MATANUSKA-SUSITNA BOROUGH

350 East Dahlia Avenue, Palmer, Alaska 99645 – 907-861-7874

PLATTING OFFICER
Fred Wagner

PLATTING
ADMINISTRATIVE SPECIALIST
Kayla Kinneen

PLATTING TECHNICIANS
Matthew Goddard
Chris Curlin
Natasha Heindel

PLATTING ASSISTANT

ABBREVIATED PLAT AGENDA

ASSEMBLY CHAMBERS
350 EAST DAHLIA AVENUE, PALMER

REGULAR MEETING 8:30 A.M. May 8, 2024

Public Participation: To participate in the Abbreviated Plat Hearing, you can attend in person, or you can submit written comments by email to platting@matsugov.us or by mail to Matanuska-Susitna Borough, Platting Division, 350 E. Dahlia Avenue, Palmer, AK 99645.

1. **INTRODUCTION**
   A. Introduction of Staff

2. **UNFINISHED BUSINESS:**
   (None)

3. **PUBLIC HEARINGS:**
   A. **PATRICIA RSB L/1:** The request is to create two lots from Lot 1, Patricia Subdivision, Plat No. 2005-120, to be known as **LOTS 1A & 1B ,** containing 15.366 acres +/-. The property is located south of W. Carmel Road, west of Crocker Creek, and directly north and west of S. Knik Goose Bay Road (Tax ID # 5741000L001); within the N ½ Section 4, Township 16 North, Range 02 West, Seward Meridian, Alaska. In the Knik-Fairview Community Council and in Assembly District #5. *(Petitioner/Owner: Southcentral Foundation, Staff: Matthew Goddard, Case #2024-056)*

THE ABBREVIATED PLAT HEARING WILL CONVENE AT **8:30 A.M** on **May 8, 2024**, in **ASSEMBLY CHAMBERS** at the Dorothy Swanda Jones Building, 350 E. Dahlia Avenue, Palmer, Alaska.

Public Hearing Process

- **Platting Officer states/reads the case/item to be addressed into the record.**
- **Public Hearing Notices**: Secretary states the number of public hearing notices sent out and the date sent.
- **Staff Report:** The Platting Officer gives an overview of the project for the hearing and the public.
- **Public Testimony**: Members of the public are invited to sign in and testify before the officer.
  - 3-minute time limit per person for members of the public.
  - The time limit may be extended at the discretion of the Platting Officer.
- **The public hearing is closed by the Officer.** No further public input is appropriate.
- **Petitioner Comments**: Petitioner, or his/her representative, comes before the officer to discuss staff recommendations and compliance with Title 43 and other applicable regulations.
  - Testimony is limited to five (5) minutes for the petitioner/applicant.
  - The time limit may be extended at the discretion of the Platting Officer
- **Motion to Approve:** Motion to approve is made by the Platting Officer.
  - No further unsolicited input from petitioner is appropriate.
  - Conditions and Findings must be written for all decisions made regarding the action being taken, whether it passed or failed.
  - Decisions are final unless reconsidered by the platting board MSB 43.35.005 or appealed to the board of adjustments and appeals. MSB 43.35.015

3A

STAFF REVIEW AND RECOMMENDATIONS
PUBLIC HEARING
MAY 8, 2024

ABBREVIATED PLAT: PATRICIA RSB LOT 1

LEGAL DESCRIPTION: SEC 04, T16N, R02W, SEWARD MERIDIAN AK

PETITIONERS: SOUTHCENTRAL FOUNDATION

SURVEYOR/ENGINEER: R & M CONSULTANTS, INC

ACRES: 15.366 ± PARCELS: 2

REVIEWED BY: MATTHEW GODDARD CASE #: 2024-056

REQUEST: The request is to create two lots from Lot 1, Patricia Subdivision, Plat No. 2005-120, to be known as **LOTS 1A & 1B,** containing 15.366 acres +/-. The property is located south of W. Carmel Road, west of Crocker Creek, and directly north and west of S. Knik Goose Bay Road; within the N ½ Section 4, Township 16 North, Range 02 West, Seward Meridian, Alaska. In the Knik-Fairview Community Council and in Assembly District #5.

EXHIBITS

Vicinity Map and Aerial Photos	**EXHIBIT A** – 6 pgs
Soils Report	**EXHIBIT B** – 33 pgs

AGENCY COMMENTS

ADOT&PF	**EXHIBIT C** – 3 pgs
USACE	**EXHIBIT D** – 1 pg
MSB Department of Public Works	**EXHIBIT E** – 1 pg
MSB Development Services	**EXHIBIT F** – 2 pgs
Utilities	**EXHIBIT G** – 3 pgs

DISCUSSION: The proposed subdivision is creating two lots with Lot 1A being 15.366 acres and Lot 1B 3.394 acres. Access for both proposed lots will be from S. Wassim Circle and W. Douglas Lane, both roads are Borough maintained.

Soils Report: A geotechnical report was submitted **(Exhibit B)**, pursuant to MSB 43.20.281(A). Brian Mullen, P.E. notes that the geotechnical subsurvace investigation was performed on February 7-8, 2024 and consisted of advancing, sampling, and logging a total of three test borings to depths of 21 to 22 feet below ground surface. Both proposed lots contain at least 10,000 square feet of usable building area and at least 10,000 square feet of contiguous usable septic area in accordance with Matanuska-Susitna Borough Code 43.20.281(A). An as-built and topographic mapping were submitted and can be seen on the agenda plat.

Comments:

ADOT&PF (**Exhibit C**) has no objection to the proposed subdivision but has the following comments:

- No direct access shall be granted to S. Knik Goose Bay Road from either lot.
- Requests a plat note be added stating "No direct access to Knik Goose-Bay Road for Lot 1A or 1B." **(Recommendation #4)**
- Requests a plat note be added stating "No direct access for utility connections through Knik Goose-Bay Road."
- DOT&PF recommends development of internal circulation off Wassim Circle to avoid conflict with existing right of way users.
- DOT&PF recommends lot development consider the MSB Official Streets and Highway Plan's future intersection at Knik Goose-Bay Road and Douglas Lane.
- DOT&PF recommends dedicating Wassim Circle and Douglas Lane on Lot 1A and Lot 1B.

USACE (**Exhibit D**) notes that a permit from the Department of the Army would be required if any development takes place in the Waters of the U.S., including jurisdictional wetlands, prior to conducting the work.

MSB Department of Public Works (**Exhibit E**) notes that there should be no direct access from Lot 1A to Knik Goose-Bay Road.

MSB Development Services (**Exhibit F**) has no comments.

Utilities: (**Exhibit G**) Enstar notes that there is a high-pressure natural gas transmission pipeline within S. Knik-Goose Bay Road ROW. ENSTAR should be notified prior to any excavation or construction within 25 FT of the S. Knik Goose-Bay Road ROW. GCI has no objections or comments. MEA did not respond. MTA did not respond.

At the time of staff report write-up, there were no responses to the Request for Comments from ADF&G; Community Council #16 Knik-Fairview; Fire Service Area #130 Central Mat-Su; Road Service Area #17 Knik; MSB Community Development, Emergency Services, Assessments or Planning Division; MEA or MTA.

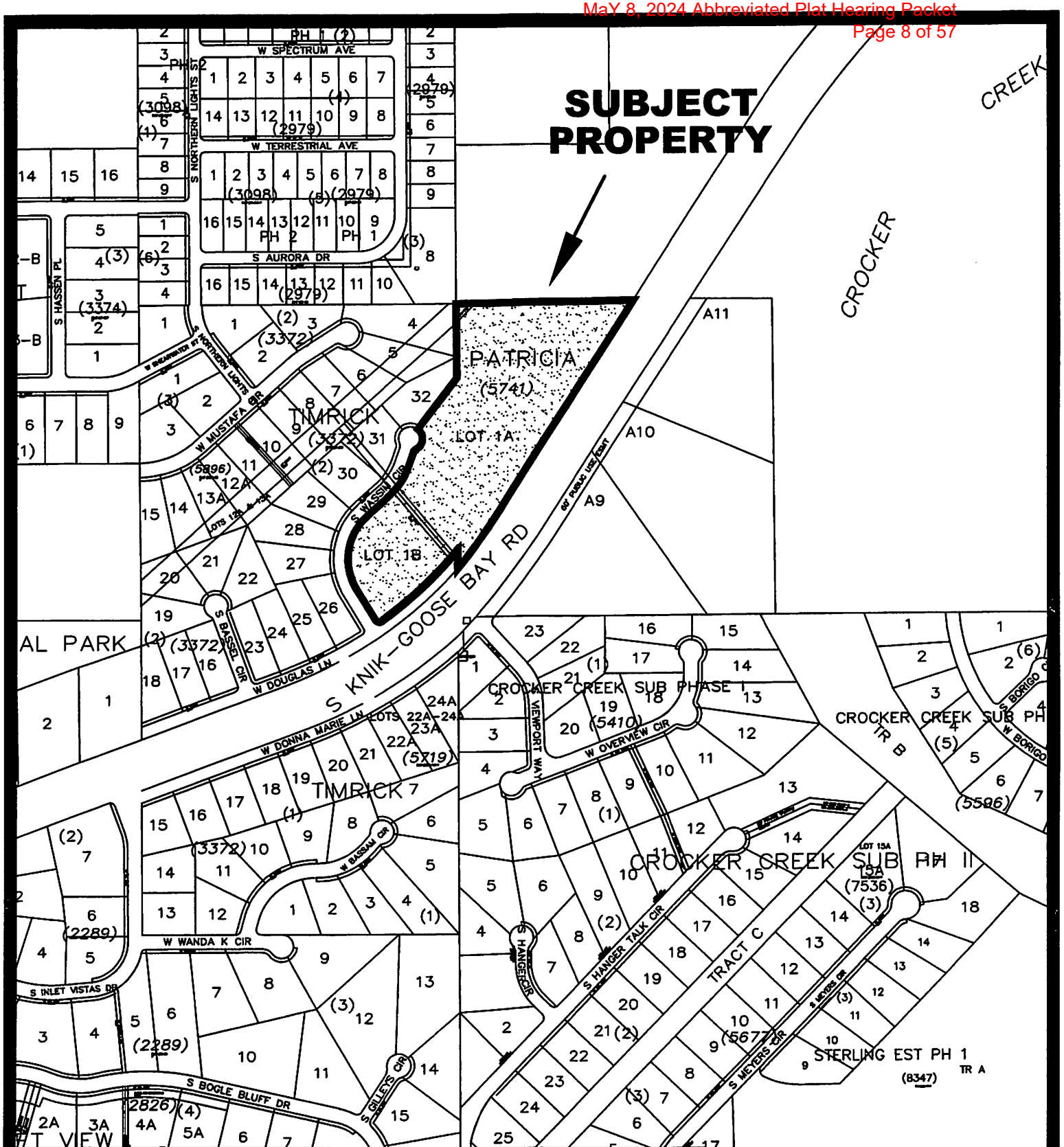
CONCLUSION: The abbreviated plat of Patricia RSB Lot 1 is consistent with AS 29.40.070 Platting Regulations and MSB 43.15.025 Abbreviated Plats. There were no objections from any federal or state agencies, Borough departments, or utilities. There were no objections to the plat from the public in response to the Notice of Public Hearing. Legal and physical access exists to the proposed lots, consistent with MSB 43.20.100 Access Required, MSB 43.20.120 Legal Access and MSB 43.20.140 Physical Access. Frontage for the subdivision exists, pursuant to MSB 43.20.320 Frontage. A soils report was submitted, pursuant to MSB 43.20.281(A)(1).

FINDINGS OF FACT

1. The plat of Patricia RSB Lot 1 is consistent with AS 29.40.070 Platting Regulations and MSB 43.15.025 Abbreviated Plats.
2. A soils report was submitted, pursuant to MSB 43.20.281(A)(1).
3. Both lots have legal and physical access consistent with MSB 43.20.100, MSB 43.20.120 and MSB 43.20.140.
4. Both lots have the required frontage pursuant to MSB 43.20.320.
5. At the time of staff report write-up, there were no responses to the Request for Comments from ADF&G; Community Council #16 Knik-Fairview; Fire Service Area #130 Central Mat-Su; Road Service Area #17 Knik; MSB Community Development, Emergency Services, Assessments or Planning Division; MEA or MTA.
6. There were no objections from any federal or state agencies, or Borough departments.
7. There were no objections from the public in response to the Notice of Public Hearing.

RECOMMENDATIONS OF CONDITIONS OF APPROVAL for the abbreviated plat of Patricia RSB Lot 1, Section 04, Township 16 North, Range 02 West, Seward Meridian, Alaska, contingent on staff recommendations:

1. Taxes and special assessments must be paid in full for the year of recording, pursuant to MSB 43.15.053(F) and AS 40.15.020. Pay taxes and special assessments (LIDs), by CERTIFIED FUNDS OR CASH.
2. Provide updated Certificate to Plat executed within seven (7) days of recording of plat and submit Beneficiary Affidavit for any holders of a beneficial interest.
3. Pay postage and advertising fees.
4. Add a plat note stating "No direct access shall be granted to S. Knik Goose-Bay Road unless otherwise authorized by the permitting authority."
5. Show all easements of record on final plat.
6. Submit recording fees, payable to Department of Natural Resources (DNR).
7. Submit final plat in full compliance with Title 43.



VICINITY MAP

FOR PROPOSED PATRICIA SUBDIVISION

LOTS 1A & 1B

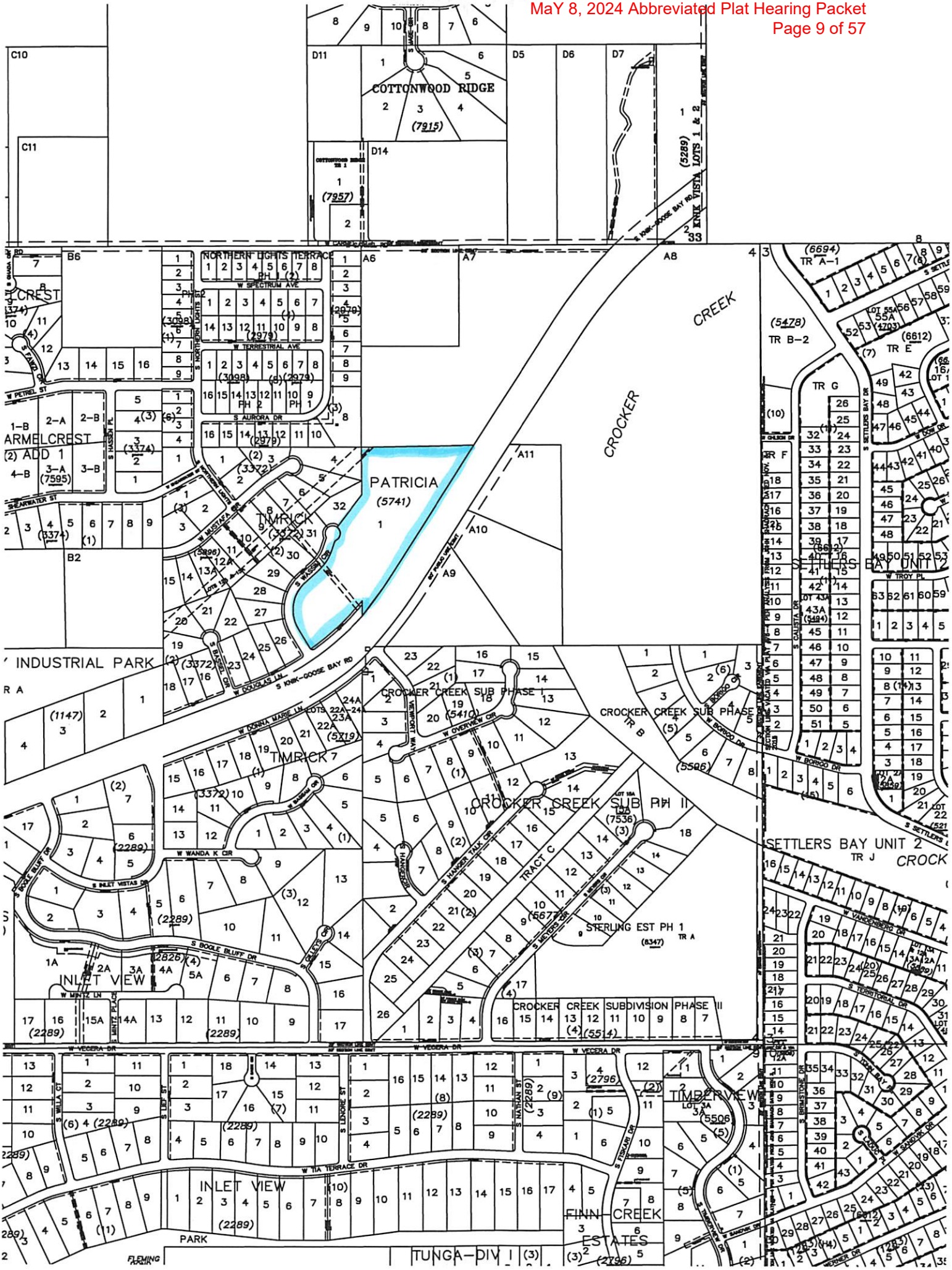
LOCATED WITHIN

SECTION 04, T16N, R02W, SEWARD MERIDIAN

ALASKA

OC 04 MAP

EXHIBIT A


COTTONWOOD RIDGE
(7915)
(7957)
(5289)
KNIK VISTA LOTS 1 & 2
C10
C11
D11
D14
D5
D6
D7
NORTHERN LIGHTS TERRACE
W SPECTRUM AVE
W TERRESTRIAL AVE
S AURORA DR
W PETREL ST
S FANCY DR
S HASSEN PL
S NORTHERN LIGHTS BLVD
W SHEARWATER ST
W MUSTAFA CIR
S WASSEN CIR
S BASSEL CIR
W DOUGLAS LN
S KNIK-GOOSE BAY RD
PATRICIA
(5741)
TIMRICK
(3372)
(3374)
(3098)
(2979)
(5896)
(3374)
(7595)
ARMELCREST
(2) ADD 1
B6
B2
A6
A7
A8
A9
A10
A11
CREEK
CROCKER
(6694)
TR A-1
(5478)
TR B-2
TR E
TR G
TR F
(6612)
SETTLERS BAY UNIT 2
W TROY PL
S CALISTA DR
S SETTLERS BAY DR
W BORROO DR
W DOW DR
W GIBSON DR
INDUSTRIAL PARK
R A
(1147)
W DONNA MARIE LN
LOTS 22A-24
(5719)
TIMRICK 7
(3372)
W WANDA K CIR
S BOGLE BLUFF DR
S INLET VISTAS DR
(2289)
INLET VIEW
W MINTZ LN
S MINTZ PLACE
(2826)
W VECCHIA DR
CROCKER CREEK SUB PHASE I
(5410)
W OVERVIEW CIR
VIEWPORT WAY
CROCKER CREEK SUB PHASE II
TR B
(5506)
CROCKER CREEK SUB PH II
LOT 10A
(7536)
S HANGER TALK CIR
S HANGER DR
TRACT C
STERLING EST PH 1
(8347)
TR A
(5671)
CROCKER CREEK SUBDIVISION PHASE III
(5514)
SETTLERS BAY UNIT 2
TR J
CROCK
W VANDENBERG DR
S TERRITORIAL DR
W SANDRA DR
S BRIMSTONE DR
TIMBERVIEW
LOT 3A
(5506)
S TIMBERVIEW DR
S ENSIGN DR
FINN CREEK
ESTATES
(2796)
INLET VIEW
(2289)
PARK
TUNGA-DIV I
(3)
W TIA TERRACE DR
S WILLA CT
S LEE ST
S LENORE ST
S NATHAN ST
FLEMING


