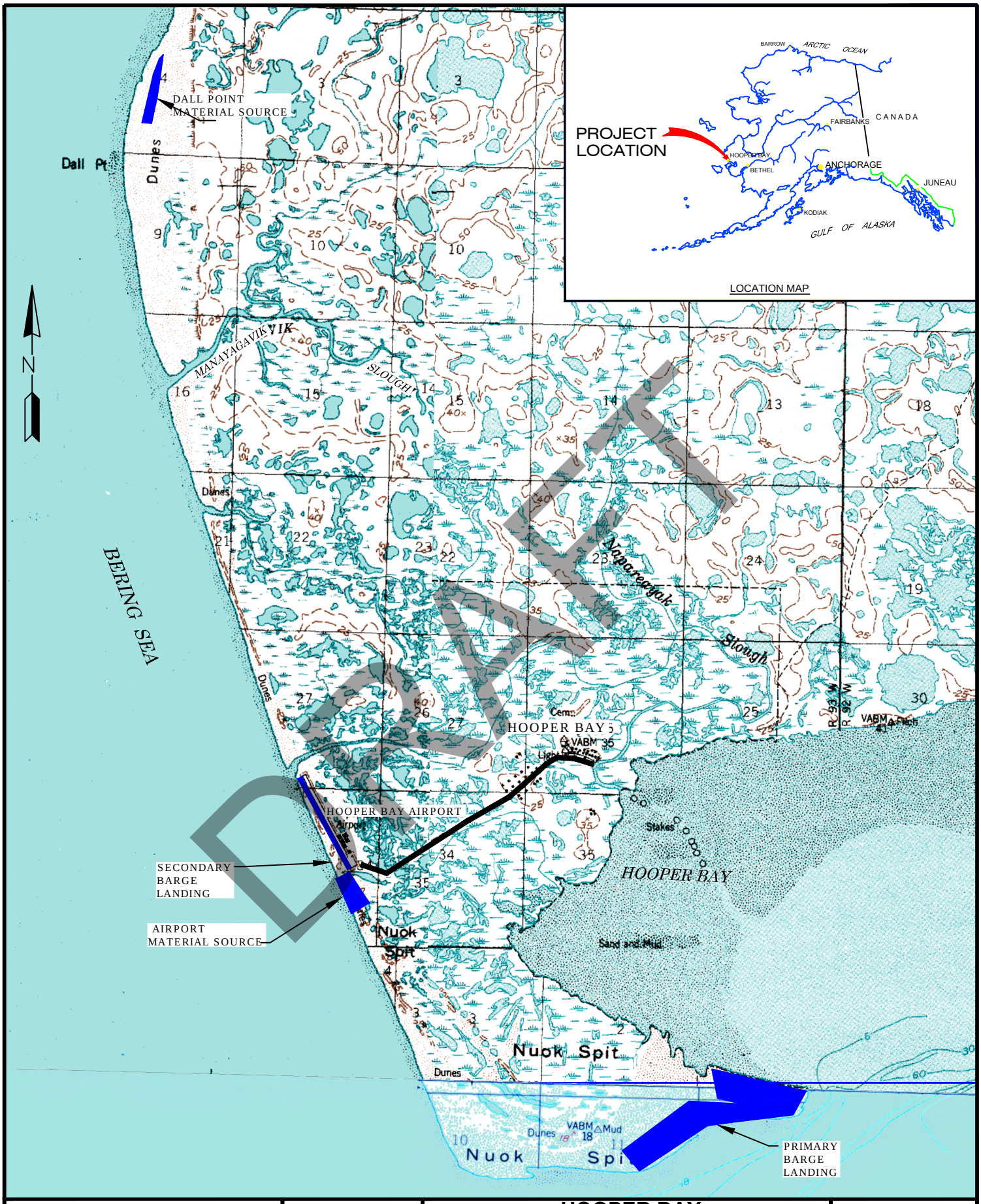

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES PRELIMINARY DESIGN AND ENVIRONMENTAL GROUP	SCALE: NTS DATE: 6/19/2013 BY T. STONE	**HOOPER BAY AIRPORT IMPROVEMENTS** PROJECT NO. 57419 LOCATION & VICINITY MAP HOOPER BAY, ALASKA	FIGURE 1 **E-18**

