RECEIVED

JAN 05 2018

Petersburg Borough, Alaska Application to Lease or Purchase Real Property (\$100.00 non-refundable filing fee required) Pa VISA 1-5-18

Form must be completed in its entirety to be considered

Date of Application:	Lease or Purchase Request? (circle appropriate choice)
Parcel ID # of Subject Property:	Proposed term of lease: 5 RENEWA (total years)
WRANGELL NARROWS SEC 4 TS 95R 79 E CRM LAT 56.7806 N LONG 132.9730 W Legal Description of Property ATS 258 SURVEY ATS LOT 1695	Current Zoning of Property
Applicant Name: TSLAND VEN TURES LLC	
Applicant Mailing Address: P.O. Box 966	
PETERSBURG, AL 992	833
1. If the complete parcel described above is not being required of the parcel to be acquired in square feet	
2. Attach a map showing the location of the land requeste with the land requested clearly marked with bolded borders or high	
Narrative on use of property: Explain proposed use of la and end. Include any planned new construction or renovation, in or renovation will be completed and type of materials to be used. proposed improvements. Explain the value of the proposal to the information you feel should be considered. (attached additional sheet PROPOSED USE IS FOR TEMPORARY BOHT	cluding time-frame when construction Provide the estimated dollar value of the economy of the city and any other if necessary)
ATTACHED FOR DETAKLS.	
	·
4. Name and address of all adjacent land owners or le applicable: (attach additional sheet if necessary)	essees, including upland owner(s) if
PETERSBURG BOROUGH FOR ALL.	

5.	Are th	iere any exis	ting permits	or leases cover	ring any part of	f the land app	olied for?	
		Yes			1	Lease	_Permit)	
				r lease, if applic			st known ac	ldress of the
6.				ral permits a バムルビモRム	re required	_	_	
7.	If app	licant is a co	rporation, p	rovide the follo	wing informati	on:		
	A.	Name, add	ress and pla	ce of incorpora	tion: <i>PET</i>	RS BURY,	AK	
	B.	Is the corpo	oration quali	ified to do busir	ness in Alaska?	: <u>×</u> Yes	No	
	C.	Name and a	address of re	esident agent: _	JOHN N PETERSBU	NURGAS,	19983	966,
NOTI	СЕ ТО	APPLICA	NT(s):					
estima adver	ated costising a	sts of: a title and other co	e report, su osts inciden	osit with the arvey, legal fee atal to the pro ae amount of c	es, postage, re cessing of thi	cording fees s applicatio	s, public n n. Applic	oticing and ant will be
16.12	and 16 ements	.16 (as they	may pert	ed and reviewe ain to my par am authoriz	ticular applic	ation) and	understan	d the Code
					$\overline{\mathrm{A_{I}}}$	oplicant/App	Muysa licant's Rej	presentative
Subsci	ribed an	d sworn to b	efore me thi	is 5 th	day of <u>_</u> _	anuary.	, 20 <u>18</u> :	^
						Stac	N	otary Public
				ate of Alaska.				
				STATE OF AI OFFICIAL S Stacy Lu NOTARY PU My Commission E	EAL hr			2/12

<u>DESCRIPTION</u> Island Ventures LLC proposes to install, at its expense, including USACE permit(s), a temporary boat ramp using personal property crushed rock, adjacent to and north of the present spit at the Scow Bay Turnaround, approximately 250 feet south of the present ramp. Applicant assumes there will be non monetary cooperation from property owner Petersburg Borough to obtain the USACE permit(s). Surface dimensions would be 24 feet width by 170 feet length. Overall width including shoulder would average 32 feet (34 feet at top, 30 feet at bottom). Construction native ground up would be geotech cloth, 2 to 8 feet pit run crushed rock, compacted 3 inch minus rock on surface, barrier rock on south shoulder as needed. The ramp would be "temporary" in the sense the area would be completely buried by the Petersburg Borough when and if the Borough moves forward with planned expansion of the Scow Bay Turnaround facility, or for any other public purpose. When and if the lease is terminated the personal property crushed rock would be removed by lessee Island Ventures LLC, unless mutually agreed otherwise by lessor Petersburg Borough and lessee Island Ventures LLC.

<u>PURPOSE</u> The purpose of the ramp is to improve the ability to launch and haul boats when there are prevailing southerly winds and waves. The existing jetty provides excellent protection from those conditions.

cost/Benefit, safety, Maintenance Although the temporary life span of the proposed ramp may be short (estimated at 2 to 10 years depending on grant funds for the total Scow Bay project), cost/benefit is still worthwhile. Increased safety offered by the proposed ramp would reduce liability for the Petersburg Borough. The ramp would be maintained by Island Ventures LLC.