S Aurora Dr
W Mustafa Cir
S Northern Lights St
S Wassim Cir
60' PUBLIC USE ESMT
ACCESS ESMT
S Viewport Way
W Overview Cir
W Douglas Ln
S Bassel Cir
W Douglas Ln
S Knik Goose Bay Rd
W Donna Marie Ln
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Matanuska-Susitna Borough, Maxar, Microsoft
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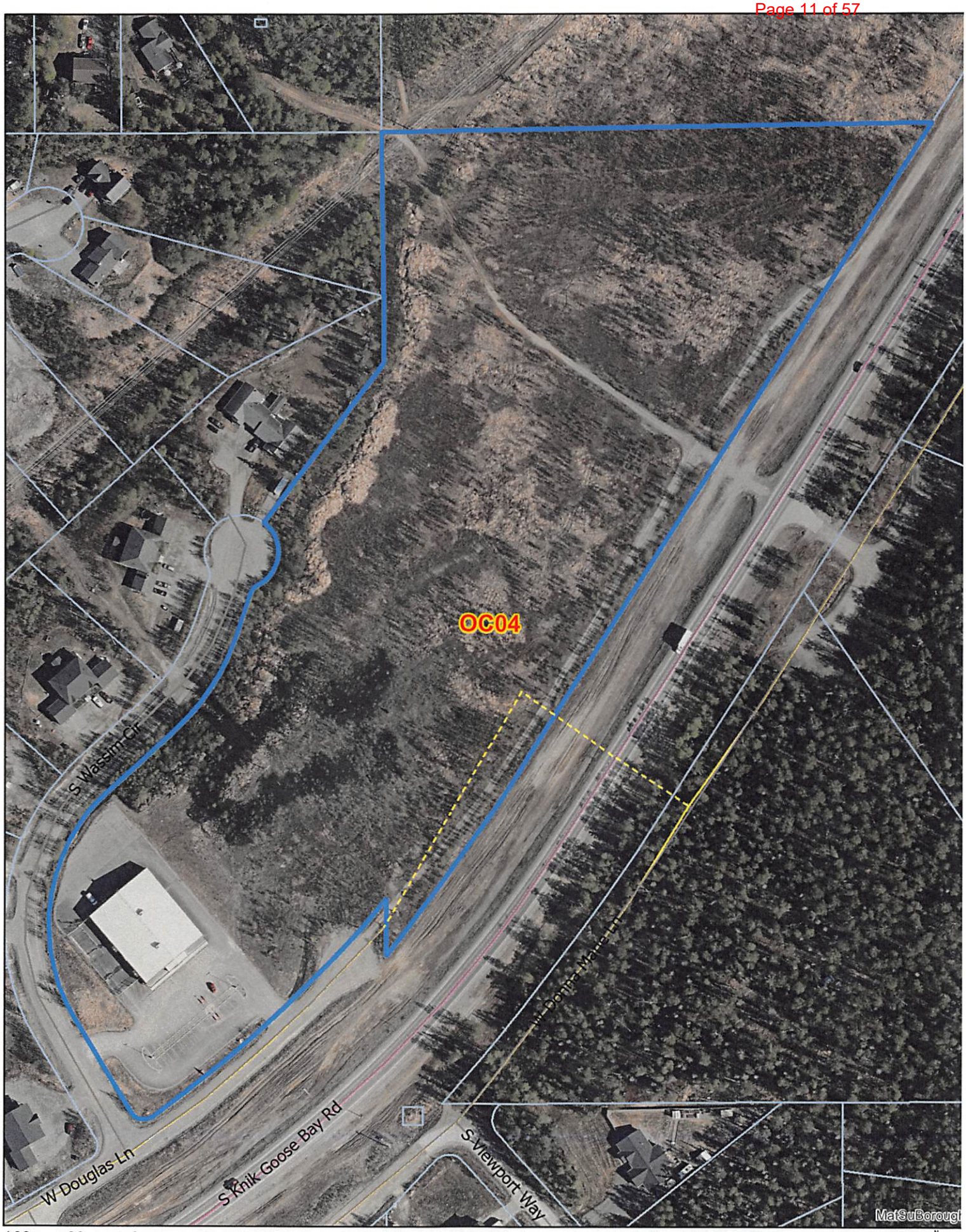
0.2 Miles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W Douglas Ln
S Knik Goose Bay Rd
S Viewport Way
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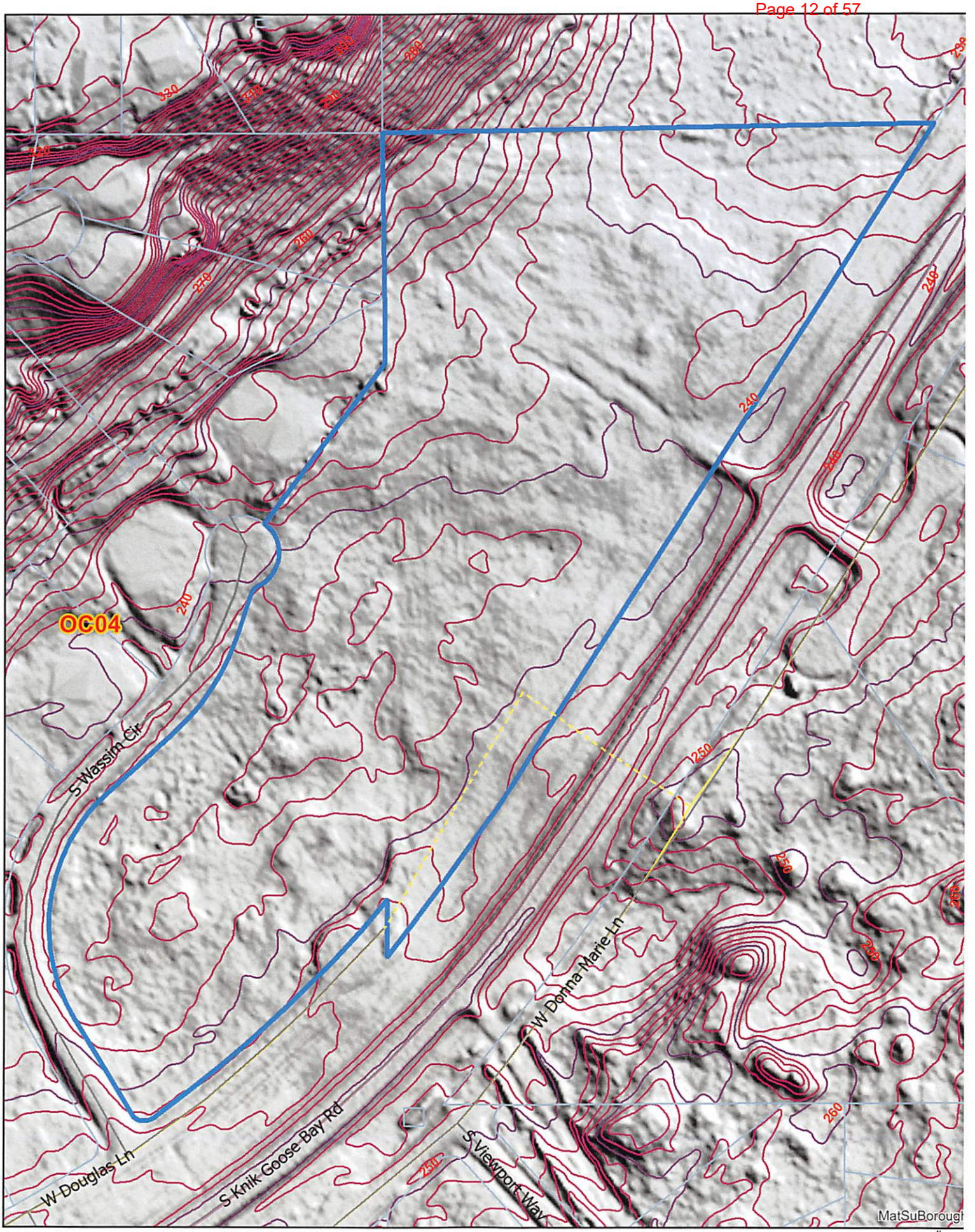
MatSuBorough


OC04
S Wassim Cir
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S Knik Goose Bay Rd
W Donna Marie Ln
S Viewpoint Way
MatSuBorough
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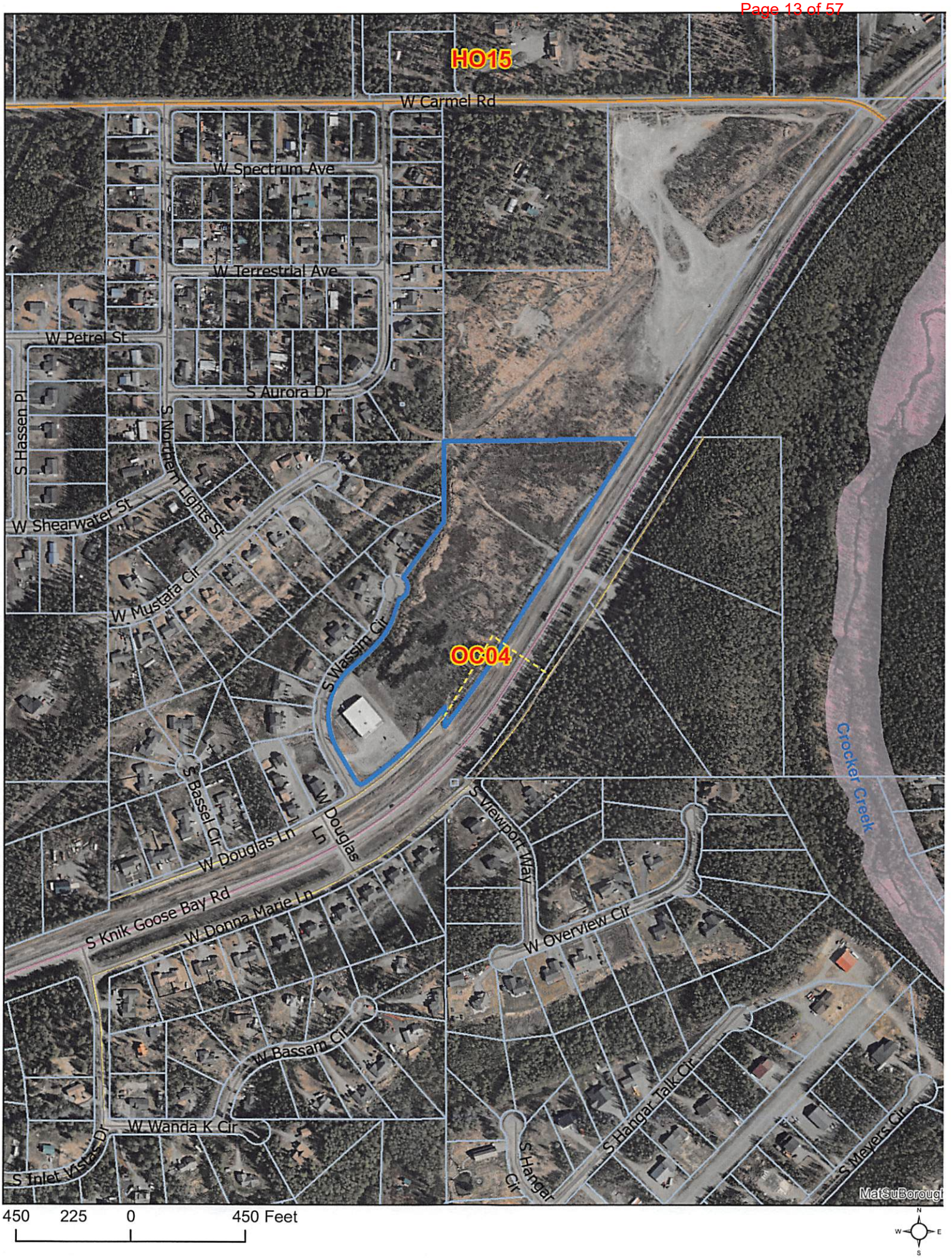
HO15
W Carmel Rd
W Spectrum Ave
W Terrestrial Ave
W Petrel St
S Aurora Dr
S Hassen Pl
S Northern Lights St
W Shearwater St
W Mustafa Cir
S Wassim Cir
OC04
Crocker Creek
S Bassel Cir
W Douglas Ln
W Douglas
S Viewport Way
S Knik Goose Bay Rd
W Donna Marie Ln
W Overview Cir
W Bassam Cir
W Wanda K Cir
S Inlet Vistas Dr
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R&M CONSULTANTS, INC.
ANCHORAGE | FAIRBANKS | JUNEAU

27 March 2024

R&M No. 3107.01

James Sears, MBA
Sr. Director of Facilities Operations
Southcentral Foundation
4501 Diplomacy Drive
Anchorage, Alaska 99508

RE: Patricia Subdivision – Geotechnical Investigation Report (Soils Report)[1]
7877 Douglass Lane Wasilla, Alaska

Dear Mr. Sears,

Southcentral Foundation (SCF) contracted[2] R&M Consultants, Inc. (R&M) to provide professional services including geotechnical investigation in support of a proposed subdivision of the subject property in Wasilla, Alaska (**Drawing 01**). This report summarizes the results of our geotechnical investigation for the project, which included: test borings advanced within the proposed new subdivision lots, laboratory soils testing on collected samples, and preparation of this geotechnical report including general conclusions regarding site suitability for septic system and well installations and general site development.

BACKGROUND

The Patricia Subdivision (N1/2, Section 4, T16N, R2W, Seward Meridian Alaska) is located north of South Knik Goose Bay Road and directly northeast of Wassim Circle (**Drawing 02**). SCF is planning to subdivide Lot 1 of the Patricia Subdivision into two proposed lots; Lot 1A and Lot 1B (**Drawing 03**). Lot 1A was undeveloped at the time of this investigation and encompasses approximately 12 acres of the northern portion of the wider property. Lot 1B was developed with an existing facility and encompasses approximately 4 acres as the southwestern corner of the wider property. Geotechnical investigation was performed to document subsurface soil conditions within the proposed lots in support of the subdivision effort.

FIELD INVESTIGATION

The geotechnical subsurface investigation program was performed on 7 and 8 February 2024 and consisted of advancing, sampling, and logging a total of three test borings to depths of 21 to 22 feet below ground surface (BGS). 1-inch slotted PVC casings were installed in each test boring to allow for groundwater measurements after drilling. Field activities were guided by an R&M geologist who maintained logs of the test borings and samples. Test borings were logged and sampled in

[1] Revision of 3/13/2024 Report, addressing minor comments received from SCF.

[2] SCF Contract 2023-612/Amendment #1 to Contract 2023-296

EXHIBIT B

general accordance with practices outlined in the Alaska Department of Transportation and Public Facilities (DOT&PF) Geotechnical Procedures Manual[3].

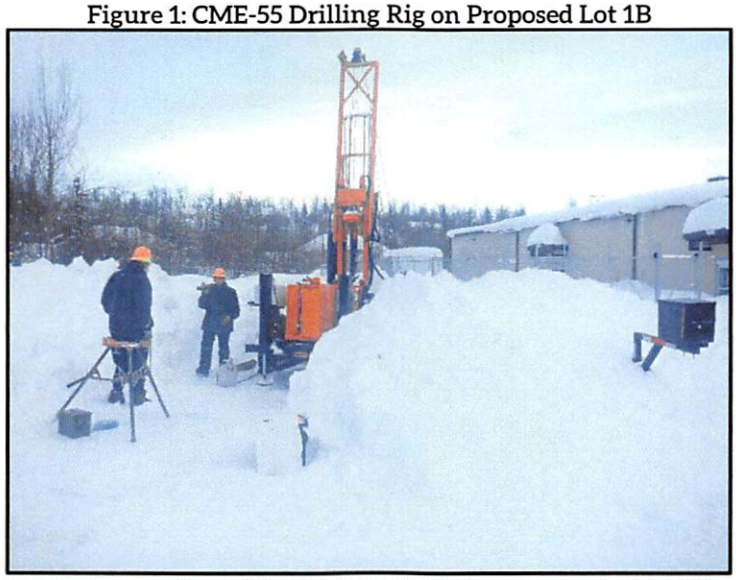
Test borings were located accordingly:

- **Lot 1A**: Test Borings RM24-TB02 and RM24-TB03 were placed distributed across the site.
- **Lot 1B**: Test Boring RM24-TB01 was located adjacent to the existing leach field southwest of the existing building to assess suitability for septic system installation in this area.

Test boring locations were recorded using a recreational grade GPS unit[4]. **Drawing 03** presents approximate test boring locations relative to recent site imagery and approximate site boundaries. A summary of the general notes and an explanation (key) for the test hole logs are presented as **Drawings 04 and 05**, respectively. Logs of the test holes are presented as **Drawings 06 through 11**. GPS coordinates for the test holes are presented on the attached logs and summarized below on **Table 1**.

Test boring and sampling operations were performed by Wininger Drilling, Inc. (Wininger) of Wasilla, using a track-mounted CME-55 drill rig (**Figures 1 and 2**). Wininger performed snow removal using a skid-steer where necessary to access the test borings. Test borings were advanced using continuous flight, 8-inch nominal outside diameter (OD), 3.25-inch inside diameter (ID), hollow-stem augers. A modification of the Standard Penetration Test (SPT; ASTM D1586) was employed to collect disturbed soil samples below the ground surface at regular intervals using 2.5-inch ID (3.0-inch OD) split-spoon samplers advanced by a 340-pound automatic drop-hammer with a fall of 30 inches. Hammer blows (uncorrected) required to drive the samplers each six inches of an 18 to 24-inch interval were recorded as shown on the test boring logs.

Figure 1: CME-55 Drilling Rig on Proposed Lot 1B



Note: Drill rig positioned at Test Boring RM24-TB01, viewing northwest, 7 February 2024.

[3] DOT&PF, 2007. Alaska Geotechnical Procedures Manual. Dated May 2007.

[4] Recreational grade GPS units are limited to a maximum accuracy of about 15 feet.

Figure 2: CME-55 Drilling Rig on Proposed Lot 1A

Note: Drill rig positioned at Test Boring RM24-TB02, 7 February 2024.

Test borings were backfilled with soil cuttings generating during advancement. 1-inch nominal diameter slotted PVC casings were installed at each test boring location for the purpose of enabling monitoring of groundwater levels, or confirming lack thereof, after drilling. Groundwater measurements in the PVC casings were performed immediately after backfilling each test boring.

After visual and ductile field classification, samples were sealed in double plastic bags and returned to R&M's laboratory in Anchorage for further examination and testing.

LABORATORY TESTING

A laboratory testing program was developed to provide data on subsurface characteristics and material properties. Testing consisted of measuring general soil index properties for soil classification and was performed at the R&M Materials Laboratory in Anchorage in accordance with the following ASTM[5] procedures: Particle Size Analysis (D 422); Moisture Content (D 2216); and Classification of Soils (D 2487 and D 2488). It should be noted that the size of gravel particles obtained using 2.5-inch ID split spoon samplers is limited to the size of the opening of the sampler. Therefore, the samples collected using split spoon samplers were thus not necessarily representative of the coarse gravel fraction.

The ASTM Unified Soil Classification System (USCS) and Frost Design Soil Classification system used for this project are summarized on **Drawings 12 and 13**, respectively. Laboratory test results are presented on the Test Boring Logs and on the Summary of Laboratory Data, **Drawing 14**. Gradation curves are presented on **Drawings 15 through 17**.

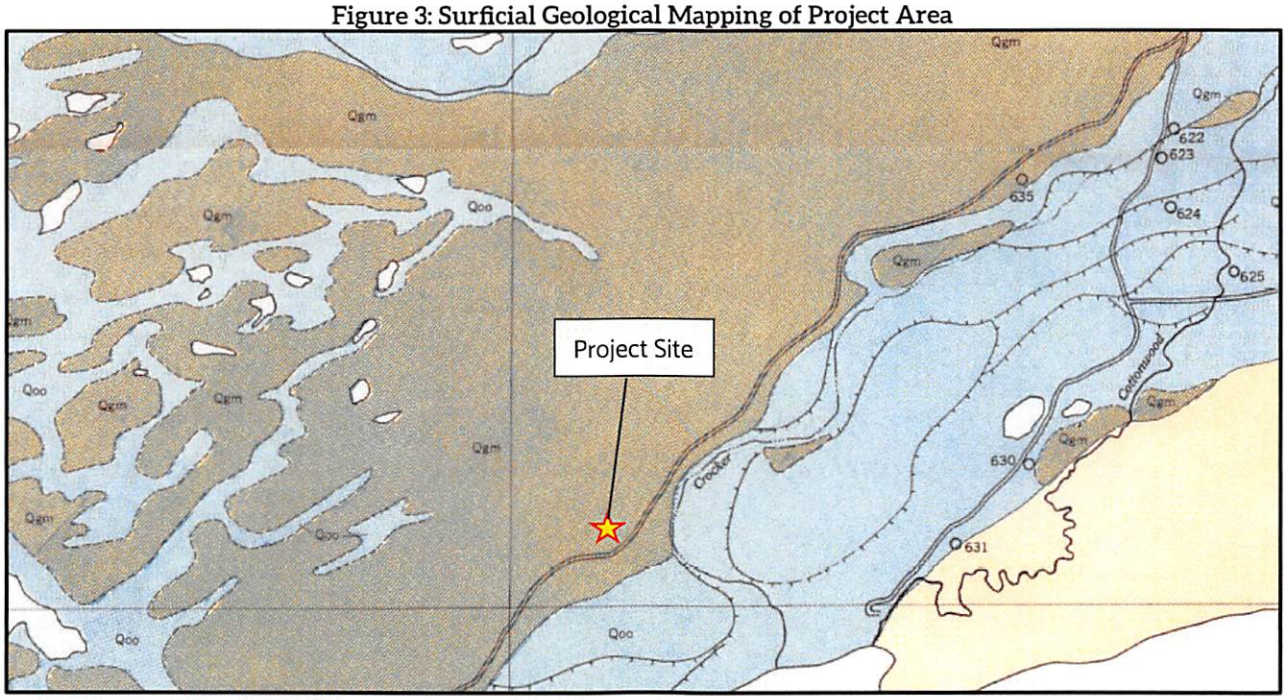
[5] American Society of Testing and Materials (ASTM), 2024. Annual Book of ASTM Standards, Volumes 04.08 and 04.09, Soil and Rock. ASTM D 422 was not reapproved following calendar year 2016 but remains commonly employed in geotechnical practice.

