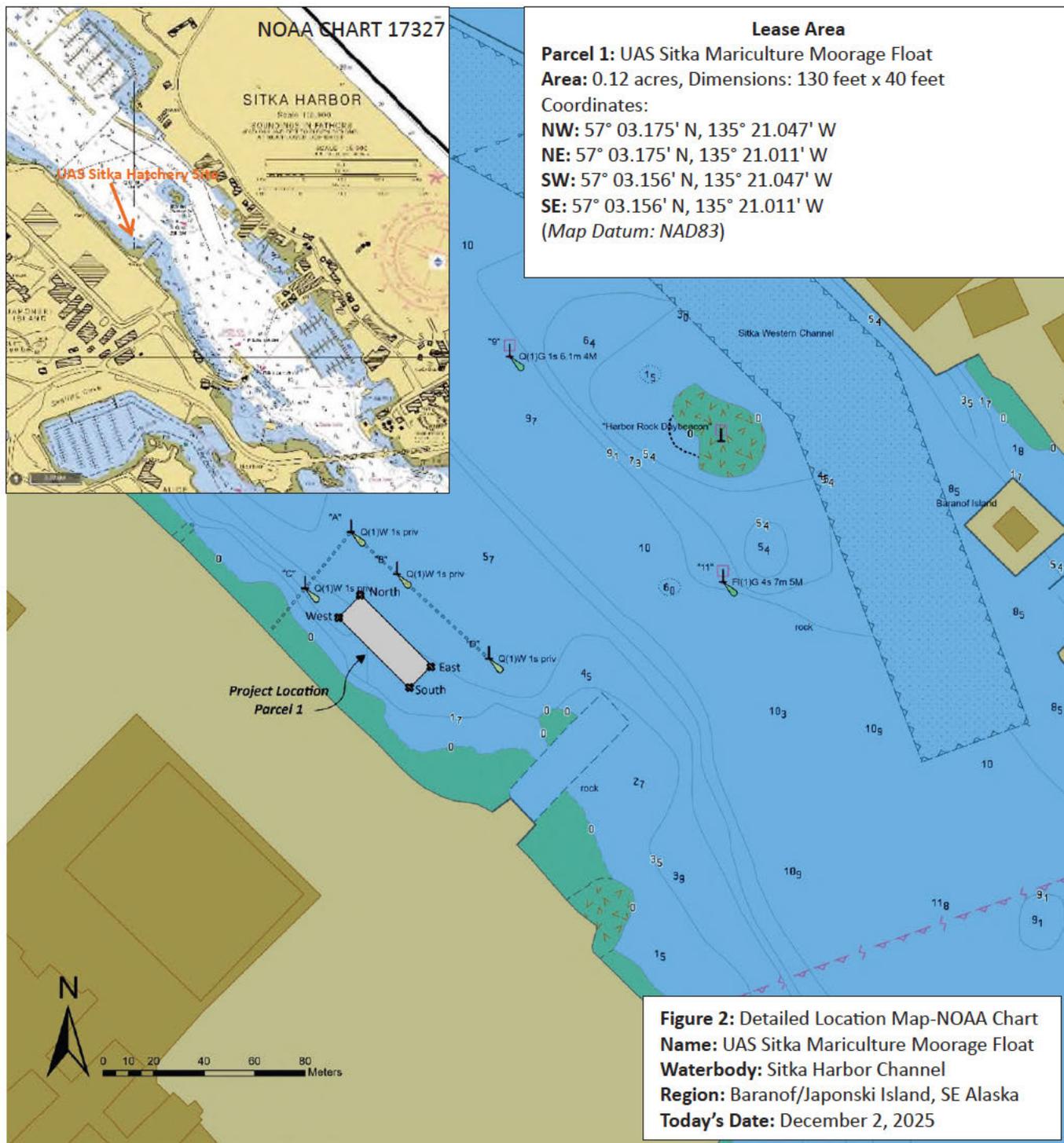
1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16

Symbol	Feature
[Red line]	Highway
[Blue line]	Waterway
[Green area]	Forest
[Brown area]	Urban
[Black dots]	Point of Interest
[Red circle]	City Center
[Blue circle]	Harbor
[Green circle]	Forest
[Brown circle]	Urban

