



Kenai Peninsula Borough

144 North Binkley Street
Soldotna, AK 99669

Meeting Agenda Assembly

Brent Johnson, President
Brent Hibbert, Vice President
Jesse Bjorkman
Lane Chesley
Tyson Cox
Richard Derkevorkian
Cindy Ecklund
Bill Elam
Mike Tupper

Tuesday, October 11, 2022

6:00 PM

Betty J. Glick Assembly Chambers

Meeting ID: 884 7373 9641 Passcode: 671108

CALL TO ORDER

PLEDGE OF ALLEGIANCE

INVOCATION

Any invocation that may be offered at the beginning of the assembly meeting shall be a voluntary offering of a private person, to and for the benefit of the assembly. No member of the community is required to attend or participate in the invocation.

[Clerk's Note: The invocation will be offered by Kathy Medcoff]

ROLL CALL

COMMITTEE REPORTS

APPROVAL OF AGENDA AND CONSENT AGENDA

(All items listed with an asterisk () are considered to be routine and non-controversial by the Assembly and will be approved by one motion. Public testimony will be taken. There will be no separate discussion of these items unless an Assembly Member so requests, in which case the item will be removed from the Consent Agenda and considered in its normal sequence on the agenda.)*

ACTION ITEMS CURRENTLY ON CONSENT AGENDA:

KPB 4623: September 20, 2022 Regular Assembly Meeting Minutes
Resolution 2022-053: Certifying October 8, 2022 Election Results
Ordinance 2022-19-20: Hearing Officers for PC Appeals
Ordinance 2022-19-21: UPS Replacement in the ERC
Ordinance 2022-19-22: Warning Sirens and Cybersecurity Upgrades
Ordinance 2022-19-23: Emergency Management Operations
Ordinance 2022-19-24: Contract Services for Transfer Facilities
Ordinance 2022-42: Land Trust Investment Fund Investments
Ordinance 2022-19-19: Special Mayoral Election
KPB 4635: Angler's Lodge LLC RDP
KPB 4634: Petition to Vacate Areas of Leisure Time Estates
KPB 4648: Confirming Appointments to APCs
KPB 4656: Confirming Appointments to the Service Area Boards
KPB 4662: Confirming an Appointment to the Resilience and Security Commission
KPB 4663: Designation of Administrative Officer and Alternate Administrative Officer

ACTION ITEMS ELIGIBLE TO BE ADDED TO THE CONSENT AGENDA:

Ordinance 2022-19-18: Emergency Siren Warning Replacement Project

APPROVAL OF MINUTES

1. [KPB-4623](#) September 20, 2022 Regular Assembly Meeting Minutes

Attachments: [092022 Regular Assembly Meeting Minutes](#)

VACANCY, DESIGNATION OR SEATING MEMBERS

1. Swear-In Newly Elected Assembly Members

PRESENTATIONS WITH PRIOR NOTICE

(20 minutes total)

1. [KPB-4624](#) KPBSD Quarterly Report, Clayton Holland, Superintendant (10 minutes)
2. [KPB-4625](#) Resilience and Security Advisory Commission Presentation: Cook Inlet Natural Gas and Energy Future, RSAC Vice Chair Brett Higman (10 minutes)

Attachments: [Cook Inlet Natural Gas Presentation](#)
[Cook Inlet Natural Gas RSAC Letter](#)

PUBLIC COMMENTS ON ITEMS NOT APPEARING ON THE AGENDA

(3 minutes per speaker; 20 minutes aggregate)

PUBLIC HEARINGS ON ORDINANCES

(Testimony limited to 3 minutes per speaker)

Ordinances referred to Finance Committee

1. [2022-19-18](#) An Ordinance Accepting and Appropriating an Additional \$231,044.38 from the State of Alaska Department of Military and Veteran Affairs, Division of Homeland Security and Emergency Management for the Emergency Siren Warning System Replacement Project (Mayor) (Hearing on 10/11/22)

Attachments: [Ordinance 2022-19-18](#)
[Amendment Memo](#)
[Memo](#)
[Letter of Award](#)

NEW BUSINESS**1. Resolutions****Resolutions referred to Policies and Procedures Committee**

- *a. [2022-053](#) LAYDOWN Certifying the Results of the October 4, 2022 Regular Borough Election (Johnson at the Request of the Borough Clerk)

2. Ordinances for Introduction**Ordinances for Introduction and referred to the Finance Committee**

- *a. [2022-19-19](#) An Ordinance Calling For A Special Mayoral Election, Setting The Special Election Date, And Appropriating Necessary Funds (Johnson) (Hearing on 10/25/22)

Attachments: [Ordinance 2022-19-19](#)
[Memo](#)

- *b. [2022-19-20](#) An Ordinance Appropriating \$100,000 to the Legal Department to Cover Costs of Hiring Hearing Officers for Planning Commission Appeals (Johnson at the Request of the Borough Attorney) (Hearing on 10/25/22)

Attachments: [Ordinance 2022-19-20](#)
[Memo](#)

- *c. [2022-19-21](#) An Ordinance Appropriating Supplemental Funding to Complete the Uninterrupted Power Supply Replacement Project Located in the Emergency Response Center (Mayor) (Hearing on 10/25/22)
- Attachments: [Ordinance 2022-19-21](#)
[Memo](#)
- *d. [2022-19-22](#) An Ordinance Accepting and Appropriating \$441,000 from the State of Alaska Department of Military and Veteran Affairs, Division of Homeland Security and Emergency Management for Areawide Warning Sirens and Cybersecurity Upgrades (Mayor) (Hearing on 10/25/22)
- Attachments: [Ordinance 2022-19-22](#)
[Memo](#)
[Allocation Table](#)
[Allocation Announcement Letter](#)
- *e. [2022-19-23](#) An Ordinance Accepting \$200,000 from the State of Alaska Department of Military and Veterans Affairs, Division of Homeland Security & Emergency Management for Emergency Management Operations and Appropriating \$40,000 for the Remaining Match Requirement (Mayor) (Hearing on 10/25/22)
- Attachments: [Ordinance 2022-19-23](#)
[Memo](#)
[Award Letter](#)
- *f. [2022-19-24](#) An Ordinance Appropriating \$653,900 from the General Fund for Increased Costs of Contract Services for Operation of the Seward, Kenai, Nikiski and Sterling Transfer Facilities (Mayor) (Hearing on 10/25/22)
- Attachments: [Ordinance 2022-19-24](#)
[Memo](#)
- *g. [2022-42](#) An Ordinance Approving the 2023 Asset Allocation for the Land Trust Investment Fund Investments and Amending KPB Code 5.10.200(B) to Update and Add New Subsections Under Authorized Investments (Mayor) (Hearing on 11/15/22)
- Attachments: [Ordinance 2022-42](#)
[Memo](#)

3. Other

Other items referred to Finance Committee

- *a. [KPB-4635](#) Approving an Amended Restaurant Designation Permit Filed by Mark Burner DBA: Anglers Lodge LLC, License No. 6094

Attachments: [6094 Memo to Assembly](#)
New Liquor License Application

Other items referred to Lands Committee

- *b. [KPB-4634](#) Petition to Vacate Entire Cul-De-Sac Where Lothrop Park Drive and Ivy Avenue Meet at Lot 1 Block 4 of Leisure Time Estates and Dedicated on Leisure Time Estates, HM 80-32, in the Ninilchik area. KPB File 2022-130V

[Clerk's Note: At its regularly scheduled meeting of September 26, 2022 the Kenai Peninsula Borough Planning Commission approved the proposed vacation by unanimous vote.]

Attachments: [Ivy Avenue Right of Way Vacation Packet](#)

Other items referred to Policies and Procedures Committee

- *c. [KPB-4648](#) Confirming Appointments to Advisory Planning Commissions

Cooper Landing Advisory Planning Commission
Laura Johnson, Seat G, Term Expires 09/30/2025

Moose Pass Advisory Planning Commission
Jennifer Boyle, Seat F, Term Expires 09/30/2025
Jeff Hetrick, Seat G, Term Expires 09/30/2025

Attachments: [Appointments to Advisory Planning Commissions](#)

***d.** [KPB-4656](#) Confirming Appointments to the Service Area Boards (Mayor)

Bear Creek Fire Service Area Board

Wolfgang V. Kurtz, Seat A, Term Expires 10/2025

Nikiski Fire Service Area Board

Tony Jackson, Seat A, Term Expires 10/2025

Paul M. Walukewicz, Seat B, Term Expires 10/2025

Kathryn Walukewicz, Seat C, Term Expires 10/2025

Road Service Area Board

Heidi Covey, At-Large Seat #2, Term Expires 09/30/2025

Seldovia Recreational Service Area Board

Elizabeth Diamant, Seat D, Term Expires 10/2025

West Emergency Service Area Board

Dawson Slaughter, Seat B, Term Expires 10/2025

Katherine Covey, Seat D, Term Expires 10/2025

Attachments: [Appointment to Service Area Boards](#)