SITE CONDITIONS

The following summarizes information pertaining to the surface and subsurface conditions encountered or interpreted within the project area based on the findings of the investigation. Vicinity/Location, Area, and Investigation Location maps for the project site are attached as **Drawings 01 through 03**, respectively.

Regional Geology. The project site is located within the Cook Inlet-Susitna Lowland physiographic province of Alaska[6]. This area is characterized as a glaciated lowland containing areas of ground moraine and stagnant ice topography, drumlin fields, eskers, and outwash plains. The topography is primarily the product of five major glacial advances that crossed the area in the middle to late Pleistocene age[7], as well as the effect of colluvial and alluvial deposits consequent with or subsequent to the advances. Surficial soils across the project site vicinity have been mapped as ground moraine deposits; chiefly till with local gravel cover (**Figure 3**). The in-situ soil profile encountered at the project site appeared generally consistent with this geological mapping.

Figure 3: Surficial Geological Mapping of Project Area



Notes: Map extracted from Trainer, 1960[8]. Map key below:

- **Qgm (olive green shading)**: Quaternary ground moraine deposits; till, in part gravelly, and locally with gravel cover.
- **Qoo (light blue shading)**: Older Quaternary outwash deposits; chiefly sand, gravel, and some silt.
- **Qe (light yellow shading):** Estuarine deposits.
- **White shading:** Water (Knik Arm in southeast corner).

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[6] Wahrhaftig, Clyde. 1965. Physiographic Divisions of Alaska. U.S. Geological Survey Professional Paper 482.

[7] Coulter, H.W., et al. 1965. Map Showing Extent of Glaciations in Alaska. U.S. Geological Survey Miscellaneous Geologic Investigations Map I-415. 1 sheet. Scale 1:2,500,000.

[8] Trainer, F.W., 1960. Map of the Matanuska Valley Agricultural Area, Alaska, Showing Surficial Geology and Location of Wells. Geological Survey Water-Supply Paper 1494, Plate 1, Scale 1:50,000.

Surface. Heavy snow cover at the time of the investigation limited direct observations of the ground surface in areas not cleared of snow. Surface conditions on the two proposed lots consisted of the following:

- **Lot 1A** was undeveloped at the time of this investigation and appeared to have been previously cleared and graded, possibly for materials extraction, with subsequent regrowth of alders and small birch trees. Primitive roads/trails were observed routed through the site. Topography was generally flat with irregular undulating surfaces resulting from minor drainages and roads/trails. The ground was surfaced with silty sand with varying gravel content at both test boring locations, which contain minor organic content (grass, woody debris, roots and twigs) in recovered samples. Recent aerial imagery (**Figure 4**) shows that the far southwestern portion of proposed Lot 1A has a history of collecting standing water in the Spring.

- **Lot 1B** was developed with an existing SCF facility that previously operated as a commercial hardware store. The developments include an approximately 12,000 sq. ft. single story building, parking areas and driveways surrounding the structure, an existing septic system leach field in the grass surfaced area southwest of the existing structure, buried and overhead utilities, and other improvements. Approximately 1 inch of topsoil was encountered at the ground surface at the test boring, which was located in the grass surfaced area. Topography was relatively flat except for a minor ditch routed along Wassim Circle. South Knik Goose Bay Road is elevated above the site. Recent aerial imagery (**Figure 4**) shows that the ditch near the property boundary along Wassim Circle and a wider portion of the unpaved area at the northern corner of the site have a history of collecting standing water in the Spring.

Figure 4: Site Imagery Showing Extent of Standing Water Conditions in May 2020

Note: Google Earth historical image dated 5/5/2020.

Soil Profile. The subsurface soil profile encountered at the test boring locations was interpreted consisting of two generalized soil units: (I) Silty Surficial Soils overlying (II) Glacial Till. The interpreted depth interval of the generalized soil units at each test boring is summarized on **Table 1**. Descriptions for the generalized soil units highlighting soil classification, density, and laboratory testing results are provided below.

Table 1: Generalized Soil Unit Profile at Test Boring Locations

Test Hole Number	Proposed Subdivision Lot	GPS Coordinates (WGS84)		Interpreted Depth of Generalized Soil Unit (feet BGS)		Groundwater Depth (feet BGS)
		Latitude (N)	Longitude (W)	UNIT I Silty Surficial Soil	UNIT II Glacial Till	
RM24-TB01	Lot 1B	61.50586	149.64706	0 to 8.0	8.0 to 21.3 TD	NE
RM24-TB02	Lot 1A	61.50693	149.64548	NE	0 to 21.5 TD	NE
RM24-TB03	Lot 1A	61.50856	149.64310	0 to 5.5	5.5 to 21.5 TD	NE

Table Notes:
BGS = below ground surface.
TD = total depth of test hole.
NE = groundwater not encountered while drilling or during measurements performed immediately after drilling.

Unit I –Silty Surficial Soil, consisting of sandy silt and silty sand (USCS = ML, SM), was encountered in two of the three test borings extending from the ground surface to depths ranging from 5.5 to 8 feet BGS. Below frost, this soil unit was generally moist and loose. The Silty Surficial Soil unit contained variable sand content and trace gravel content, had tested percent passing the No. 200 standard sieve (P200) of 28 and 58 percent in the two samples tested, and was estimated to be nonplastic. This soil unit typically contained visible organic matter consisting of woody debris, roots, and disseminated organics ranging from trace levels to an estimated 5 percent by volume. These soils were estimated as highly frost susceptible (F3 to F4). Extents of the Silty Surficial Soil unit encountered at the proposed subdivision lots was as follows:

- **Lot 1A**: the Silty Surficial Soil unit extended to a depth of 5.5 feet bgs at Test Boring RM24-TB03 in the northern portion of the lot but was not encountered at Test Boring RM24-02 in the southwestern portion of the lot.

- **Lot 1B**: the Silty Surficial Soil unit extended to a depth of 8.0 feet at Test Boring RM24-TB01. The upper 4.5 feet of this unit was interpreted to be reworked (i.e., fill material).

Unit II – Glacial Till, consisting of silty sand with gravel and silty gravel with sand (USCS= SM, GM), was encountered across the Patricia Subdivision below the surficial soils and extending to completion depth at each test boring, consistent with the 'Qgm' unit mapped at the project site (**Figure 3**). Cobbles and potential boulders were interpreted at each test boring location within this unit based on sample recovery and drilling action. The Glacial Till unit was dense to very dense in consistency, dry to moist, had tested P200 content ranging between 31 and 36 percent, and was estimated as containing nonplastic to low plasticity fines. The Glacial Till unit was estimated as highly frost susceptible (F3 to F4).

Groundwater was not observed while drilling and during measurements performed in the PVC casings immediately after drilling[9]. However, indications of potential for perched for groundwater conditions were interpreted at both proposed subdivision lots as follows:

- **Lot 1A**: Recent aerial imagery (**Figure 4**) shows that the far southwestern portion of proposed Lot 1A has a history of collecting standing water in the Spring.
- **Lot 1B:** Wet soils were observed immediately below frost while drilling Test Boring RM24-TB01. Additionally, recent aerial imagery (**Figure 4**) shows that the ditch near the property boundary along Wassim Circle and a wider portion of the unpaved area at the northern corner of the site have a history of collecting standing water in the Spring.

Permafrost was not suspected or interpreted at the test boring locations during this investigation, and we generally do not anticipate permafrost affecting this site. The project area is regionally mapped as containing isolated masses of permafrost (less than 10 percent area coverage) with heightened potential for perennially frozen soil in areas with high ground insulation such as bogs or swamps[10].

Bedrock was not suspected or interpreted at the test hole locations during this investigation. We do not anticipate shallow bedrock conditions affecting this site.

GENERAL CONCLUSIONS

General conclusions, based on the results of this investigation, regarding suitability for onsite wastewater disposal and water well system installations and site development for both proposed subdivision lots are provided below.

Lot 1A. The investigation results indicate favorable conditions for the installation of water wells, onsite wastewater disposal (i.e., septic) systems, and site development. The proposed lot contains greater than 10,000 square feet of usable building area and greater than 10,000 square feet of contiguous septic area in accordance with Matanuska-Susitna Borough Code 43.20.281(A). Design and installation of onsite water and wastewater systems should be performed in accordance with the governing Alaska Department of Environmental Conservation requirements for these systems. To improve drainage within the footprint of septic system infiltration galleries, materials consistent with the Silty Surficial Soil unit (Unit I defined above) variably surfacing the site should be removed such that the base of the infiltration gallery bedding is placed on soils consistent with the Glacial Till unit (Unit II defined above).

Considering the known history of standing surface water in the southwestern portion of this proposed lot (**Figure 4**), site design and grading should consider increasing the grade and/or improving drainage in this portion of the site to mitigate

[9] Additional groundwater measurements are planned to be recorded by R&M during the late spring or summer season in 2024, results presented in a future memorandum submitted to SCF.

[10] Jorgenson et al., 2008. "Permafrost Characteristics of Alaska", Institute of Northern Engineering, University of Alaska.

potential for standing water to affect developments. Potential drainage improvement systems include installation of a surface or subsurface retention basin and/or culverts to convey surface water off site.

Favorable soils (Unit II) for support of foundations and other developments were encountered underlying a variable cover of Silty Surficial Soil (Unit I) on this site. The Silty Surficial Soil is generally not favorable for support of conventional foundations and should be removed within the influence areas of foundations where encountered. Foundation and other site development design should consider the high frost susceptibility of soils underlying the site.

Lot 1B. The investigation results indicate favorable conditions for the installation of water wells, onsite wastewater disposal (i.e., septic) systems, and site development. The proposed lot contains greater than 10,000 square feet of usable building area and greater than 10,000 square feet of contiguous septic area in accordance with Matanuska-Susitna Borough Code 43.20.281(A). Design and installation of onsite water and wastewater systems should be performed in accordance with the governing Alaska Department of Environmental Conservation requirements for these systems. To improve drainage within the footprint of septic system infiltration galleries, the Silty Surficial Soil unit (Unit I defined above) surfacing the site should be removed such that the base of the infiltration gallery bedding is placed on soils consistent with the Glacial Till unit (Unit II defined above). The top surface of the Glacial Till unit was encountered approximately 8 feet below the ground surface at the test boring advanced within this site.

Considering the known history of standing surface water within portions of this proposed lot (**Figure 4**), site design should consider improving drainage in these areas of the site to mitigate potential effects of standing water on developments. Potential drainage improvement systems include installation of a surface or subsurface retention basin and/or culverts to convey surface water off site.

Favorable soils (Unit II) for support of conventional foundations and other developments were encountered underlying the Surficial Silty Soil (Unit I) at the project site. Foundation and other site development design should consider the high frost susceptibility of soils underlying the site.

CLOSURE

R&M Consultants, Inc. performed this work in a manner consistent with the level of skill ordinarily exercised by members of the profession currently practicing under similar conditions. No warranty, express or implied, beyond exercise of reasonable care and professional diligence, is made. This report is intended for use only in accordance with the purposes of study described within.

We appreciate the opportunity to perform this geotechnical investigation. Should you require further information concerning the investigation or this report, please contact us at your convenience. Sincerely,

R&M CONSULTANTS, INC.

Brian M. Mullen, P.E.
Senior Geotechnical Engineer

Drafted by:

Alex M. Brown
Staff Geologist

Reviewed by:

Aaron T. Banks, C.P.G.
Senior Geologist

ATTACHMENTS

Location/Vicinity and Area Maps (**Drawings 01 and 02**)
Investigation Location Map (**Drawing 03**)
General Notes (**Drawing 04**)
Explanation of Selected Symbols (**Drawing 05**)
Test Hole Logs (**Drawings 06 through 11**)
Classification of Soil for Engineering Purposes (**Drawing 12**)
USACE Frost Design Soil Classification (**Drawing 13**)
Summary of Laboratory Soils Data (**Drawing 14**)
Gradation Curves (**Drawings 15-17**)

Project Location

MATANUSKA VALLEY

DUCK FLATS

MOUNT EKLUTNA

ALL LOCATIONS ARE APPROXIMATE

0 1.25 2.5 5

APPROXIMATE SCALE IN MILES

NOTES:
- World Topographic Map from ESRI Online
- USGS Anchorage C-8, 15-minute quadrangle

N

Date Saved: 3/7/2024 1:53:35 PM by LSoutherland Z:_GIS\Projects\3107.01 SCF Wasilla Subdivision\Map Documents\DWG-1 LocVic_Patricia Subdivision.mxd

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SCF PATRICIA SUBDIVISION
WASILLA, AK

LOCATION AND VICINITY MAP

PROJ.NO:	3107.01
DATE:	MAR 2024
REF:	GEOTECH RPT
DRAWING NO:	01

ALL LOCATIONS ARE APPROXIMATE

0 1,000 2,000 4,000

APPROXIMATE SCALE IN FEET

NOTES:
- Aerial Photography from World Imagery on ESRI Online

N

Date Saved: 3/7/2024 9:16:17 AM by LSoutherland Z:_GIS\Projects\3107.01 SCF Wasilla Subdivisions\Map Documents\DWG-2 AreaMap_Patricia.mxd

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SCF PATRICIA SUBDIVISION
WASILLA, AK

AREA MAP

PROJ.NO:	3107.01
DATE:	MAR 2024
REF:	GEOTECH RPT
DRAWING NO:	02

ALL LOCATIONS ARE APPROXIMATE

0 250 500 1,000

APPROXIMATE SCALE IN FEET

NOTES:
- Aerial Photography from World Imagery on ESRI Online

N

Date Saved: 3/7/2024 2:00:16 PM by LSoutherland Z:_GIS\Projects\3107.01 SCF Wasilla Subdivisions\Map Documents\DWG-3 TBLocations_Patricia.mxd

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SCF PATRICIA SUBDIVISION
WASILLA, AK

INVESTIGATION LOCATION MAP

PROJ.NO:	3107.01
DATE:	MAR 2024
REF:	GEOTECH RPT
DRAWING NO:	03

SOILS
CONSISTENCY AND SYMBOLS

CLASSIFICATION: Identification and classification of the soil is accomplished in accordance with the ASTM version of the Unified Soil Classification System. When laboratory testing data on material passing the 75-mm sieve is available Standard D 2487 (Classification of Soils for Engineering Purposes) is used and when laboratory data is not available D 2488 (Visual-Manual Procedure) is used. This classification system identifies three major soil divisions: coarse-grained soils, fine-grained soils, and highly organic soils. These three divisions are further subdivided into a total of 15 basic soils groups. Based on the results of visual observations and prescribed laboratory tests, a soil is catalogued according to the basic soil groups, assigned a group symbol(s) and name, and thereby classified. Flow charts contained in the two standards can be used to assign the appropriate group symbol(s) and name.

SOIL DENSITY/CONSISTENCY - CRITERIA: Soil density/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 shrinkage 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 soil may vary significantly and inexplicably with ice content, thermal regime and soil type.

COARSE GRAINED
(DOT&PF 2007)

Relative Density	N * (blows/FT.)
Very loose	0 - 4
Loose	5 - 10
Medium dense	11 - 30
Dense	31 - 50
Very dense	>50

FINE GRAINED
(ASTM D 2488)

Consistency	Thumbnail Test
Very soft	Thumb > 1 in.
Soft	Thumb = 1 in.
Firm	Thumb = 1/4 in.
Hard	Thumbnail indents
Very hard	Thumbnail will not indent

* Standard Penetration "N": Blows per 12 inches of a 140-pound manual hammer (lifted with rope & cathead) falling 30 inches on a 2-inch O.D. split-spoon sampler except where noted. Blow counts presented on test boring logs are direct field values (i.e.they have not been corrected to account for hammer efficiency, borehole diameter, sampling method, or rod length)

KEY TO TEST RESULTS

DD - Dry Density
LL - Liquid Limit
MC - Moisture Content
Org - Organic Content
PI - Plastic Index
PL - Plastic Limit
PP - Pocket Penetrometer
P200 - % Passing No. 200 Screen
P.02 - % Passing 0.02 mm
P.005 - % Passing 0.005 mm
P.002 - % Passing 0.002 mm
Gs - Specific Gravity
Cs - Chemical Sample Identification

STANDARD SYMBOLS

SYMBOL	NAME	PARTICLE SIZE	SYMBOL	NAME
	CLAY	< 0.002mm, Plastic		ORGANICS
	SILT	0.002mm, - #200		ICE
	SAND (Sa)	#200, - #4		ICE W/SOIL INCLUSIONS
	GRAVEL (Gr)	#4, - 3"		ICE LENSE IN SOIL
	COBBLES & BOULDERS	3" - 12" & > 12"		ICE CRYSTALS IN CLAY

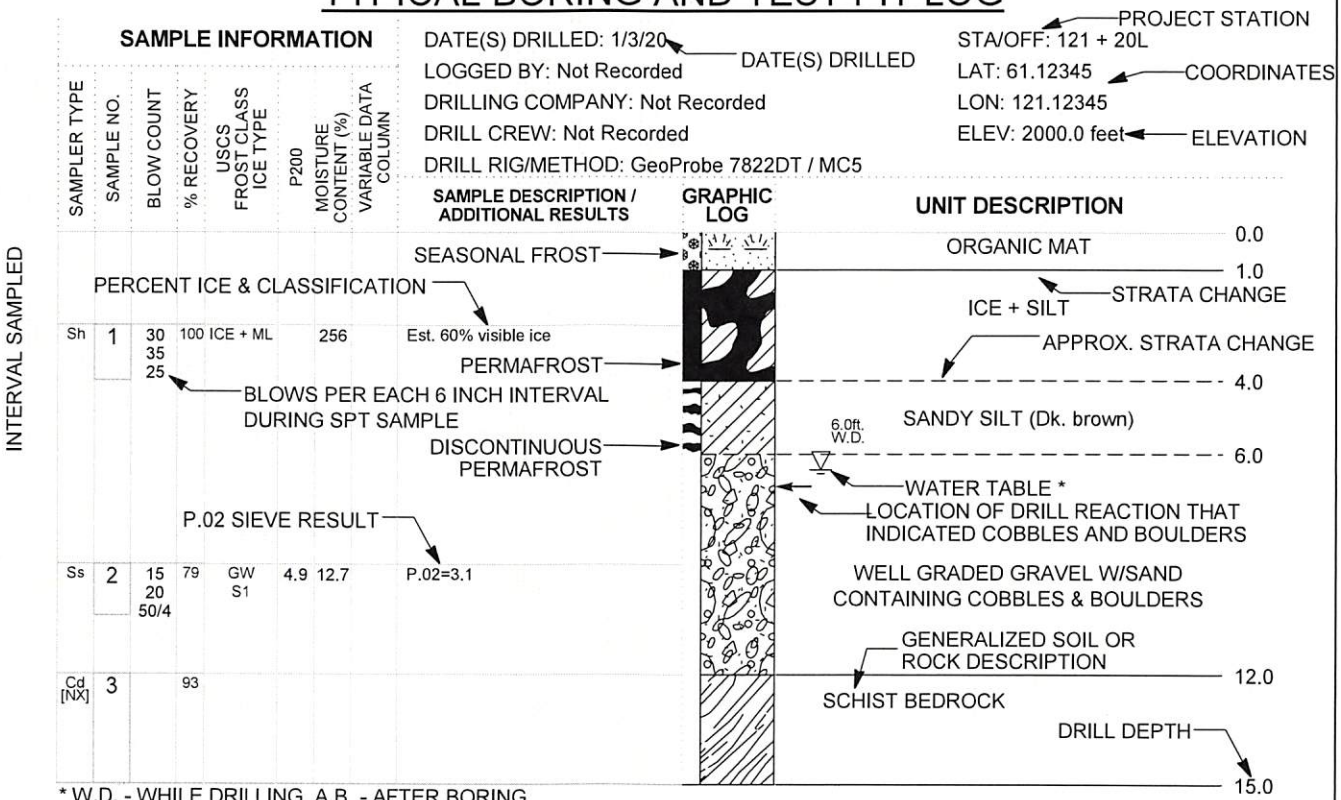
(The symbols shown above are frequently used in combinations, e. g. SILTY GRAVEL W/SAND)

SAMPLER TYPE SYMBOLS

A	Auger Sample	MC	1.5 In. I.D. Macro-core	Tm	Modified Shelby Tube
C	Cuttings Sample	MC7	3.0 In. I.D. Macro-core	Ts	3.0 In. Shelby Tube
Cd	Double Tube Core Barrel	Sh	2.5 In. Split Spoon w/340 lb. Manual Hammer	BX	Rock Core - 1-5/8 in. core diameter
Cs	Single Tube or Auger Core	Sha	2.5 In. Split Spoon w/340 lb. Auto Hammer	NX	Rock Core - 2-1/8 in core diameter
Ct	Triple Tube Core Barrel	Sl	2.5 In. Split Spoon w/140 lb. Hammer	NQ	Rock Core - 1-7/8 in. core diameter
G	Grab Sample	Ss	1.4 In. Split Spoon w/140 lb. Manual Hammer	HQ	Rock Core - 2-1/2 in. core diameter
		Ssa	1.4 In. Split Spoon w/140 lb. Auto Hammer		

NOTE: Sampler types are noted above the boring log or adjacent to it at the respective depth. Individual logs may not utilize all listed items.