SITKA A-5 SE, AK
2021



Attachment 2
Figure 2
Detailed Location Map



Attachment 1

Figure 3

Site Plan

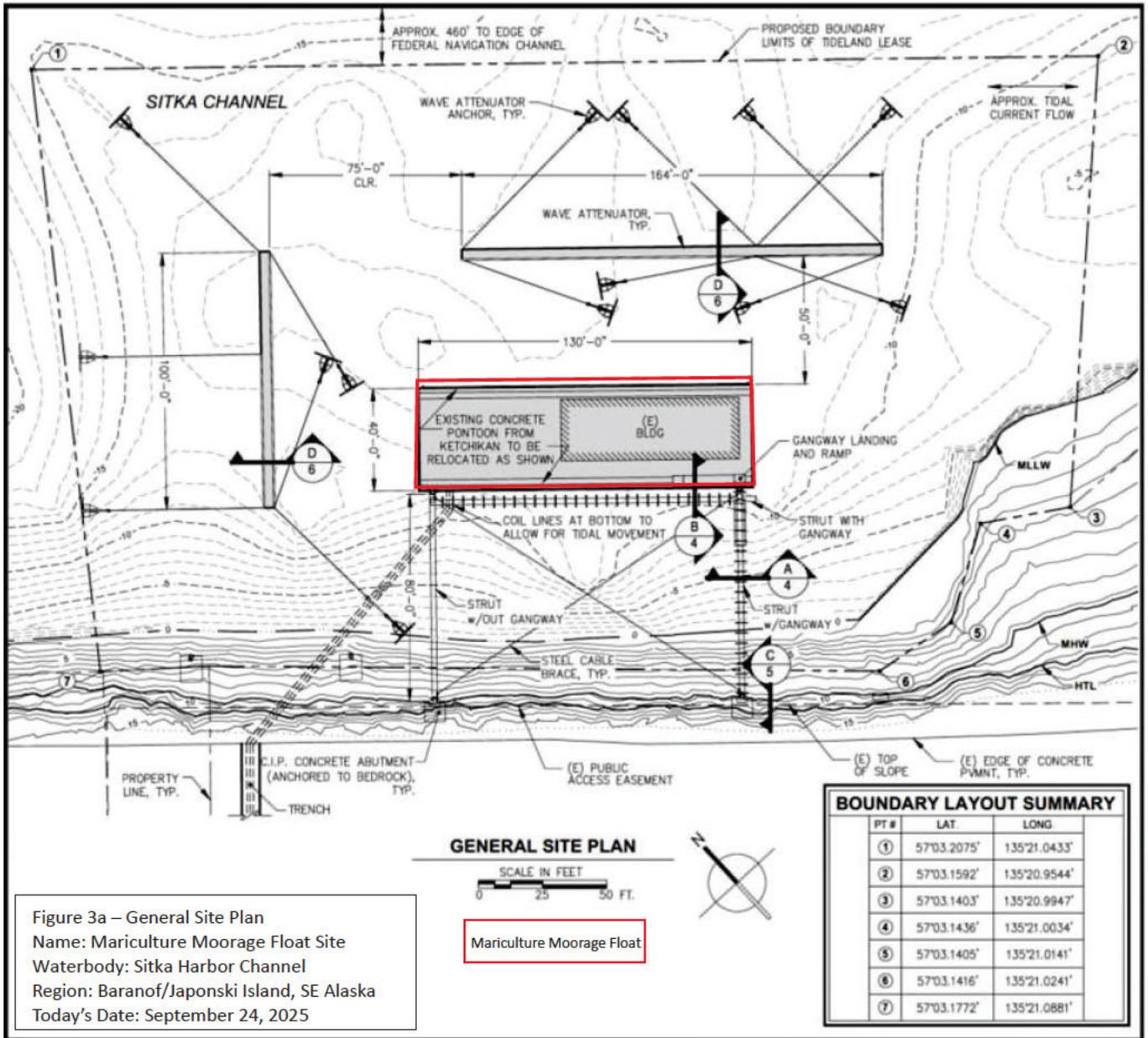
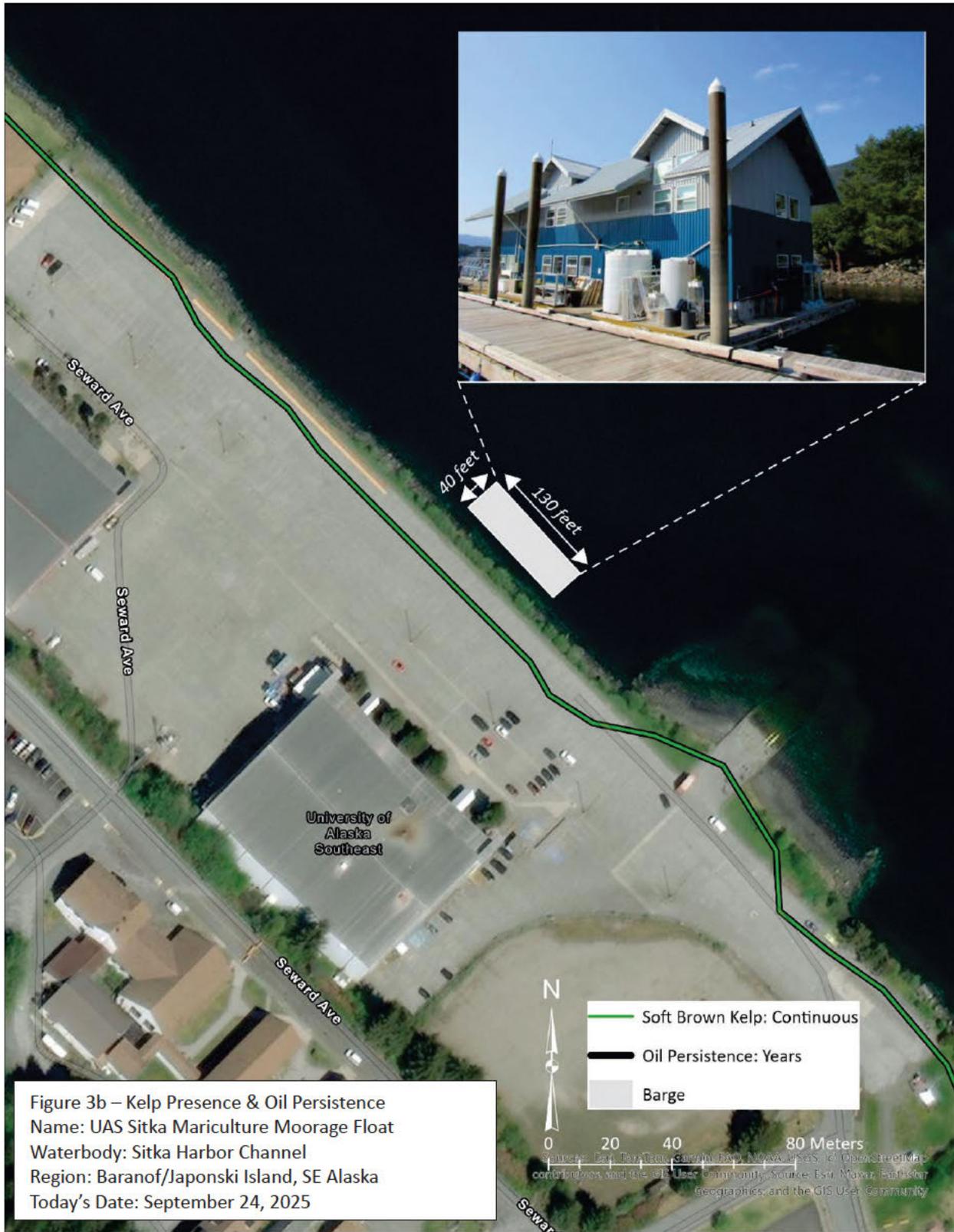