***e.** [KPB-4662](#) Confirming an Appointment to the Resilience and Security Advisory Commission (Mayor)

Resilience and Security Advisory Commission

Bretwood Higman, Southwest Peninsula Seat, Term Expires 09/30/2025

Attachments: [Appointment to Resilience and Security Advisory Commission](#)

Other Items referred to Policies and Procedures Committee

***f.** [KPB-4663](#) Designation of Administrative Officer and Alternate Administrative Officer to Act on Behalf of the Mayor (Mayor)

Attachments: [Memo](#)

[Designation of Admin Ofc. & Alt. Admin Ofc.](#)

MAYOR'S REPORT

[KPB-4637](#) Mayor's Report Cover Memo

Attachments: [Mayor's Report Cover Memo](#)

1. Assembly Requests/Responses - None.

2. Agreements and Contracts

- a. [KP-4638](#) Authorization to Award a Contract for ITB23-015 Brushing Vegetation Control - Central Region
Attachments: [Auth to Award ITB23-015](#)
- b. [KP-4639](#) Authorization to Award a Contract for ITB23-021 Brushing Vegetation Control - West Region, Units 6 & 7
Attachments: [Auth to Award ITB23-021](#)
- c. [KP-4640](#) Authorization to Award a Contract for ITB23-020 Kwechak Creek Maintenance
Attachments: [Auth to Award ITB23-020](#)
- d. [KP-4641](#) Purchase of Motorola Radios, Under the National Association of State Procurement Officials (NASPO) Contract
Attachments: [Purchase of Motorola Radios](#)
- e. [KP-4642](#) Authorization to Award a Contract for ITB23-016 Brushing Vegetation Control - North Region
Attachments: [Auth to Award ITB23-016](#)
- f. [KP-4643](#) Authorization to Award a Contract for ITB23-017 Brushing Vegetation Control - South Region
Attachments: [Auth to Award ITB23-017](#)
- g. [KP-4644](#) Authorization to Award a Contract for ITB23-018 Brushing Vegetation Control - East Region, Unit 3
Attachments: [Auth to Award ITB23-018](#)
- h. [KP-4645](#) Authorization to Award a Contract for ITB23-019 Brushing Vegetation Control - West Region, Units 3, 4, & 5
Attachments: [Auth to Award ITB23-019](#)
- i. [KP-4646](#) FutureSync Sole Source Waiver
Attachments: [FutureSync Sole Source Waiver](#)

3. Other

- a. [KPB-4647](#) Litigation Status Report - Quarter Ending 09/30/22

Attachments: [Litigation Status Report - Quarter Ending 093022](#)

PUBLIC COMMENTS AND PUBLIC PRESENTATIONS

ASSEMBLY COMMENTS

PENDING LEGISLATION

(This item lists legislation which will be addressed at a later date as noted.)

1. [2022-36](#) An Ordinance Amending KPB Chapter 21.25 and KPB Chapter 21.29 Regarding Conditional Land Use Permits and Material Site Permits, Updating Notice, Applicability, Permit Types, Application Requirements, Standards and Permits Conditions (Johnson, Chesley) (Second Hearing on 10/25/22) (Referred to Lands Committee)

Attachments: [Ordinance 2022-36](#)
[Derkevorkian Amendments #1- #14](#)
[Takings Overview presentation](#)
[Sectional Analysis with Potential Amendments - Planning Department](#)
[Memo](#)
[Final Material Site Sectional Analysis](#)
[Material Site Subcommittee Presentation](#)
[080922 Public comment](#)
[082322 Public Comment](#)
[Review Notes by Charley Palmer](#)
[090622 Public Comment](#)
[091222 Public Comment](#)
[100322 Public Comment](#)
[Reference Copy R2018-004 SUB](#)
[Reference Copy O2019-30](#)
[Reference Copy O2021-41](#)
[Reference Copy O2021-41 SUB](#)

2. [2021-41](#) An Ordinance Amending KPB 21.29, KPB 21.25, and KPB 21.50.055 Regarding Material Site Permits, Applications, Conditions, and Procedures (Mayor, Johnson) (Referred to Policies and Procedures Committee) [Tabled on 02/01/22]

(Elam, Derkevorkian) Substitute: An Ordinance Amending KPB 21.29, KPB 21.25, and KPB 21.50.055 Regarding Material Site Permits, Applications, Conditions, and Procedures (Elam, Derkevorkian) [Tabled on 02/01/22]

Attachments:

[Ordinance 2021-41](#)
[Elam Amendment #2 \(notice of reconsideration given\)](#)
[Ecklund Tupper Amendment \(amendments pending\)](#)
[Ordinance 2021-41 \(Elam, Derkevorkian\) Substitute](#)
[Memo](#)
[Material Site Work Group Timeline](#)
[Legal Memo re Assembly Questions](#)
[Public Comments 021522](#)
[Public Comments 020122](#)
[Public Comments 020122](#)
[Public Comment 011822](#)
[Reference Copy Ordinance 2006-01 SUB](#)
[Reference Copy Resolution 2018-004 SUB](#)
[Reference Copy Resolution 2018-025](#)
[Elam Amendment #1 \(dealt with on 011822\)](#)

INFORMATIONAL MATERIALS AND REPORTS

ASSEMBLY MEETING AND HEARING ANNOUNCEMENTS

1. October 25, 2022 Material Subcommittee Meeting

Time TBD Betty J. Glick Assembly Chambers

Borough Administration Building

Remote participation available through Zoom

Meeting ID: 884 7373 9641 Passcode: 671108

2. October 25, 2022 Regular Assembly Meeting

6:00 PM Betty J. Glick Assembly Chambers

Borough Administration Building

Remote participation available through Zoom

Meeting ID: 884 7373 9641 Passcode: 671108

ADJOURNMENT

This meeting will be broadcast on KDLL-FM 91.9 (Central Peninsula), KBBI-AM 890 (South Peninsula), K201AO(KSKA)-FM 88.1 (East Peninsula).

The meeting will be held through Zoom, the Meeting ID: 884 7373 9641 Passcode: 671108 and in-person from the Betty J. Glick Assembly Chambers, Borough Administration Building, Soldotna, Alaska. To attend the Zoom meeting by telephone call toll free 1-888-788-0099 or 1-877-853-5247 and enter the Meeting ID: 884 7373 9641 Passcode: 671108. Detailed instructions will be posted on at the Kenai Peninsula Borough's main page at www.kpb.us: "Meeting and Public Notices" "Assembly Meeting Calendar".

For further information, please call the Clerk's Office at 714-2160 or toll free within the Borough at 1-800-478-4441, Ext. 2160. Visit our website at www.kpb.us for copies of the agenda, meeting minutes, ordinances and resolutions.



Kenai Peninsula Borough

144 North Binkley Street
Soldotna, AK 99669

Meeting Minutes - Draft

Assembly

Brent Johnson, President

Brent Hibbert, Vice President

Jesse Bjorkman

Lane Chesley

Tyson Cox

Richard Derkevorkian

Cindy Ecklund

Bill Elam

Mike Tupper

Tuesday, September 20, 2022

6:00 PM

Betty J. Glick Assembly Chambers

Meeting ID: 884 7373 9641 Passcode: 671108

CALL TO ORDER

PLEDGE OF ALLEGIANCE

INVOCATION

[Clerk's Note: The invocation was given by Patrick Brosamer.]

ROLL CALL

[Clerk's Note: Assembly Members Ecklund and Tupper participated via Zoom.]

Present: 9 - Jesse Bjorkman, Tyson Cox, Brent Hibbert, Brent Johnson, Richard Derkevorkian, Bill Elam, Lane Chesley, Cindy Ecklund, and Mike Tupper

Also present were:

Aaron Rhoades, Chief of Staff

Brandi Harbaugh, Finance Director

Sean Kelley, Borough Attorney

Johni Blankenship, Borough Clerk

Michele Turner, Deputy Borough Clerk

COMMITTEE REPORTS

Assembly Member Cox stated the Finance Committee met and discussed its agenda items.

Assembly Member Chesley stated the Policies and Procedures Committee met and discussed its agenda items.

APPROVAL OF AGENDA AND CONSENT AGENDA

Hibbert moved to approve the agenda and consent agenda.

Copies have been made available to the public, Borough Clerk Johni Blankenship noted by title only the resolutions and ordinances on the consent agenda.

[KPB-4598](#) September 6, 2022 Regular Assembly Meeting Minutes
approved.

[KPB-4599](#) September 11, 2022 Special Assembly Meeting Minutes
approved.

The following public hearing items met the required conditions of KPB 22.40.110 and were added to the consent agenda:

[2022-19-15](#) An Ordinance Accepting Grant Funds from the State of Alaska Division of Homeland Security & Emergency Management and the Federal Emergency Management Agency to Reimburse Costs Associated with Disaster Recovery Efforts Related to the Lowell Point Road Landslide (Mayor)
This Budget Ordinance was enacted.