TYPICAL BORING AND TEST PIT LOG



* W.D. - WHILE DRILLING, A.B. - AFTER BORING
** - REFER TO SAMPLER SYMBOL (Ss, Sh, ETC.) FOR SAMPLER I.D. & HAMMER WEIGHT/TYPE
NOTE: Water levels shown on the boring logs are the levels measured in the boring at the times indicated.

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EXPLANATION OF SELECTED SYMBOLS

PROJ.NO:	GENERAL
DATE:	N/A
REF:	N/A
DWG.NO:	05

RM24-TB01

Log Page 1 of 2

Date(s) Drilled: 2/7/24
Logged By: A. Brown
Drilling Company: Wininger Drilling
Drill Crew: Frank & Cole Wininger
Rig/Method: Tracked CME 55 / 3.25" I.D. HSA

Lat: 61.50586
Lon: -149.64706

DEPTH (FT)	SAMPLER TYPE	SAMPLE NO.	BLOW COUNT	PERCENT RECOVERY	USCS FROST CLASS ICE TYPE	MOISTURE CONTENT (PERCENT)	P200 (%)	SAMPLE DESCRIPTION / ADDITIONAL RESULTS	GRAPHIC LOG	UNIT DESCRIPTION
0										0.0
	Sha	1	11 13 13	87				Brown-gray, Est. <5% visible organics by volume (woody debris)		
2	Sha	2	4 3 2	73				Dk. brown, Est. 5% visible organics by volume (woody debris/roots)		SANDY SILT W/ ORGANICS, Fine to coarse sand, Nonplastic, Soft, Moist to wet, Appears to transition to native soil around 4.5'
4										
	Sha	3	3 2 2	87	ML* F4*	36.4	58	Dk. brown, Est. 5% visible organics by volume (woody debris/roots), Gr=4, Sa=38, Fines=58		
6										
	Sha	4	5	100				Brown		
8		5	11 16					Gray-brown		8.0
10	Sha	6	4 10 14	100	SM* F3*	8.3	36	Brown, Fines=36		SILTY SAND W/GRAVEL CONTAINING COBBLES & BOULDERS, Gravel subrounded to angular, Fine to coarse sand, Nonplastic fines, Medium dense to very dense, Moist
12										
14										14.0

(Continued on Next Page)

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SCF WASILLA SUBDIVISIONS (PATRICIA)
WASILLA, AK

LOG OF TEST BORING

PROJ.NO:	3107.01
DATE:	MARCH 2024
REF:	DRAFT
DWG.NO:	06

RM24-TB01

Log Page 2 of 2

Date(s) Drilled: 2/7/24
Logged By: A. Brown
Drilling Company: Wininger Drilling
Drill Crew: Frank & Cole Wininger
Rig/Method: Tracked CME 55 / 3.25" I.D. HSA

Lat: 61.50586
Lon: -149.64706

DEPTH (FT)	SAMPLE INFORMATION: SAMPLER TYPE	SAMPLE NO.	BLOW COUNT	PERCENT RECOVERY	USCS FROST CLASS ICE TYPE	MOISTURE CONTENT (PERCENT)	P200 (%)	SAMPLE DESCRIPTION / ADDITIONAL RESULTS	GRAPHIC LOG	UNIT DESCRIPTION
14										14.0
16	Sha	7	10 50/0.2	86				Sampler refusal, possibly driving on cobble, Dk. brown		SILTY SAND W/GRAVEL CONTAINING COBBLES & BOULDERS , Gravel subrounded to angular, Fine to coarse sand, Nonplastic fines, Medium dense to very dense, Moist
18										17.5
20	Sha	8	15 43 50/0.3	92				Rocks jammed in drive shoe, Gray-brown		SILTY GRAVEL W/SAND, Gravel to 2.5" dia, subrounded to angular, Fine to coarse sand, Nonplastic fines, Very dense, Dry to moist
										21.3

* Estimated classification

1) Latitude and Longitude coordinates reference the WGS 84 datum and were recorded using a recreational-grade GPS unit.
2) Gr = gravel (%), Sa = Sand (%), Fines = Passing the No. 200 sieve (%), P.xx = % passing size mm.
3) No groundwater was encountered during drilling on 7 February 2024.
4) 1-inch slotted PVC casing installed to 21.3 feet for monitoring of groundwater levels.

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SCF WASILLA SUBDIVISIONS (PATRICIA)
WASILLA, AK

LOG OF TEST BORING

PROJ.NO:	3107.01
DATE:	MARCH 2024
REF:	DRAFT
DWG.NO:	07

RM24-TB02

Log Page 1 of 2

Date(s) Drilled: 2/7/24
Logged By: A. Brown
Drilling Company: Wininger Drilling
Drill Crew: Frank & Cole Wininger
Rig/Method: Tracked CME 55 / 3.25" I.D. HSA

Lat: 61.50693
Lon: -149.64548

DEPTH (FT)	SAMPLE INFORMATION: SAMPLER TYPE	SAMPLE NO.	BLOW COUNT	PERCENT RECOVERY	USCS FROST CLASS ICE TYPE	MOISTURE CONTENT (PERCENT)	P200 (%)	SAMPLE DESCRIPTION / ADDITIONAL RESULTS	GRAPHIC LOG	UNIT DESCRIPTION
0										0.0
	Sha	1	8 8 7	100				Brown, Est. <5% visible organics by volume (woody debris/roots)		
2										
	Sha	2	6 16 17	87				Brown		
4										
	Sha	3	6 11 13	87	SM* F3*	7.5	31	Brown, Gr=28, Sa=41, Fines=31		SILTY SAND W/GRAVEL CONTAINING COBBLES & BOULDERS, Gravel subrounded to angular, Fine to coarse sand, Nonplastic fines, Medium dense to dense, Moist
6										
	Sha	4	6 11 19	100				Brown		
8										
10	Sha	5	6 15 25	100	SM* F3*	7.1	33	Brown, Fines=33		
12										
										(SEE NEXT PAGE) 13.5
14										14.0

(Continued on Next Page)

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SCF WASILLA SUBDIVISIONS (PATRICIA)
WASILLA, AK

LOG OF TEST BORING

PROJ.NO:	3107.01
DATE:	MARCH 2024
REF:	DRAFT
DWG.NO:	08

RM24-TB02

Log Page 2 of 2

Date(s) Drilled: 2/7/24
Logged By: A. Brown
Drilling Company: Wininger Drilling
Drill Crew: Frank & Cole Wininger
Rig/Method: Tracked CME 55 / 3.25" I.D. HSA

Lat: 61.50693
Lon: -149.64548

DEPTH (FT)	SAMPLE INFORMATION: SAMPLER TYPE	SAMPLE NO.	BLOW COUNT	PERCENT RECOVERY	USCS FROST CLASS ICE TYPE	MOISTURE CONTENT (PERCENT)	P200 (%)	SAMPLE DESCRIPTION / ADDITIONAL RESULTS	GRAPHIC LOG	UNIT DESCRIPTION
14										14.0
16	Sha	6	25 50/0.4	56				Rock jammed in drive shoe, Brown		SILTY GRAVEL W/SAND CONTAINING COBBLES & BOULDERS, Gravel subrounded to angular, Fine to coarse sand, Nonplastic fines, Very dense, Moist
18										
20	Sha	7	17 29 21	80				Brown-gray		21.5

* Estimated classification

1) Latitude and Longitude coordinates reference the WGS 84 datum and were recorded using a recreational-grade GPS unit.
2) Gr = gravel (%), Sa = Sand (%), Fines = Passing the No. 200 sieve (%), P.xx = % passing size mm.
3) No groundwater was encountered during drilling on 7 February 2024.
4) 1-inch slotted PVC casing installed to 21.5 feet for monitoring of groundwater levels.

R&M CONSULTANTS, INC.

SCF WASILLA SUBDIVISIONS (PATRICIA)
WASILLA, AK

LOG OF TEST BORING

PROJ.NO:	3107.01
DATE:	MARCH 2024
REF:	DRAFT
DWG.NO:	09

RM24-TB03

Log Page 1 of 2

Date(s) Drilled: 2/8/24
Logged By: A. Brown
Drilling Company: Wininger Drilling
Drill Crew: Frank & Cole Wininger
Rig/Method: Tracked CME 55 / 3.25" I.D. HSA

Lat: 61.50856
Lon: -149.64310

DEPTH (FT)	SAMPLER TYPE	SAMPLE NO.	BLOW COUNT	PERCENT RECOVERY	USCS FROST CLASS ICE TYPE	MOISTURE CONTENT (PERCENT)	P200 (%)	SAMPLE DESCRIPTION / ADDITIONAL RESULTS	GRAPHIC LOG	UNIT DESCRIPTION
0										0.0
	Sha	1	1 1 2	73				Brown, Est. 5% visible organics by volume (woody debris/roots/disseminated orgs.)		
2	Sha	2	2 4 5	73	SM* F3*	10.7	28	Brown, Est. <5% visible organics by volume (woody debris), Fines=28		SILTY SAND W/ ORGANICS, Fine to coarse sand, Nonplastic fines, Loose, Dry to moist, Thin organic layer at surface (0.1')
4	Sha	3	8	87				Brown, Est. <5% visible organics by volume (woody debris)		
		4	9 8					Brown		5.5
6	Sha	5	11 12 19	100	SM* F3*	8.9	35	Sampler overfilled, Brown, Gr=20, Sa=45, Fines=35		SILTY SAND W/GRAVEL CONTAINING COBBLES & BOULDERS, Gravel subrounded to angular, gravel content decreases notably in samples below 12', cobbles likely based on driving & drilling action, Fine to coarse sand, Nonplastic to low plasticity fines, Medium dense to very dense, Moist
8	Sha	6	9 15 15	100				Brown		
10										
12										
14										14.0

(Continued on Next Page)

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SCF WASILLA SUBDIVISIONS (PATRICIA)
WASILLA, AK

LOG OF TEST BORING

PROJ.NO:	3107.01
DATE:	MARCH 2024
REF:	DRAFT
DWG.NO:	10

RM24-TB03

Log Page 2 of 2

Date(s) Drilled: 2/8/24
Logged By: A. Brown
Drilling Company: Wininger Drilling
Drill Crew: Frank & Cole Wininger
Rig/Method: Tracked CME 55 / 3.25" I.D. HSA

Lat: 61.50856
Lon: -149.64310

DEPTH (FT)	SAMPLE INFORMATION: SAMPLER TYPE	SAMPLE NO.	BLOW COUNT	PERCENT RECOVERY	USCS FROST CLASS ICE TYPE	MOISTURE CONTENT (PERCENT)	P200 (%)	SAMPLE DESCRIPTION / ADDITIONAL RESULTS	GRAPHIC LOG	UNIT DESCRIPTION
14										14.0
16	Sha	7	7 50/0.4	44				Sampler refusal, Brown		SILTY SAND W/GRAVEL CONTAINING COBBLES & BOULDERS, Gravel subrounded to angular, gravel content decreases notably in samples below 12', cobbles likely based on driving & drilling action, Fine to coarse sand, Nonplastic to low plasticity fines, Medium dense to very dense, Moist
18										
20	Sha	8	8 17 30	27				Brown		21.5

* Estimated classification

1) Latitude and Longitude coordinates reference the WGS 84 datum and were recorded using a recreational-grade GPS unit.
2) Gr = gravel (%), Sa = Sand (%), Fines = Passing the No. 200 sieve (%), P.xx = % passing size mm.
3) No groundwater was encountered during drilling on 8 February 2024.
4) 1-inch slotted PVC casing installed to 21.5 feet for monitoring of groundwater levels.

R&M CONSULTANTS, INC.

SCF WASILLA SUBDIVISIONS (PATRICIA)
WASILLA, AK

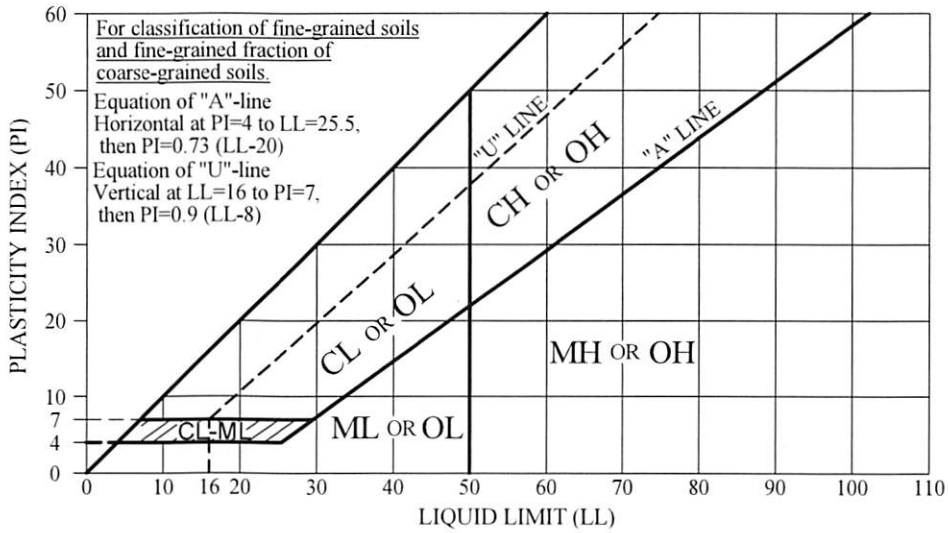
LOG OF TEST BORING

PROJ.NO:	3107.01
DATE:	MARCH 2024
REF:	DRAFT
DWG.NO:	11

Z:\PROJECT\2846.01 ADNR TLO PS TERM BOYD ROAD SUBDIVISION\EARTH\GINT\ANDR TLO BOYD ROAD SUBDIVISION.GPJ

Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests [A]			Soil Classification	
			Group Symbol	Group Name [B]
Coarse-grained Soils More than 50% retained on the No. 200 sieve	Gravels More than 50% of coarse fraction retained on No. 4 sieve	Clean Gravels Less than 5% fines [C]	$Cu \geq 4$ and $1 < Cc < 3$ [E]	GW	Well-graded gravel [F]
			$Cu < 4$ and/or $1 > Cc > 3$ [E]	GP	Poorly-graded gravel [F]
		Gravels with Fines More than 12% fines [C]	Fines classify as ML or MH	GM	Silty gravel [F,G,H]
			Fines classify as CL or CH	GC	Clayey gravel [F,G,H]
	Sands 50% or more of coarse fraction passes No. 4 sieve	Clean Sands Less than 5 % fines [D]	$Cu \geq 6$ and $1 < Cc < 3$ [E]	SW	Well-graded sand [I]
			$Cu < 6$ and/or $1 > Cc > 3$ [E]	SP	Poorly-graded sand [I]
		Sands with Fines More than 12 % fines [D]	Fines classify as ML or MH	SM	Silty sand [G,H,I]
			Fines classify as CL or CH	SC	Clayey sand [G,H,I]
Fine-grained Soils 50% or more passes the No. 200 sieve	Silts and Clays Liquid Limit less than 50	inorganic	PI > 7 and plots on or above "A" line [J]	CL	Lean clay [K,L,M]
			PI < 4 and plots below "A" line [J]	ML	Silt [K,L,M]
		organic	Liquid limit - oven dried / Liquid limit - not dried < 0.75	OL	Organic Clay [K,L,M,N] / Organic Silt [K,L,M,O]
	Silts and Clays Liquid Limit 50 or more	inorganic	PI plots on or above "A" line	CH	Fat clay [K,L,M]
			PI plots below "A" line	MH	Elastic silt [K,L,M]
		organic	Liquid limit - oven dried / Liquid limit - not dried < 0.75	OH	Organic Clay [K,L,M,P] / Organic Silt [K,L,M,Q]
Highly organic soils	Primarily organic matter, dark in color, and organic odor			PT	Peat

[A] Based on the material passing the 3-in. (75-mm) sieve.
[B] If field sample contained cobbles or boulders, or both, add "with cobbles or boulders, or both" to group name.
[C] Gravel with 5 to 12 % fines require dual symbols:
GW-GM well-graded gravel with silt
GW-GC well-graded gravel with clay
GP-GM poorly-graded gravel with silt
GP-GC poorly-graded gravel with clay
[D] Sands with 5 to 12 % fines require dual symbols:
SW-SM well-graded sand with silt
SW-SC well-graded sand with clay
SP-SM poorly-graded sand with silt
SP-SC poorly-graded sand with clay
[E] $Cu = D_{60} / D_{10}$ $\quad Cc = \frac{(D_{30})^2}{D_{10} \times D_{60}}$
[F] If soil contains ≥ 15% sand, add "with sand " to group name.
[G] If fines classify as CL-ML, use dual symbol GC-GM, or SC-SM.
[H] If fines are organic, add "with organic fines" to group name.
[I] If soil contains ≥ 15% gravel, add "with gravel" to group name.
[J] If Atterberg limits plot in hatched area, soil is a CL-ML, silty clay.
[K] If soil contains 15 to 29% plus No. 200, add "with sand" or "with gravel," whichever is predominant.
[L] If soil contains ≥ 30% plus No. 200, predominantly sand, add "sandy" to group name.
[M] If soil contains ≥ 30% plus No. 200, predominantly gravel, add "gravelly" to group name.
[N] PI ≥ 4 and plots on or above "A" line.
[O] PI < 4 and plots below "A" line.
[P] PI plots on or above "A" line.
[Q] PI plots below "A" line.



R&M CONSULTANTS, INC.

CLASSIFICATION OF SOILS FOR ENGINEERING PURPOSES ASTM D 2487

PROJ.NO:	GENERAL
DATE:	N/A
REF:	N/A
DWG.NO:	12

U.S. ARMY CORPS OF ENGINEERS
FROST DESIGN SOIL CLASSIFICATION

FROST GROUP	KIND OF SOIL	PERCENTAGE FINER THAN 0.02 mm BY WEIGHT	TYPICAL SOIL TYPES UNDER UNIFIED SOIL CLASSIFICATION SYSTEM
NFS*	(a) Gravels Crushed Stone Crushed Rock	0 - 1.5	GW, GP
	(b) Sands	0 - 3	SW, SP
PFS+	(a) Gravels Crushed Stone Crushed Rock	1.5 - 3	GW, GP
	(b) Sands	3 - 10	SW, SP
S1	Gravelly Soils	3 - 6	GW, GP, GW-GM, GP-GM
S2	Sandy Soils	3 - 6	SW, SP, SW-SM, SP-SM
F1	Gravelly Soils	6 - 10	GM, GW-GM, GP-GM
F2	(a) Gravelly Soils (b) Sands	10 - 20 6 - 15	GM, GW-GM, GP-GM SM, SW-SM, SP-SM
F3	(a) Gravelly Soils (b) Sands, Except Very Fine Silty Sands (c) Clays, PI>12	Over 20 Over 15 --------	GM, GC SM, SC CL, CH
F4	(a) All Silts (b) Very Fine Silty Sand (c) Clays PI<12 (d) Varved Clays and Other Fine-grained Banded Sediments	-------- Over 15 -------- --------	ML, MH SM CL, CL-ML CL, CL-ML CL and ML CL, ML, and SM; CL, CH and ML; CL, CH, ML and SM

* Non-frost-susceptible
\+ Possibly frost-susceptible, but requires laboratory test to determine frost design soils classification.

From: "Seasonal Frost Conditions", June, 1992, U.S. Army Corps of Engineers TM-5-822-5.

R&M CONSULTANTS, INC.