Figure 3a – General Site Plan
 Name: Mariculture Moorage Float Site
 Waterbody: Sitka Harbor Channel
 Region: Baranof/Japonski Island, SE Alaska
 Today's Date: September 24, 2025

Attachment 1
Figure 3
Site Plan



Attachment 1
Figure 4
Detailed Site Plan



Barge at current moorage in Ketchikan



Figure 4c – Site Plan Photos
Name: UAS Sitka Mariculture Moorage Float
Waterbody: Sitka Harbor Channel
Region: Baranof/Japonski Island, SE Alaska
Today's Date: September 22, 2025

Proposed moorage site along shoreline at UAS Sitka.

Attachment 1
Figure 5
Cross-Sectional Diagram

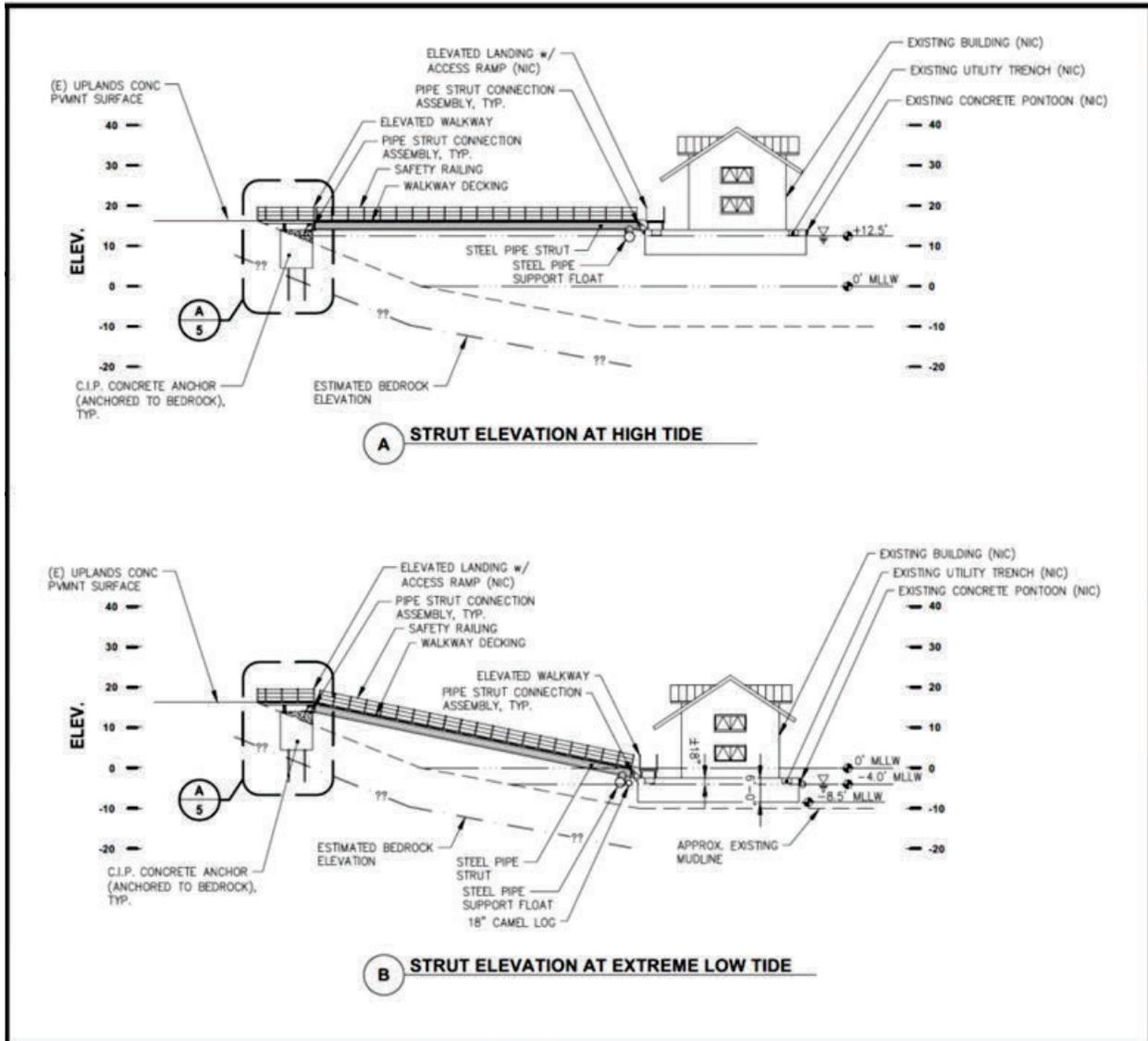


Figure 5 – Cross-Sectional Diagram
 Name: UAS Sitka Mariculture Moorage Float
 Waterbody: Sitka Harbor Channel
 Region: Baranof/Japonski Island, SE Alaska
 Today's Date: September 24, 2025