[2022-19-16](#) An Ordinance Appropriating Funds from the Bear Creek Fire Service Area Operating Fund Balance for the Cost of Repairs to A Rescue Pumper (Mayor)
This Budget Ordinance was enacted.

New Business

[2022-050](#) A Resolution Authorizing the Mayor to Execute the Fiscal Year 2023 Alaska Land Mobile Radio Communication System Membership Agreements (Mayor)
This Resolution was adopted.

[2022-051](#) A Resolution Affirming Support for Garrison Ridge Road and Bridge Upgrades (Johnson, Elam)
This Resolution was adopted.

[2022-052](#) A Resolution Authorizing a Sole Source Award for Purchase and Installation of the Stryker Power Load System for an Existing

Ambulance and Ambulance in Production

This Resolution was adopted.

[2022-19-18](#) An Ordinance Accepting and Appropriating an Additional \$231,044.38 from the State of Alaska Department of Military and Veteran Affairs, Division of Homeland Security and Emergency Management for the Emergency Siren Warning System Replacement Project (Mayor) (Hearing on 10/11/22)

This Ordinance was introduced and set for public hearing.

[KPB-4580](#) Confirming Appointments to Advisory Planning Commissions (Mayor)

Cooper Landing APC

Jeanette Cadieux, Seat A, Term Expires 09/30/2025

Chris Degernes, Seat B, Term Expires 09/30/2025

Funny River APC

Glenda Radvansky, Seat F, Term Expires 09/30/2025

Hope/Sunrise APC

G. Johnny Sorenson, Seat C, Term Expires 09/30/2025

Peter Scott Smith, Jr., Seat D, Term Expires 09/30/2025

approved.

[KPB-4582](#) Confirming an Appointment to the Kachemak Emergency Service Area Board (Mayor)

Kachemak Emergency Service Area Board

Ralph Crane, Seat E, Term Expires 10/2022

approved.

[KPB-4583](#) Confirming an Appointment to the Resilience and Security Advisory Commission (Mayor)

Resilience and Security Advisory Commission

Scott Waterman, At-Large Seat, Term Expires 09/30/2025

approved.

[KPB-4597](#) Approval of the Precinct Boards, Canvass Board and Absentee Voting Officials for the October 4, 2022 Regular Municipal Election (Borough Clerk)

approved.

[2022-19-17](#) WITHDRAWN BY THE SPONSOR An Ordinance Authorizing the Acquisition of Real Property Located at 3964 Bartlett Street, Homer, Alaska on Behalf of the South Peninsula Hospital Service Area, Appropriating \$640,000 from the South Peninsula Hospital Plant Replacement and Expansion Fund for the Purchase, and Authorizing a Third Amendment to the Operating Agreement with South Peninsula Hospital, Inc. (Mayor) (Hearing on 10/11/22)

This Budget Ordinance was withdrawn by the sponsor.

Approval of the Agenda and Consent Agenda

President Johnson called for public hearing.

The following people spoke in support of Resolution 2022-051:

Rod Vansong
Arnold Mason

The following people spoke in regards to Agenda Item KPB-4597, Approval of Election Precinct Workers:

Susan Smalley
Michele Vasquez
Bonnie Nichols
Tim Navarre

There being no one else who wished to speak, the public comment period was closed.

A motion was made by Hibbert to approve the Agenda and Consent Agenda. The motion carried by the following vote:

Yes: 9 - Bjorkman, Cox, Hibbert, Johnson, Derkevorkian, Elam, Chesley, Ecklund, and Tupper

PUBLIC COMMENTS ON ITEMS NOT APPEARING ON THE AGENDA

President Johnson called for public comment.

Tom Patmore, Clam Gulch addressed the assembly regarding the borough putting a fire station in Clam Gulch.

The following people spoke in regards to Ordinance 2022-36:

Greg Turner, Soldotna
Alena Stog
Linda Farnsworth Hutchings

There being no one else who wished to speak, the public comment period was closed.

COMMENDING RESOLUTIONS AND PROCLAMATIONS

None.

PRESENTATIONS WITH PRIOR NOTICE

None.

PUBLIC HEARINGS ON ORDINANCES

[2022-40](#) An Ordinance Amending KPB 14.31.130 Relating to Notice of Assessments for Road Improvement Special Assessment Districts to Ensure Code Compatibility with Software Constraints (Mayor)

Cox moved to enact Ordinance 2022-40.

President Johnson called for public comments with none being offered.

The motion to enact Ordinance 2022-40 carried by the following vote:

Yes: 9 - Bjorkman, Cox, Hibbert, Johnson, Derkevorkian, Elam, Chesley, Ecklund, and Tupper

[2022-41](#) An Ordinance Amending KPB Chapter 21.02 to Establish an Advisory Planning Commission in the Nikiski Area (Mayor)

Chesley moved to enact Ordinance 2022-41.

President Johnson called for public comment.

The following people spoke in support of Ordinance 2022-41:

Camille Broussard, Nikiski
Stacy Oliva, Nikiski

There being no one else who wished to speak, the public comment period was closed.

Chesley moved to amend Ordinance 2022-41 as follows:

Amend the seventh Whereas clause to read, "at its meeting held on August 22, 2022, the KPB Planning Commission recommended approval as amended for an alternative smaller area; and" and

Add a new eighth Whereas clause to read, "the alternative includes all the petitioned land on the Kenai Peninsula, excluding Cook Inlet and the west side of the Kenai Peninsula Borough and encompasses 307,410 acres, or in-keeping with existing Advisory Planning Commission size;" and

Delete the existing Section 1 and replace it to read, "**21.02.230. Nikiski Advisory Planning Commission**

An advisory planning commission is established for the community of the borough known as Nikiski with boundaries as follows:

Beginning at the intersection of the southerly mean high water line of Turnagain Arm and the 150th meridian west of Greenwich within T10N R4W S.M.;

Thence southerly along the 150th meridian to the township line between T8N and T9N R4W;

Thence westerly along the township line between T8N and T9N to the northwest corner of T8N R9W S.M.;

Thence southerly along the range line between R9W and R10W to the southeast corner of T6N R10W S.M.;

Thence westerly along the township line between T5N and T6N to the southeast corner of Section 32 T6N R10W;

Thence northerly along the section line between Sections 32 and 33 to the northeast corner of Section 32;

Thence westerly along the section line to the northwest corner of Section 31 T6N R10W on the corporate boundary of the city of Kenai;

Thence northerly and westerly along the corporate boundary of the city of Kenai to the intersection with the mean high water line of Cook Inlet and the section line between Sections 23 and 26 T6N R12W S.M.;

Thence northerly and easterly along the mean high water line on the easterly shore of Cook Inlet, and easterly along the southerly mean high water line of Turnagain Arm, to the point of beginning."

Assembly Member Bjorkman spoke in opposition to the amendment.

The motion to amend Ordinance 2022-41 failed by the following vote:

Yes: 2 - Johnson, and Ecklund

No: 7 - Bjorkman, Cox, Hibbert, Derkevorkian, Elam, Chesley, and Tupper

The motion to enact Ordinance 2022-41 carried by the following vote:

Yes: 9 - Bjorkman, Cox, Hibbert, Johnson, Derkevorkian, Elam, Chesley, Ecklund, and Tupper

MAYOR'S REPORT

Mayor's Report Cover Memo

[KPB-4585](#) Mayor's Report Cover Memo

1. Assembly Requests/Responses - None.
2. Agreements and Contracts
 - a. [KPB-4586](#) River and Sea Marine Snowmachines Sole Source Waiver
3. Other
 - a. [KPB-4588](#) Tax Adjustment Request Approval
 - b. [KPB-4587](#) Certification of the 2022 Personal Property Supplemental Assessment Roll
 - c. [KPB-4589](#) Revenue-Expenditure Report August 2022
 - d. [KPB-4590](#) Budget Revisions August 2022

PUBLIC COMMENTS AND PUBLIC PRESENTATIONS

President Johnson called for public comment.

Ed Martin III addressed the assembly regarding suggested amendments to Ordinance 2022-36.

Linda Farnsworth Hutchings spoke in support of Proposition 3, Central Emergency Service Area Station Bonds.

There being no one else who wished to speak, the public comment period was closed.

ASSEMBLY COMMENTS

Assembly Member Elam thanked everyone for attending and providing testimony. He stated there was a lot of friction in the community and hoped some of that would go down. He wished everyone a good evening.

Assembly Member Cox reminded everyone that absentee in-person voting started on September 19, 2022 and encouraged everyone to vote "Yes" on KPB Proposition 2, Educational Capital Improvement Bonds, KPB Proposition 3, Central Emergency Service Area Station Bonds, and Soldotna Proposition 2022-A, for a Soldotna Field House. He congratulated his daughter on her four goals at her soccer game in Nikiski.