FROST DESIGN SOIL CLASSIFICATION

PROJ.NO:	GENERAL
DATE:	N/A
REF:	N/A
DWG.NO:	13

SAMPLE IDENTIFICATION			PARTICLE SIZE ANALYSIS (% FINER)[1]																ATTERBERG LIMITS			MOIST. CONT. (%)	ASTM CLASS[2]	FROST CLASS[3]
			STANDARD SIEVE SIZE													(mm)								
TEST BORING	NO.	DEPTH (FT)	3"	2"	1 1/2"	1"	3/4"	1/2"	3/8"	#4	#10	#20	#40	#60	#140	#200	0.02	0.005	0.002	LL	PL	PI			
RM24-TB01	3	5.0- 6.5				100	99		98	96	92	86	80	74	64	58							36.4	ML*	F4*
RM24-TB01	6	10.0- 11.5														36							8.3	SM*	F3*
RM24-TB02	3	5.0- 6.5		100	92	88	84		79	72	64	58	52	45	34	31							7.5	SM*	F3*
RM24-TB02	5	10.0- 11.5														33							7.1	SM*	F3*
RM24-TB03	2	2.5- 4.0														28							10.7	SM*	F3*
RM24-TB03	5	7.5- 9.0				100	97		87	80	73	66	59	53	40	35							8.9	SM*	F3*

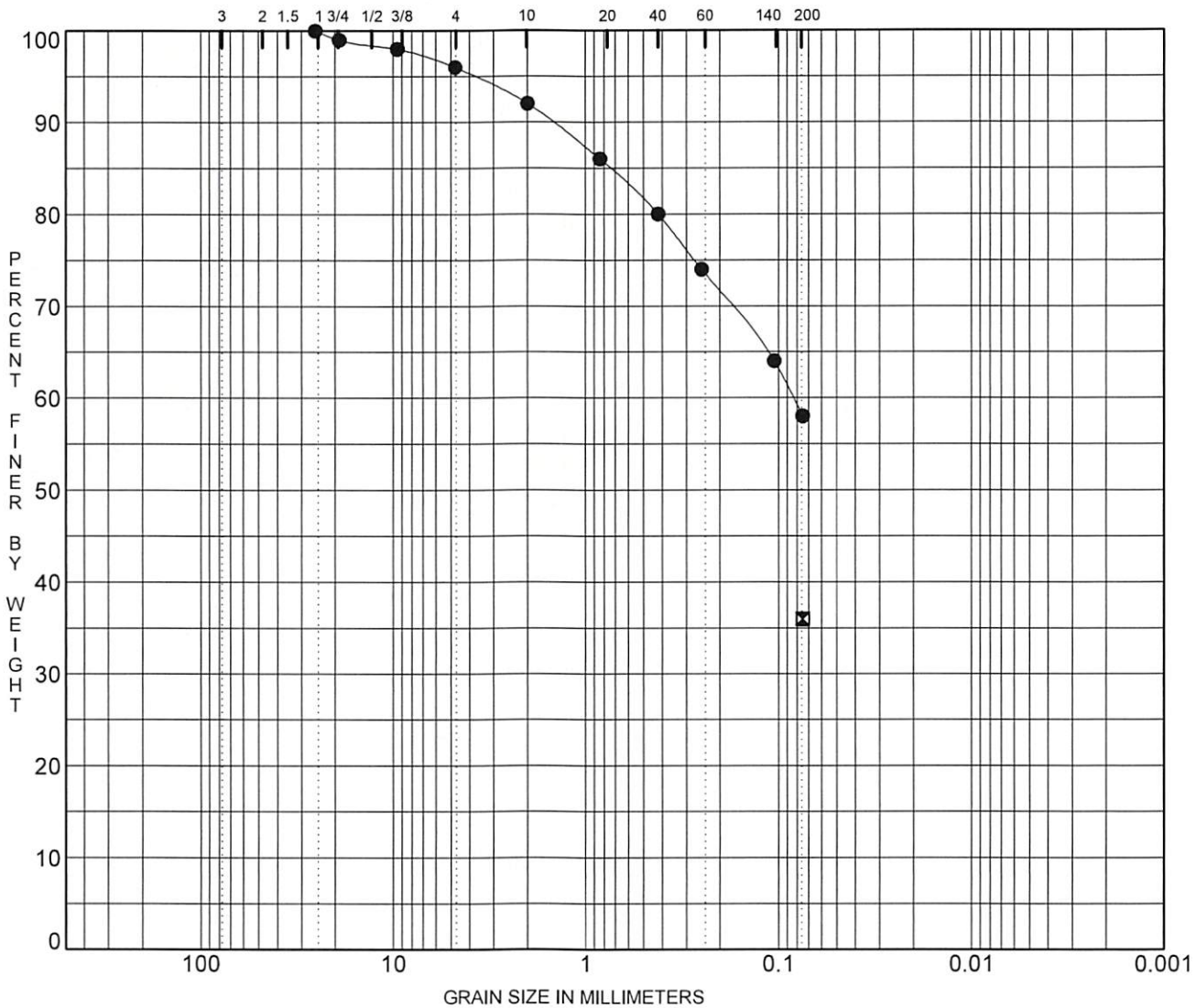
NOTES:
1) The maximum particle size of samples is limited by the I.D. of the sampler opening or the width of the auger flights.
2) Soil plasticity was estimated following ASTM D 2488 when the Atterberg limits were not tested.
3) Frost classification was estimated following the USACE Frost Design Classification where hydrometer tests were not performed.
*Estimated classification

R&M CONSULTANTS, INC.

SCF WASILLA SUBDIVISIONS (PATRICIA)
WASILLA, AK

SUMMARY OF LABORATORY SOILS DATA

PROJ.NO:	3107.01
DATE:	MARCH 2024
REF:	DRAFT
DWG.NO:	14



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	Borehole	Smpl. No	Interval	ASTM Class	FROST Class	MC%	LL	PL	PI	Cc	Cu
●	RM24-TB01	3	5.0- 6.5	ML*	F4*	36.4					
⧓	RM24-TB01	6	10.0- 11.5	SM*	F3*	8.3					

	Borehole	Smpl. No	D100	D60	D30	D10	%Gravel	%Sand	%Fines	P.02
●	RM24-TB01	3	25.4	0.08			4	38	58	
⧓	RM24-TB01	6							36	

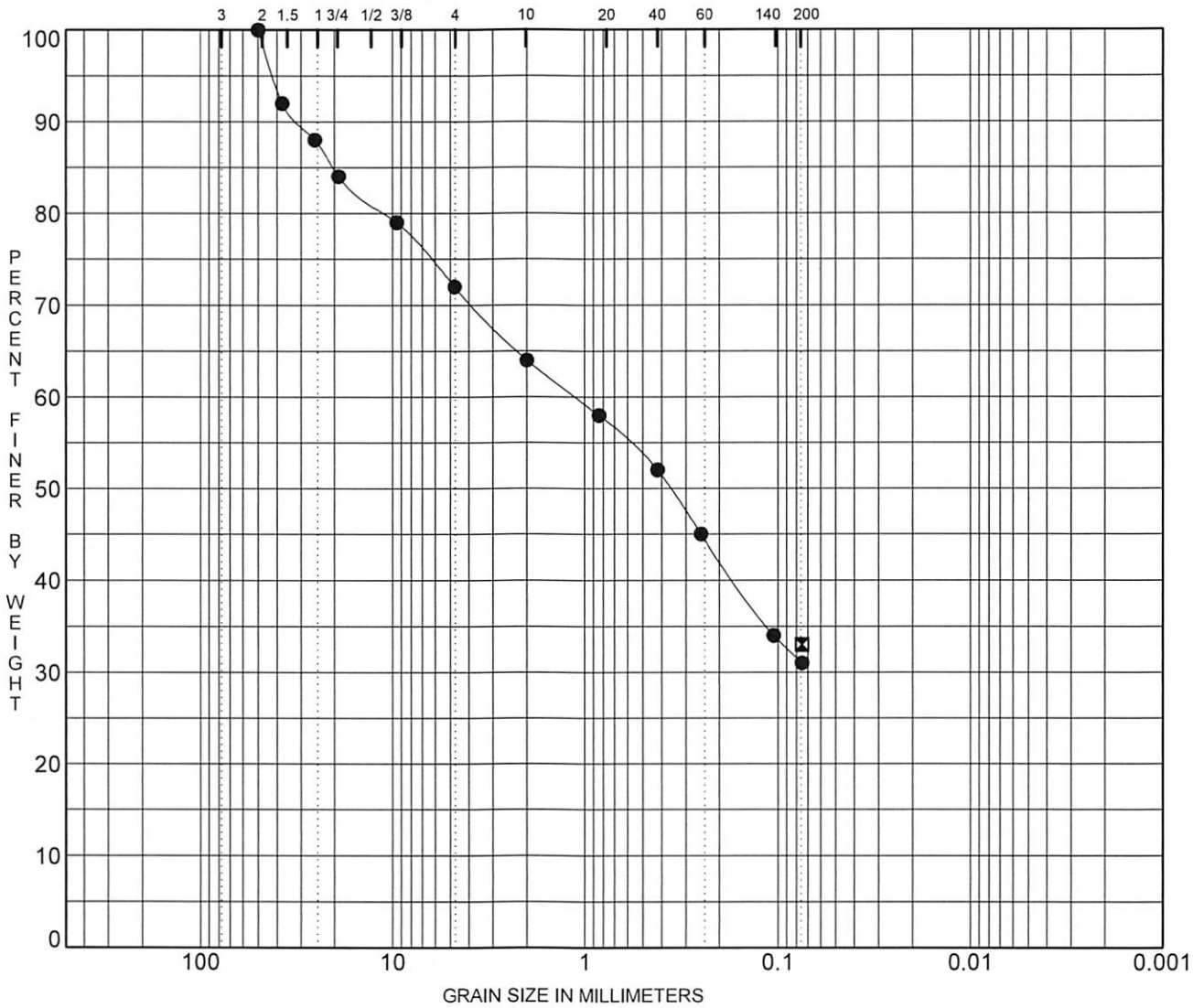
*Estimated Classification

R&M CONSULTANTS, INC.

SCF WASILLA SUBDIVISIONS (PATRICIA)
WASILLA, AK

SURFACE SEDIMENT GRADATION CURVES

PROJ.NO:	3107.01
DATE:	MARCH 2024
REF:	DRAFT
DWG.NO:	15



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	Borehole	Smpl. No	Interval	ASTM Class	FROST Class	MC%	LL	PL	PI	Cc	Cu
●	RM24-TB02	3	5.0- 6.5	SM*	F3*	7.5					
⧓	RM24-TB02	5	10.0- 11.5	SM*	F3*	7.1					

	Borehole	Smpl. No	D100	D60	D30	D10	%Gravel	%Sand	%Fines	P.02
●	RM24-TB02	3	50	1.12			28	41	31	
⧓	RM24-TB02	5							33	

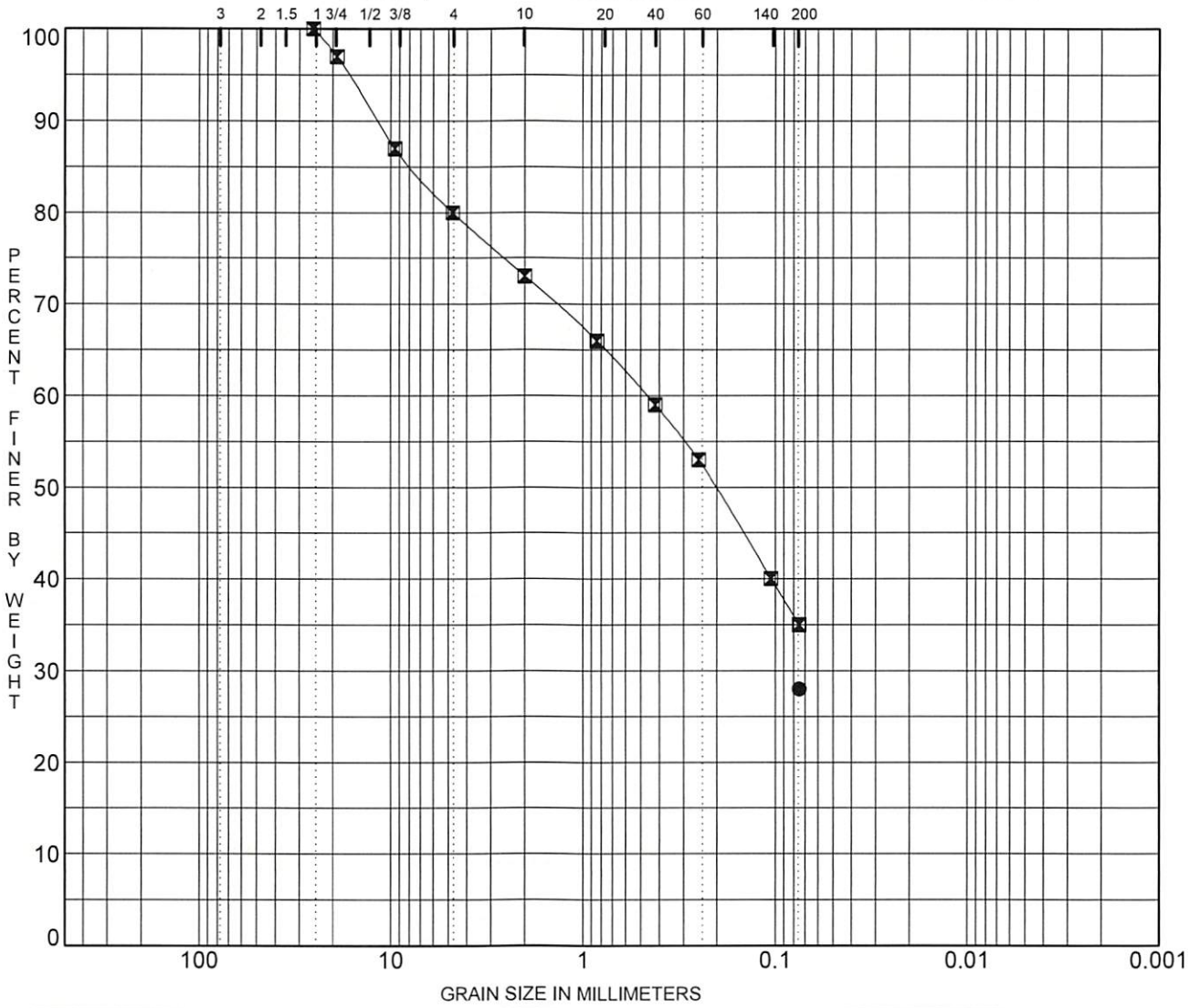
*Estimated Classification

R&M CONSULTANTS, INC.

SCF WASILLA SUBDIVISIONS (PATRICIA)
WASILLA, AK

SURFACE SEDIMENT GRADATION CURVES

PROJ.NO:	3107.01
DATE:	MARCH 2024
REF:	DRAFT
DWG.NO:	16



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	Borehole	Smpl. No	Interval	ASTM Class	FROST Class	MC%	LL	PL	PI	Cc	Cu
●	RM24-TB03	2	2.5- 4.0	SM*	F3*	10.7					
⧓	RM24-TB03	5	7.5- 9.0	SM*	F3*	8.9					

	Borehole	Smpl. No	D100	D60	D30	D10	%Gravel	%Sand	%Fines	P.02
●	RM24-TB03	2							28	
⧓	RM24-TB03	5	25.4	0.46			20	45	35	

*Estimated Classification

R&M CONSULTANTS, INC.

SCF WASILLA SUBDIVISIONS (PATRICIA)
WASILLA, AK

SURFACE SEDIMENT GRADATION CURVES

PROJ.NO:	3107.01
DATE:	MARCH 2024
REF:	DRAFT
DWG.NO:	17

PINARD ENGINEERING

Paul E. Pinard
Registered Engineer/AK & ID
P.O. Box 871347, Wasilla, AK 99687
(907) 357-ENGR(3647)

ON-SITE DRINKING WATER AND SEWER SYSTEM ENGINEER'S EVALUATION

PROPERTY DESCRIPTION: **LOT 1, PATRICIA SUBDIVISION**

This property is developed to serve a small **commercial** business with a total daily wastewater flow of less than **500** gallons.

Owner's Name(s): **First National Bank of Alaska**
Owner's Address: **PO Box 100720**
Anchorage, Alaska 99510

Buyer's Name(s): **Southcentral Foundation**
Buyer's Address:

RECEIVED
MAR 14 2024
PLATTING

ON-SITE DRINKING WATER SYSTEM:

_____This property is served by a Class "A" Public Water System, approved by ADEC.

PZP XX A drinking water sample was recently collected from this system, tested at an ADEC certified laboratory and was found to be **satisfactory,** meeting ADEC drinking water standards for coliform bacteria.

NOTES: **A flow test was conducted, during which the well produced an average of 4.6 gpm.**

ON-SITE WASTEWATER DISPOSAL SYSTEM:

_____A new wastewater disposal system has been installed. Based on periodic visual observations, it appears this system was constructed in general conformance with current 18 AAC 72 regulations and ADEC policies.

_____This wastewater disposal system was installed by an ADEC Certified Installer and approved by ADEC.

PZP XX The existing wastewater disposal system was tested in accordance with current ADEC policy and was found to be operating **satisfactorily.**

_____It appears this system meets 18 AAC 72 regulations and ADEC policies at the time it was installed, documented and filed at ADEC.

PZP XX It appears this system meets the horizontal separation distance requirements of 18 AAC 72 regulations. However, it is unknown if the minimum vertical separations to seasonal high groundwater and impermeable layers were achieved. The design and construction of the system appear to be undocumented, as records on the system were not found at the ADEC. Compliance with minimum installation requirements of ADEC is unknown.

NOTES: **The septic tank needs to be pumped/cleaned.**

This report does not constitute a guarantee of any kind, explicit or implied, as to the future performance of this water supply or wastewater disposal system. It does accurately portray the conditions found on the date they were tested and/or documented.

DATE 9/6/21

Date Received

STATE OF ALASKA
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

APPLICATION FOR ON-SITE WATER AND SEWER SYSTEM APPROVAL OR DOCUMENTATION OF SYSTEM INSTALLATION

I. GENERAL INFORMATION

Legal Description of the Location

LOT 1, PATRICIA SUBDIVISION

Applicant Name: FIRST NATIONAL BANK ALASKA	Applicant is: (Check one) ☐ Bank ☐ Certified Installer, No. ____ ☒ Owner/Builder ☐ Engineer
Mailing Address: PO BOX 100720	Type of Residence: ☐ Single Family ☐ Multi-Family; Total Number Bedrooms: NA (COMM)
City, State, Zip Code: ANCHORAGE, ALASKA 99510	Telephone:

Send Approval to: ☐ Applicant ☒ Other (*Give Name & Address*) PAUL SCHILLING @ SCHILLING COMM RE

II. WATER SUPPLY SYSTEM

Source of Water and Containment (Check all that Apply)	Type of Water Supply System	Treatment of Water (Check all that Apply)
☒ Well (*Drilled or Driven*) ☐ Surface (*Identify*) ____ ☐ Roof Catchment ☐ Holding Tank ☐ Other (*Identify*) ____	☒ Private ☐ Public (*Serves more than one family*)	☐ None ☐ Chlorination ☐ Filtration ☐ Mineral Removal ☒ Other: UNKNOWN

Well Data

Is the height of the well casing more than 12" above the ground?	☒ Yes ☐ No
Is the sanitary seal or well cap installed on the well casing?	☒ Yes ☐ No
Is drainage directed away from or around the casing within a radius of 10 feet of the well casing?	☒ Yes ☐ No
Is well wire enclosed in conduit?	☒ Yes ☐ No

Date Drilled	Depth of Well (*Feet*)	Static Water Level (*Feet*)	Yield (*If available*)	Pump Rate (*If available*)
8/18 *	60 *	25.2		4.8 GPM

Separation Distance from the Well Casing to each of the Following Sources of Contamination:

Septic Holding Tank on Lot: 100' + **	Sewer Lines on Lot: 25' + **	Absorption Area on Lot: 100' + **
Closest Septic /Holding Tank on Adjacent Lot: 100' +	Closest Sewer Lines on Adjacent Lot: 25' +	Closest Edge of an Absorption Area on Adjacent Lot: 100' +

If toxic materials are stored on the property, including fuel tanks, paints, lubricants and other petroleum based materials, pesticides, fungicides or herbicides, indicate distance from contaminants to well casing: On Lot NONE NOTED W/IN 25'; On Adjacent Lot NONE W/IN 25'

Water Sample Taken by: (Name) PINARD ENGINEERING	Sampler is: ☐ Buyer ☒ Engineer
Address: PO BOX 871347 WASILLA, ALASKA 99687	☐ Banker ☐ Government Official

Water Sample Results:
Attach Copy ☒ Satisfactory – Date: 9/4/21 ☐ Unsatisfactory – Date:

Comments/Recommendations:

* INFORMATION FROM DRILLERS WELL CAP.

** INFORMATION FROM AS-BUILT SURVEY.

I certify that the above information, and that provided in Section IV, is correct:

Signature	Typed/Printed Name	Title	Date
Paul E Pinard	PAUL E. PINARD, P.E.	CE-4793	9/6/21

Note: Must be signed by a Certified Installer, Professional Engineer, DEC Staff, or Owner/Builder

III. WASTEWATER DISPOSAL	Legal Description: LOT 1, PATRICIA SUBDIVISION
☒ Septic Tank/Absorption System	☐ Package Treatment *(Specify Brand Name or Process)*

☐ Holding Tank *(Specify)*	Capacity of Tank	Where Waste is Disposed	Frequency of Pumping
☐ Septic Tank Outfall Discharged To:		☐ Other: *(Specify Outhouse, Incinerator, etc.)*	

☐ NEW SYSTEM

Name of Installer			Date Installed
☐ Owner/Builder ☐ Certified Installer No. ____ ☐ Other ____		Septic Tank Type/Manufacturer	
Septic Tank Size *(Gallons)*	Number of Compartments	Soil Type and Rating	
Type Soil Absorption System	Dimensions/Size Soil Absorption System		Type/Quantity Backfill Material Used for Soil Absorption System
Percolation Test Results *(Attach Copy of Report)*		Percolation Test By: *(Name)*	

Minimum Ground Cover Over Absorption Area Feet	Minimum Ground Cover Over Septic Tank Feet	Cleanout Pipes/Caps Installed on Septic Tank ☐ Yes ☐ No	Cleanout Pipes/Caps Installed on Absorption System ☐ Yes ☐ No

Separation Distance To:	Water Supply Source On Lot Feet	Nearest Water Supply Source On Adjacent Lot Feet	Nearest Body of Water Feet	Water Table/Bedrock Feet	Lot Line Feet

Comments/Recommendations

I certify that the above information, and that provided in Section IV, is correct:

Signature	Typed/Printed Name	Title, Reg./Cert. No., Inst. No.	Date

NOTE: Must be signed by a Certified Installer, Professional Engineer, DEC Staff, or Approved Owner/Builder

☒ EXISTING SYSTEM

Name of Installer UNKNOWN			Date Installed UNKNOWN
☐ Owner/Builder ☐ Certified Installer No. ____ ☒ Other UNKNOWN		Septic Tank Type/Manufacturer UNKNOWN/UNKNOWN	
Septic Tank Size *(Gallons)* UNKNOWN	Number of Compartments UNKNOWN (2?)	Soil Type and Rating UNKNOWN - ? SF/BDRM	
Type Soil Absorption System UNKNOWN (BED?)	Dimensions/Size Soil Absorption System UNKNOWN		Type/Quantity Backfill Material Used for Soil Absorption System UNKNOWN SR/? CY
Adequacy Test Results *(Attach Copy of Report)* ☒ Pass ☐ Fail	Adequacy Test Performed By: *(Name)* PINARD ENGINEERING		Date Septic Tank Pumped *(Attach Copy of Receipt)* PUMPING IS NEEDED AT THIS TIME

Minimum Ground Cover Over Absorption Area 4 Feet	Minimum Ground Cover Over Septic Tank 4 Feet	Cleanout Pipes/Caps Installed on Septic Tank ☒ Yes ☐ No	Cleanout Pipes/Caps Installed on Absorption System ☒ Yes ☐ No

Separation Distance To:	Water Supply Source On Lot 100 + * Feet	Nearest Water Supply Source On Adjacent Lot 100 + * Feet	Nearest Body of Water 100 + Feet	Water Table/Bedrock UNKN/UNKN Feet	Lot Line See ABS Feet

Comments/Recommendations

* BASED ON INFORMATION OBTAINED FROM AS-BUILT SURVEY.