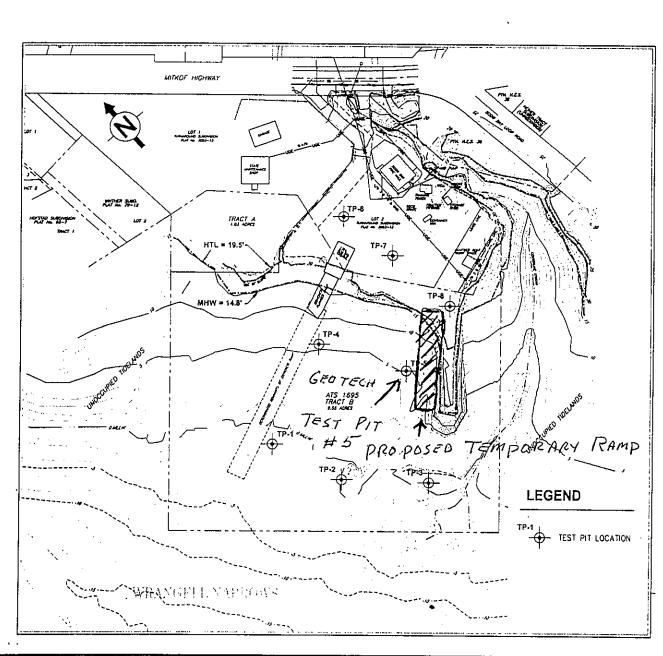
SCHEDULE USACE permit is estimated to take 3 to 6 months, if granted. Lease requirements would begin once the USACE permit(s) is issued. If not issued, the project would be cancelled. Construction is estimated to be completed within 6 months after the USACE permit is issued, excluding winter months December through March, or any other periods disallowed by government agencies for habitat or environmental reasons. Actual construction time is estimated 3 days.

BENEFIT TO COMMUNITY Boat launching ramps are vital to all communities in SE Alaska. On a per capita basis, Petersburg has less than the average number of ramps in its main population area. The present Scow Bay ramp receives much use, both commercial and pleasure. An additional ramp that allows safe use in prevailing southerly winds would be beneficial to the community. General private use of the ramp would be allowed on an individual permission

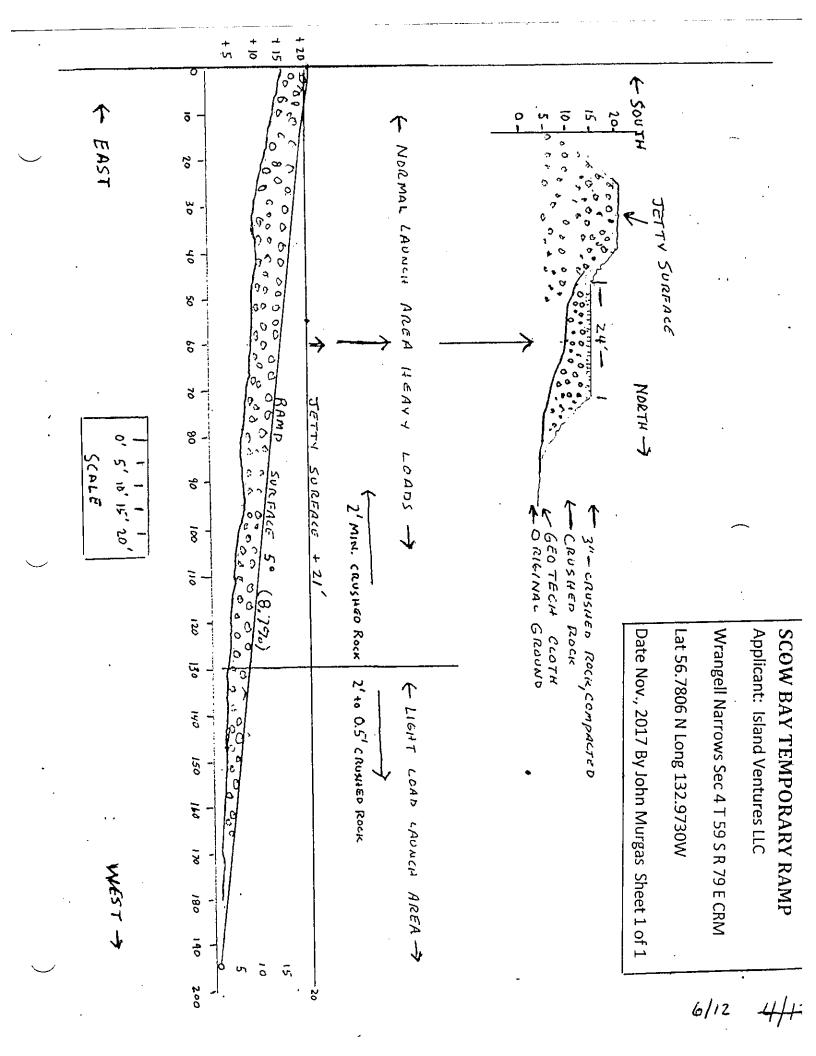
basis with supervision by Island Ventures LLC when staff is available. The proposed ramp would help keep commercial vessel services in Petersburg instead of going to other communities.