Assembly Member Tupper stated he wished he was attending in person. He stated he was attending the Alaska Hospital and Health Care Association conference that had great discussions on developing the medical workforce in Alaska. Mr. Tupper thanked Chief of Staff Rhoades for his work at the borough and the borough employees for all their work every day.

Assembly Member Bjorkman thanked everyone for attending and providing testimony. He stated how important it was that the public attends and participates in the process. He stated public participation matters and the assembly listens. Mr. Bjorkman stated it was a busy time of year with high school sports and congratulated the Nikiski Bulldogs for their victory over the Soldotna Stars in their recent volleyball match. He encouraged everyone to support the bond propositions that were on the ballot for the borough election on October 4, 2022. He wished everyone safe travels, stay dry and have fun.

Assembly Member Chesley stated that he and Finance Director Brandi Harbaugh were presenting at the Homer City Council meeting sometime in October regarding borough and city revenue sources based on FY2023 projections. He thanked Ms. Harbaugh for all her efforts in putting the presentation together. Mr. Chesley encouraged everyone to vote. He also stated Alex Koplin from Kenai Peninsula Votes was not affiliated with any political party and was working to get voter participation up. He stated he worked in the marine and safety industry and compared water through a two inch pipe verses three inch pipe. Mr. Chesley thanked Borough Attorney Sean Kelley and Planning Director Robert Ruffner for all their work regarding the material site legislation. He also thanked Deputy Borough Clerk Michele Turner for her IT support for the Assembly. He wished everyone a good evening.

Assembly Member Ecklund thanked Chief of Staff Aaron Rhoades for his work at the borough. She also thanked other borough employees for working with her this past month: Land Management Officer Marcus Mueller, Roads Director Dil Uhlin, Borough Attorney Sean Kelley, and Planning Director Robert Ruffner. She stated she was thankful for the public process and public participation. She reminded everyone of the public planning meeting on September 20 & 21, 2022 in Cooper Landing at the Community Hall regarding Unit 395 for land use along the realignment road. Ms. Ecklund wished everyone a good evening.

Vice President Hibbert thanked the public for participating and providing testimony.

He thanked borough staff for always bringing the Assembly a lot of good information. He thanked the clerks for their long hours in preparation for the upcoming election on October 4, 2022. Mr. Hibbert thanked the assembly for their work, Mr. Chesley for chairing the Material Site Sub-Committee and President Johnson for running the meetings. He thanked Chief of Staff Aaron Rhoades for being a friend. He wished everyone a safe night.

President Johnson thanked Mike Navarre for attending and appreciated him already getting started in his new job. He thanked Assembly District 4 candidate, Don Boston for attending. President Johnson gave a brief overview of Proposition 1, Reapportionment of Assembly and Board of Education Districts. He encouraged everyone to do their civic duty - research the candidates and issues that were on the October 4, 2022 ballot, and cast your vote.

INFORMATIONAL MATERIALS AND REPORTS

None.

ASSEMBLY MEETING AND HEARING ANNOUNCEMENTS

October 11, 2022 Material Subcommittee Meeting
Time TBD Betty J. Glick Assembly Chambers
Borough Administration Building
Remote participation available through Zoom
Meeting ID: 884 7373 9641 Passcode: 671108

October 11, 2022 Regular Assembly Meeting
6:00 PM Betty J. Glick Assembly Chambers
Borough Administration Building
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ADJOURNMENT

With no further business to come before the assembly, President Johnson adjourned the meeting at 8:10 p.m.

I certify the above represents accurate minutes of the Kenai Peninsula Borough Assembly meeting of September 20, 2022.

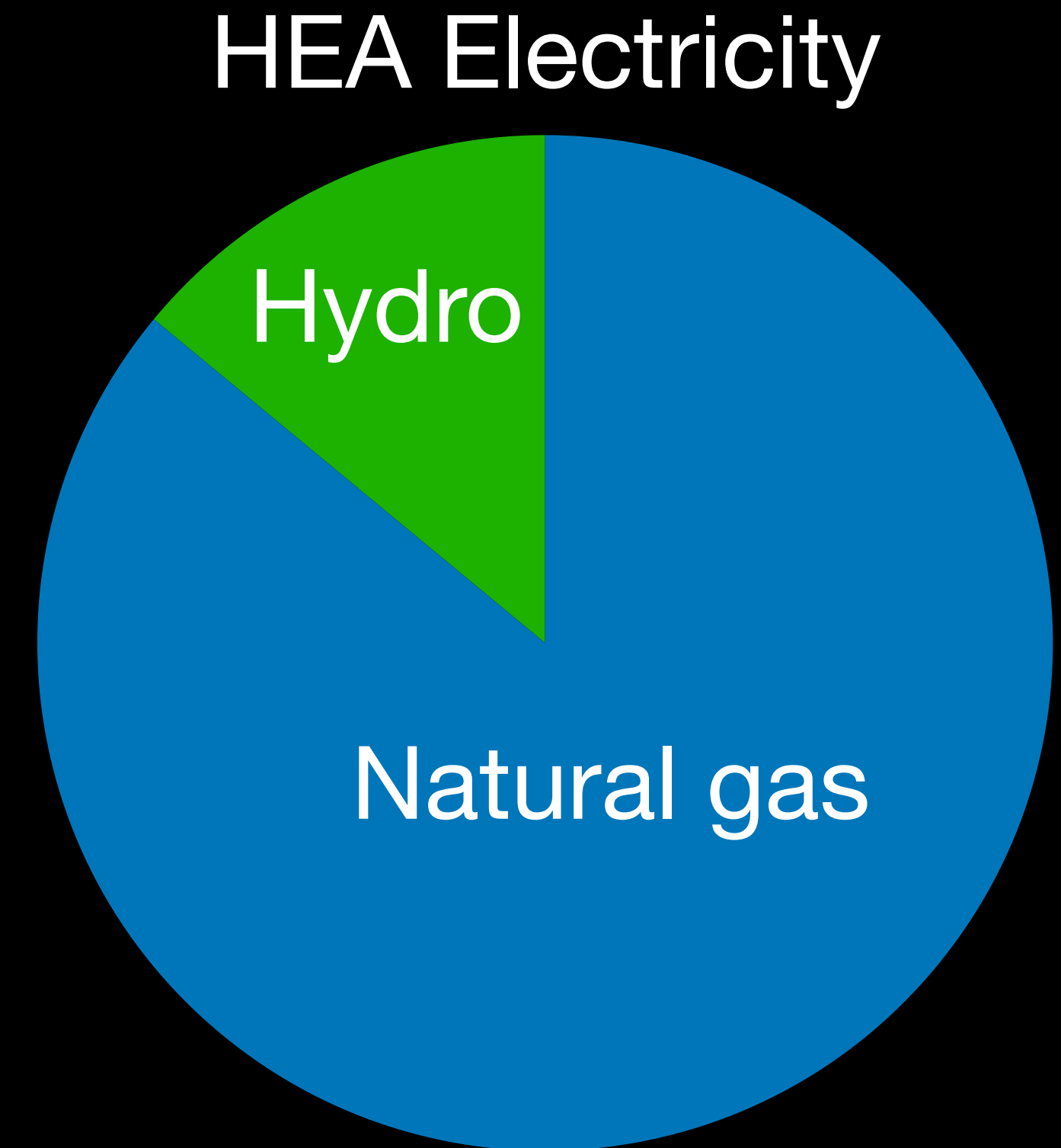
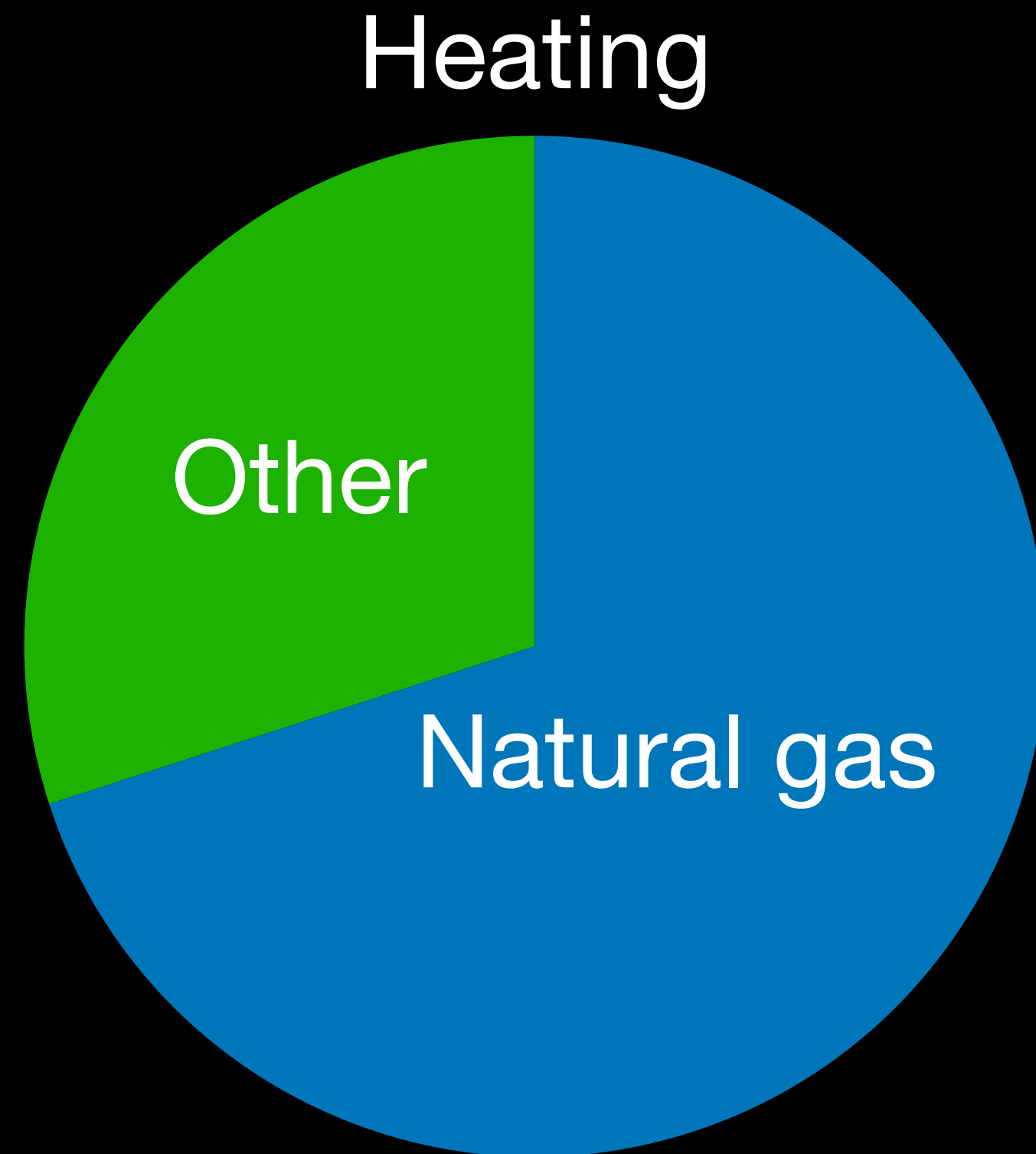
Johni Blankenship, MMC, Borough Clerk

