

STATE OF ALASKA DEPARTMENT OF NATURAL RESOURCES
DIVISION OF MINING, LAND AND WATER

PRELIMINARY DECISION

ADL 105303

Byron Spence dba Canoe Lagoon Oysters

Application for Lease

AS 38.05.083

This Preliminary Decision is the initial determination on a proposed disposal of interest in state land and is subject to comments received during the Public Notice period. The public is invited to comment on this Preliminary Decision. The deadline for commenting is **5:00 PM on February 24, 2020**. Please see the Comments Section of this decision for details on how and where to send comments for consideration. Only the applicant and those who comment have the right to appeal the Final Finding and Decision.

Proposed Action:

The Department of Natural Resources (DNR), Division of Mining, Land and Water (DMLW), Southcentral Regional Land Office (SCRO) has received a request from Byron Spence dba Canoe Lagoon Oysters (CLO) to lease 5.52 acres, more or less, of tide and submerged lands for 10 years for the continuing operation of an existing commercial aquatic farmsite for the purpose of harvesting Pacific oysters (*Magallana gigas*). The location of the project area is further described as being within Section 28, Township 66 South, Range 81 East, Copper River Meridian, approximately seven nautical miles north of the town of Coffman Cove.

SCRO is considering the issuance of a 10-year aquatic farmsite lease to CLO for the continuing operation of an existing commercial aquatic farm. The proposed aquatic farmsite consists of nine separate parcels; one used for suspended Pacific oyster culture using lantern nets, one parcel for mooring processing floats, three parcels for log and float drying areas, two parcels for hardening and defouling beaches, one parcel for a float site, and one parcel for a wet storage area, totaling about 5.52 acres.

Scope of Review:

The scope of this decision is to determine if it is in the State's best interest to issue this aquatic farmsite lease.

Authority:

This lease application is being adjudicated pursuant to AS 38.05.035 Delegation of the Powers and Duties of the Director; AS 38.05.070(b) Generally; AS 38.05.083 Aquatic Farming and Hatchery Site Leases; and AS 38.05.945 Public Notice. The authority to execute the Preliminary Decision, Final Finding and Decision, and the lease, has been delegated to the Regional Manager of SCRO.

Administrative Record:

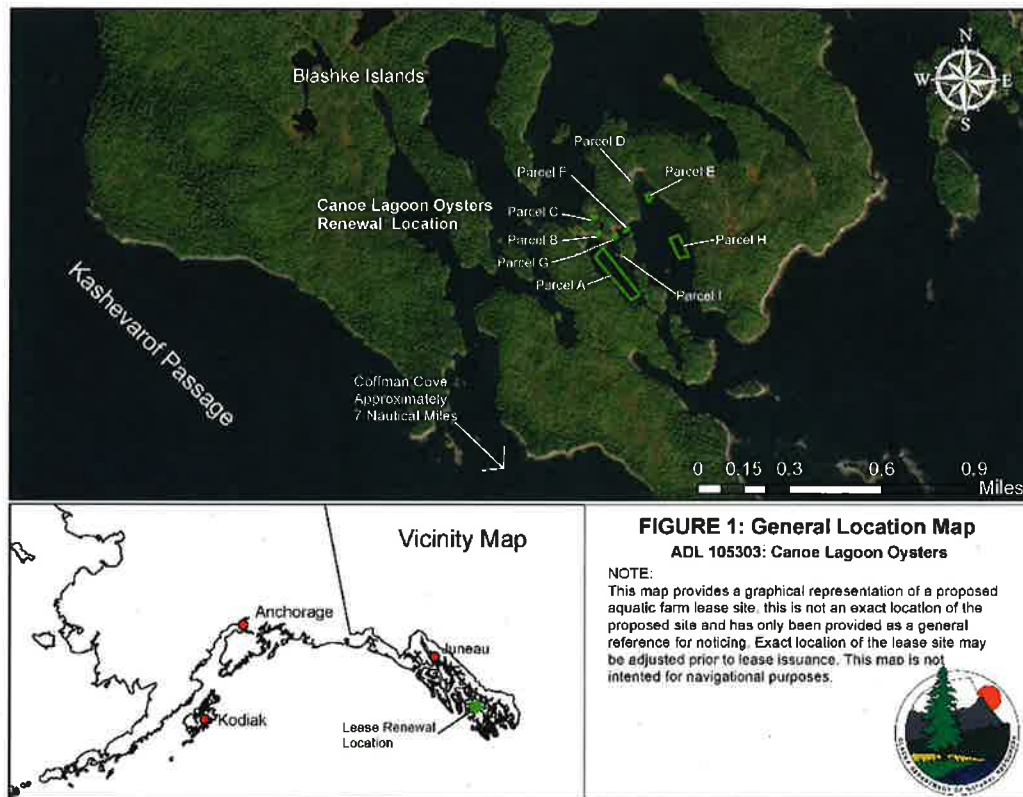
The administrative record for the proposed action consists of the Constitution of the State of Alaska, the Alaska Land Act as amended, applicable statutes and regulations referenced herein, the 2000 Central/Southern Southeast Area Plan and other classification references described herein, and the casefile for the application serialized by DNR as ADL 105303.

Legal Description, Location, and Geographical Features:

The state tide and submerged land this leasehold is located is described as follows:

Site 1

- **Site reference name:** Canoe Lagoon
- **Legal description:** Section 28, Township 66 South, Range 81 East, Copper River Meridian
- **Geographical locations:** Located in or near two small inlets, locally named “Fool’s Bay” and “Canoe Lagoon” on the south Blashke Island in Clarence Strait.



- **Approximate Lat/Longs:**

Parcel #: Description of the parcel, dimensions = acres

Parcel A: Canoe Lagoon Oyster culture area (180 ft x 840 ft, 3.47 acres)

NE Corner: 56° 6.985' N and 132° 54.080' W

SE Corner: 56° 6.828' N and 132° 53.977' W

SW Corner: 56° 6.822' N and 132° 54.025' W

NW Corner: 56° 6.967' N and 132° 54.133' W

Parcel B: Canoe Lagoon processing site (40 ft x 100 ft; 0.09 acre)

NE Corner: 56° 7.028' N and 132° 54.067' W
SE Corner: 56° 7.017' N and 132° 54.087' W
SW Corner: 56° 7.020' N and 132° 54.105' W
NW Corner: 56° 7.033' N and 132° 54.075' W

Parcel C: Canoe Lagoon logs and floats drying area (50 ft x 100 ft; 0.15 acre)

NE Corner: 56° 7.080' N and 132° 54.071' W
SE Corner: 56° 7.073' N and 132° 54.063' W
SW Corner: 56° 7.064' N and 132° 54.092' W
NW Corner: 56° 7.072' N and 132° 54.098' W

Parcel D: Fool's Bay logs and floats drying area (50 ft x 250 ft; 0.29 acre)

NE Corner: 56° 7.147' N and 132° 53.845' W
SE Corner: 56° 7.134' N and 132° 53.839' W
SW Corner: 56° 7.133' N and 132° 53.848' W
NW Corner: 56° 7.145' N and 132° 53.853' W

Parcel E: Fool's Bay hardening and defouling beach (50 ft x 200 ft; 0.23 acre)

NE Corner: 56° 7.088' N and 132° 53.752' W
SE Corner: 56° 7.080' N and 132° 53.757' W
SW Corner: 56° 7.068' N and 132° 53.788' W
NW Corner: 56° 7.088' N and 132° 53.792' W

Parcel F: Pass hardening and defouling beach (50 ft x 150 ft; 0.17 acre)

NE Corner: 56° 7.025' N and 132° 53.933' W
SE Corner: 56° 7.012' N and 132° 53.923' W
SW Corner: 56° 7.008' N and 132° 53.952' W
NW Corner: 56° 7.013' N and 132° 53.950' W

Parcel G: Pass logs and floats drying area (30 ft x 100 ft; 0.07 acre)

NE Corner: 56° 7.012' N and 132° 53.998' W
SE Corner: 56° 7.002' N and 132° 53.993' W
SW Corner: 56° 6.997' N and 132° 54.020' W
NW Corner: 56° 7.000' N and 132° 54.023' W

Parcel H: Fool's Bay float and growing area (150 ft x 300 ft; 1.03 acres)

NE Corner: 56° 6.953' N and 132° 53.698' W
SE Corner: 56° 6.888' N and 132° 53.682' W
SW Corner: 56° 6.892' N and 132° 53.732' W
NW Corner: 56° 6.952' N and 132° 53.745' W

Parcel I: Canoe Lagoon wet storage & hardening beach (20 ft x 40 ft; 0.02 acre)

NE Corner: 56° 6.952' N and 132° 54.002' W
SE Corner: 56° 6.947' N and 132° 53.995' W
SW Corner: 56° 6.945' N and 132° 54.003' W
NW Corner: 56° 6.948' N and 132° 54.008' W

Total acres for all parcels together: 5.52 acres

- **Existing surveys:** None
- **Municipality/Borough:** City and Borough of Wrangell
- **Native Corporations/Federally Recognized Tribes:** Sealaska Corporation
- **Size:** 5.52 acres, more or less

Title:

A DNR Title Report (RPT-11325) was issued on September 8, 2018 from DMLW's Realty Services Section. The State of Alaska holds title to the subject tide and submerged lands under the Equal Footing Doctrine and the Submerged Lands Act of 1953.