INFORMATION ON THIS SYSTEM WAS NOT FOUND IN RECORDS AT THE ADEC. THIS APPEARS TO BE AN UNDOCUMENTED SYSTEM. COMPLIANCE WITH MINIMUM CONSTRUCTION/INSTALLATION REQUIREMENTS OF THE ADEC IS UNKNOWN.
THE SEPTIC TANK NEEDS TO BE PUMPED/CLEANED.

I certify that the above information, and that provided in Section IV, is correct:

Signature	Typed/Printed Name	Title, Reg./Cert. No., Inst. No.	Date
Paul E Pinard	PAUL E. PINARD, P.E.	CE - 4793	9/5/21

NOTE: Must be signed by a Professional Engineer.

STATE OF ALASKA
SEAL
Paul E. Pinard
Registered Professional
CE - 4793
Engineer
REGISTERED PROFESSIONAL ENGINEER

9/6/21

PINARD ENGINEERING

P.O. Box 871347
Wasilla, AK 99687
(907) 357-ENGR (3647)

ADEQUACY TEST

LOCATION: **Lot 1, Patricia Subdivision**

APPLICANT: **First National Bank Alaska**
PO Box 100720
Anchorage, Alaska 99510

SEPTIC TANK TYPE/SIZE: **Unknown/Unknown**

ABSORPTION SYSTEM: **Unknown (Seepage Bed?)**

DAILY FLOW:

NA BEDROOMS x 150 GAL/BR = **(<500 Gallons)**

JOB NUMBER: **21-220**

DATE OF TEST: **9/4/21**

FIELD STAFF: **C. Pinard**

NUMBER OF BEDROOMS: **NA (Commercial)**

SCUM: **0.1'** SLUDGE: **0.6'**

NEEDS TO BE PUMPED: Yes **XX** No

CURRENTLY IN USE: Yes No **XX**

TEST DATA

Time	Flow Rate	Volume	Cumulative Volume	Septic Tank	Septic Tank	Soil Absorption System				Comments
AM	(GPM)	(GALs)	(GALs)	Liquid Level *	Δ Level	Monitor Tube 1*	Δ SAS Level	Monitor Tube 2*	Δ SAS Level	
11:45	4.8	-	-	4.1'	-	0.0'	-	0.0'	0.0'	Start Flow – Meter 390516
12:00	4.5	72	72	4.1'	0.0'	0.0'	0.0'	0.0'	0.0'	390588
12:15	4.5	68	140	4.1'	0.0'	0.0'	0.0'	0.0'	0.0'	390656
12:30	4.6	67	207	4.1'	0.0'	0.0'	0.0'	0.0'	0.0'	390723
12:45	4.5	69	276	4.1'	0.0'	0.0'	0.0'	0.0'	0.0'	390792
1:15	4.6	136	412	4.1'	0.0'	0.0'	0.0'	0.0'	0.0'	390928
1:45	4.6	137	549	4.1'	0.0'	0.0'	0.0'	0.0'	0.0'	391065
2:15	4.6	137	686	4.1'	0.0'	0.0'	0.0'	0.0'	0.0'	391202
2:45	-	137	823	4.1'	0.0'	0.0'	0.0'	0.0'	0.0'	Stop Test - 391339

RECOVERY

Date	Time	ST MT	SAS MT

*ALL MEASUREMENTS IN FT.

TEST: PASSED **XXX** FAILED

COMMENTS: **The system was tested and found to be operating satisfactorily. There no measurable liquid in the SAS MTs prior to or at any time during the test.**

Reviewed by: **Paul Pinard**

Date: **9/5/21**

PINARD ENGINEERING

P.O. Box 871347
Wasilla, AK 99687
(907) 357-ENGR (3647)

WELL FLOW TEST

LOCATION: **Lot 1, Patricia Subdivision**

JOB NUMBER: **21-220**

DRILLER: **Wheaton Water Wells**

DATE OF TEST: **9/4/21**

DATE WELL COMPLETED: **8/18**

FIELD STAFF: **C. Pinard**

WELL DEPTH: **60'**

STATIC WATER LEVEL (top of casing): **25.2'**

Time	Elapsed Time (Minutes)	Static Water Level	Flow Rate (gpm)	Cumulative Gallons Pumped	Remarks
11:45 AM	-	25.2'	4.8	-	Start Test - Meter 390516
12:00 PM	15	28.8'	4.5	72	390588
12:15	30	29.3'	4.5	140	390656
12:30	45	26.4'	4.6	207	390723
12:45	60	27.1'	4.5	276	390792
1:00	75	27.5'	4.5	344	390860
1:15	90	27.4'	4.7	412	390928
1:30	105	26.9'	4.5	482	390998
1:45	120	27.2'	4.6	549	391065
2:00	135	26.8'	4.5	618	391134
2:15	150	26.3'	4.7	686	391202
2:30	165	27.1'	4.5	756	391272
2:45	180	27.0'	-	823	Stop Test - 391339

RECOVERY

			All well protection features are adequate.
			Recovery measurements are not necessary

Average Flow Rate: **4.6 gpm**

Comments: DURING THIS TEST, THIS WATER SUPPLY WELL WAS CAPABLE OF PRODUCING **4.8** GPM. THIS TEST DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE THAT THE WATER SUPPLY SYSTEM WILL CONTINUE TO FUNCTION AND PRODUCE AT THIS RATE.

Reviewed by: **Paul Pinard** PSP

Date: **9/5/21**

ERDMAN & ASSOCIATES

DRINKING WATER ANALYSIS
COLIFORM BACTERIA

SECTION I.
COMPLETED BY PERSON TAKING THE SAMPLE

PINARD ENGINEERING
PO Box 871347
Wasilla, AK 99687
Phone/Fax 357-3647

☒ Private ☐ Public water PWSID _____

☐ Repeat sample Lab reference # _____

COLLECTION INFORMATION

Project: 21-220

Date: 3 Sept 2021 Time: 11:15 (AM) / PM

Legal Description: Lot 1 Block _____

Collected By: C. Pinard

Subdivision Patrokla Sub.

Location: Hose Bibb, Kitchen Sink, Bath Sink, Other _____

Delivered to Lab by: C. Pinard

SECTION II.
COMPLETED BY LAB

LAB ID# 210908

Date/Time Received: 9/3/21 725 AM / PM Initial: SME

Date/Time Test Set-up: 9/3/21 756 AM / (PM) Initial: SME

Comments:

TEST	READING * PRESENT	READING * ABSENT	DATE	TIME	INT'L	RESULTS
Total Coliform Read in 24-28 hours		✓	9/4/21	910 AM PM	SME	☒ SATISFACTORY ☐ UNSATISFACTORY
E. Coli Read in 24-28 hours		✓				☐ INCONCLUSIVE *Please submit another sample*

* Bacteria Present in or Absent from Water Sample, by Standard Method 9223.

SECTION III.
NOTIFICATION / DISTRIBUTION

Date ADEC Notified *(Public Positives Only)*: _____

Comments: _____

Faxed Copy: ☐ Date: _____

Date Client Notified *(Positives Only)*: _____

Comments: _____

(This section for Survey Section use)

Survey Assigned to: R&M Consultants, Inc. Estimated Completion Date: Winter 2023-'24

Project History:
R&M completed Control, Design, ROW surveying, and Mapping in the summer of 2018. The project is in construction and near completion (July 2023).

Hz/Vert Control:
The control is based upon Survey Control Diagram 2018-15 Bethel Recording District using 150/5300-16B temp mons. Please set and tie in three new line-of-site temp monuments (dig-ins) in the prepared airport surfaces (Runway, Apron, RSAs, segmented circle, etc.) away from bank edges to avoid sloughing using 150/5300-16B guidance.

Deliverable: SCD ROS

ROW/Monument Ties:
Following are the RWE needs for this project (See Attached Redlines):

- Verify and replace if necessary the existing boundary monuments as shown on the attached preliminary Right-of-Way Acquisition Plat for the new Newtok Airport at Mertarvik.
- Set the new boundary and centerline monuments as shown on the attached redlines for the preliminary Right-of-Way Acquisition Plat for the new Newtok Airport at Mertarvik.
- Finalize the preliminary ROW Acquisition Plat by addressing the redlines from DOT&PF and any redline comments from DNR.
- Plot the final ROW Acquisition Plat on Mylar and get it recorded.

Deliverable: RWAP

TIN/Topo:
Complete a 150/5300-18c Table 2-1 ALP as-built survey for all applicable tasks for this airport. This as built information will be incorporated into the SCD ROS, AGIS and 5010.

Deliverables: SCD ROS, AGIS, ALP As built, 5010

ALP & 5010 Airport Master Record:
The Contractor shall update the ALP with as built information and provide it to the Contracting Agency and the FAA for review. The Contractor shall also coordinate with the Department's 5010 administrator to provide an as built 5010.

Other:
Deliverables:
B8.3.5.6 - RWAP; B8.3.6.4 – Post Con A-D, G, H, I, J; B8.3.8.4 Aero Surveys A & B; B10.3.2.2 ALP As Built, and B10.3.3.1 – 5010 As built
Schedule:
Fieldwork: July of 2023, if not sooner.
Office work: Fall/Winter of 2023-24 all tasks need to be completed by February 1, 2024.

Completed by _____ Date Completed _____
Notes: _____

THE STATE of ALASKA
GOVERNOR MICHAEL J. DUNLEAVY

Department of Transportation and Public Facilities

4111 Aviation Avenue
P.O. Box 196900
Anchorage, AK 99519-6900
Main: 907-269-0520
Fax: 907-269-0521
dot.alaska.gov

April 12, 2024

Fred Wagner, Platting Officer
Matanuska-Susitna Borough
350 East Dahlia Avenue
Palmer, AK 99645

[Sent Electronically]

Re: Plat Review

Dear Mr. Wagner:

The Alaska Department of Transportation and Public Facilities (DOT&PF) Central Region has reviewed the following plats and have the following comments:

- **Deone Lots 2A & 2B (CC), Plat #2003-57, Southcentral Foundation, WA 11 Hale (Palmer-Wasilla Highway and Knik Goose-Bay Road)**
  - No objection to proposed lot division.
  - DOT&PF requires dedicated shared common access for Lot 2A through Lot 2B to Knik Goose-Bay Road be shown on plat.
  - No direct access for Lot 2A to the Palmer-Wasilla Highway will be authorized.
  - Please add as plat note: "No direct access for Lot 2A to Palmer-Wasilla Highway."
  - Subsequent development of Lot 2A and Lot 2B requires continued use of shared common access. No further access to Knik-Goose Bay Road will be authorized.
  - No median break on Knik-Goose Bay Road will be allowed for this driveway. This access will be right in and right out only.
  - Plat actions invalidate existing driveway permits and require permits to be reapplied for. Apply for a new driveway permit for access onto Knik-Goose Bay Road. Driveway permits can be applied for at DOT&PF's online ePermits website: https://dot.alaska.gov/row/Login.po. Please contact DOT&PF's ROW division at 1-800-770-5263 to speak with a regional permit officer if you have any questions.
  - Any future driveway relocation will go through the permitting process which may require relocating driveway on Knik-Goose Bay Road further away from the Knik-Goose Bay Road and Palmer-Wasilla Highway intersection due to safety considerations and the functional area of the intersection.
  - No new utility access through Knik-Goose Bay Road or right of way, or the Palmer-Wasilla Highway or right of way will be authorized. Utilities and subsequent utility development required through existing driveway access.
  - Please be advised that this property is in the project area of the Knik-Goose Bay Road: Centaur Ave to Vine Rd Phase I project, which is currently in its construction phase.

EXHIBIT C

Further information about this project can be found at https://www.knikgoosebay.com/

- **TA 15 Smith (MG) (Talkeetna Spur Road)**
  - Records indicate that the 50' road easement is currently placed at "the center line to coincide with center of existing access road from Talkeetna Spur Road."
  - Easement vacation/rededication not necessary, easement already located at the desired location.
  - DOT&PF recommends updating MSB GIS maps and/or layers to show easement in correct location.

- **Ken Loyer Farm, PA 12 Loyer (Outer Springer Loop Road)**
  - No objection to the proposed plat.
  - Current access use does not meet permittable driveway standards. Lot 1A access required through common access only.
  - Platting actions invalidate existing driveway permits. Reapply for driveway permits for Lot 2 and the common access at Lot 1A. Driveway permits and Approach Road Review can be applied for at DOT&PF's online ePermits website: https://dot.alaska.gov/row/Login.po. Please contact DOT&PF's ROW division at 1-800-770-5263 to speak with a regional permit officer if you have any questions.
  - Subsequent development of either lot will require continued access to Outer Springer Loop Road from existing access points, no additional access will be permitted.
  - All future utilities must connect through existing driveway access points. No new utility connections through Outer Springer Loop Road.

- **Hotchkiss Farm, Plat No. 72-31, PA 12 Hotchkiss (Outer Springer Loop Road)**
  - No objection to revised plat.
  - Please add as plat note: "All new utility connections through existing access or common access easement."
  - Platting actions invalidate existing driveway permits. Reapply for driveway permits for Lot 1. Driveway permits and Approach Road Review can be applied for at DOT&PF's online ePermits website: https://dot.alaska.gov/row/Login.po. Please contact DOT&PF's ROW division at 1-800-770-5263 to speak with a regional permit officer if you have any questions.

- **Patricia RSB L1, Plat #2005-120, OC 04 Hale, Southcentral Foundation (Knik Goose-Bay Road MP 9)**
  - No objection to lot division.
  - No direct access to Knik Goose-Bay Road will be granted. Lot 1A and Lot 1B must take access from Wassim Circle and/or Douglas Lane. Subsequent development of Lot 1A and Lot 1B required to take access through Wassim Circle and Douglas Lane.
  - Please add as plat note: "No direct access to Knik Goose-Bay Road for Lot 1A or 1B."
  - Please add as plat note: "No direct access for utility connections through Knik Goose-Bay Road."
  - Utility access required through Wassim Circle and Douglas Lane. No utility access through Knik Goose-Bay Road will be permitted. Subsequent development of Lot 1A and Lot 1B will require continued utility access through Wassim Circle and Douglas Lane.
  - DOT&PF recommends development of internal circulation off Wassim Circle to avoid conflict with existing right of way users.

- DOT&PF recommends lot development consider the Mat-Su Borough's Official Streets and Highway Plan's (OSHP) future intersection at Knik Goose-Bay Road and Douglas Lane. View the OSHP by selecting the "Official Streets and Highways Plan" and "OSHP Primary Intersection" layers in the MSB Planning and Land Use Viewer's Layer List.
- Recommend dedicating Wassim Circle and Douglas Lane on Lot 1A and Lot 1B.

All properties accessing DOT&PF roads must apply to Right of Way for a driveway permit and/or approach road review, subject to provisions listed in 17 AAC 10.020. Any previously issued access permits become invalid once the property undergoes a platting action and must be reissued.

We recommend the petitioner verify all section line easements and DOT&PF road rights-of-way adjacent to their property. For assistance, the petitioner may contact the Engineering group within the Right of Way section in DOT&PF at (907) 269-0700. The petitioner is liable to remove any improvements within the easements and rights-of-way that impede the operation and maintenance of those facilities even if they are not shown on the plat, so it is in the petitioner's best interest to identify the exact locations and widths of any such easements or rights-of-way before they improve the property.

If any section line easements or road rights-of-way exist within the bounds of their plat, we recommend the petitioner dedicate them. If there is an existing right-of-way or easement, the petitioner is unable to develop that portion of the property yet continues to pay property taxes on it; dedicating will remove that cost to the petitioner.

If there are any questions regarding these comments please feel free to contact me at (907) 269-0509 or kristina.huling@alaska.gov.

Sincerely,

Kristina Huling

Kristina Huling
Mat-Su Area Planner, DOT&PF

cc: Sean Baski, Highway Design Chief, DOT&PF
Matt Walsh, Property Management Supervisor, Right of Way, DOT&PF
Devki Rearden, Engineering Associate, DOT&PF
Morris Beckwith, Right of Way, DOT&PF
Brad Sworts, Pre-Design & Engineering Div. Manager, MSB
Anna Bosin, Traffic & Safety Engineer, DOT&PF

Matthew Goddard

From: Hegna, Jonathan R CIV USARMY CEPOA (USA) <Jonathan.R.Hegna@usace.army.mil>
Sent: Tuesday, April 16, 2024 10:05 PM
To: Matthew Goddard
Subject: RE: USACE Comments / RFC Patricia RSB Lot 1 (MG) / SOV

Hello Mathew Goddard,

We are responding to your request for comment on the Patricia RSB Lot 1 Project. The U. S. Army Corps of Engineers (Corps) Regulatory Offices administers Section 404 of the Clean Water Act (33 United States Code 1344), which requires that a Department of the Army (DA) permit be obtained for the placement or discharge of dredged and/or fill material into waters of the U.S., including jurisdictional wetlands, prior to conducting the work. Waters of the U.S. may include certain rivers, streams, lakes, ponds, and adjacent wetlands. If the project will involve a discharge of dredged or fill material into wetlands or other waters, then a permit may be required from our office prior to construction. Thank you for the opportunity to comment on the project. Please contact me if you have any questions.

Respectfully,

Jonathan Hegna

Project Manager
U.S. Army Corps of Engineers / Alaska District
2204 3rd Street, Elmendorf AFB, Alaska 99506
Phone: 907-753-2708
Email: Jonathan.R.Hegna@usace.army.mil

From: Matthew Goddard <Matthew.Goddard@matsugov.us>
Sent: Tuesday, April 9, 2024 8:38 AM
To: Huling, Kristina N (DOT) <kristina.huling@alaska.gov>; Post, David E (DOT) <david.post@alaska.gov>; Myers, Sarah E E (DFG) <sarah.myers@alaska.gov>; Percy, Colton T (DFG) <colton.percy@alaska.gov>; CEPOA-SM-RD-Pagemaster <regpagemaster@usace.army.mil>; billydoc56@hotmail.com; pcook@alaskan.com; Michael Keenan <Michael.Keenan@matsugov.us>; Fire Code <Fire.Code@matsugov.us>; Jeffrey Anderson <Jeffrey.Anderson@matsugov.us>; Brian Davis <Brian.Davis@matsugov.us>; dglsaviatn@aol.com; Bill Gamble <Bill.Gamble@matsugov.us>; Land Management <Land.Management@matsugov.us>; Tom Adams <Tom.Adams@matsugov.us>; Brad Sworts <Brad.Sworts@matsugov.us>; Jamie Taylor <Jamie.Taylor@matsugov.us>; Daniel Dahms <Daniel.Dahms@matsugov.us>; Elaine Flagg <Elaine.Flagg@matsugov.us>; Tammy Simmons <Tammy.Simmons@matsugov.us>; Charlyn Spannagel <Charlyn.Spannagel@matsugov.us>; Katrina Kline <katrina.kline@matsugov.us>; MSB Farmers <MSB.Farmers@matsugov.us>; Permit Center <Permit.Center@matsugov.us>; Code Compliance <Code.Compliance@matsugov.us>; Planning <MSB.Planning@matsugov.us>; Alex Strawn <Alex.Strawn@matsugov.us>; Fred Wagner <Frederic.Wagner@matsugov.us>; pamela.j.melchert@usps.gov; matthew.a.carey@usps.gov; Matthews, Jordan T - Anchorage, AK <jordan.t.matthews@usps.gov>; John Aschenbrenner <John.Aschenbrenner@matsugov.us>; Andrew Fraiser <andrew.fraiser@enstarnaturalgas.com>; ROW <row@enstarnaturalgas.com>; Right of Way Dept. <row@mtasolutions.com>; OSP Design Group <ospdesign@gci.com>; mearow@mea.coop
Subject: [Non-DoD Source] RFC Patricia RSB Lot 1 (MG)

Hello,

EXHIBIT D

Matthew Goddard

From: Tammy Simmons
Sent: Tuesday, April 16, 2024 2:57 PM
To: Matthew Goddard
Cc: Brad Sworts; Jamie Taylor; Daniel Dahms; Tammy Simmons
Subject: Re: RFC Patricia RSB Lot 1 (MG)

Hello,

PD&E comments there should be no direct access from lot 1A to Knik Goose Bay Road.