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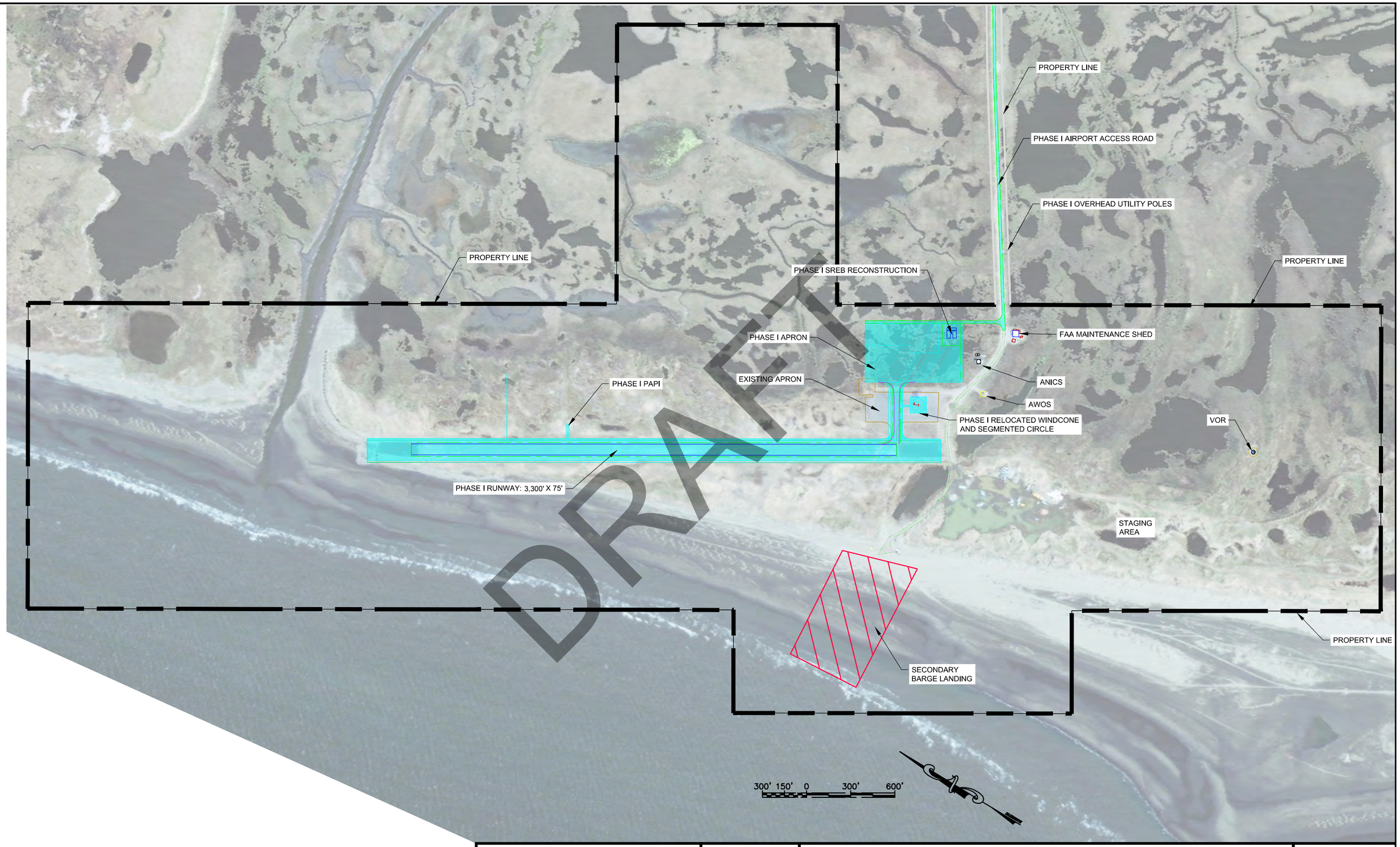

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES PRELIMINARY DESIGN AND ENVIRONMENTAL GROUP	Scale: SEE GRAPHIC Date: 3/18/14 By:: T.STONE	HOOPER BAY AIRPORT IMPROVEMENTS PROJECT NO. 57419 PHASE I PROJECT DETAILS HOOPER BAY, ALASKA	FIGURE 2 **E-19**

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
CENTRAL REGION
PRELIMINARY DESIGN & ENVIRONMENTAL

TRIP REPORT

PROJECT NAME:	**Hooper Bay Airport Improvements**
PROJECT NO.:	**57419**
DATE:	**September 24 and September 25, 2008**
TIME:	**10:30am-7:30 pm, 9:00 am to 5:00 pm**
PRESENT:	**Craig Boeckman, Materials & Chris Prince, Aviation Design, Megan Costello, PD&E**
NOTED BY:	**Megan Costello, PD&E** mc

9/24/08:

After landing in Hooper Bay at approximately 10:30 am, we received a ride from the local school district to Hooper Bay School, our lodging location for the night. Our objective was to try to get out to the proposed airport and material sites, while setting fish traps to identify any fish habitat along the way. In addition, Craig planned on conducting soil probes along the proposed route and I wanted to verify that it was all wetland habitat as shown on the national wetland inventory maps.

The proposed airport access road will start at the end of the existing road. The existing road passes by the landfill and the newly-installed wind farm, prior to turning into a trail with recently-installed plastic matting. We drove on the reinforced plastic until that ended, and then followed established ATV trails as best we could.

Image 1: Start of proposed access road. Note plastic reinforced trail.