Third Party Interests:

No third-party interests.

Classification and Planning:

The project area is subject to the Central/Southern Southeast Area Plan (CSSAP), Region 4, Wrangell – Central, Map 3-16.

The project area is designated General Use (Gu) which converts to the classification of Resource Management Land. Resource Management Land is classified as land that might have a number of important resources but for which a specific resource allocation decision is not possible, or land that contains one or more resource values, none of which is of sufficiently high value to merit designation as a primary use.

Aquatic farming is specifically mentioned in Chapter 2 within the CSSAP with stated goals to “provide opportunities to increase income and diversify the state’s economy through the use of state tidelands and submerged lands for aquatic farming”. Chapter 2 further explains that “aquatic farming will be allowed on state tidelands or submerged lands where there is no significant conflict and the objectives of the CSSAP are met”. Pursuant with Chapter 2 within the CSSAP, State tidelands and submerged lands adjacent to federal conservation units, specifically the Tongass National Forest, DNR will take into consideration the management intent for the uplands identified within the Tongass Land and Resource Management Plan (TLRMP). Uplands associated with the project area under the TLRMP are designated Semi-Remote Recreation.

Floating facilities are specifically mentioned in Chapter 2 within the CSSAP with stated goals to “provide opportunities to increase personal income and diversify the state’s economy by accommodating residential uses needed to support commercial and industrial development”. To protect existing habitats, resources and uses, floating facilities should not be authorized in the following areas: designated habitat or harvest areas, anchorages, areas designated recreation (Rd, Ru), or adjacent to areas of uplands. In addition, they should not be permitted near an authorized aquatic farming operation (except for associated caretaker residences), near known cultural or historic sites, near a public use cabin or sensitive Forest Service research site, or adjacent to areas designated LUD II, National Monument or Wilderness in the Tongass Land and Resource Management Plan. Further, they should not be authorized where the use is prohibited in the management intent statement for a particular parcel in this plan. The Project area under ADL 105303 conforms with siting stipulations within Chapter 2 of the CSSAP. Aquatic farming and floating facilities are specifically mentioned in Chapter 4 of the Tongass Land and Resource Management Plan (TLRMP) requiring coordination with other federal agencies.

In accordance with the Central/Southern Southeast Area Plan, aquatic farming is an allowable use and is therefore consistent with the plan.

Traditional Use Findings

Traditional use findings will not be discussed in this Preliminary Decision because the proposed lease site is located within the City and Borough of Wrangell, an organized borough. Pursuant to AS 38.05.830 a traditional use finding is not required.

Access:

Access to the aquatic farm is by boat or skiff. Housing and minor support facilities are located on an adjacent authorized US Forest Service permitted site. Permit from US Forest Service is in the renewal process. Permit holder has been in good standing with US Forest Service and final permit number will be addressed within the Final Finding and Decision.

Access To and Along Navigable and Public Waters:

Nearly all shore and tidelands in the State of Alaska are subject to a To and Along Easement under AS 38.05.127 and 11 AAC 51.045. The purpose of this easement is to uphold the constitutional right of the public to have free access to, and use of, the state's waterways. At the proposed lease site, the Along easement is 50 feet seaward from the line of mean high water (MHW).

Public Trust Doctrine:

Pursuant to AS 38.05.126 all authorizations for this site will be subject to the principles of the Public Trust Doctrine; specifically, the right of the public to use navigable waterways and the land beneath them for: navigation, commerce, fishing, hunting, protection of areas for ecological studies, and other purposes. These rights must be protected to the maximum extent practicable while allowing for the development of this project. As such, SCRO is reserving the right to grant other authorizations to the subject area consistent with the Public Trust Doctrine.

Lease Discussion:

CLO was issued a 10-year aquatic farm lease on May 01, 2009 with a lease expiration of January 1, 2019. A renewal application was received by ADF&G and DNR on March 7, 2018.

This renewal consists of nine parcels encompassing approximately 5.52 acres, more or less. Parcel A measures 180-feet by 840-feet, encompasses approximately 3.47 acres, and is used for suspended culture using lantern nets for cultivating Pacific oysters. Parcel B measures 40-feet by 100-feet, encompasses approximately 0.09 acres, and is used for mooring processing floats. Parcel C measures 50-feet by 100-feet, encompasses approximately 0.15 acres, and is used as a drying area. Parcel D measures 50-feet by 250-feet, encompasses approximately 0.29 acres, and is used as a drying area. Parcel E measures 50-feet by 200-feet, encompasses approximately 0.23 acres and is used as a hardening and defouling beach. Parcel F measures 50-feet by 150-feet, encompasses approximately 0.17 acres and is used as a hardening and defouling beach. Parcel G measures 30-feet by 100-feet, encompasses approximately 0.07 acres and is used as a drying area. Parcel H measures 150-feet by 300-feet, encompasses approximately 1.03 acres, and is used as a float and growing area. Parcel I measures 20-feet by 40-feet, encompasses approximately 0.02 acres, and is used as a wet storage area and hardening beach.

At this time, the Commercial Use Requirements (CUR) states a farm needs to be making annual

sales “of at least \$3,000.00 per acre or fraction of an acre, or \$15,000.00 per farm, whichever is less.” Under 11 AAC 63.110(7), the lease will include provisions that failure to meet the CUR constitutes a default and may be cause for termination. Annual reports of the previous year’s sales are due by January 31st of every year. ADL 105303 was assigned in 2017 and therefore does not need to meet the CUR until its fifth year of operation. The proposed lease will be subject to the terms of DMLW’s standard lease document and any Additional Stipulations based, in part, upon the following considerations.

Operation and Development Plan:

The Operation and Development Plan revised and submitted on April 16, 2018 is accepted by SCRO as complete but may be subject to change based on agency and public review. Should the proposed lease be granted, it is anticipated that the Development Plan will need to be updated throughout the life of the lease as activities and/or infrastructure are added or subtracted. All updates must be approved, in writing, by SCRO before any construction, deconstruction, replacement of infrastructure, or change in activity will be permitted. SCRO reserves the right to require additional agency review and/or public notice for changes that are deemed by SCRO to be beyond the scope of this decision.

Hazardous Materials and Potential Contaminants:

No hazardous materials or fuel will be stored on the proposed lease. The use and storage of all hazardous substances must be done in accordance with existing federal, state and local laws. Debris (such as soil) contaminated with used motor oil, solvents, or other chemicals may be classified as a hazardous substance and must be removed from the sites and managed and disposed of in accordance with state and federal law.

Lease Performance Guaranty (bonding):

In accordance with AS 38.05.083(e) and 11 AAC 63.080, CLO will be required to submit a performance guaranty for the lease site.

- **\$2,500.00 Performance Bond:** CLO submitted a cash performance bond in the amount of \$2,500 in 2017. This bond will remain in place for the life the proposed lease. The bond amount is based upon the level of development, amounts of hazardous material/substances on site, and the perceived liability to the state. This bond will be used to insure the applicant’s compliance with the terms and conditions of the lease issued for their project. This bond amount will be subject to periodic adjustments and may be adjusted upon approval of any amendments, assignments, re-appraisals, changes in the development plan, changes in the activities conducted, or changes in the performance of operations conducted on the authorized premises, and as a result of any violations to one or more of the authorizations associated with this project.
- **Reclamation Bond:** SCRO is reserving the right to require a reclamation bond due to non-compliance issues during the term of the lease or near the end of the life of the project.