Approved by the Assembly: _____

Natural Gas Supply Disruption: Avoiding a Crisis

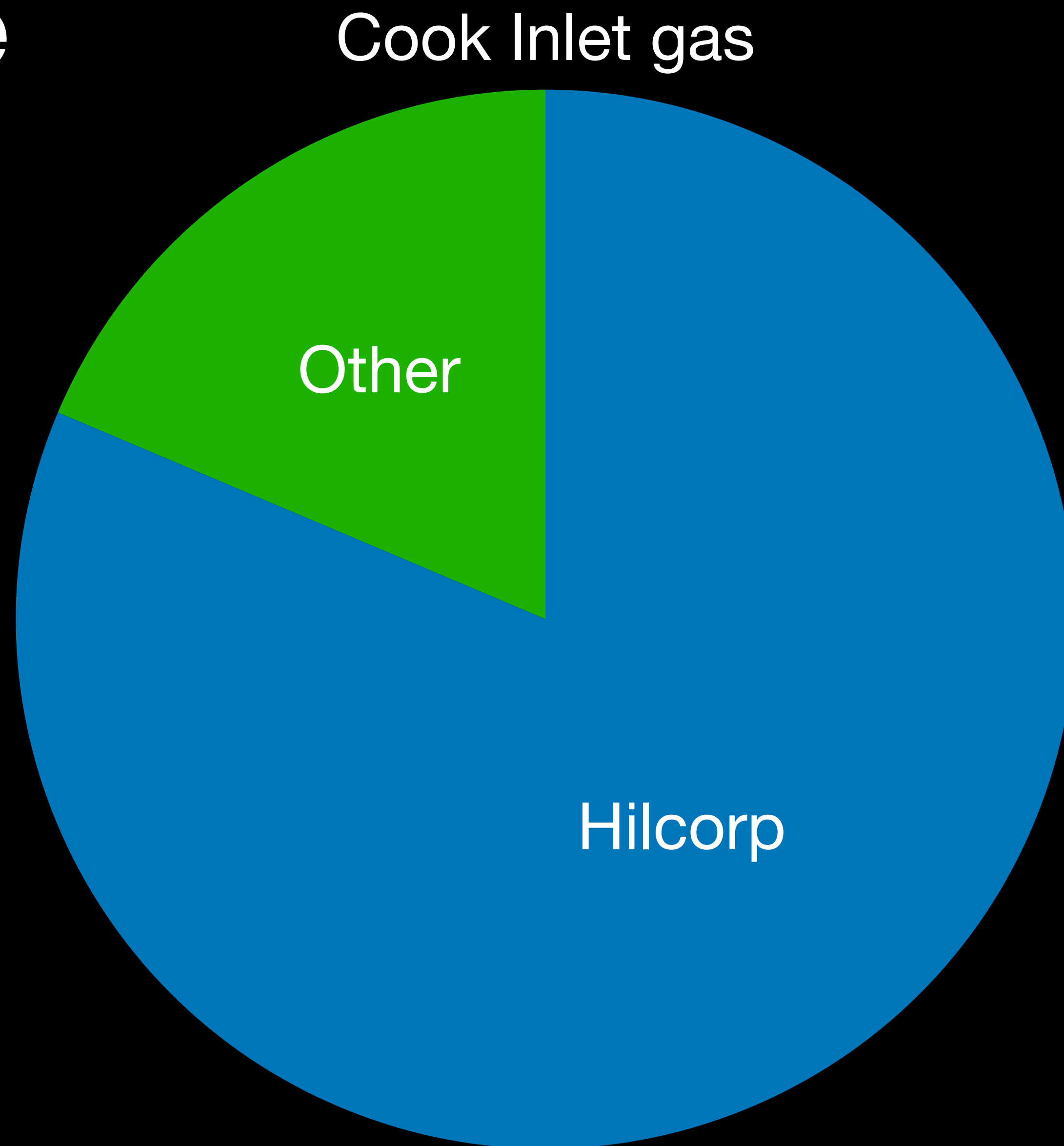
Bretwood Higman, Resilience and Security Advisory Commission