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At the start of the proposed airport access road, there is a slough crossing. This slough is a tributary of Akuliqataq Slough, which is labeled as a fishing area on Alaska Department of Commerce,Community, and Economic Development (DCCED) maps. The slough crossing was approximately 2 feet wide, and the water level was around 6 inches deep. I set a minnow trap at this location at approximately 1:00 pm and picked up the trap at approximately 7:30 pm. No fish were caught in this trap, although groups of very small minnows were seen swimming in the slough. These fish were too small to catch in the trap mesh size.

Image 2: Trapping location #1. The proposed access road will cross this slough Trap was set behind person in background. In the foreground, Craig is taking a soil sample.

Image 3: Existing slough crossing near the start of the proposed access road.

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I set a second trap father up the trail where a tributary of the same slough flows under the proposed access road. The tributary was too shallow to trap, so I placed my trap in the main slough. (See photos.) The tributary slough was approximately 1 foot wide, where I set the traps was 3-4 feet wide. I set this trap at 1:15 pm, and checked it at 7:15 pm. Three different fish species were caught in this trap. In addition, the carcasses of many small silver fish were on the bottom of the slough. I caught two small fish that appeared to be a juvenile flatfish, approximately 1.5-2 inches in length. Upon later discussion with ADF&G, they believe the fish may be one of five possible species: Bering flounder (*Hippoglossoides robustus*), flathead sole (*Hippoglossoides elassodon*), Alaska plaice (*Pleuronectes quadrituberculatus*), Arctic flounder (*Pleuronectes glacialis*), northern rock sole (*Lepidopsetta polyxystra*). These are all members of the Right-eye Flounder family: *Pleuronectidae sp*. I also caught one 3 inch sculpin, *Cottidae sp*., most likely Coast Range Sculpin, however could be another as there are 100 species of sculpin in Alaska. The small silver fish were identified as either nine spine or three spine stickleback, *Gasterosteidae sp*.

Image 4: Slough #2. Location of fish trap #2 is shown in upper right corner.

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Image 5: Close up of trap #2.

Image 6: Close-up of dead sticklebacks at bottom of slough.

Image 7: *Pleuronectidae sp.*

Image 8: Sculpin, *Cottidae sp.*

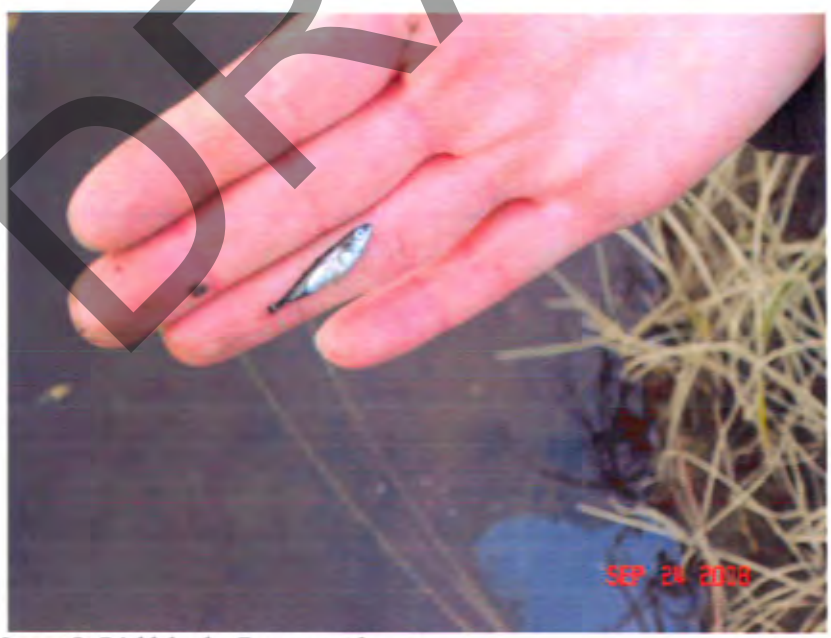

Image 9: Stickleback, *Gasterosteidae sp.*

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Following the second trap, we followed the proposed access route as best we could. The habitat is all wetlands, ranging from emergent grasses to hummocky permafrost wetlands with bog plants such as Crowberry, bog rosemary, bog cranberry, cloudberry, etc. This corresponds with the NWI maps, which shows the area as a mix of freshwater emergent wetland, freshwater ponds and lakes, and estuarine marine sloughs. (See attached maps.) We ran into Myron Naneng along the way, president of Sea Lion Corp, who said that shorebirds and Eiders use the entire area as nesting habitat between mid-May and late-June.

Image 10: View from first high point showing the difference in wetland habitat.

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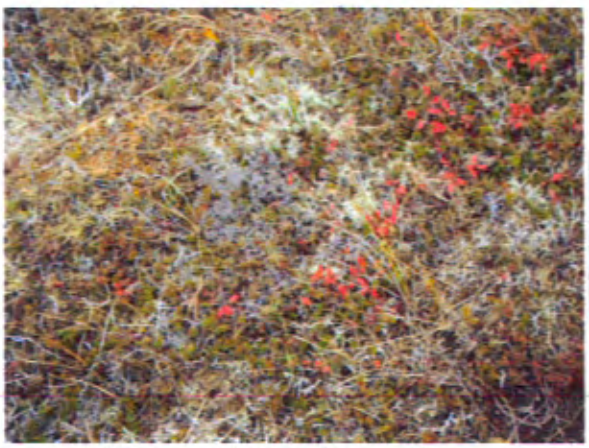

Image 11: Close up of hummock vegetation.