Thank you,

PD&E Review Group

From: Matthew Goddard <Matthew.Goddard@matsugov.us>
Sent: Tuesday, April 9, 2024 8:37 AM
To: Huling, Kristina N (DOT) <kristina.huling@alaska.gov>; Post, David E (DOT) <david.post@alaska.gov>; Myers, Sarah E E (DFG) <sarah.myers@alaska.gov>; Percy, Colton T (DFG) <colton.percy@alaska.gov>; regpagemaster@usace.army.mil <regpagemaster@usace.army.mil>; billydoc56@hotmail.com <billydoc56@hotmail.com>; pcook@alaskan.com <pcook@alaskan.com>; Michael Keenan <Michael.Keenan@matsugov.us>; Fire Code <Fire.Code@matsugov.us>; Jeffrey Anderson <Jeffrey.Anderson@matsugov.us>; Brian Davis <Brian.Davis@matsugov.us>; dglsaviatn@aol.com <dglsaviatn@aol.com>; Bill Gamble <Bill.Gamble@matsugov.us>; Land Management <Land.Management@matsugov.us>; Tom Adams <Tom.Adams@matsugov.us>; Brad Sworts <Brad.Sworts@matsugov.us>; Jamie Taylor <Jamie.Taylor@matsugov.us>; Daniel Dahms <Daniel.Dahms@matsugov.us>; Elaine Flagg <Elaine.Flagg@matsugov.us>; Tammy Simmons <Tammy.Simmons@matsugov.us>; Charlyn Spannagel <Charlyn.Spannagel@matsugov.us>; Katrina Kline <katrina.kline@matsugov.us>; MSB Farmers <MSB.Farmers@matsugov.us>; Permit Center <Permit.Center@matsugov.us>; Code Compliance <Code.Compliance@matsugov.us>; Planning <MSB.Planning@matsugov.us>; Alex Strawn <Alex.Strawn@matsugov.us>; Fred Wagner <Frederic.Wagner@matsugov.us>; pamela.j.melchert@usps.gov <pamela.j.melchert@usps.gov>; matthew.a.carey@usps.gov <matthew.a.carey@usps.gov>; Matthews, Jordan T - Anchorage, AK <jordan.t.matthews@usps.gov>; John Aschenbrenner <John.Aschenbrenner@matsugov.us>; Andrew Fraiser <andrew.fraiser@enstarnaturalgas.com>; ROW <row@enstarnaturalgas.com>; Right of Way Dept. <row@mtasolutions.com>; OSP Design Group <ospdesign@gci.com>; mearow@mea.coop <mearow@mea.coop>
Subject: RFC Patricia RSB Lot 1 (MG)

Hello,

The following link is a request for comments on the proposed Patricia RSB Lot 1.
Please ensure all comments have been submitted by April 19, 2024 so they can be incorporated in the staff report that will be presented to the Platting Officer at the abbreviated plat hearing.

Patricia RSB L1

Feel free to contact me if you have any questions.

Thank you,
Matthew Goddard

EXHIBIT E

Matthew Goddard

From: Permit Center
Sent: Tuesday, April 9, 2024 10:49 AM
To: Matthew Goddard
Subject: RE: RFC Patricia RSB Lot 1 (MG)

Hello sir. No comments on this one from the Permit Center.

Brandon Tucker
Permit Technician
Matanuska-Susitna Borough Permit Center
350 E Dahlia Ave
Palmer AK 99645
P (907) 861-7871
F (907) 861-8158

From: Matthew Goddard <Matthew.Goddard@matsugov.us>
Sent: Tuesday, April 9, 2024 8:38 AM
To: Huling, Kristina N (DOT) <kristina.huling@alaska.gov>; Post, David E (DOT) <david.post@alaska.gov>; Myers, Sarah E E (DFG) <sarah.myers@alaska.gov>; Percy, Colton T (DFG) <colton.percy@alaska.gov>; regpagemaster@usace.army.mil; billydoc56@hotmail.com; pcook@alaskan.com; Michael Keenan <Michael.Keenan@matsugov.us>; Fire Code <Fire.Code@matsugov.us>; Jeffrey Anderson <Jeffrey.Anderson@matsugov.us>; Brian Davis <Brian.Davis@matsugov.us>; dglsaviatn@aol.com; Bill Gamble <Bill.Gamble@matsugov.us>; Land Management <Land.Management@matsugov.us>; Tom Adams <Tom.Adams@matsugov.us>; Brad Sworts <Brad.Sworts@matsugov.us>; Jamie Taylor <Jamie.Taylor@matsugov.us>; Daniel Dahms <Daniel.Dahms@matsugov.us>; Elaine Flagg <Elaine.Flagg@matsugov.us>; Tammy Simmons <Tammy.Simmons@matsugov.us>; Charlyn Spannagel <Charlyn.Spannagel@matsugov.us>; Katrina Kline <katrina.kline@matsugov.us>; MSB Farmers <MSB.Farmers@matsugov.us>; Permit Center <Permit.Center@matsugov.us>; Code Compliance <Code.Compliance@matsugov.us>; Planning <MSB.Planning@matsugov.us>; Alex Strawn <Alex.Strawn@matsugov.us>; Fred Wagner <Frederic.Wagner@matsugov.us>; pamela.j.melchert@usps.gov; matthew.a.carey@usps.gov; Matthews, Jordan T - Anchorage, AK <jordan.t.matthews@usps.gov>; John Aschenbrenner <John.Aschenbrenner@matsugov.us>; Andrew Fraiser <andrew.fraiser@enstarnaturalgas.com>; ROW <row@enstarnaturalgas.com>; Right of Way Dept. <row@mtasolutions.com>; OSP Design Group <ospdesign@gci.com>; mearow@mea.coop
Subject: RFC Patricia RSB Lot 1 (MG)

Hello,

The following link is a request for comments on the proposed Patricia RSB Lot 1.
Please ensure all comments have been submitted by April 19, 2024 so they can be incorporated in the staff report that will be presented to the Platting Officer at the abbreviated plat hearing.

Patricia RSB L1

Feel free to contact me if you have any questions.

Thank you,
Matthew Goddard
Platting Technician

EXHIBIT F

Matthew Goddard

From: Code Compliance
Sent: Tuesday, April 9, 2024 3:49 PM
To: Matthew Goddard
Subject: RE: RFC Patricia RSB Lot 1 (MG)

Good afternoon,

No comments for code complaince.

Very Respectfully,

Jamie R Jokhy
Administrative Assistant
Development Services
(907) 861-7842
jamie.jokhy@matsugov.us

From: Matthew Goddard <Matthew.Goddard@matsugov.us>
Sent: Tuesday, April 9, 2024 8:38 AM
To: Huling, Kristina N (DOT) <kristina.huling@alaska.gov>; Post, David E (DOT) <david.post@alaska.gov>; Myers, Sarah E E (DFG) <sarah.myers@alaska.gov>; Percy, Colton T (DFG) <colton.percy@alaska.gov>; regpagemaster@usace.army.mil; billydoc56@hotmail.com; pcook@alaskan.com; Michael Keenan <Michael.Keenan@matsugov.us>; Fire Code <Fire.Code@matsugov.us>; Jeffrey Anderson <Jeffrey.Anderson@matsugov.us>; Brian Davis <Brian.Davis@matsugov.us>; dglsaviatn@aol.com; Bill Gamble <Bill.Gamble@matsugov.us>; Land Management <Land.Management@matsugov.us>; Tom Adams <Tom.Adams@matsugov.us>; Brad Sworts <Brad.Sworts@matsugov.us>; Jamie Taylor <Jamie.Taylor@matsugov.us>; Daniel Dahms <Daniel.Dahms@matsugov.us>; Elaine Flagg <Elaine.Flagg@matsugov.us>; Tammy Simmons <Tammy.Simmons@matsugov.us>; Charlyn Spannagel <Charlyn.Spannagel@matsugov.us>; Katrina Kline <katrina.kline@matsugov.us>; MSB Farmers <MSB.Farmers@matsugov.us>; Permit Center <Permit.Center@matsugov.us>; Code Compliance <Code.Compliance@matsugov.us>; Planning <MSB.Planning@matsugov.us>; Alex Strawn <Alex.Strawn@matsugov.us>; Fred Wagner <Frederic.Wagner@matsugov.us>; pamela.j.melchert@usps.gov; matthew.a.carey@usps.gov; Matthews, Jordan T - Anchorage, AK <jordan.t.matthews@usps.gov>; John Aschenbrenner <John.Aschenbrenner@matsugov.us>; Andrew Fraiser <andrew.fraiser@enstarnaturalgas.com>; ROW <row@enstarnaturalgas.com>; Right of Way Dept. <row@mtasolutions.com>; OSP Design Group <ospdesign@gci.com>; mearow@mea.coop
Subject: RFC Patricia RSB Lot 1 (MG)

Hello,

The following link is a request for comments on the proposed Patricia RSB Lot 1.

ENSTAR Natural Gas Company, LLC
Engineering Department, Right of Way Section
401 E. International Airport Road
P. O. Box 190288
Anchorage, Alaska 99519-0288
(907) 277-5551
FAX (907) 334-7798

April 18, 2024

Matanuska-Susitna Borough, Platting Division
350 East Dahlia Avenue
Palmer, AK 99645-6488

To whom it may concern:

ENSTAR Natural Gas Company, LLC has reviewed the following abbreviated plat for **Patricia RSB Lot 1 (MSB Case# 2024-056)** and requests the following note to be added to the plat:

- ENSTAR Natural Gas Company, LLC advises that there is a high-pressure natural gas transmission pipeline within S. Knik-Goose Bay Road ROW. Notify ENSTAR prior to any excavation or construction within 25 FT of the S. Knik Goose Bay Road ROW.

ENSTAR Natural Gas Company, LLC has reviewed the following preliminary and abbreviated plats and has no comments or recommendations.

- **Sun Valley Ferris**
  (MSB Case# 2024-054)
- **Thor Road Addition PUE**
  (MSB Case# 2024-045)
- **Lazy Moose Run**
  (MSB Case# 2024-048)

If you have any questions, please feel free to contact me at (907) 714-7521 or by email at skylar.furlong@enstarnaturalgas.com.

Sincerely,

Skylar Furlong

Skylar Furlong
Environmental Permitting & Compliance Specialist
ENSTAR Natural Gas Company, LLC

EXHIBIT G

Matthew Goddard

From: OSP Design Group <ospdesign@gci.com>
Sent: Friday, April 12, 2024 9:19 AM
To: Matthew Goddard
Cc: OSP Design Group
Subject: RE: RFC Patricia RSB Lot 1 (MG)
Attachments: Agenda Plat STAMPED.pdf

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Hello Matthew,

GCI has no objections or comments to this plat.

Thank you,

JOSHUA SWANSON
GCI | Engineer II, OSP Design
w: www.gci.com

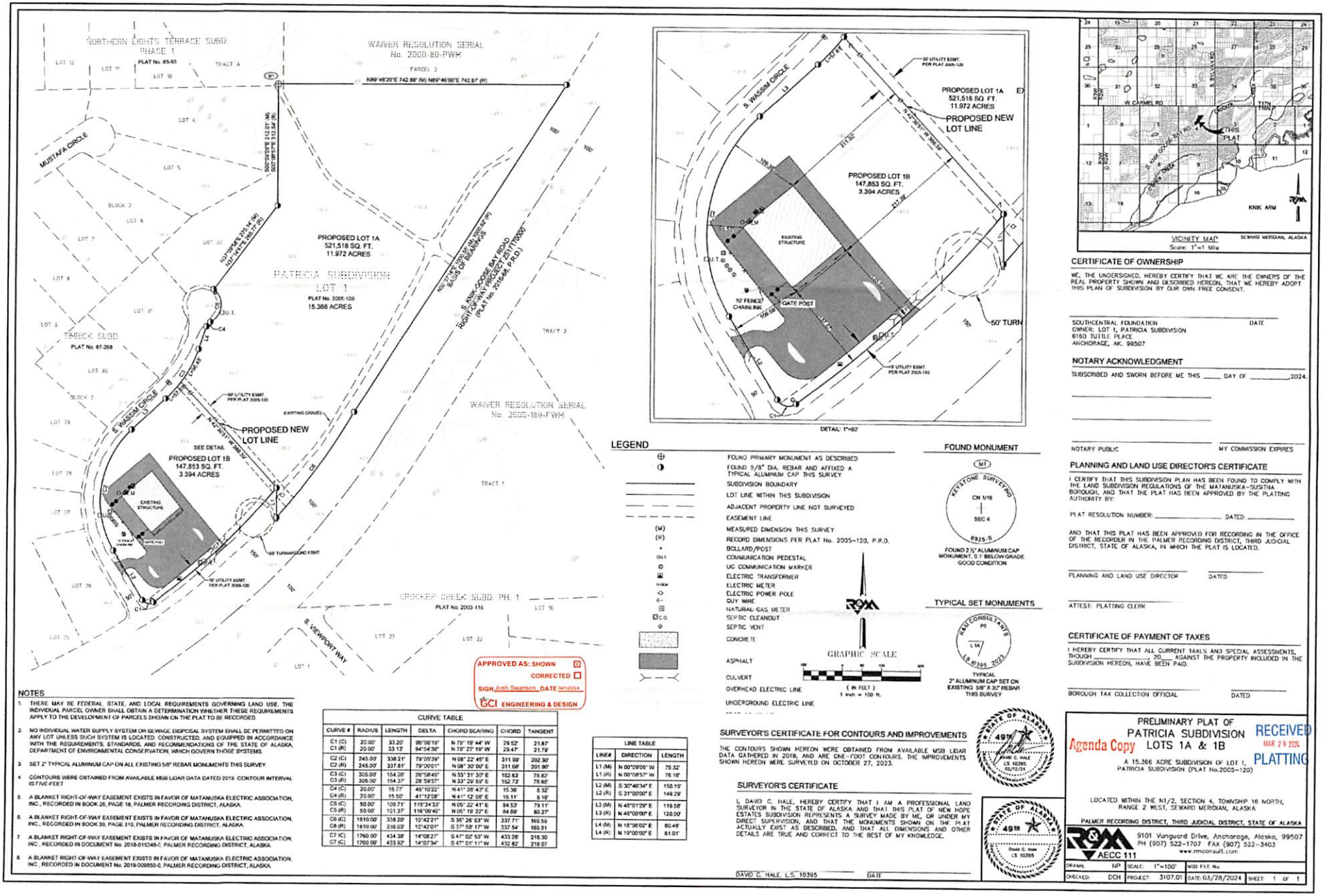
From: Matthew Goddard <Matthew.Goddard@matsugov.us>
Sent: Tuesday, April 9, 2024 8:38 AM
To: Huling, Kristina N (DOT) <kristina.huling@alaska.gov>; Post, David E (DOT) <david.post@alaska.gov>; Myers, Sarah E E (DFG) <sarah.myers@alaska.gov>; Percy, Colton T (DFG) <colton.percy@alaska.gov>; regpagemaster@usace.army.mil; billydoc56@hotmail.com; pcook@alaskan.com; Michael Keenan <Michael.Keenan@matsugov.us>; Fire Code <Fire.Code@matsugov.us>; Jeffrey Anderson <Jeffrey.Anderson@matsugov.us>; Brian Davis <Brian.Davis@matsugov.us>; dglsaviatn@aol.com; Bill Gamble <Bill.Gamble@matsugov.us>; Land Management <Land.Management@matsugov.us>; Tom Adams <Tom.Adams@matsugov.us>; Brad Sworts <Brad.Sworts@matsugov.us>; Jamie Taylor <Jamie.Taylor@matsugov.us>; Daniel Dahms <Daniel.Dahms@matsugov.us>; Elaine Flagg <Elaine.Flagg@matsugov.us>; Tammy Simmons <Tammy.Simmons@matsugov.us>; Charlyn Spannagel <Charlyn.Spannagel@matsugov.us>; Katrina Kline <katrina.kline@matsugov.us>; MSB Farmers <MSB.Farmers@matsugov.us>; Permit Center <Permit.Center@matsugov.us>; Code Compliance <Code.Compliance@matsugov.us>; Planning <MSB.Planning@matsugov.us>; Alex Strawn <Alex.Strawn@matsugov.us>; Fred Wagner <Frederic.Wagner@matsugov.us>; pamela.j.melchert@usps.gov; matthew.a.carey@usps.gov; Matthews, Jordan T - Anchorage, AK <jordan.t.matthews@usps.gov>; John Aschenbrenner <John.Aschenbrenner@matsugov.us>; Andrew Fraiser <andrew.fraiser@enstarnaturalgas.com>; ROW <row@enstarnaturalgas.com>; Right of Way Dept. <row@mtasolutions.com>; OSP Design Group <ospdesign@gci.com>; mearow@mea.coop
Subject: RFC Patricia RSB Lot 1 (MG)

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]

Hello,

The following link is a request for comments on the proposed Patricia RSB Lot 1.
Please ensure all comments have been submitted by April 19, 2024 so they can be incorporated in the staff report that will be presented to the Platting Officer at the abbreviated plat hearing.

Patricia RSB L1



LEGEND

- FOUND PRIMARY MONUMENT AS DESCRIBED
- FOUND 5/8" DIA. REBAR AND AFFIXED A TYPICAL ALUMINUM CAP THIS SURVEY
- SUBDIVISION BOUNDARY
- LOT LINE WITHIN THIS SUBDIVISION
- ADJACENT PROPERTY LINE NOT SURVEYED
- EASEMENT LINE
- (M) (R) MEASURED DIMENSION THIS SURVEY
- RECORD DIMENSIONS PER PLAT No. 2005-120, P.R.D.
- BOLLARD/POST
- COMMUNICATION PEDESTAL
- UG COMMUNICATION MARKER
- ELECTRIC TRANSFORMER
- ELECTRIC METER
- ELECTRIC POWER POLE
- GUY WIRE
- NATURAL GAS METER
- SEPTIC CLEANOUT
- SEPTIC VENT
- CONCRETE
- ASPHALT
- CULVERT
- OVERHEAD ELECTRIC LINE
- UNDERGROUND ELECTRIC LINE

GRAPHIC SCALE
(IN FEET)
1 inch = 100 ft.

FOUND MONUMENT

FOUND 2½" ALUMINUM CAP MONUMENT, 0.1' BELOW GRADE. GOOD CONDITION

TYPICAL SET MONUMENTS

TYPICAL 2" ALUMINUM CAP SET ON EXISTING 5/8" X 30" REBAR THIS SURVEY

APPROVED AS: SHOWN ☒
CORRECTED ☐
SIGN Josh Swanson DATE 04/10/24
GCI ENGINEERING & DESIGN

NOTES

1. THERE MAY BE FEDERAL, STATE, AND LOCAL REQUIREMENTS GOVERNING LAND USE. THE INDIVIDUAL PARCEL OWNER SHALL OBTAIN A DETERMINATION WHETHER THESE REQUIREMENTS APPLY TO THE DEVELOPMENT OF PARCELS SHOWN ON THE PLAT TO BE RECORDED.
2. NO INDIVIDUAL WATER SUPPLY SYSTEM OR SEWAGE DISPOSAL SYSTEM SHALL BE PERMITTED ON ANY LOT UNLESS SUCH SYSTEM IS LOCATED, CONSTRUCTED, AND EQUIPPED IN ACCORDANCE WITH THE REQUIREMENTS, STANDARDS, AND RECOMMENDATIONS OF THE STATE OF ALASKA, DEPARTMENT OF ENVIRONMENTAL CONSERVATION, WHICH GOVERN THOSE SYSTEMS.
3. SET 2" TYPICAL ALUMINUM CAP ON ALL EXISTING 5/8" REBAR MONUMENTS THIS SURVEY.
4. CONTOURS WERE OBTAINED FROM AVAILABLE MSB LIDAR DATA DATED 2019. CONTOUR INTERVAL IS FIVE-FEET.
5. A BLANKET RIGHT-OF-WAY EASEMENT EXISTS IN FAVOR OF MATANUSKA ELECTRIC ASSOCIATION, INC., RECORDED IN BOOK 26, PAGE 18, PALMER RECORDING DISTRICT, ALASKA.
6. A BLANKET RIGHT-OF-WAY EASEMENT EXISTS IN FAVOR OF MATANUSKA ELECTRIC ASSOCIATION, INC., RECORDED IN BOOK 39, PAGE 310, PALMER RECORDING DISTRICT, ALASKA.
7. A BLANKET RIGHT-OF-WAY EASEMENT EXISTS IN FAVOR OF MATANUSKA ELECTRIC ASSOCIATION, INC., RECORDED IN DOCUMENT No. 2018-015348-0, PALMER RECORDING DISTRICT, ALASKA.
8. A BLANKET RIGHT-OF-WAY EASEMENT EXISTS IN FAVOR OF MATANUSKA ELECTRIC ASSOCIATION, INC., RECORDED IN DOCUMENT No. 2019-009850-0, PALMER RECORDING DISTRICT, ALASKA.