Insurance:

CLO will be required to submit proof of liability insurance to SCRO, with the State of Alaska listed as a "NAMED" insured party. CLO will be responsible for maintaining such insurance throughout the term of the lease.

Survey:

In accordance with AS 38.04.045, this short-term lease does not require a survey. However, the State of Alaska reserves the right to require one in the future, should the need arise due to changes in statutes or increased use of the area. CLO has submitted GPS coordinate point(s) for the four corners of the proposed leasehold.

Compensation and Appraisal:

DMLW has approved an administrative lease fee schedule for aquatic farmsites that meet the conditions listed within the schedule. The most current lease fee schedule will be used to establish the fair market rental each lessee must pay. Fees are subject to adjustment per AS 38.05.083(c). The current annual rate for an aquatic farm lease that is 0.01 to 30 acres in size is \$450.00 for the first acre and \$125.00 for each additional acre or portion thereof. In accordance with the Aquatic Farmsite Fee Schedule, Report No. 2522-13, a breakdown of the lease fee for CLO will be as follows:

5.52 acres (1 acre at \$450.00) + (5 x \$125) = **\$1,075.00 per year**

If the applicant does not agree with the fee schedule amount of \$1,075.00, a fair market value determination can be obtained by the applicant. Fair market value is determined by obtaining a DNR approved appraisal of the lease site. If an appraisal is conducted to determine fair market value of the lease site, the applicant will be required to pay the appraised amount and the \$1,075.00 annual fee will no longer be an option. The appraisal cost will be borne by the applicant. The parcel may need to have an approved Alaska Tidelands Survey to accomplish the appraisal. If a survey is required, the cost will be incurred by the applicant.

Assignment of Lease:

The proposed lease, if issued, may be transferred or assigned to another individual or corporation **only** with prior written approval from the DMLW. A lease will not be assigned to an entity if that entity does not meet the statutory requirements of the lease or the lease is not in good standing. DMLW reserves the right to amend the terms of the lease prior to assignment.

Reclamation:

In accordance with AS 38.05.090(b), all lessees must restore their lease sites to a "good and marketable condition" within 120 days after termination of the lease. What level of reclamation constitutes as being "good and marketable" is at the discretion of SCRO. DNR reserves the right to require a reclamation bond at any time.

Agency and Public Notice of the Preliminary Decision:

Pursuant to AS 38.05.945, this PD will be advertised for 30-day public comment period. An agency review will be conducted and run concurrently with the Public Notice. Notice will be posted on the Alaska Online Public Notice System, and the post office in Coffman Cove, Alaska. Courtesy

notices will also be mailed or emailed to neighboring property owners, permit/lease holders, and other interested parties on **DATE** for a 30-day public comment period. The deadline for public and agency comments is **30 DAYS FROM DATE**.

The following agencies will be included in the review:

- DNR DMLW – Mining
- DNR DMLW – Water
- DNR DMLW – Realty Services
- DNR Southeast Land Office
- DNR DPOR/Office of History and Archaeology/State Historic Preservation Office
- DNR Natural Resource Conservation and Development Board
- DNR Division of Parks and Outdoor Recreation (DPOR)
- DNR Division of Oil and Gas
- DNR Contract and Land Sales
- ADF&G – Habitat
- ADF&G – Aquatic Farm Coordinator
- ADF&G – Advisory Committee
- Department of Environmental Conservation Shellfish
- Department of Transportation and Public Facilities
- U.S. Forest Service
- U.S. Army Corp of Engineers
- U.S. Fish and Wildlife Service
- National Oceanic and Atmospheric Administration
- U.S. Environmental Protection Agency
- U.S. Coast Guard
- Alaska Department of Commerce, Community, and Economic Development
- City of Coffman Cove
- City and Borough of Wrangell

Comment(s):

This decision is subject to both public and agency comments and all comments received by the comment deadline will be considered in the Final Finding and Decision. Only those who comment and the applicant have the right to appeal the Final Finding and Decision.

Written comments about this project must be received in this office no later than 5:00 PM on **DATE to be considered.**

To submit comments, please choose one of the following methods:

Postal: Department of Natural Resources
Southcentral Region Office
ATTN: Brent Reynolds
550 West 7TH Avenue Suite 900C
Anchorage, AK 99501-3577
Phone: 907-269-8567
E-mail: brent.reynolds@alaska.gov
Fax: 907-269-8913

If public comments result in significant changes to the Preliminary Decision, additional public notice may be given. To be eligible to appeal the Final Finding and Decision, a person must provide written comments during the Preliminary Decision comment period per AS 38.05.035(i)-(m).

Signature Page Follows

Recommendation:

DMLW has completed a review of the information provided by the applicant, examined the relevant land management documents, and has found that this project is consistent with all applicable statutes and regulations. SCRO considered three criteria to determine if this project provided the best interest to the State and the development and enjoyment of its natural resources. The criteria include direct economic benefit to the State, indirect economic benefit to the State, and encouragement of the development of the State's resources. This authorization provides a direct economic benefit to the State with the collection of one-time filing fees and any annual lease fees. The authorization of this lease is in the State's best interest as it furthers economic development of the State's aquatic farm industry. It is recommended that SCRO issue a 10-year lease to CLO.



Brent Reynolds, Natural Resource Specialist II

11/27/19

Date

Preliminary Decision:

It is the determination of the Division of Mining, Land, and Water that it may be in the State's best interest to issue an aquatic farm lease to CLO, as described above. Upon authorization of lease ADL 105303, the applicant will be required to pay the annual lease fee of \$1,075.00, keep the \$2,500.00 performance bond on file, and provide proof of liability insurance. This Preliminary Decision shall now proceed to public notice.



Clark Cox, Regional Manager
Southcentral Regional Land Office, Division of Mining, Land & Water

1-23-20
Date

Attachments

Attachment A – Development Plan: Project Description, General Location Map, Detailed Location Map, Site Plan Maps, and Cross-Sectional Diagrams.



Attachment A Development Plan

Project Description

Site Location: The aquatic farm site (established 1979/1980) is located in or near two small inlets, locally named "Fool's Bay" and "Canoe Lagoon" on the south Blashke Island in Clarence Strait in Section 28, SW ¼, about 7.1 NM northeast of the town of Coffman Cove.

Site dimensions, acres for each parcel: The aquatic farm consists of 9 separate parcels, totaling about 5.52 acres in six sections located in Township 66 S, Range 81 E, Copper River Meridian.

Parcels include:

1. 180' x 840' (3.47 acres) (PARCEL A) area for suspended Pacific oyster culture using lantern nets,
2. 40' x 100' (0.09 acre) (PARCEL B) for mooring processing floats,
3. 50' x 100' (0.15 acre) (PARCEL C) log and float drying area,
4. 50' x 250' (0.29 acre) (PARCEL D) log and float drying area,
5. 50' x 200' (0.23 acre) (PARCEL E) hardening and defouling beach,
6. 50' x 150' (0.17 acre) (PARCEL F) hardening and defouling beach,
7. 30' x 100' (0.07) (PARCEL G) log and float drying area,
8. 150' x 300' (1.03 acre) (PARCEL H) float site,
9. 20' x 40' (0.02 acre) (PARCEL I) wet storage area.

Culture method: Lantern nets suspended from log floats. Oyster seed is placed in small lantern nets and graduated to larger mesh-size nets as they grow. Rinsing, cleaning, culling, sorting and re-netting is done repeatedly during the growing cycle to prevent doubling and encourage speedy growth. Beach hardening and defouling occurs at Parcels E and F.

Gear and equipment (type, size, number, configuration, material, mesh size, and anchoring system): Log floats are constructed of two and three 25' long logs connected every 5 feet by 5' long wooden planks (making a floating ladder shape). Each float suspends approximately twenty five 10-tier lantern nets (and some 6-tier nets, used for juveniles). Four rows of log floats with an average of 18 floats per row (max of 72 floats with 1600 lantern nets). Anchors are shore ties or large bags of rocks in trawl netting. Anchor lines are typically 50'-60' long (Canoe Lagoon has a limited tidal range, with a MLLW of approximately 9'). All log floats are located in Parcel A in Canoe Lagoon.