Image 12: Typical emergent habitat near start of access road.

Image 13: View from first high point back towards town. Second trapping slough seen to the right of the person in photograph.

The third fish trap was set in the southern edge of the one of two lakes that would be split by runway alignment #2. These lakes are connected by emergent habitat, although there did not appear to be much water flow between the two lakes. I set the trap at 2:30 pm in about 10 inches of water, and checked it at 6:45 pm. No fish were identified.

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Image 14: Lakes that second alignment will cut across. Fish trap was set at southern shore of first lake.

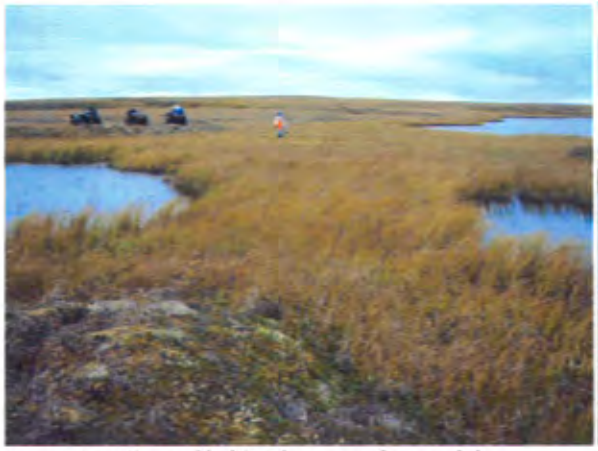

Image 15: View of habitat between the two lakes.

Image 16: Trap 3 location.

Trap # 4 was set in the slough at the end of runway alignment #1. This slough had been previously identified by residents at the May 2008 public meeting as an area where they trapped Blackfish. This slough actually is a large wetland area, with an open flowing water area in the middle. Floating vegetation mat is present between the higher ground and the open water. Birds were seen flying overhead at this location, and it appeared to be very valuable habitat. In addition, the emergent wetland located upstream of this slough was identified at the May 2008 public meeting as a place where Eider's congregated prior to migration. I placed the trap at the edge of the vegetative mat in the open water location. The trap was set at 3:30 pm, and checked at 6:15 pm. Two Blackfish, 3-4 inches in length, were trapped in this short time.

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Image 17: Slough habitat near fish trap #4. This habitat is proposed to be filled in with runway alignment #1.

Image 18: Looking downstream of the slough. Note wide emergent wetland habitat.

Image 19: Trap location looking upstream

Image 20: Blackfish caught in Trap #4.

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After setting the final fish trap, we continued on in hopes of driving the proposed haul route to the "Dall Point" northern material site. We were unable to cross the large tidal-slough to access this material site. The tidal-slough had many bird tracks and wildlife droppings, and we saw a rodent run by while we were looking at the water. This area is obviously heavily used by wildlife, and more than likely contains fish. I did not set traps in this location, because we did not plan to come back to this site on the following day, and we would not have been able to pick the traps back up. However, this water is tidally influenced, and flows into valuable emergent wetland habit upstream. There is no reason to suggest that fish do not utilize this area as it is

similar in habitat to the Akuliqataq slough, which contains fish. Any crossing of this slough would need to accommodate for fish habitat as well as tidal surges.

Image 21: Tidally influenced slough we were unable to cross to proposed material site

Image 22 and 23: Bird tracks and animal droppings at tidal slough area.

Since we were unable to cross the slough, we decided to backtrack to see if we could cross at a more inland location. We attempted to cross the slough in two additional locations, and an ATV got stuck in both locations. We determined we could not cross the slough, and would need to access this route by driving along the beach the following day. We then headed back towards the way we came, while diverting slightly to drive the proposed runway location and picking up the fish traps. We returned back to Hooper Bay at approximately 7:30 pm.