CURVE TABLE

CURVE #	RADIUS	LENGTH	DELTA	CHORD BEARING	CHORD	TANGENT
C1 (C)	20.00'	33.20'	95°06'19"	N 78° 19' 44" W	29.52'	21.87'
C1 (R)	20.00'	33.13'	94°54'38"	N 78° 27' 16" W	29.47'	21.79'
C2 (C)	245.00'	338.21'	79°05'39"	N 08° 22' 45" E	311.99'	202.30'
C2 (R)	245.00'	337.81'	79°00'01"	N 08° 30' 00" E	311.68'	201.90'
C3 (C)	305.00'	154.26'	28°58'48"	N 33° 31' 30" E	152.63'	78.80'
C3 (R)	305.00'	154.37'	28°59'57"	N 33° 29' 59" E	152.73'	78.86'
C4 (C)	20.00'	15.77'	45°10'22"	N 41° 26' 43" E	15.36'	8.32'
C4 (R)	20.00'	15.50'	41°12'08"	N 41° 12' 08" E	15.11'	8.19'
C5 (C)	50.00'	109.71'	115°24'33"	N 05° 22' 41" E	84.53'	79.11'
C5 (R)	50.00'	101.37'	116°09'46"	N 05° 19' 22" E	84.88'	80.27'
C6 (C)	1810.00'	338.20'	10°42'21"	S 36° 26' 03" W	337.71'	169.59'
C6 (R)	1810.00'	338.03'	10°42'01"	S 37° 58' 17" W	337.54'	169.51'
C7 (C)	1760.00'	434.38'	14°08'27"	S 47° 02' 53" W	433.28'	218.30'
C7 (R)	1760.00'	433.82'	14°07'34"	S 47° 01' 11" W	432.82'	218.07'

LINE TABLE

LINE#	DIRECTION	LENGTH
L1 (M)	N 00°09'05" W	76.32'
L1 (R)	N 00°08'57" W	76.19'
L2 (M)	S 30°48'34" E	150.19'
L2 (R)	S 31°00'00" E	149.29'
L3 (M)	N 48°01'29" E	119.58'
L3 (R)	N 48°00'00" E	120.00'
L4 (M)	N 18°56'02" E	60.48'
L4 (R)	N 19°00'00" E	61.01'

SURVEYOR'S CERTIFICATE FOR CONTOURS AND IMPROVEMENTS

THE CONTOURS SHOWN HEREON WERE OBTAINED FROM AVAILABLE MSB LIDAR DATA GATHERED IN 2019, AND ARE ONE-FOOT CONTOURS. THE IMPROVEMENTS SHOWN HEREON WERE SURVEYED ON OCTOBER 27, 2023.

SURVEYOR'S CERTIFICATE

I, DAVID C. HALE, HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR IN THE STATE OF ALASKA AND THAT THIS PLAT OF NEW HOPE ESTATES SUBDIVISION REPRESENTS A SURVEY MADE BY ME, OR UNDER MY DIRECT SUPERVISION, AND THAT THE MONUMENTS SHOWN ON THE PLAT ACTUALLY EXIST AS DESCRIBED, AND THAT ALL DIMENSIONS AND OTHER DETAILS ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

DAVID C. HALE, L.S. 10395 DATE

STATE OF ALASKA 49TH David C. Hale LS 10395 05/12/24

STATE OF ALASKA 49TH David C. Hale LS 10395

CERTIFICATE OF OWNERSHIP

WE, THE UNDERSIGNED, HEREBY CERTIFY THAT WE ARE THE OWNERS OF THE REAL PROPERTY SHOWN AND DESCRIBED HEREON, THAT WE HEREBY ADOPT THIS PLAN OF SUBDIVISION BY OUR OWN FREE CONSENT.

SOUTHCENTRAL FOUNDATION DATE
OWNER: LOT 1, PATRICIA SUBDIVISION
6160 TUTTLE PLACE
ANCHORAGE, AK. 99507

NOTARY ACKNOWLEDGMENT

SUBSCRIBED AND SWORN BEFORE ME THIS ____ DAY OF _____, 2024.

NOTARY PUBLIC MY COMMISSION EXPIRES

PLANNING AND LAND USE DIRECTOR'S CERTIFICATE

I CERTIFY THAT THIS SUBDIVISION PLAN HAS BEEN FOUND TO COMPLY WITH THE LAND SUBDIVISION REGULATIONS OF THE MATANUSKA-SUSITNA BOROUGH, AND THAT THE PLAT HAS BEEN APPROVED BY THE PLATTING AUTHORITY BY:

PLAT RESOLUTION NUMBER: _____ DATED: _____

AND THAT THIS PLAT HAS BEEN APPROVED FOR RECORDING IN THE OFFICE OF THE RECORDER IN THE PALMER RECORDING DISTRICT, THIRD JUDICIAL DISTRICT, STATE OF ALASKA, IN WHICH THE PLAT IS LOCATED.

PLANNING AND LAND USE DIRECTOR DATED

ATTEST: PLATTING CLERK

CERTIFICATE OF PAYMENT OF TAXES

I HEREBY CERTIFY THAT ALL CURRENT TAXES AND SPECIAL ASSESSMENTS, THOUGH _____, 20__, AGAINST THE PROPERTY INCLUDED IN THE SUBDIVISION HEREON, HAVE BEEN PAID.

BOROUGH TAX COLLECTION OFFICIAL DATED

RECEIVED
MAR 2 9 2024
PLATTING

PRELIMINARY PLAT OF PATRICIA SUBDIVISION LOTS 1A & 1B

Agenda Copy

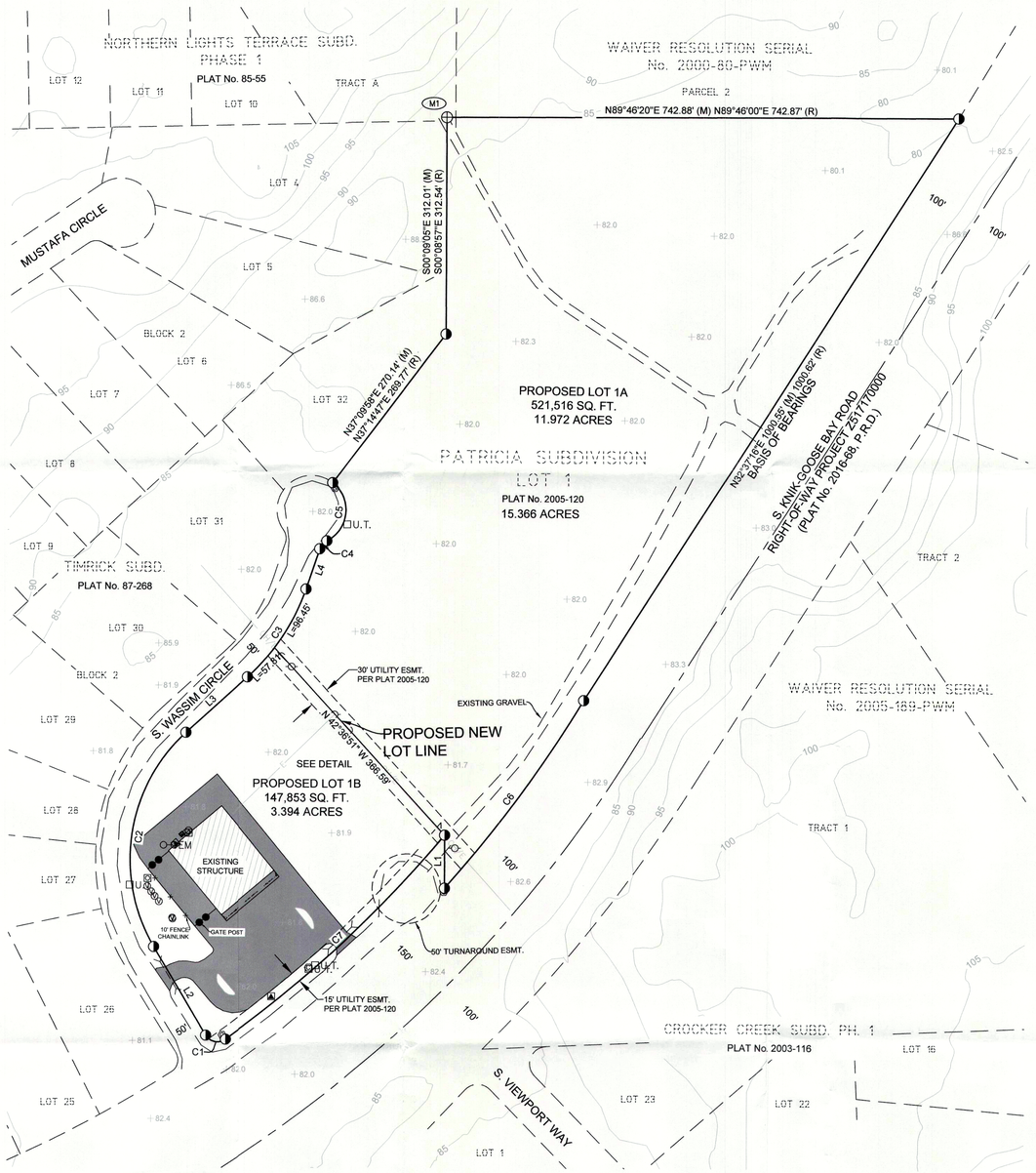
A 15.366 ACRE SUBDIVISION OF LOT 1, PATRICIA SUBDIVISION (PLAT No.2005-120)

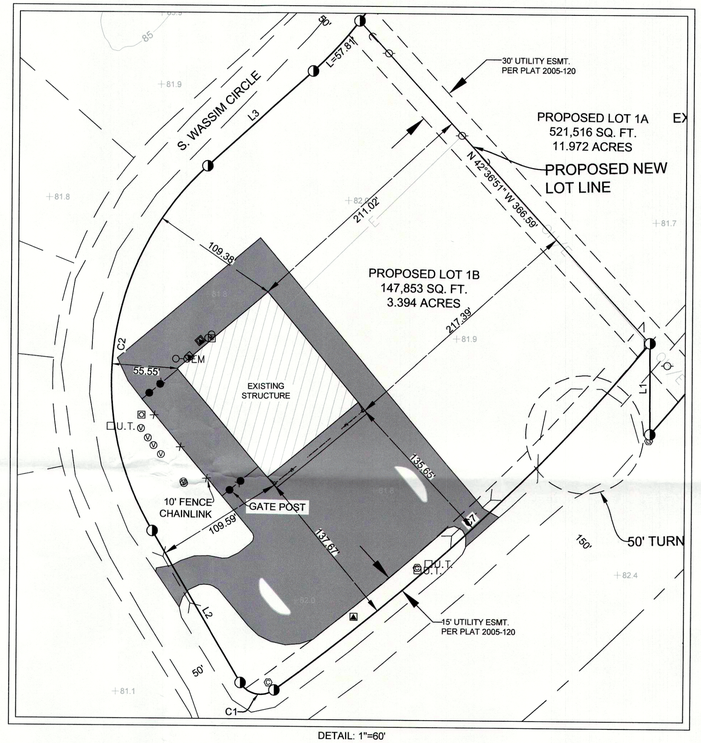
LOCATED WITHIN THE N1/2, SECTION 4, TOWNSHIP 16 NORTH, RANGE 2 WEST, SEWARD MERIDIAN, ALASKA

PALMER RECORDING DISTRICT, THIRD JUDICIAL DISTRICT, STATE OF ALASKA

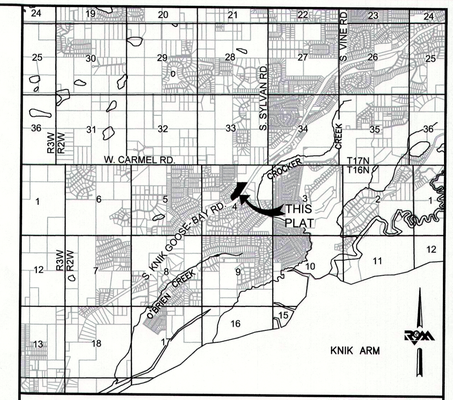
R&M AECC 111
9101 Vanguard Drive, Anchorage, Alaska, 99507
PH (907) 522-1707 FAX (907) 522-3403
www.rmconsult.com

DRAWN:	NP	SCALE:	1"=100'	MSB FILE No.	
CHECKED:	DCH	PROJECT:	3107.01	DATE: 03/28/2024	SHEET: 1 OF 1





DETAIL: 1"=60'



VICINITY MAP
Scale: 1"=1 Mile

LEGEND

⊕	FOUND PRIMARY MONUMENT AS DESCRIBED
◑	FOUND 5/8" DIA. REBAR AND AFFIXED A TYPICAL ALUMINUM CAP THIS SURVEY
———	SUBDIVISION BOUNDARY
———	LOT LINE WITHIN THIS SUBDIVISION
— — —	ADJACENT PROPERTY LINE NOT SURVEYED
— — — —	EASEMENT LINE
(M)	MEASURED DIMENSION THIS SURVEY
(R)	RECORD DIMENSIONS PER PLAT No. 2005-120, P.R.D.
○	BOLLARD/POST
□U.T.	COMMUNICATION PEDESTAL
©	UG COMMUNICATION MARKER
▲	ELECTRIC TRANSFORMER
O-OEM	ELECTRIC METER
⊙	ELECTRIC POWER POLE
←	GUY WIRE
G	NATURAL GAS METER
⊠C.O.	SEPTIC CLEANOUT
Ⓥ	SEPTIC VENT
	CONCRETE
	ASPHALT
	CULVERT
OH/E	OVERHEAD ELECTRIC LINE
E	UNDERGROUND ELECTRIC LINE

FOUND MONUMENT

M1
KEYSTONE SURVEYING
CN 1/16
SEC 4
6925-S

FOUND 2½" ALUMINUM CAP MONUMENT, 0.1' BELOW GRADE. GOOD CONDITION

TYPICAL SET MONUMENTS

R&M CONSULTANTS PS
L 1A
LS 10395 2023

TYPICAL 2" ALUMINUM CAP SET ON EXISTING 5/8" X 30" REBAR THIS SURVEY

GRAPHIC SCALE
100 0 50 100 200
(IN FEET)
1 inch = 100 ft.

NOTES

1. THERE MAY BE FEDERAL, STATE, AND LOCAL REQUIREMENTS GOVERNING LAND USE. THE INDIVIDUAL PARCEL OWNER SHALL OBTAIN A DETERMINATION WHETHER THESE REQUIREMENTS APPLY TO THE DEVELOPMENT OF PARCELS SHOWN ON THE PLAT TO BE RECORDED.
2. NO INDIVIDUAL WATER SUPPLY SYSTEM OR SEWAGE DISPOSAL SYSTEM SHALL BE PERMITTED ON ANY LOT UNLESS SUCH SYSTEM IS LOCATED, CONSTRUCTED, AND EQUIPPED IN ACCORDANCE WITH THE REQUIREMENTS, STANDARDS, AND RECOMMENDATIONS OF THE STATE OF ALASKA, DEPARTMENT OF ENVIRONMENTAL CONSERVATION, WHICH GOVERN THOSE SYSTEMS.
3. SET 2" TYPICAL ALUMINUM CAP ON ALL EXISTING 5/8" REBAR MONUMENTS THIS SURVEY.
4. CONTOURS WERE OBTAINED FROM AVAILABLE MSB LIDAR DATA DATED 2019. CONTOUR INTERVAL IS FIVE-FEET.
5. A BLANKET RIGHT-OF-WAY EASEMENT EXISTS IN FAVOR OF MATANUSKA ELECTRIC ASSOCIATION, INC., RECORDED IN BOOK 26, PAGE 18, PALMER RECORDING DISTRICT, ALASKA.
6. A BLANKET RIGHT-OF-WAY EASEMENT EXISTS IN FAVOR OF MATANUSKA ELECTRIC ASSOCIATION, INC., RECORDED IN BOOK 39, PAGE 319, PALMER RECORDING DISTRICT, ALASKA.
7. A BLANKET RIGHT-OF-WAY EASEMENT EXISTS IN FAVOR OF MATANUSKA ELECTRIC ASSOCIATION, INC., RECORDED IN DOCUMENT No. 2018-015348-0, PALMER RECORDING DISTRICT, ALASKA.
8. A BLANKET RIGHT-OF-WAY EASEMENT EXISTS IN FAVOR OF MATANUSKA ELECTRIC ASSOCIATION, INC., RECORDED IN DOCUMENT No. 2019-009850-0, PALMER RECORDING DISTRICT, ALASKA.

CURVE TABLE

CURVE #	RADIUS	LENGTH	DELTA	CHORD BEARING	CHORD	TANGENT
C1 (C)	20.00'	33.20'	95°06'19"	N 78° 19' 44" W	29.52'	21.87'
C1 (R)	20.00'	33.13'	94°54'38"	N 78° 27' 19" W	29.47'	21.79'
C2 (C)	245.00'	338.21'	79°05'39"	N 08° 22' 45" E	311.99'	202.30'
C2 (R)	245.00'	337.81'	79°00'01"	N 08° 30' 00" E	311.68'	201.96'
C3 (C)	305.00'	154.26'	28°58'45"	N 33° 31' 30" E	152.63'	78.82'
C3 (R)	305.00'	154.37'	28°59'57"	N 33° 29' 59" E	152.73'	78.88'
C4 (C)	20.00'	15.77'	45°10'22"	N 41° 26' 43" E	15.36'	8.32'
C4 (R)	20.00'	15.50'	41°12'08"	N 41° 12' 08" E	15.11'	8.16'
C5 (C)	50.00'	100.71'	115°24'33"	N 05° 22' 41" E	84.53'	79.11'
C5 (R)	50.00'	101.37'	116°09'46"	N 05° 19' 22" E	84.88'	80.27'
C6 (C)	1810.00'	338.20'	10°42'21"	S 36° 26' 03" W	337.71'	169.59
C6 (R)	1810.00'	338.03'	10°42'01"	S 37° 58' 17" W	337.54'	169.51
C7 (C)	1760.00'	434.38'	14°08'27"	S 47° 02' 53" W	433.28'	218.30
C7 (C)	1760.00'	433.92'	14°07'34"	S 47° 01' 11" W	432.82'	218.07

LINE TABLE

LINE#	DIRECTION	LENGTH
L1 (M)	N 00°09'05" W	76.32'
L1 (R)	N 00°08'57" W	76.16'
L2 (M)	S 30°46'34" E	150.15'
L2 (R)	S 31°00'00" E	149.29'
L3 (M)	N 48°01'29" E	119.58'
L3 (R)	N 48°00'00" E	120.00'
L4 (M)	N 18°56'02" E	60.48'
L4 (R)	N 19°00'00" E	61.01'

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DAVID C. HALE, L.S. 10395 — DATE

STATE OF ALASKA 49TH
DAVID C. HALE
LS 10395
02/12/24
Registered Professional Land Surveyor

STATE OF ALASKA 49TH
David C. Hale
LS 10395
Registered Professional Land Surveyor

CERTIFICATE OF OWNERSHIP

WE, THE UNDERSIGNED, HEREBY CERTIFY THAT WE ARE THE OWNERS OF THE REAL PROPERTY SHOWN AND DESCRIBED HEREON, THAT WE HEREBY ADOPT THIS PLAN OF SUBDIVISION BY OUR OWN FREE CONSENT.

SOUTHCENTRAL FOUNDATION — DATE
OWNER: LOT 1, PATRICIA SUBDIVISION
6160 TUTTLE PLACE
ANCHORAGE, AK. 99507

NOTARY ACKNOWLEDGMENT

SUBSCRIBED AND SWORN BEFORE ME THIS _____ DAY OF _____,2024.

NOTARY PUBLIC — MY COMMISSION EXPIRES

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PLANNING AND LAND USE DIRECTOR — DATED

ATTEST: PLATTING CLERK

CERTIFICATE OF PAYMENT OF TAXES

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BOROUGH TAX COLLECTION OFFICIAL — DATED

PRELIMINARY PLAT OF PATRICIA SUBDIVISION LOTS 1A & 1B

Agenda Copy

RECEIVED
MAR 29 2024
PLATTING

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LOCATED WITHIN THE N1/2, SECTION 4, TOWNSHIP 16 NORTH, RANGE 2 WEST, SEWARD MERIDIAN, ALASKA

PALMER RECORDING DISTRICT, THIRD JUDICIAL DISTRICT, STATE OF ALASKA

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DRAWN: NP	SCALE: 1"=100'	MSB FILE No.			
CHECKED: DCH	PROJECT: 3107.01	DATE: 03/28/2024	SHEET: 1 OF 1		