Where we are now



Gas is our main source of energy

Where we are now



Much of “Other” is Hilcorp operated Beluga gas for Chugach

Most gas comes from a single supplier

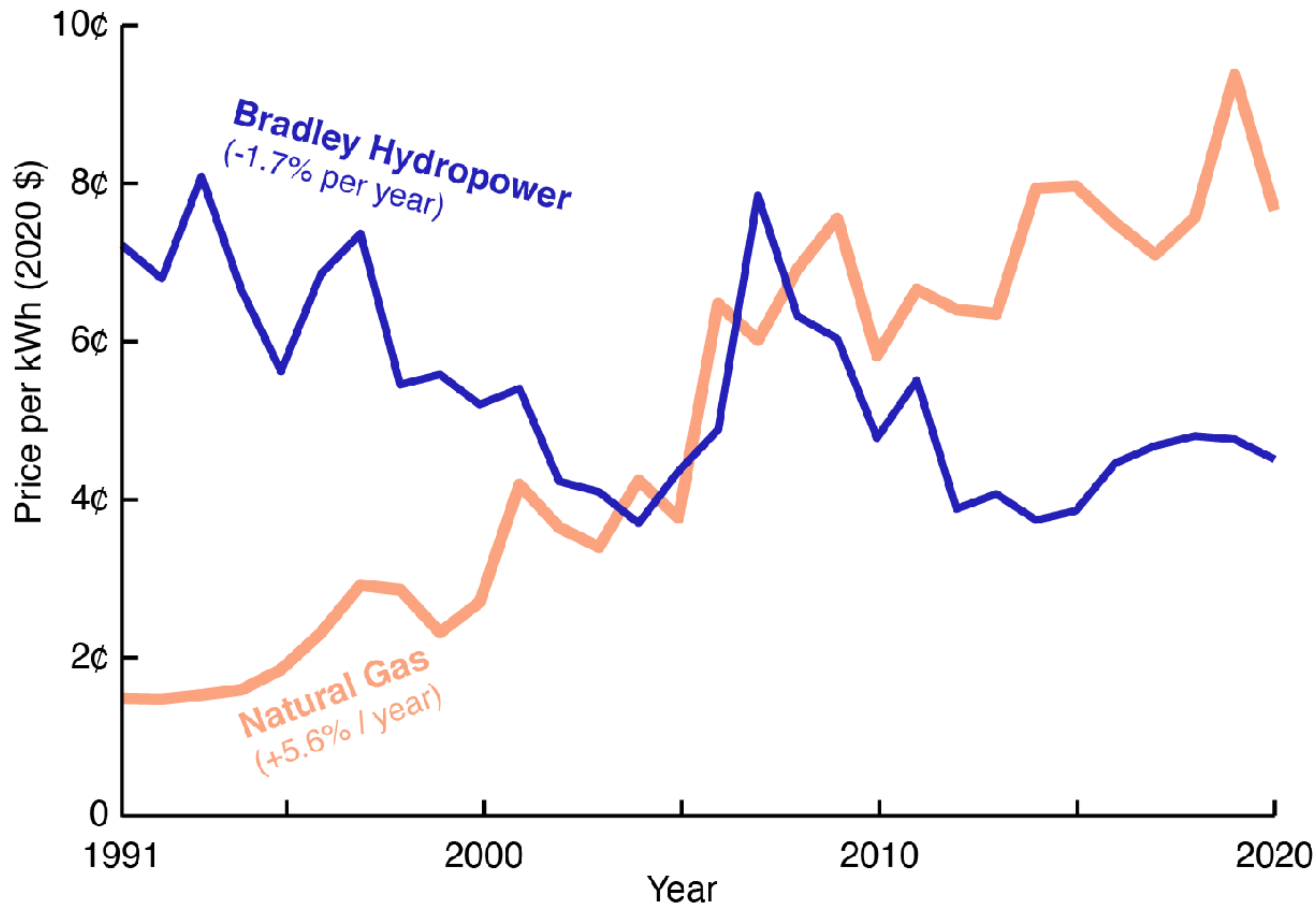
Where we are now

"There is no crisis of natural gas today. What we want to make sure of is that 5, 6 years from now there's no crisis of natural gas, and that means as a community we need to move with urgency to diversify our [energy]."
Luke Saugier - Hilcorp

The supply is questionable

Where we are now

Generation costs for Homer Electric Association's electricity



Methods: Quarterly RCA reporting for 1991 to 2000, annual reports thereafter. Some quarters missing. 2nd quarter of 1997 excluded for Bradley as an outlier. Inflation adjusted based on CPI. Gas prices reflect the dominant source of electricity for HEA for each year. O&M of gas plants not included - full cost of gas generation is slightly higher.

Gas prices are rising

Where we are now

- Natural gas provides most of our electricity and heat
- Hilcorp provides the vast majority of our gas
- Hilcorp warns of dwindling gas and the potential for crisis
- Gas prices have historically risen faster than inflation

Summary

What could be done?

Find more gas?

- Hilcorp doesn't anticipate that they will turn around dwindling supply.
- Federal lease sale: To supply more than about 5 years of gas BOEM believes gas prices would have to go up 36% on top of oil being at a sustained \$100/barrel.
- Subsidized exploration cost over \$2 billion in the 2010s, and only extended the gas supply 10-15 years, with no price reduction.





What could be done?

Gas pipeline?

- Still lacks necessary financial backing
- Construction estimated to take 9 years
- Price estimates vary - dependent on financing

What could be done?

LNG import?



- Marathon has permits to import LNG, but only 2% of rail belt demand.
- LNG prices will be tied to the Pacific market, which is volatile and currently much more expensive.

What could be done?

Conservation?

- Cheap gas from Cook Inlet can be thought of as a limited resource.
- Reduced consumption is likely to extend the supply.
- Opportunity in improved building efficiency to reduce consumption



What could be done?

Alternatives?

- Renewable energy can provide cost-competitive electricity
- Heat pumps: Although currently more expensive than natural gas heating, low cost renewable electricity and increasing gas prices could reverse this.

What could the Borough do?

Better understand the problem

- As it stands, all the information we have is Hilcorp's statements about gas supply. The borough could work to improve our understanding of the situation, potential consequences, and options for action.
 - Direct conversation with Hilcorp and with major consumers like HEA and Enstar
- Economic impact analysis
 - Scenario analysis
 - Gas import

What could the Borough do?

Encourage conservation

- Cheap natural gas is a limited resource - what could the borough do to conserve some of it for future use?
 - Reduce direct consumption by borough facilities such as the hospitals and schools
- Encourage efficiency improvements more widely
 - Public education - opportunities for reduced gas use, and uncertainty of future prices
 - C-PACE, Tax, or building code policy to incentivize conservation

What could the Borough do?

Develop alternatives

- Landfill gas
- Seek partners for renewable development on Borough land
- Further tax incentives for IPP development in the borough
- Solar (PV or heating) at borough facilities

What could the Borough do?

Provide leadership

- Borough conference on KP energy future
- Interface with utilities
- Coordinate with borough entities (cities, tribes) to reduce consumption and prepare for future impacts
- Establish line of communication with state and federal entities that may be able to help avert a crisis



hig314@gmail.com

Introduce conversation on CI gas to KPB Assembly

Affordable natural gas from the Cook Inlet Basin has powered and heated much of the Railbelt from the early 1960's. It was present in significant supply to feed the Agrium plant in Nikiski and export for many years. However, by 2004, easy supply had decreased and prices began to climb. The Agrium plant shut down in 2007, and the export facility stopped exporting in 2015. The Federal Energy Regulatory Commission (FERC) approved a plan in 2020 to convert the export facility to an import facility, but with a capacity that would only be a tiny percentage of Cook Inlet's needs .

In 2010, the Alaska Legislature passed the Cook Inlet Recovery Act, providing significant (~\$2+B) subsidies for further exploration in Cook Inlet. \$2.25 - \$2.5 billion will be paid by the state when all obligations come due.

While this effort provided an additional 12 or so years of solid supply, we are again at the point where shortages are present on the horizon. HilCorp made a statement in April 2022 to the five Railbelt electrical utilities that they would not be able to fully commit to extending long term gas contracts as they begin to expire in the spring of 2024. In May, Luke Saugier, Senior VP for Alaska, announced at Governor Dunlevy's Sustainable Energy Conference that HilCorp did not anticipate that their exploration activities would lead to discoveries that could fill future demand, and that Cook Inlet Gas supplies would not be sufficient to meet demand in three to five years. He said Hillcorp was available to assist renewable energy companies with data and development of tidal or geothermal energy, potentially leasing drilling platforms for tidal energy or assisting in understanding tidal dynamics in Cook Inlet.

The Alaska Oil and Gas Commission published a report in 2018 stating that while it is expected that up to 1.3 trillion cubic feet of gas are still under Cook Inlet, the cost for extraction would be 50 to 100% higher than existing costs, and

Oil and gas production started in the Cook Inlet basin after the discovery of the Swanson River field in 1958. Figure 6 shows natural gas production began ramping up in late 1960s as new industrial end users were coming online. Production expanded through the 1970s and ranged around 200 Bcf per year until the mid-2000s, when it began to decline sharply. As of June 30, 2017, the Cook Inlet basin produced approximately 8.505 trillion cubic feet of gas and 1.365 billion barrels of oil.