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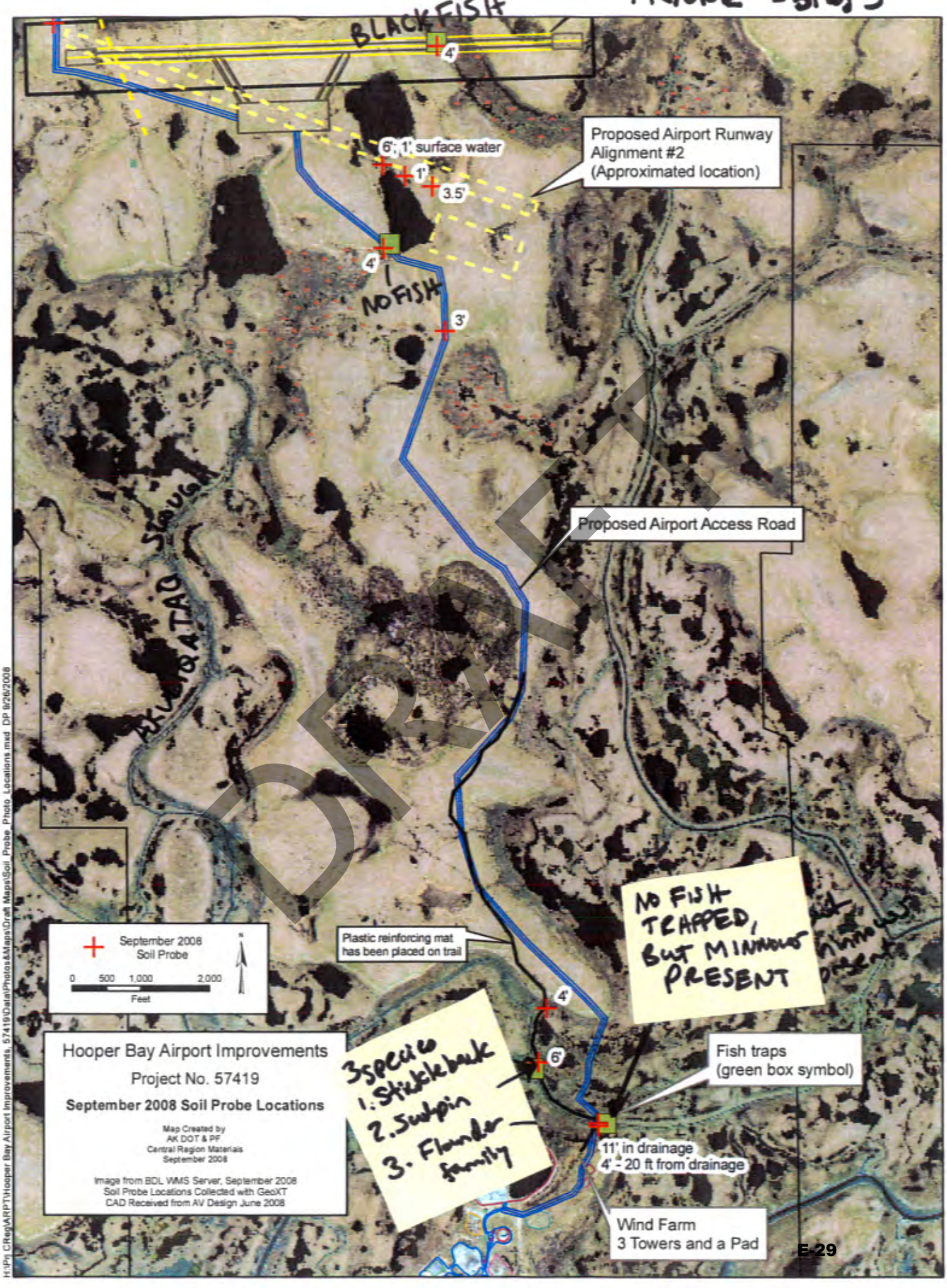
BLACKFISH
4'
6'; 1' surface water
1'
3.5'
Proposed Airport Runway Alignment #2 (Approximated location)
4'
NO FISH
3'
SLOUGH
AKUTAQ
Proposed Airport Access Road
DRAFT
NO FISH TRAPPED, BUT MINNOWS PRESENT
Plastic reinforcing mat has been placed on trail
September 2008 Soil Probe
0 500 1,000 2,000
Feet
4'
6'
3 species
1. Stickleback
2. Sculpin
3. Flounder family
Fish traps (green box symbol)
11' in drainage
4' - 20 ft from drainage
Wind Farm
3 Towers and a Pad
Hooper Bay Airport Improvements
Project No. 57419
September 2008 Soil Probe Locations
Map Created by
AK DOT & PF
Central Region Materials
September 2008
Image from BDL WMS Server, September 2008
Soil Probe Locations Collected with GeoXT
CAD Received from AV Design June 2008