Harvest equipment and method: Equipment includes a work barge and two mobile work rafts, detailed below under support facilities. The lantern nets are hoisted with a hand crank winch onto the work barge and/or work rafts, rinsed, and transferred to the stationary barge complex (see below) for cleaning, sorting, and packing. Hoisting, rinsing, cleaning, culling, sorting and re-netting is done repeatedly during the growing cycle to prevent doubling and encourage speedy growth. A final hoist, sort, cull, clean and thorough manual defouling (sometimes aided by time spent on a hardening beach) is done before size grading, counting and packing for sale.

Attachment A Development Plan

Support facilities (type, size, number): Support structures include a DEC-certified packing house, two covered work floats for cleaning/sorting/etc, and three non-covered work floats. All floats are wooden decked (red cedar) with flotation by sealed, foam-filled HDPE pipe and some closed cell expanded polystyrene. Collectively these constitute a stationary raft complex, permanently moored at Parcel B using shore ties and rock bag anchors, and the individual rafts are as follows:

1. 16'x20'x2' work float with covered work space
2. 16'x20'x2' work float with covered work space
3. 16'x30'x3' work float with DEC-certified pack house
4. 16'x20'x2' work float
5. 16'x20'x2' work float
6. 16'x20'x2' work float

Mobile harvest facilities include:

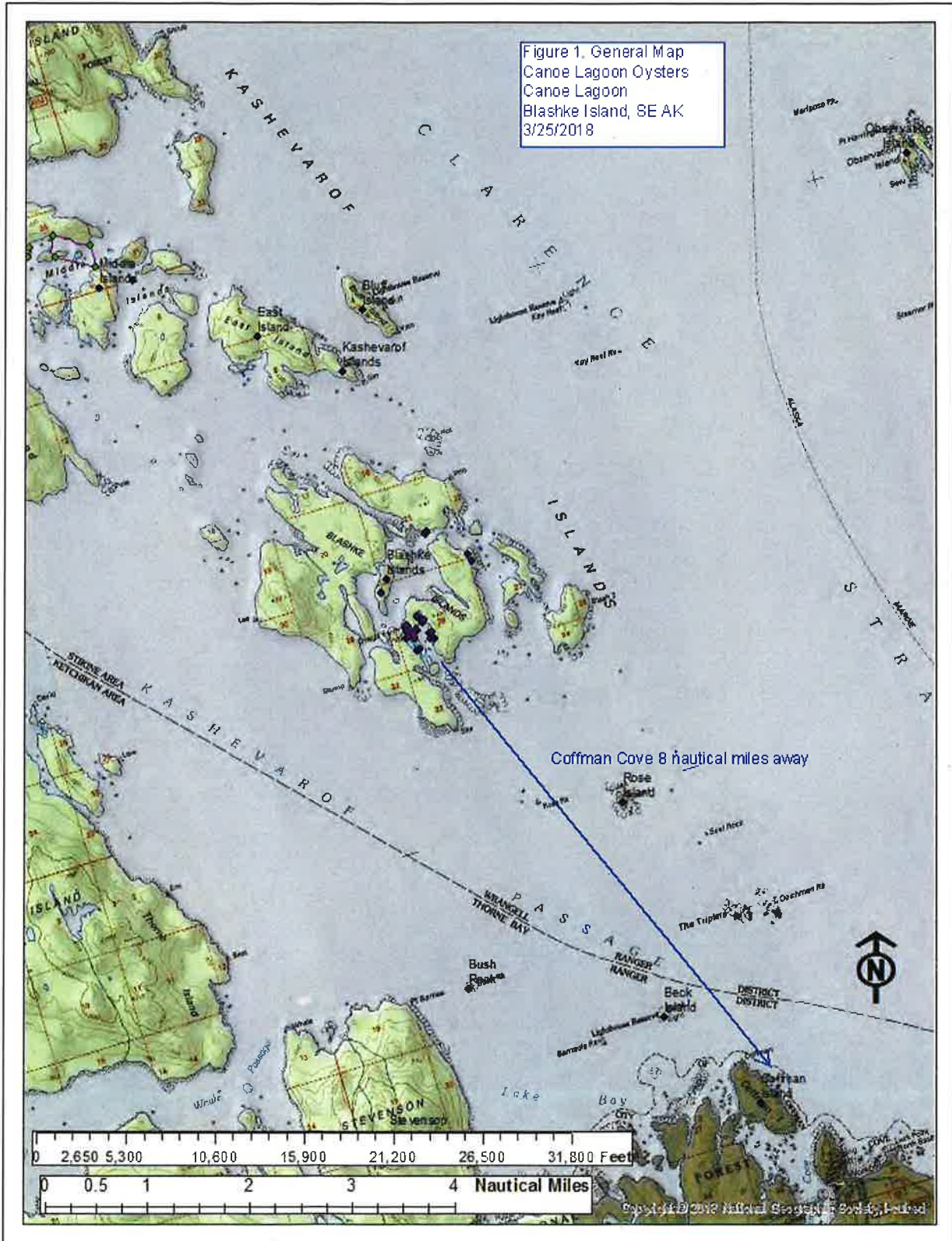
1. 10 ft x 24 ft work raft (mobile barge with hoist, fiberglass, under construction.)
Note: This raft replaced a 10 ft x 20 ft work raft that was decommissioned.
2. 14 ft x 32 ft work raft (gear staging, drying, storage.)
Seasonally moored in Fool's Bay for staging and storage.
3. 14 ft x 40 ft work raft (gear staging, drying and storage.)

Housing and some minor support facilities (storage, shop facilities, office) are located on an adjacent USFS lease site.

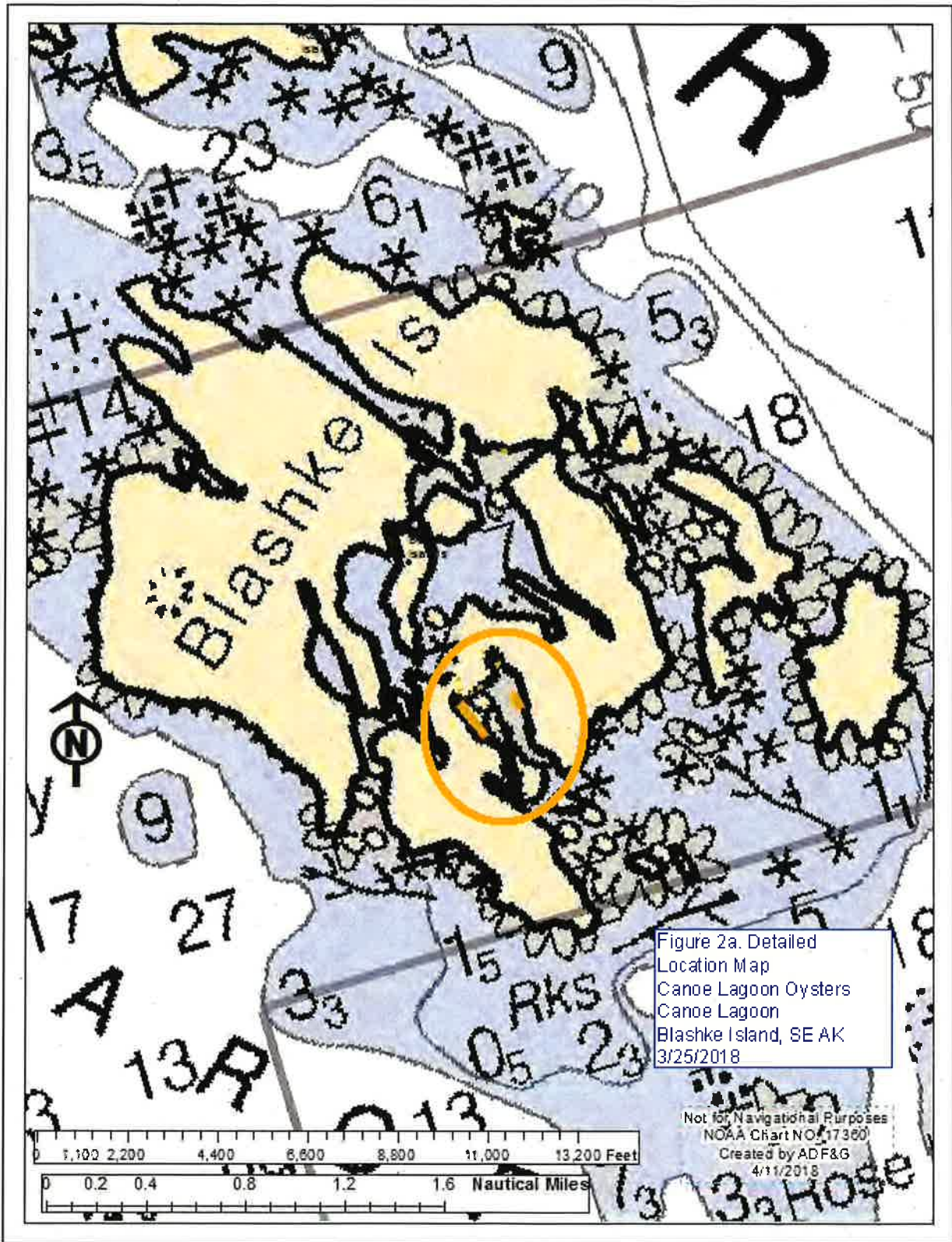
Access to and from site: Access is by boat or skiff. Several are available, including my gillnet boat, a 19' runabout and several small aluminum skiffs.