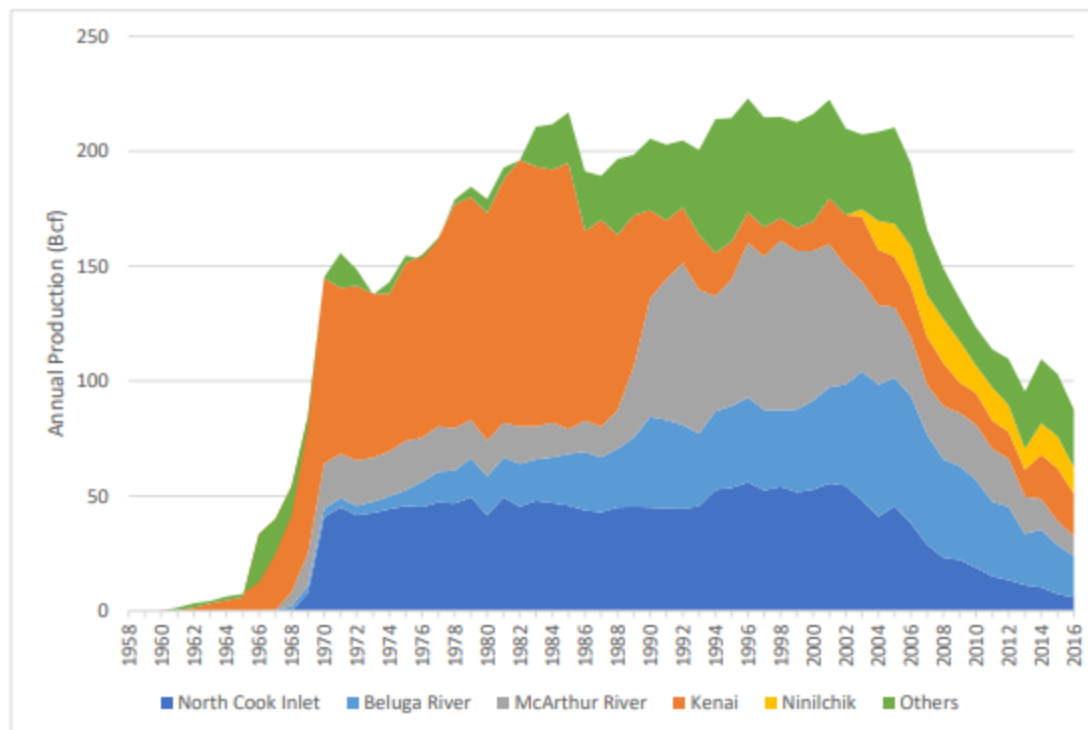
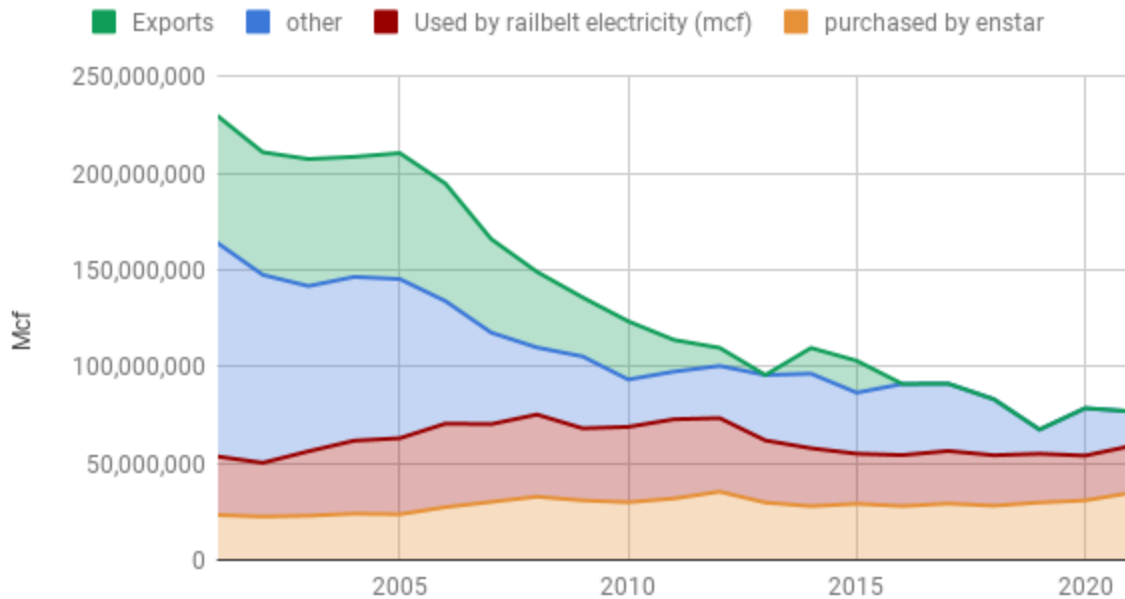


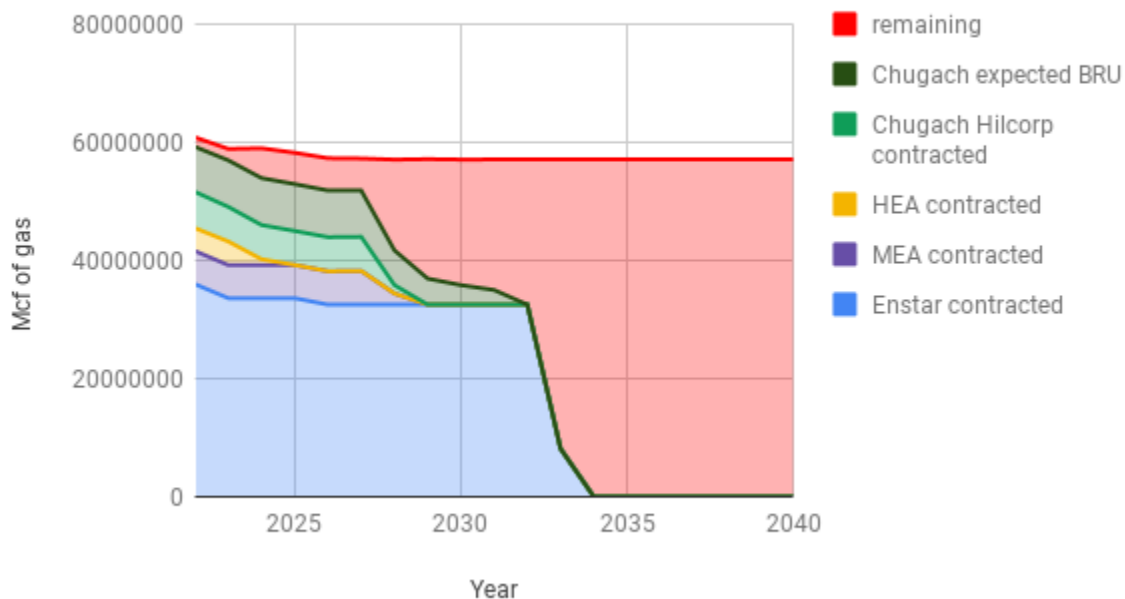
Figure 6. Historical Cook Inlet natural gas production

Note: Data sourced from AOGCC. Production excludes reinjections for enhanced oil recovery at the Swanson River field and storage injections and withdrawals.

Cook Inlet Gas usage



Gas contracts vs expected utility gas needs



As we head into the next stage of energy uncertainty in the Cook Inlet Region, more of the same is just a band aid on the long term problem. At a minimum, a diversification from all energy sources being Cook Inlet gas to a broader mix is in order. Best case scenario is the development of of long-term, stable

sources of renewable and affordable energy to power and heat homes and businesses in the Kenai Peninsula Borough.

Solar and battery storage can be produced now for the avoided costs of gas not burned. Wind energy with battery storage is currently the cheapest source of new energy projects in the United States, and even if the cost is tripled for Alaska, it is still near the avoided cost of not burning gas. Expansion plans for battery storage are underway at Chugach Electric and Golden Valley Electric Association, and the Homer Electric Association already has a substantial battery in place and operational. Ocean Renewable Power Corp has a turbine in Cook Inlet at point Mackenzie this summer, currently set in a static mode see how Beluga whales will react. It will go live later and company projections are to deploy 2MW turbines by 2025 and 5MW turbines by 2027.

The Governor and the Alaska Energy Authority (AEA) announced in spring 2022 the application for a FERC permit for the Dixon Diversion project above Bradley Lake.

Oil and gas federal leases in the Cook Inlet have drawn minimal interest in recent years. Another is planned for 2022. The State of Alaska is not in a position to bail out the industry in exploration as they did in 2007.

And finally, electric transportation is increasing and once it hits about 10% of vehicles, will increase exponentially as costs come down. Current prices are \$.60-\$1.00 per vehicle mile, electric vehicles may be as low as \$.10 per mile by 2025 or 2026. This increases demand on the electric grid, and necessitates different thinking about power production.

The economic impacts of rising gas prices will be felt throughout the peninsula. Homes and businesses will cost more to operate. Borough buildings will cost more to operate, exacerbating energy impacts on borough finances

With all this, the RSAC asks the KPB assembly to consider the following:

1. Study the problem - the crisis in natural gas supply affects the entirety of our energy infrastructure, and is quite complex
 - a. Convene working group and engage borough staff time to identify and refine ideas like those outlined below.
 - b. Establish a dialogue with Hilcorp to learn what we can from their assessment of the situation.
 - c. Economic impact analysis
2. Conservation - by reducing consumption of natural gas, we reduce dependency and increase the time available to adopt alternative sources
 - a. Borough facilities: Assess natural gas consumption and electricity consumption, identify potential efficiency improvements, implement them.
 - b. Other facilities: The Borough may be able to encourage more widespread efficiency improvements
 - i. Public education: Use Borough outreach staff and explicit action like resolutions to encourage businesses and individuals to reduce natural gas consumption.