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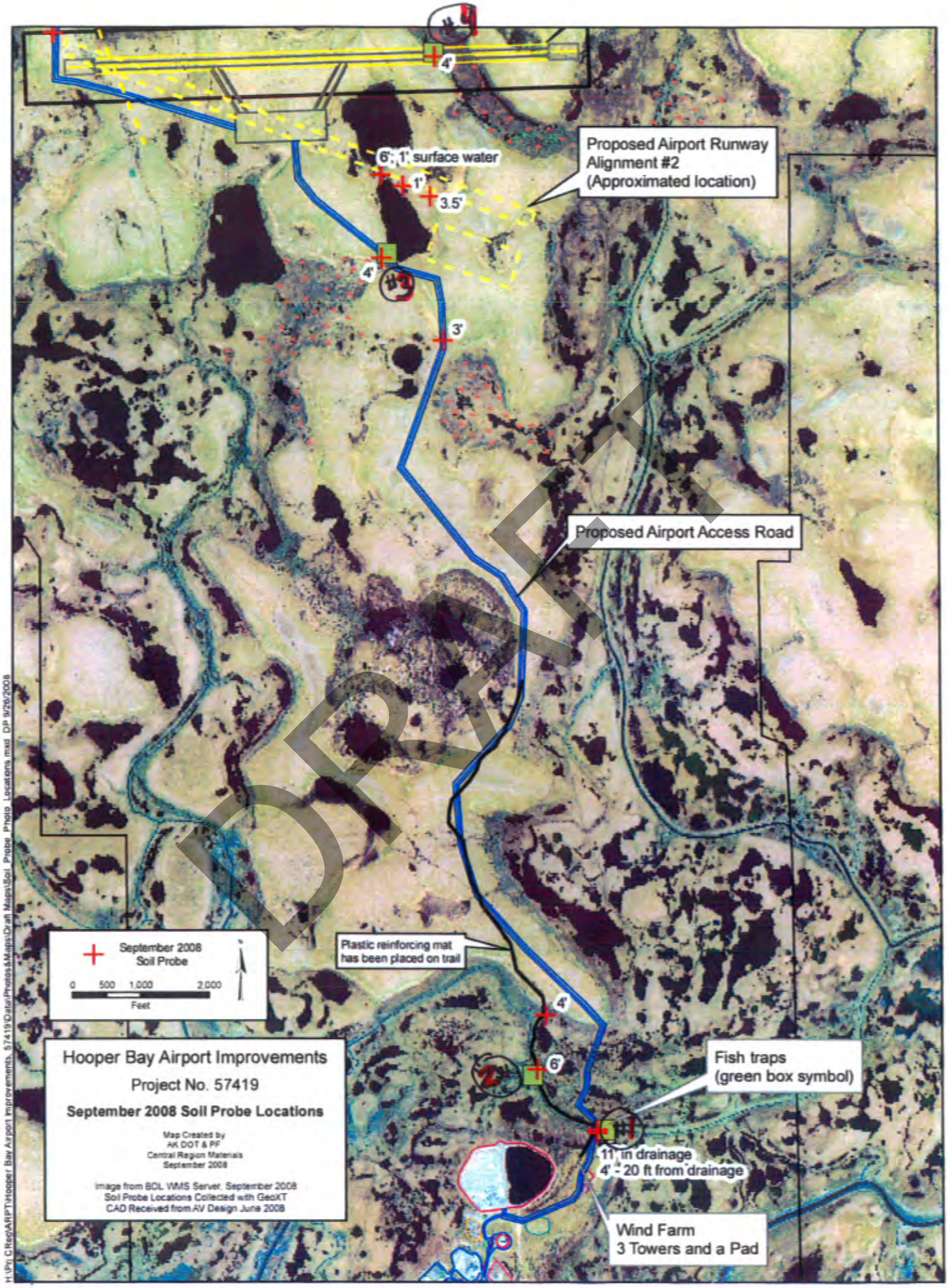
Proposed Airport Runway Alignment #2 (Approximated location)
6', 1' surface water
1'
3.5'
4'
3'
Proposed Airport Access Road
Plastic reinforcing mat has been placed on trail
4'
6'
Fish traps (green box symbol)
11' in drainage
4' - 20 ft from drainage
Wind Farm
3 Towers and a Pad
September 2008 Soil Probe
0 500 1,000 2,000
Feet
Hooper Bay Airport Improvements
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September 2008 Soil Probe Locations
Map Created by
AK DOT & PF
Central Region Materials
September 2008
Image from BOL WMS Server, September 2008
Soil Probe Locations Collected with GeoXT
CAD Received from AV Design June 2008
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STATE OF ALASKA DEPARTMENT OF NATURAL RESOURCES
DIVISION OF MINING, LAND AND WATER