Storage location of equipment and gear when not in use: Equipment/gear storage and drying locations include Parcels C, D, G, and I. Additional equipment and gear storage locations are located on adjacent uplands leased from the USFS.

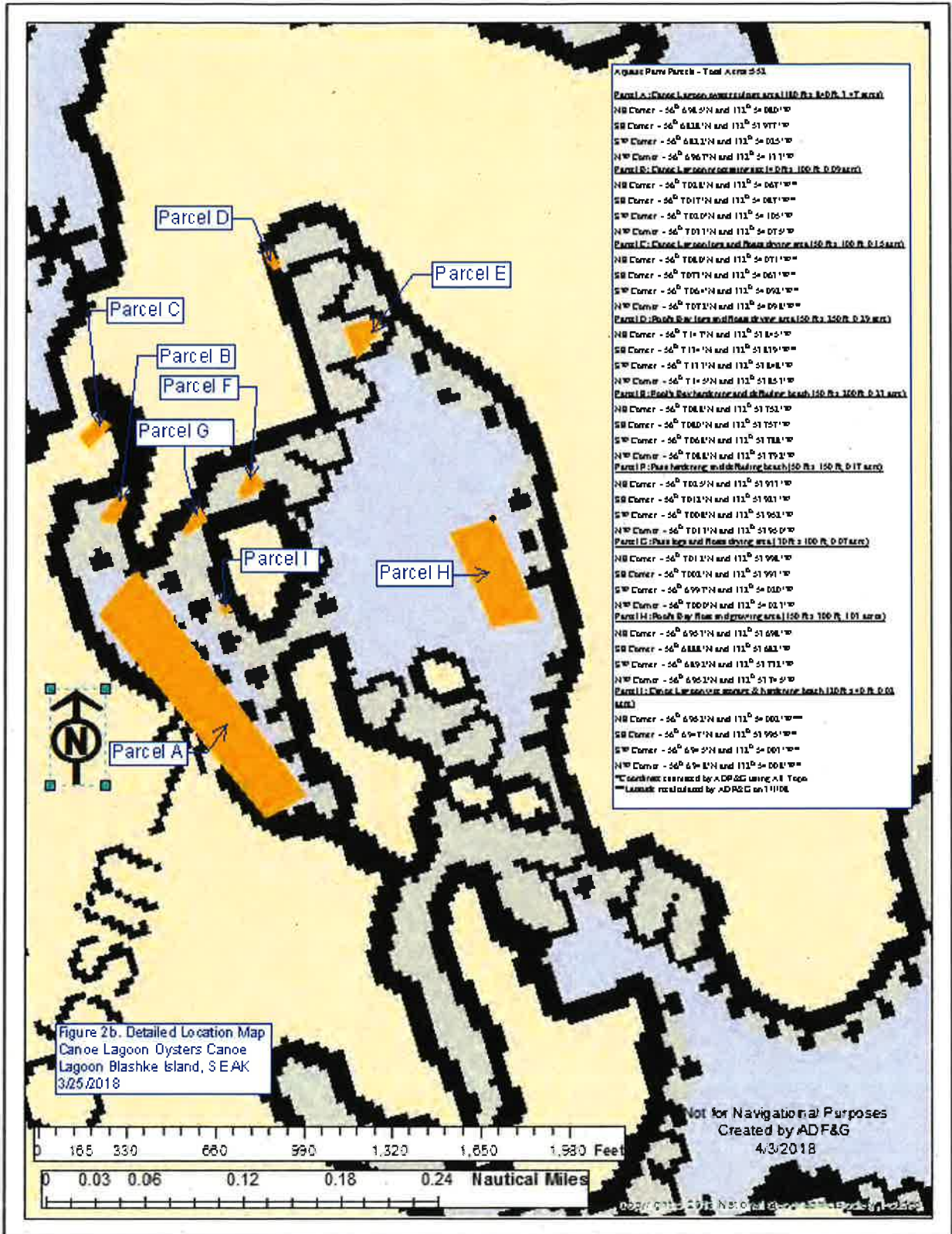
Attachment A Development Plan



Attachment A
Development Plan



Attachment A Development Plan



Attachment A Development Plan

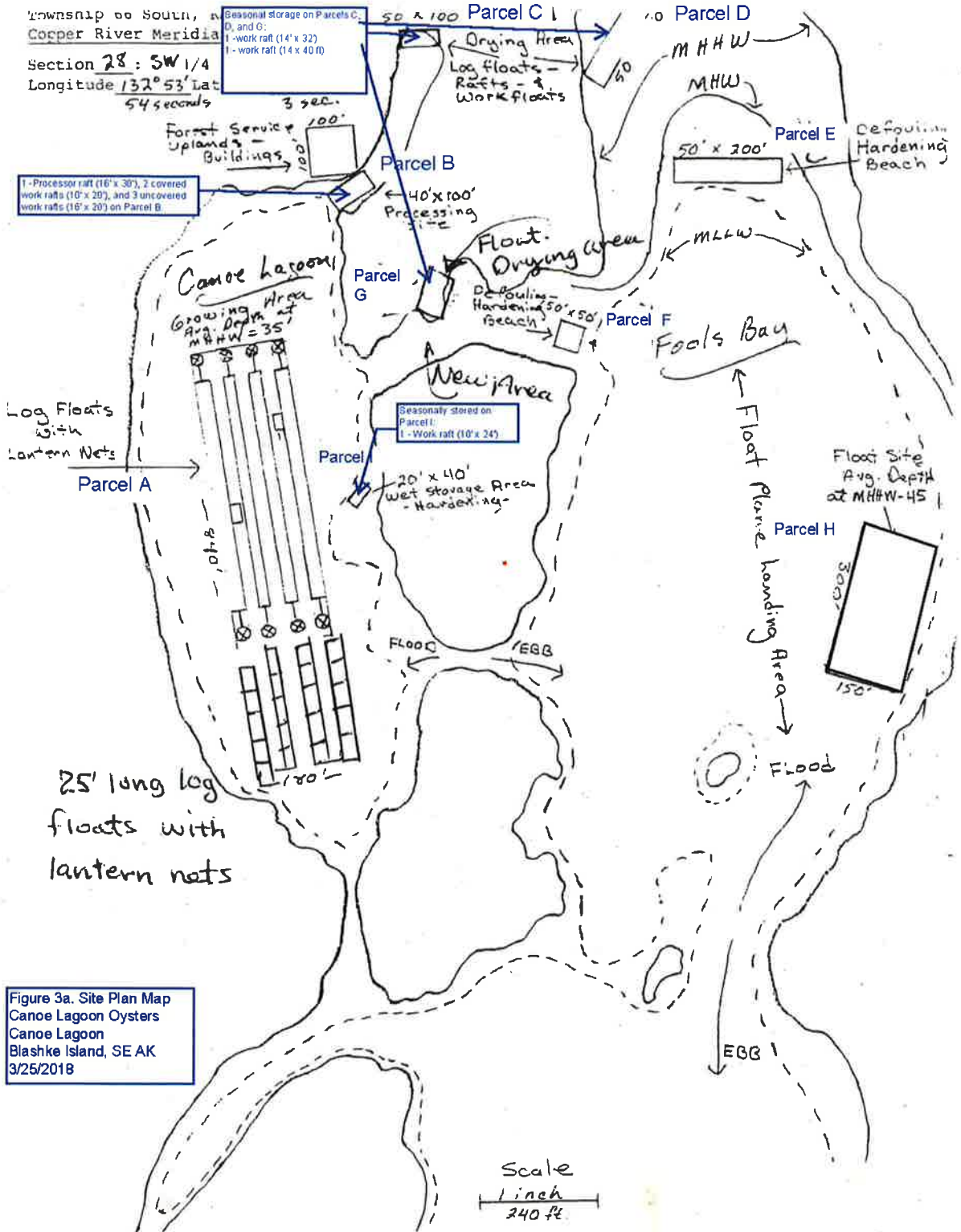


Figure 3a. Site Plan Map
Canoe Lagoon Oysters
Canoe Lagoon
Blashe Island, SEAK
3/25/2018

Attachment A Development Plan

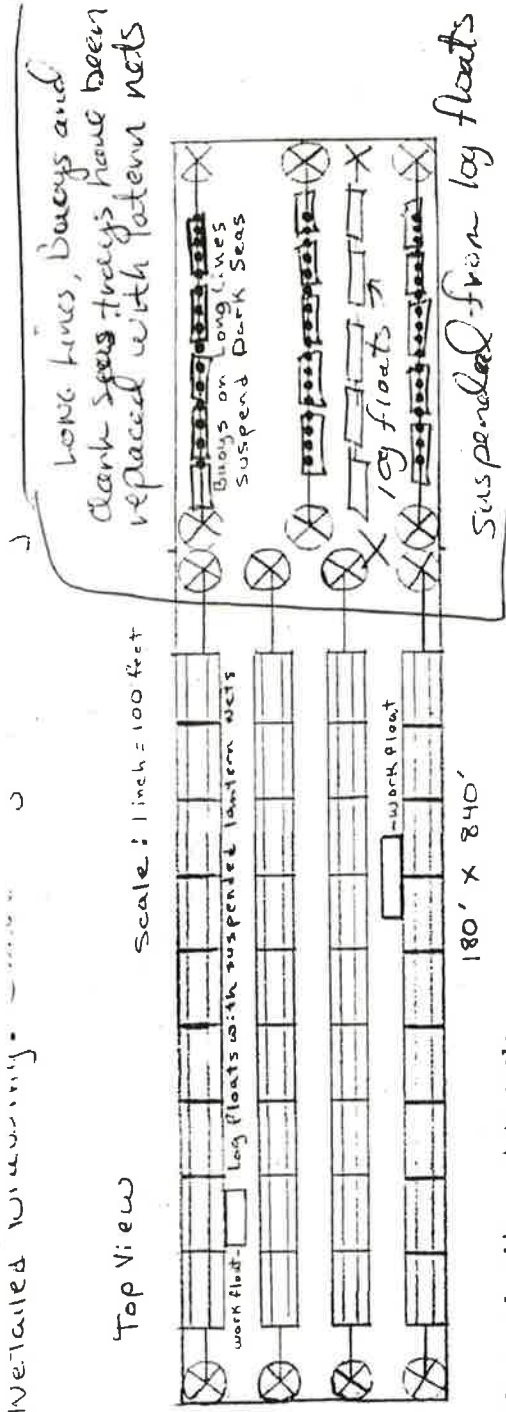
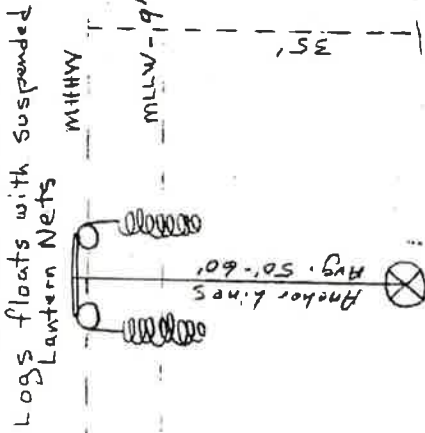


Figure 3b. Site Plan Map - Parcel A
Canoe Lagoon Oysters
Canoe Lagoon
Blashke Island, SE AK
3/25/2018

Floats & longlines not to scale
Log floats are constructed of 2x3 - 25 foot logs, connected every 5 feet with 5' long wooden planks. Each float suspends approx. 25 - 10 or 5 tier lantern nets. Four rows of log floats with an average of 18 floats per row = total maximum of 72 log floats with 1600 lantern nets. Anchors are constructed of rock encased in heavy duty netting. Anchor lines are 50' to 60' long. Mobile work floats (see diagram), Float#1-10' X 20', Float#2-14' X 32'. Black polyethylene buoys suspend 1000 Dark Seas (rigid, stackable polyethylene screen-trays) in stacks of 10/stack on three eighty foot longlines. Each stack holds 800-1000 oysters depending on the size of oyster.

Cross - Section - End view



Canoe Lagoon has a limited tidal range since MLLW is approx. 9 feet.

Figure 4. Cross-sectional diagram - Longline and lantern nets - Parcel A
Canoe Lagoon Oysters
Canoe Lagoon
Blashke Island, SE AK
3/25/2018

Attachment A Development Plan

Processing Site Plan Map - Parcel B

Located within the Canoe Lagoon Crawling Area:

All floats are constructed of wood for decking and structural support with foam filled plastic pipe and Styrofoam blocks for flotation.

Anchorage is with shore ties and large rock bags

Floats are moored at this location and in this configuration permanently for year around use.