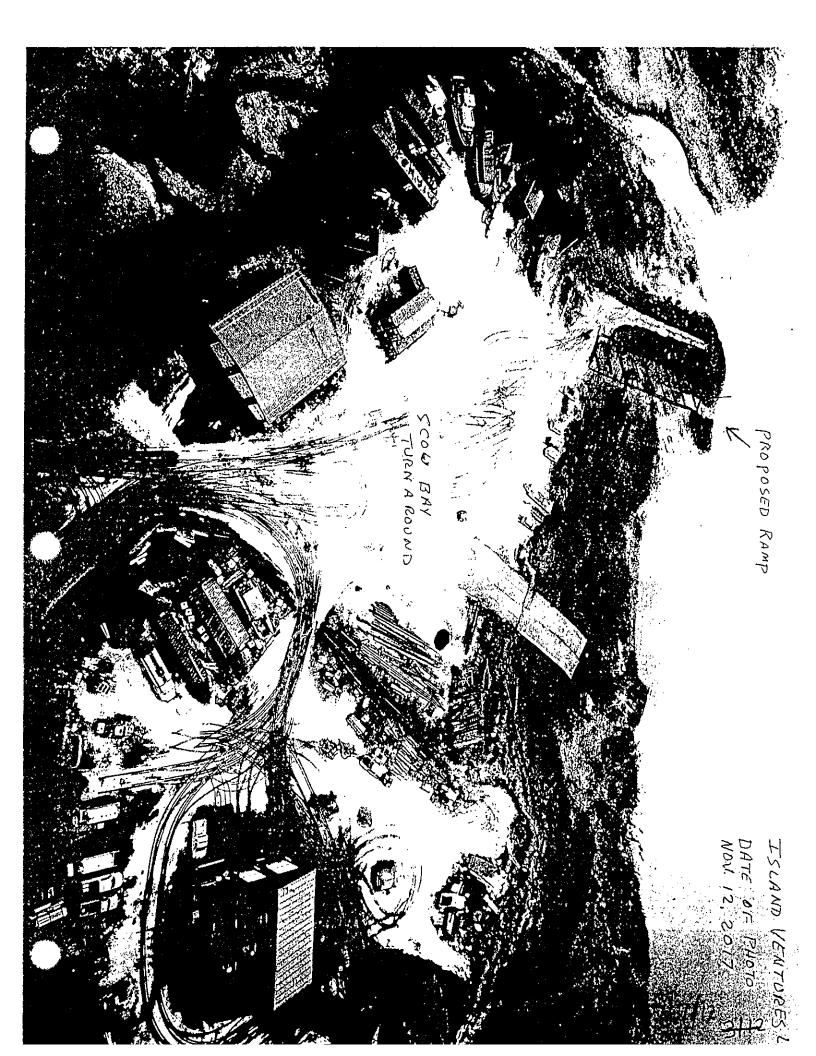
FAVORABLE RAMP SLOPE Ramp slope of 5 degrees is the maximum slope for a large vessel hydraulic trailer without potential vessel sliding. It is minimally adequate for most recreational vessels. The present Scow Bay ramp slope is 5 degrees only on the upper concrete portion, then tapers (banana shaped) to 4 and 3 degrees, so is useable for recreational boats only at its upper portion. The proposed ramp is designed to provide a more constant slope, which will allow a larger launch tide window for recreational vessels.