☐ **Northern Region**
3700 Airport Way
Fairbanks, AK 99709
(907) 451-2740

☒ **Southcentral Region**
550 W 7th Ave., Suite 900C
Anchorage, AK 99501-3577
(907) 269-8552

☐ **Southeast Region**
400 Willoughby, #400
P.O. Box 111020
Juneau, AK 99801
(907) 465-3400

MATERIAL SITE RECLAMATION PLAN OR
LETTER OF INTENT/ANNUAL RECLAMATION STATEMENT
AS 27.19.030 – 27.19.050

Non-refundable filing fee for reclamation plan: $100

In accordance with Alaska Statute 27.19, reclamation is required of all mining operations, including sand and gravel extraction. Completion of this form will meet the law's requirements for a **reclamation plan** (see below for filing requirements; due date: at least 45 days before mining is proposed to begin; requires approval by the Division of Mining, Land and Water). Completion of this form will also serve as a **letter of intent** for operations exempt from the plan requirement (due date: before mining begins). No approval is required for a letter of intent, but a miner who files a letter of intent must, before December 31, file an **annual reclamation statement** (Section 8 of this form).

Check applicable box:

☐ A.. RECLAMATION PLAN (REQUIRED if the operation will disturb five or more acres this year, OR 50,000 cubic yards, OR if the operation has a cumulative disturbed area of five or more acres)

☐ B. RECLAMATION PLAN—VOLUNTARY (for an operation below limits shown in Box A but wanting to qualify for the statewide bonding pool)

☐ C. LETTER OF INTENT (less than five acres to be disturbed AND less than 50,000 cubic yards AND less than five acres unreclaimed area) NOTE: A miner who files a letter of intent is also required to file an annual reclamation statement at the end of the year.

THIS RECLAMATION PLAN/LETTER OF INTENT IS FOR CALENDAR YEAR _____.
(IF YOU CHECKED EITHER BOX A OR B ABOVE AND PROPOSE A MULTI-YEAR PLAN, STATE ALL YEARS COVERED.)

1. **MINER INFORMATION** (IF THERE IS MORE THAN ONE MINER, ATTACH A LIST OF THE NAMES, ADDRESSES, AND TELEPHONE NUMBERS OF ALL OTHER OWNERS, OPERATORS, OR LEASEHOLDERS OF THE MINING OPERATION)

Alaska Department of Transportation and Public Facilities (DOT&PF)
NAME OF MINER WHO WILL SERVE AS AGENT FOR NOTICE PURPOSES

PO Box 1969000
ADDRESS (NOTIFY THE DEPARTMENT OF ANY LATER CHANGE OF ADDRESS)

Anchorage	AK	99519	(907) 269-0534
CITY	STATE	ZIP CODE	TELEPHONE

Sea Lion Corportation (surface and subsurface)
NAME OF LANDOWNER (IF OTHER THAN MINER) OR PUBLIC LAND MANAGEMENT AGENCY

N/A
FEDERAL OR STATE CASEFILE NUMBER (IF ANY) ASSIGNED TO THE SITE

102-4018 (Rev. 04/06)

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2. **LEGAL DESCRIPTION OF PROPOSED MINING SITE**

Dall Point	Section 8	T 17N	R 93W	Seward
LEGAL SUBDIVISION/ SECTION/ QUARTER-SECTION		TOWNSHIP	RANGE	MERIDIAN

3. **DESCRIPTION OF THE MINING OPERATION** (IF YOU CHECKED BOX A OR B ON P. 1 OF THIS FORM AND ARE PROPOSING A MULTI-YEAR RECLAMATION PLAN, ATTACH SEPARATE SHEETS AS NEEDED SHOWING ACREAGE TO BE MINED, VOLUME TO BE MINED, AND EXISTING ACREAGE OF MINED AREA FOR EACH YEAR COVERED BY THE PLAN)

a. 20 acres — Total acreage to be mined or disturbed during the year.

b. 350,000 cu. yds. — Estimated total volume to be mined or disturbed, including overburden.

c. sandy gravel — Type of material (sand, gravel, peat, etc.).

d. 0 acres — Existing acreage of mined area (disturbed area that has not yet been reclaimed, but counting only acreage disturbed after October 15, 1991)

4. **DESCRIPTION OF THE RECLAMATION OPERATION**

a. The total acreage that will be reclaimed during the year (or each year, if for a multi-year reclamation plan) is: _____.

b. Provide a list of equipment (type and quantity) to be used during the reclamation operation.

c. A time schedule of reclamation measures shall be included as part of the plan.

The following measures must be considered in preparing and implementing the reclamation plan. Please mark those measures appropriate to your reclamation activity:

☒ Topsoil that is not promptly redistributed to an area being reclaimed will be separated and stockpiled for future use. This material will be protected from erosion and contamination by acidic or toxic materials and preserved in a condition suitable for later use.

☐ The area will be backfilled, graded and recontoured using strippings, overburden, and topsoil to a condition that allows for the reestablishment of renewable resources on the site within a reasonable period of time. It will be stabilized to a condition that will allow sufficient moisture to be retained for natural revegetation.

☒ Stockpiled topsoil will be spread over the reclaimed area to promote natural plant growth that can reasonably be expected to revegetate the area within five years.

☐ Stream channel diversions will be relocated to a stable location in the flood plain.

☒ Exploration trenches or pits will be backfilled. Brush piles, vegetation, topsoil, and other organics will be spread on the backfilled surface to inhibit erosion and promote natural revegetation.

☐ All buildings and structures constructed, used, or improved on land owned by the State of Alaska will be removed, dismantled, or otherwise properly disposed of at the completion of the mining operation.

☒ Any roads, airstrips or other facilities constructed to provide access to the mining operation shall be reclaimed (unless otherwise authorized) and included in the reclamation plan.

☐ Peat and topsoil mine operations shall ensure a minimum of two inches of suitable growing medium is left or replaced on the site upon completion of the reclamation activity.