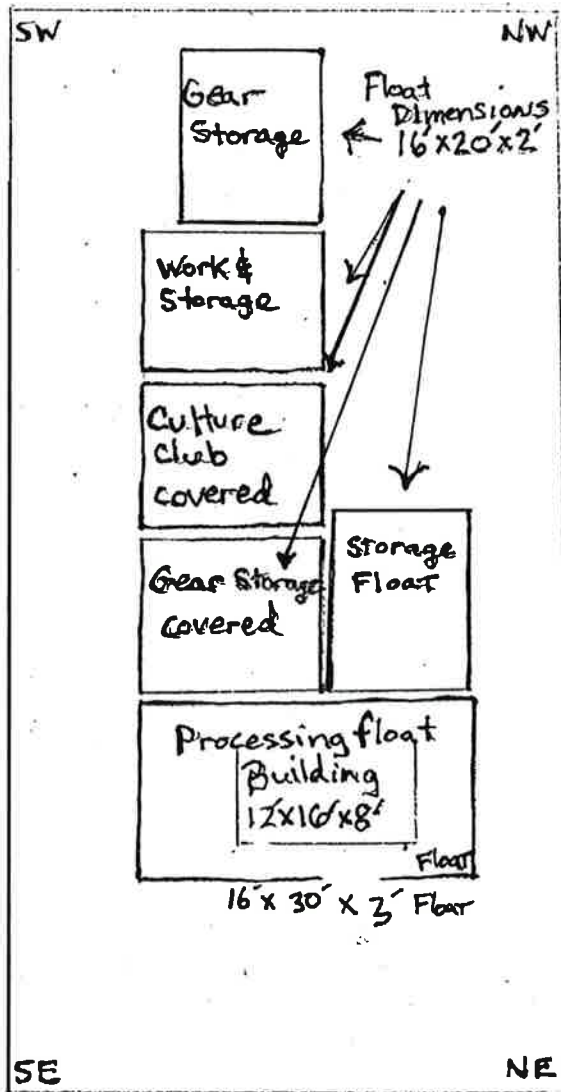
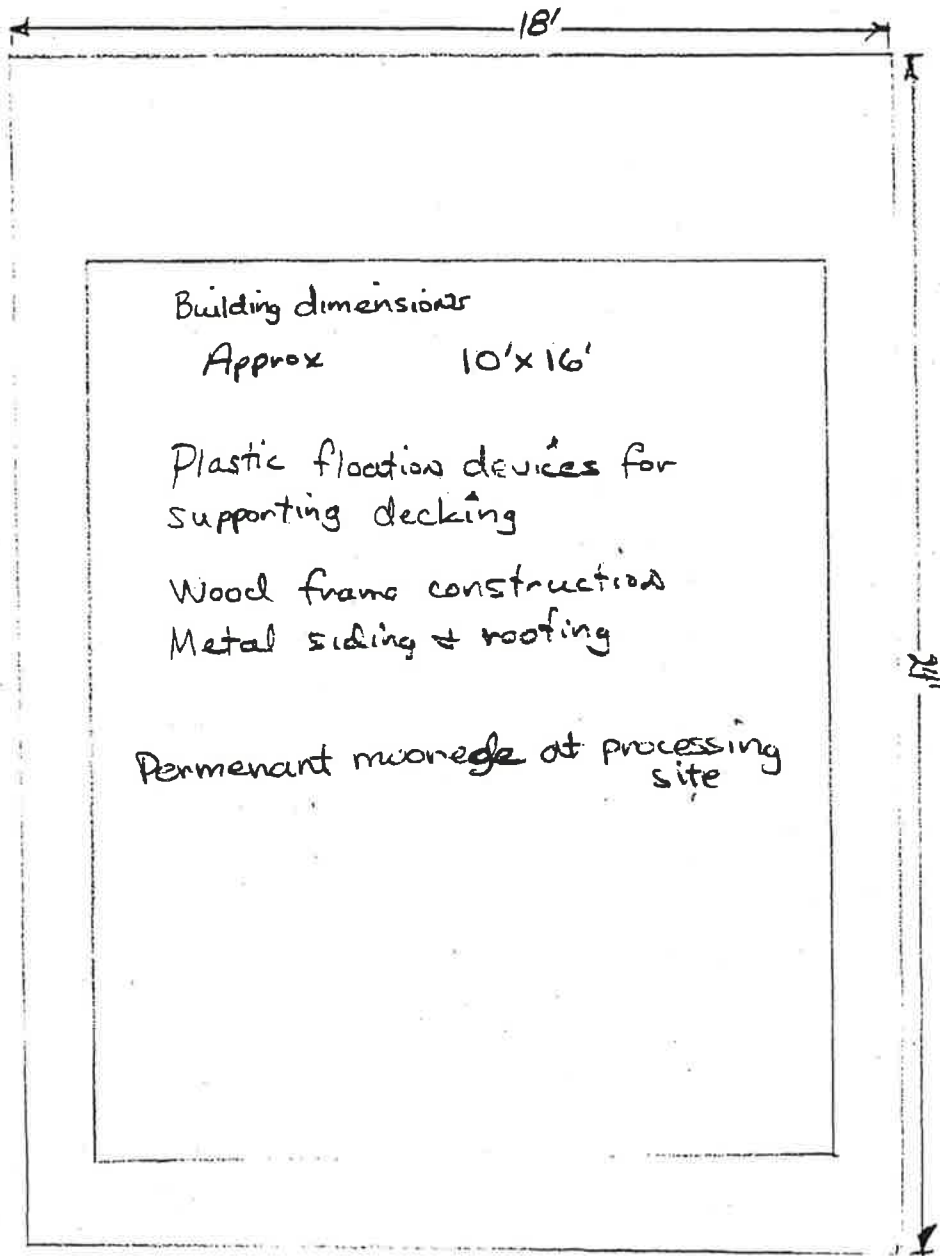


Figure 3c. Site Plan
Canoe Lagoon Oysters
Canoe Lagoon
Blashke Island, SE AK
3/25/2018

Attachment A
Development Plan

processing floor

Note Location within processing near site plan
On Parcel B



Scale 1" = 3'

Figure 5b. Drawings
Canoe Lagoon Oysters
Canoe Lagoon
Blashke Island, SE AK
3/25/2018

Attachment A
Development Plan

Parcel B

Details for Work Rafts (6 total) with Processor Facility on Parcel B

Float list

- 3x - 16' x 20' x 2' - cedar decking w/ polyethylene pipe flotation
- 2x - 16 x 20' x 2' - Roofed work barges, used for cleaning/sorting/processing
- 1 - 16 x 30' x 3' Floating DEC. packinghouse

6 total floats at parcel "B"
Permanently Moored.

All constructed with foam-filled HDPE
Pipe for flotation w/ cedar decking

Float Construction Details

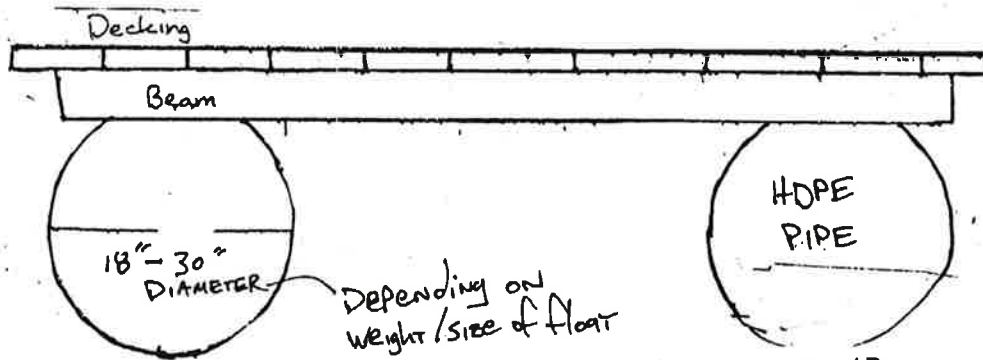


Figure 5c. Cross-sectional Diagram - Work Rafts with processor located on Parcel B
Canoe Lagoon Oysters
Canoe Lagoon
Blashke Island, SE AK
3/25/2018

Parcel B
FIGURE #11 details
Canoe Lagoon Oysters
Canoe Lagoon
Blashke Island, SE AK
03/25/18

Attachment A Development Plan

Mobile Floating Work Rafts (3 total) Used for the Operations

Cross-sectional diagram existing

Utilized for hoisting heavy culturing gear from water unto float decks for removal of oysters for sorting, thinning or harvesting. Vessel is pushed or towed to various locations at culture sites for gear handling.