OTHER Geotechnical data is favorable. See attached test pit data. The adjacent spit, installed in the 1960's, has not settled. Tidal current, at all stages of tide, is zero. Wave erosion of beach rock and sands, and littoral drift erosion, are close to zero. Maintenance of surface 3 inch minus compacted rock is expected to be minimal. There would be no loss of traction nor compromise of surface competency of the rock ramp vs. a concrete ramp. Island Ventures LLC has been operating on the rock portion of the present ramp with minimal maintenance since 2007.



PURPOSE: TEST PIT INVESTIGATION		EXISTING CONDITIONS	SCOW BAY BOAT HAULOUT				
		SCALE IN FEET					
		20 SCALE	APPLICANT: CITY AND BOROUGH PETERSBURG, ALASKA FILE NO.: WATERWAY: WRANGELL NARROWS				
DATUM: HTL a	= 14.8'		PROPOSED ACTIVITY: TEST PIT INVESTIGATION SEC. 4 T. 59 S R. 79 E M COPPER RIVER MERIDIAN LAT.: 56,7806' N LONG.: 132.9730' W				
MLLW = 0.0' MLLW =	0.0' PND	PROJECT NO. 162046.01	DATE: MARCH 2017 SHEET 1 of 1				





SOILS CLASSIFICATION, CONSISTENCY AND SYMBOLS

CLASSIFICATION

Identification and classification of the soil is accomplished in general accordance with the ASTM version of the Unified Soil Classification System (USCS) as presented in ASTM Standard D2487. The standard is a qualitative method of classifying soil into the following major divisions (1) coarse grained, (2) fine grained, and (3) highly organic soils. Classification is performed on the soils passing the 75 mm (3 inch) sieve and if possible the amount of oversize material (> 75 mm particles) is noted on the soil logs. This is not always possible for drilled test holes because the oversize particles are typically too large to be captured in the sampling equipment. Oversize materials greater than 300 mm (12 inches) are termed boulders, while materials between 75 mm and 300 mm are termed cobbles. Coarse grained soils are those having 50% or more of the non-oversize soil retained on the No. 200 sieve (0.075 mm); if a greater percentage of the coarse grains is retained on the No. 4 (4.76 mm) sieve the coarse grained soil is classified as gravel, otherwise it is classified as sand. Fine grained soils are those having more than 50% of the non-oversize material passing the No. 200 sieve; these may be classified as silt or clay depending their Atterberg liquid and plastic limits or observations of field consistency. Refer to the most recent version of ASTM D2487 for a complete discussion of the classification method.

SOIL CONSISTENCY - CRITERIA

Soil consistency as defined below and determined by normal field and laboratory methods applies only to non-frozen material. For these materials, the influence of such factors as soil structure, i.e. Fissure systems, shinkage cracks, slickensides, etc., must be taken into consideration in making any correlation with the consistency values listed below. In permafrost zones, the consistency and strength of frozen soils may vary significantly and unexplainably with ice content, thermal regime and soil type.

Standard Penetration Test (Blows/ft) Relative to Density/Consistency

N60	Density	Relative Density	N60	Consistency	Undrained Shear Strength psf
0-4	Very Loose	0-15%	< 2	Very Soft	< 250
4-10	Loose	15-35%	2 - 4	Soft	250 - 500
10-30	Medium	35-65%	4 - 8	Medium	500 - 1000
30-50	Dense	65-85%	8 - 15	Stiff	1000 - 2000
> 50	Very Dense	>85%	15 - 30	Very Stiff	2000 - 4000
			> 30	Hard	> 4000

Ref: Terzaghi, Peck, and Mesri Soil Mechanics in Engineering Practice, 3rd Edition, pg 60-63
ASTM D1586 Standard Test Method for Penetration Test and Split-Barrel Sampling of Soils
ASTM D2487 Standard Practice for Classification of Soils for Engineering Purposes (USCS)

SAMPLER TYPE SYMBOLS

A Auger Sample Hs 1.4" Split Spoon w/ Air Hammer Bs Bulk (grab) Sample Pb Pitcher Barrel Cs Core Barrel w/ Single Tube Sl 2.5" Split Spoon w/ 140# Hammer Cd Core Barrel w/ Double Tube Sm 2.5" Split Spoon w/ 300# Hammer Ct Core Barrel w/ Triple Tube Sh 2.5" Split Spoon w/ 340# Hammer Hl 2.5" Split Spoon w/ Air Hammer Sp 2.5" Split Spoon, Pushed	Ss St Sx Sz Ts Tm	1.4" Split Spoon w/ 140# Hammer 1.4" Split Spoon w/ 47# Hammer 2.0" Split Spoon w/ 47# Hammer 1.4 Split Spoon w/ 340# Hammer Shelby Tube Modified 2.5 O.D. Shelby Tube

Note: Split Spoon size refers to sampler inside diameter.