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☒ If extraction occurs within a flood plain, the reclamation activity shall reestablish a stable bed and bank profile such that river currents will not be altered and erosion and deposition patterns will not change.

NOTE: If you propose to use reclamation measures other than those shown above, or if the private landowner or public land manager of the site requires you to use stricter reclamation measures than those shown above, attach a list of those measures to this plan.

5. **ALTERNATE POST-MINING LAND USE**

☐ The mining site is public land. The land management agency's land use plan (if any) for post-mining land use is: _____.

☐ The mining site is public land. As allowed by AS 27.19.030(b), I propose to reclaim it to the following post-mining land use: _____ _____.

☒ The mining site is private property. The private landowner plans to use it for the following post-mining land use: ____ The property owner has no post-mining land use plans._____.

6. **ATTACHMENTS**

☐ If the mining operation has additional owners, operators, or leaseholders not shown on p. 1 of this form, attach a list of their names, addresses, and telephone numbers.

☐ Attach a USGS map at a scale no smaller than 1:63,360 (inch to the mile) showing the general vicinity of the mining operation and the specific property to be mined. Option: If you checked Box C on the first page of this form and the mining site is adjacent to an airport or public highway, state the name of the airport or the name and milepost of the public highway.

☒ Attach a diagram of the mined area (this term includes the extraction site, stockpile sites, overburden disposal sites, stream diversions, settling ponds, etc.) and the mining operation as a whole (this term includes the roads you plan to build, your power lines, support facilities, etc.). Show and state the number of acres to be mined during the year. (If you checked Box A or B on the first page of this form and your plan covers more than one year, show each year's work.) Show the location corners or property boundaries of the site in relation to the reclamation work and any other areas affected by the operation.

☒ Attach a list of the equipment (type and quantity) to be used during the reclamation activity.

☐ A time schedule of events must be attached that includes dates and activities related to this reclamation plan.

☐ If the site is private land not owned by the miner, attach a signed, notarized statement from the landowner indicating the landowner's consent to the operation. The landowner may also use the consent statement to notify the department that the landowner plans a post-mining land use incompatible with natural revegetation and therefore believes that reclamation to the standard of AS 27.19.020 is not feasible.

☐ For those miners that are required to file an annual reclamation statement, attach photographs and/or videotapes dated and described as to location of the reclamation activity that was completed.

☐ If you propose to use reclamation measures other than those listed on this form, or if the private landowner or public land manager of the site requires you to use stricter reclamation measures, attach a list of those measures.

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7. **RECLAMATION BONDING** (REQUIRED **ONLY** IF YOU CHECKED BOX A or B ON THE FIRST PAGE OF THIS FORM)

The total acreage of my mining operation that is subject to the bonding requirement for the current year is _____ acres (add acreages stated in Section 3(a) and 3(d) of this form).

The per-acre bond amount is $750/acre or a total bond amount of $_____.

Please check the appropriate bonding method that you will apply toward this reclamation plan:

☐ Participation in the statewide bonding pool.

☐ Posting a corporate surety bond.

☐ Posting a personal bond accompanied by a letter of credit, certificate of deposit, or a deposit of cash or gold.

☐ Posting a bond or financial guarantee with another government agency that has jurisdiction over the mining operation, as allowed by a cooperative management agreement between that agency and the Division of Mining, Land and Water.

☐ Posting a general performance bond with a state agency that meets the requirements of 11 AAC 97.400(4).

The above reclamation plan/letter of intent and all attachments are correct and complete to the best of my knowledge.

_____ _____

Signature of Miner Date

DRAFT

AS 27.19.030 and AS 27.19.050 require a miner either to file a reclamation plan for approval or to file a letter of intent followed by an annual reclamation statement. **AS 38.05.035(a) authorizes the director to decide what information is needed to process an application for the sale or use of state land and resources. 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)(9) and confidentiality is requested). 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.**

8. **ANNUAL RECLAMATION STATEMENT—REQUIRED** IF YOU FILED A LETTER OF INTENT (CHECKED BOX C ON THE FIRST PAGE) FOR THIS OPERATION. DUE DATE: DECEMBER 31, _____. YOU MUST FILE EVEN IF THE MINING DESCRIBED IN YOUR LETTER OF INTENT DID NOT TAKE PLACE.

This _____ annual reclamation statement is for:
(year)

a. _____acres Total acreage mined.

b. _____cu. yds. Total volume mined or disturbed, including overburden.

c. _____acres Total acreage reclaimed.

d. _____acres Cumulative total of unreclaimed acreage.

e. Reclamation measures that were used (check appropriate measures from Section 4, DESCRIPTION OF THE RECLAMATION OPERATION, and attach list of additional or stricter measures if applicable).

The above annual reclamation statement and all attachments are correct and complete to the best of my knowledge.

_____ _____
Signature of Miner Date

AS 27.19.030 and AS 27.19.050 require a miner either to file a reclamation plan for approval or to file a letter of intent followed by an annual reclamation statement. 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)(9) and confidentiality is requested). 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.

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