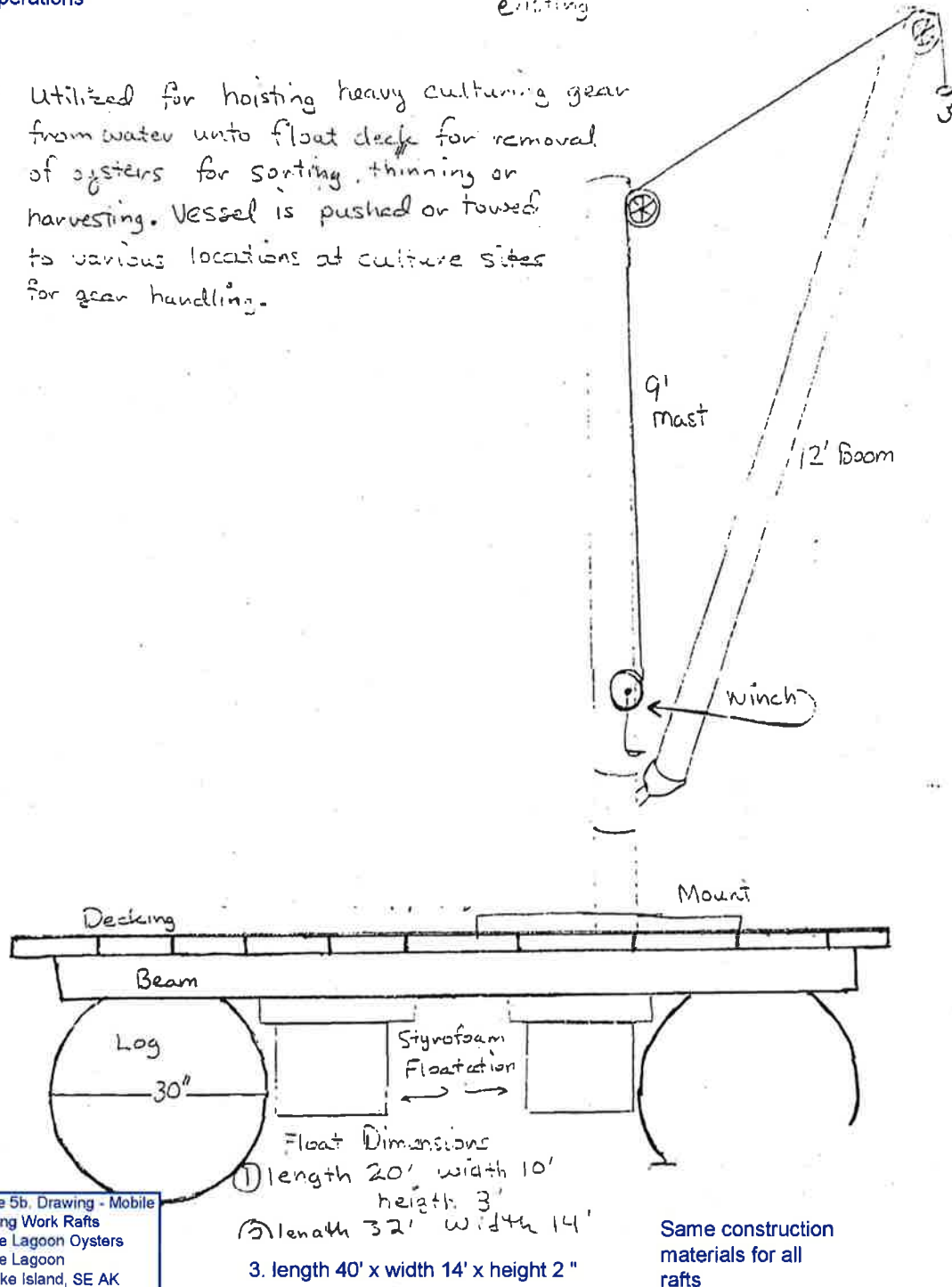


Figure 5b. Drawing - Mobile Floating Work Rafts Canoe Lagoon Oysters Canoe Lagoon Blashke Island, SE AK 3/25/2018

Attachment A Development Plan

MOBILE WORK Raft

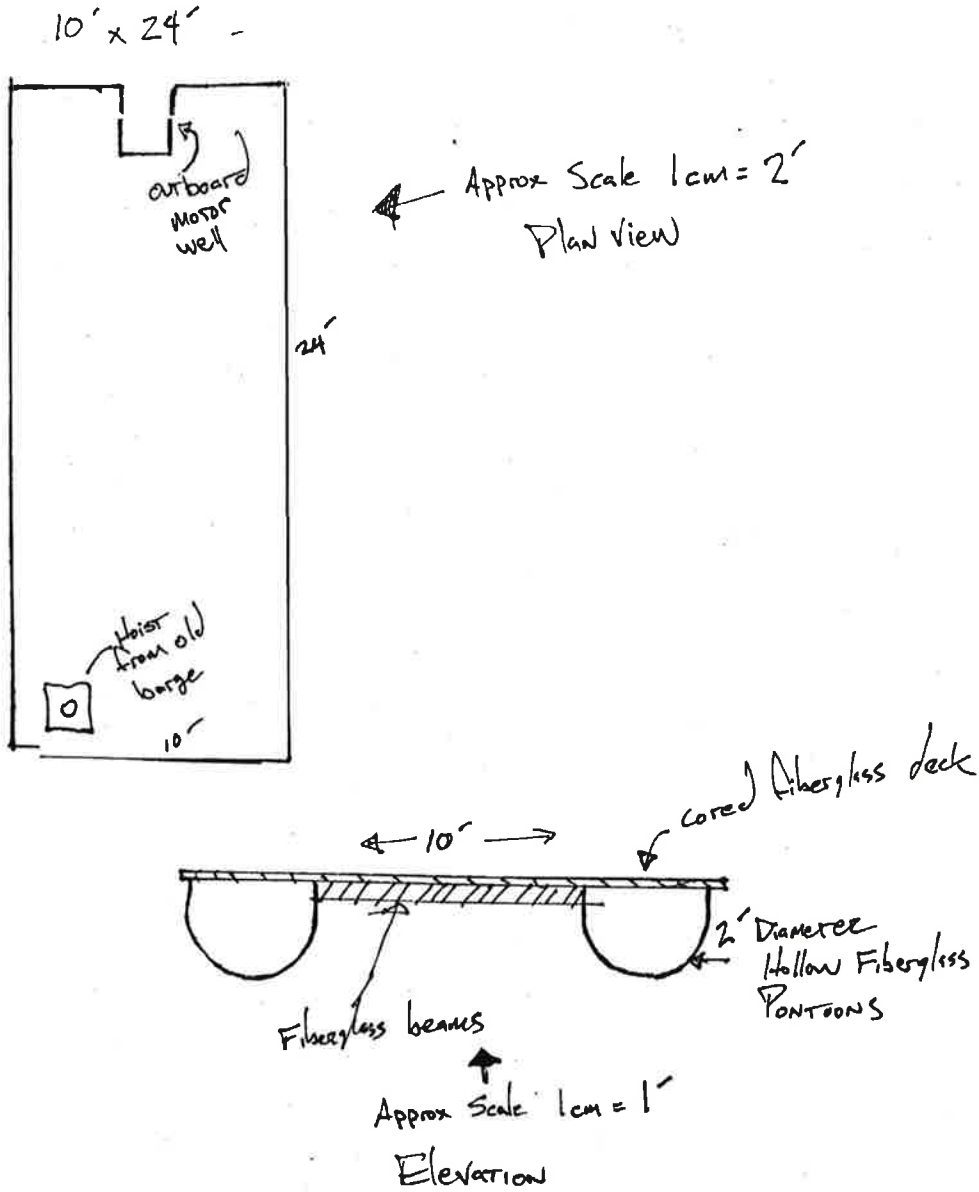


Figure 5c. Cross-sectional Diagram and Drawing - Work Barge (10 ft x 24 ft) Canoe Lagoon Oysters Canoe Lagoon Blashke Island, SE AK 3/25/2018

Attachment A Development Plan

Lantern Nets for Intermediate Cultivation:



Lantern Nets Model Code:		R-21	R-30	R-42	R-55	R-72	R-90
Net	Mesh (mmsq)	2.1	3	4.2	5.5	7.2	9
	Deniers	210	280	300	450	600	600
	Type	Raschel (Knotless net)					
Dimensions	Nr. of Storeys	From 5 to 20					
	Diameters	50 cm / 45 cm / 38 cm					
Storeys Height	Rope	20 cm / 15 cm					
	Net	22 cm / 17 cm					
Top & Bottom Frames	Ring	6.4 mm					
	Cross Bar	5.4 mm					
Center Frames	Ring	4.6 mm					
	Cross Bar	4.6 mm					
Joint	Kind	Normal Hook					
	Terminal	Plastic Cap					
Rope	Kind	5.5 mm PE twisted, Black					
	Hanging End	70 cm before tying knot					
	Bottom End	100 cm before tying knot					
Opening	Type	Velcro / Drawstring PE Line 8,000D					

Lantern Nets for Adult Cultivation:



Lantern Nets Model Code:		K-90	K-120	K-150	K-210	K-310
Net	Mesh (mmsq)	9	12	15	21	31
	Deniers	1,700	2,500	3,500	4,300	6,000
	Type	Knotted				
Dimensions	Nr. of Storeys	From 5 to 20				
	Diameters	50 cm / 45 cm / 38 cm				
Storeys Height	Rope	20 cm / 15 cm				
	Net	22 cm / 17 cm				
Top & Bottom Frames	Ring	6.4 mm				
	Cross Bar	5.4 mm				
Center Frames	Ring	4.6 mm				
	Cross Bar	4.6 mm				
Joint	Kind	Normal Hook				
	Terminal	Plastic Cap				
Rope	Kind	5.5 mm PE twisted, Black				
	Hanging End	70 cm before tying knot				
	Bottom End	100 cm before tying knot				
Opening	Type	Drawstring PE Line 8,000D				

Figure 5d. Drawing -
Lantern Nets
Canoe Lagoon Oysters
Canoe Lagoon Blashke
Island, SE AK 4/19/2018