P N D	Designed: PND Drawn: PND Checked: PND	STANDARD BO LOG DET	· -
ENGINEERS, INC.	Project No.: 162046.01 Date: March 2017	BOREHOLE LOGS	FIGURE A 1 of 3

			SOIL/ROCK DESCRIPTION			5	SAMI	PLES	GRAPH COMMENTS	
Depth (Feet)	> Water Table	GRAPHIC SYMBOL	Soil Name, Color, Moisture Condition, Relative Density, Soil Structure, Mineralogy, Other Information Rock Name, Description	Number	Туре	Location	Recovery (%) (RQD)	Penetration Blows per 6/Inch (per Foot)* or {Kock Quality}	2 4 6 8 Additional Information	Elevation (Feet)
- <u>-</u>	2	000000	0' - 0.30' A.C. PAVEMENT POORLY-GRADED GRAVEL. W/ SILT AND SAND (GP-GM) Gray, Moist, Dense, Subangular	1	Ss		30	20-20-25 (45)	Begin drilling 10/24/03 8:00 a.m. 1.5' to 2' - Hard, loud drilling (Cobbles/Boulder encountered)	24.43 —
_			SLATY ARGILLITE grayish black, fine grained, thin bedded, medium hard, BX-U, steeply dipping	2	Ct		56 (50)	{Paor}	drillhole blockage	
1	2	3	4	5	6	7	8	9	10 11 1	12

COLUMN DESCRIPTIONS

1 Depth Depth (in feet) below	the ground surface.
-------------------------------	---------------------

2 Water Level Groundwater level recorded while drilling. Depths and times are recorded in comments column.

3 Graphic Log Graphic depiction of materials encountered.

Soil/ Rock Description of materials encountered, including USCS soil descriptions and rock descriptions defined in Fig. B-5 and B-6.

5 Sample Number Sample identification number.

6 Sample Type Type of soil or rock sample collected at depth interval depicted; symbols explained on Fig. B-1.

[7] Sample Location Location of soil or rock sample taken.

8 Sample Recovery Soil: Percentage of sample recovered. Rock: Percentage of sample recovered and RQD value.

Sample Blows or Rock Quality

Soil: Number of blows to advance driven sampler each 6-inch interval using sampler type specified with a 30-inch drop. Blows per foot given in parentheses. Rock: Rock quality as defined from RQD value.

Graphs Graphic log depicting blow counts per foot with a specified split spoon, Pocket Penetration and Vane Shear tests depicted where taken on fine grained soils.

Comments or observations on drilling/sampling by driller or PND field personnel.

[12] Elevation (in feet) with respect to Mean Lower Low Water (MLEW) or other datum where specified.

GENERAL NOTES

- 1. Field descriptions may have been modified to reflect laboratory test results.
- 2. Descriptions on these boring logs apply only at the specific locations at the time the borings were drilled. They are not warranted to be representative of subsurface conditions at other locations or times.
- 3. Split spoon blow counts shown are uncorrected raw data. Various hammer sizes and split spoon sizes were used and have not been corrected to a Standard Penetration Test (SPT). Blow counts may vary substantially between SPT and these methods.

PND	Designed: PND Drawn: PND Checked: PND	STANDARD I LOG DE	
ENGINEERS, INC.	Project No.: 162046.01 Date: March 2017	BOREHOLE LOGS	FIGURE A 2 of 3

M	JOR DIVISION	ארכ	SYM	3OLS	TYPICAL
	OCK DIVISIO	J145	GRAPH	LETTER	DESCRIPTIONS
	GRAVEL AND	CLEAN GRAVELS		GW	Well-graded gravels, gravel sand mixtures, little or no fines
COARSE GRAINED	GRAVELLY SOILS	(LITTLE OR NO FINES)		GP	Poorly graded gravels, gravel-sand mixtures, little or no fines
SOILS	MORE THAN 50% OF COARSE FRACTION RETAINED ON NO.	GRAVELS WITH		GM	Silty gravels, gravel-sand-silt mixtures
	4 SIEVE (4.75mm)	(APPRECIABLE AMOUNT OF FINES)		GC	Clayey gravels, gravel-sand-clay mixtures
	SAND AND SANDY SOILS MORE THAN 50% RETAINED ON NO. 200 SIEVE (0.075mm) PASSING NO. 4	CLEAN SANDS		SW	Well-graded sands, gravely sands, little or no fines
		(DITLE OR NO FINES)		SP	Poorly graded sands, gravelly sands, little or no fines
200 SIEVE		SANDS WITH FINES		SM	Silty sands, sand-silt mixtures
	SIEVE (4.75mm)	(APPRECIABLE AMOUNT OF FINES)		SC	clayey sands, sand-clay mixtures
5,115	4			ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity
FINE GRAINED SOILS	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
				OL	Organic sitts and organic slity clays of low plasticity
	61175			мн	Inorganic silts, micaceous or diatomiceous fine sandy or silty soils, elastic silts
MORE THAN 50% PASSING NO. 200 SIEVE (0.075mm)	SILTS AND CLAYS	LIQUID LIMIT GREATER [HAN 50		СН	Inorganic clays of high plasticity, fat clays
		İ		ОН	Organic clays of medium to high plasticity, organic silts
HIG	HLY ORGANIC SC	DILS	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	PT	Peat and other highly organic soils

NOTE: Multiple symbols are used to indicate borderline or dual soil classifications as per ASTM 2488

Stratigraphic Contact Distinct contact between soil strata or geologic units Approximate location of soil strata change within a geologic soil unit Laboratory / Field Tests List of Abbreviations . %F Percent Fines HA Hydrometer Analysis PP Pocket Penetrometer ALAtterberg Limits LMA Limited Mechanical Analysis SA Sieve Analysis CP Laboratory Compaction test MC Moisture Content TV Torvane CO Consolidation test MD Moisture content and Dry density ΤX Triaxial Shear DP Depth "Peat" Probe OC Organic Content UC Unconfined Compression Direct Shear DS PM Permeability or Hydraulic Conductivity VS Vane Shear PND Designed: STANDARD BOREHOLE Drawn: PND LOG DETAILS Checked: PND Project No.: 162046.01 ENGINEERS, INC. FIGURE A **BOREHOLE LOGS**

March 2017

3 of 3

."		SOIL DESCRIPTION	S	AMPLES	G	RAPH	COMMENTS	
Depth (feet)	Graphic Symbol	Soil Name, Color, Moisture Content, Relative Density, Soil Structure, Mineralogy, Other Information	Number Type Location	Penetrat Blows p 6/Inci (per for or (Rock Que	er 20 POCI	OW COUNT 40 60 80 KET PEN (Isf) 2 3 4 E SHEAR (Isf) 4 0,6 0,8	Casing Depth, Drilling Rate, Fluid Loss, Drill Pressure, Tests, Instrumentation, Additional Information	Elevation (feet)
-0.0		SAND WITH SILT AND GRAVEL (SM) gray and brown, medium dense; imported fill	5 Bs				Begin Excavation: 3/30/17; Time: 2:05pm Excavator Model PC 200-6 with 1.5 CY bucket	— 22.0
- 2.5		SILTY GRAVEL WITH SAND AND COBBLES (GM) bluish gray, dense to very dense; glacial till						19.5
- 5.0				1	;			17.0
7.5		Till walls hold firm					2ft. to 14ft.: hard excavating	14.5
- 10.0								12.0
- 12.5	7,07,07							9.5
- 15.0		Test Pit Bottom					End Excavation: 3/30/17; Time: 2:25pm	7.0
- 17,5								4.5
-20.0					, , ,			2.0
P		Logged By: P Data Entry: P Checked: S	1	S	COW B	SAY BOA	AT HAULOUT , Alaska	
EN	GINE	EERS, INC. Project No.: 1	62046.01 far. 2017	TE	ST PIT	TP-7	FIGURE 7	,

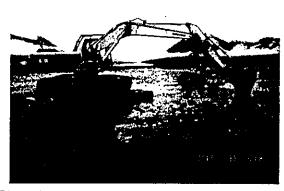


Photo 1: Begin excavation at TP1.



Photo 3: Greenish gray colored silty sand sits adjacent mound of bluish gray till clumps to the right at TP1.



Photo 5: Excavating through surface horizon of silty sand at



Photo 2: Excavating into glacial till at TP1.



Photo 4: Excavator en route over tide flats to TP2.



Photo 6: Upper silty sand horizon readily sloughs while lower wall within glacial till holds firm at TP2.





ENGINEERS, INC.