- ii. Policy: Develop tax or building code policy that incentivises alternatives to natural gas
 - c. Pass C-PACE ordinances to help businesses secure capital for efficiency improvements
- 3. Develop alternatives - the Borough can seek to encourage development of alternatives to fill the gap left by dwindling gas supplies
 - a. Landfill gas: Accelerate the Borough landfill gas energy project.
 - b. Encourage development on Borough property: The extensive land holdings under Borough management may in some cases be advantageous for energy development (e.g. solar farms.) Identify these sites, establish appropriate designations, and seek partners for development.
 - c. Tax policy: Look for other opportunities to encourage energy development along the lines of the IPP tax break ordinance.
 - d. Develop solar on borough facilities as net-meter or SFPPR customers for HEA / Seward Utility. For example - rooftop solar on Borough school buildings.
- 4. Leadership - the Borough can help coordinate action at different governmental levels and among the public:
 - a. Resolution encouraging city governments to adopt policies reducing gas consumption or increasing renewable consumption. Pair encouragement with offer of staff resources (e.g. grant writing.)
 - b. Emphasize the urgency of the situation to the state government - KPB is heavily dependent on HEA, which is the first utility to lose its active contract in 2024. Encourage productive engagement by the state, e.g. through fiscal incentives to develop utility-scale alternative energy.
 - c. Similarly reach out to the federal government. Work through Murkowski's office to identify specific opportunities to bring federal funding to bear on our situation.
 - d. Convene a public conference on the topic with a title like "The State and Future of Cook Inlet Gas and Energy"

Introduced by:	Mayor
Date:	09/20/22
Hearing:	10/11/22
Action:	
Vote:	

**KENAI PENINSULA BOROUGH
ORDINANCE 2022-19-18**

**AN ORDINANCE ACCEPTING AND APPROPRIATING AN ADDITIONAL \$231,044.38
FROM THE STATE OF ALASKA DEPARTMENT OF MILITARY AND VETERAN
AFFAIRS, DIVISION OF HOMELAND SECURITY AND EMERGENCY
MANAGEMENT FOR THE EMERGENCY SIREN WARNING SYSTEM
REPLACEMENT PROJECT**

WHEREAS, Ordinance 2021-19-57 appropriated \$700,000 from the General Fund fund balance to the General Government Capital project fund for the Emergency Siren Warning System Replacement Project; and

WHEREAS, the State of Alaska Department of Military and Veterans Affairs, Division of Homeland Security & Emergency Management (DHS&EM) provides funds to enhance the capability of local governments to prevent, deter, respond to and recover from all-hazard incidents, and to enhance regional preparedness efforts; and

WHEREAS, the DHS&EM State Homeland Security Program is a federal grant pass through program with the Federal Emergency Management Agency which provides funding for planning, equipment, training and exercises; and

WHEREAS, DHS&EM approved the Kenai Peninsula Borough's request for additional funding to supplement the siren replacement project through an amendment increase of \$231,044.38 totaling \$452,537.38 under the 2020 State Homeland Security Grant Program award; and

WHEREAS, \$380,537.38 in 2020 State Homeland Security Grant and \$700,000 in funds transferred from the General Fund increase the total Emergency Siren Warning System Replacement Project to \$1,080,537.38; and

WHEREAS, it is in the best interest of the Borough to accept the grant funds;

NOW, THEREFORE, BE IT ORDAINED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH:

SECTION 1. That the mayor, or his designee, is authorized to accept \$231,044.38 from the State of Alaska Department of Military and Veteran Affairs, Division of Homeland Security and Emergency Management and to execute a grant agreement and any other documents deemed necessary to accept and to expend the grant funds and to fulfill the intents and purposes of this ordinance.

SECTION 2. That grant funds in the amount of \$231,044.38 are appropriated to the account 271.94910.21HSP.49999 for areawide warning system upgrades.

SECTION 3. That the appropriations made in this ordinance are project length in nature and as such do not lapse at the end of any particular fiscal year.

SECTION 4. This ordinance shall be effective immediately upon enactment.

ENACTED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH THIS * DAY OF * 2022.

Brent Johnson, Assembly President

ATTEST:

Johni Blankenship, MMC, Borough Clerk

Yes:

No:

Absent:

Kenai Peninsula Borough

Office of Emergency Management

MEMORANDUM

TO: Brent Johnson, Assembly President
Members, Kenai Peninsula Borough Assembly

THRU: Mike Navarre, Mayor *MN*
Brandi Harbaugh, Finance Director *BH*

FROM: Brenda Ahlberg, Emergency Manager *BA*

DATE: October 11, 2022

RE: Amendment to Ordinance 2022-19-18, Accepting and Appropriating an Additional \$231,044.38 from the State of Alaska Department of Military and Veteran Affairs, Division of Homeland Security and Emergency Management for the Emergency Siren Warning System Replacement Project (Mayor)

The following amendment to Ordinance 2022-19-18 is requested.¹

➤ Amend Section 4, as follows:

SECTION 4. This ordinance shall be effective [IMMEDIATELY UPON ENACTMENT]
retroactive to August 29, 2022 .

Your approval would be appreciated.

¹ Please note the bracketed language is to be deleted and the bold underlined language is to be added.

Kenai Peninsula Borough

Office of Emergency Management

MEMORANDUM

TO: Brent Johnson, Assembly President
Members, Kenai Peninsula Borough Assembly

THRU: Charlie Pierce, Mayor *AR for CP*
Brandi Harbaugh, Finance Director *BA*
Rachel Chaffee, Community & Fiscal Projects Manager *RC*

FROM: Brenda Ahlberg, Emergency Manager *BA*

DATE: September 8, 2022

RE: Ordinance 2022-19- 18, Accepting and Appropriating an Additional \$231,044.38 from the State of Alaska Department of Military and Veteran Affairs, Division of Homeland Security and Emergency Management for the Emergency Siren Warning System Replacement Project (Mayor)

The Alaska Division of Homeland Security and Emergency Management approved an amendment increase to the 2020 State Homeland Security Program award in the amount of \$231,044.38. The amendment increase will provide additional funds for the siren replacement project.

Brenda Ahlberg, Emergency Manager is the project manager; the grant performance period ends May 31, 2023.

FINANCE DEPARTMENT FUNDS/ACCOUNT VERIFIED	
Acct. No:	<u>271.94910.21HSP.49999</u>
Am	<u>231,044.38</u>
By: <i>CJ</i>	Date: <u>9/8/2022</u>

Attachment: 20SHSP-GY20.A03 Amendment Increase Letter (09/07/2022)



THE STATE
of **ALASKA**
GOVERNOR MIKE DUNLEAVY

**Department of Military and
Veterans Affairs**

Division of Homeland Security and
Emergency Management

P.O. Box 5750
JBER, AK 99505-0800
Main: 907.428.7000
Fax: 907.428.7009
ready.alaska.gov

September 7, 2022

The Honorable Charlie Pierce, Mayor
Kenai Peninsula Borough
144 N Binkley Street
Soldotna, AK 99669

RE: 2020 State Homeland Security Program, EMW-2020-SS-00012-S01
State Program No.: 20SHSP-GY20
Amendment 3, Effective August 29, 2022

Mayor Pierce:

Enclosed is the Award Amendment for the Kenai Peninsula Borough's 2020 State Homeland Security Program. This amendment obligates reallocated funds in the amount of \$231,044.38 for a new award total of \$452,537.38. All previous Grant Terms and Conditions, Grant Requirements, and Assurances and Agreements still apply.

A pre-signed Obligating Award Document (OAD) is attached. Please print the document, sign the OAD, and send a scanned copy to mva.grants@alaska.gov within 30 days of subrecipient receipt. Keep the hard copy for your records.

If you have any questions, please contact the Division Project Manager for this grant, Tiffany Peltier, at (907) 428-7026 or by email at tiffany.peltier@alaska.gov.

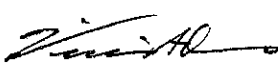
Sincerely,

A handwritten signature in black ink, appearing to read "William A. Dennis".

William A. Dennis
Administrative Operations Manager

Enclosure(s): Obligating Award Document
Project Budget Details Report

cc: Brenda Ahlberg, Jurisdiction Project Manager
Brandi Harbaugh, Jurisdiction Chief Financial Officer

State of Alaska Division of Homeland Security and Emergency Management Under US Department of Homeland Security Federal Emergency Management Agency Grant Programs Directorate						Page 1 of 1	
						FEDERAL AWARD DATE	
						August 19, 2020	
						FEDERAL GRANT PROGRAM	
						2020 State Homeland Security Program	
OBLIGATING AWARD DOCUMENT						FEDERAL GRANT NUMBER	
						EMW-2020-SS-00012-S01	
RECIPIENT NAME AND ADDRESS		PERFORMANCE PERIOD		AMENDMENT		CFDA:	97.067
Kenai Peninsula Borough 144 N. Binkley Street Soldotna, AK 99669		FROM:	October 01, 2020	AMENDMENT #:	2	AWARD AMOUNT	
		TO:	May 31, 2023	EFFECTIVE DATE:	August 29, 2022	\$452,537.38	
		STATE PROGRAM NUMBER				20SHSP-GY20	
UEI NUMBER	LFJ1BSEYK6H3			FUNDING ALLOCATION			
EIN	92-0030894			PLANNING		EXERCISE	\$20,000.00
METHOD OF PAYMENT	Electronic			TRAINING		EQUIPMENT	\$432,537.38
PURPOSE OF AWARD							
This amendment obligates reallocated funds in the amount of \$231,044.38 for new award total of \$452,537.38.							
Final Report Due: July 15, 2023							
GRANT REQUIREMENTS AND PROGRAM TERMS AND CONDITIONS							
The acceptance of a grant from the United States government creates a legal duty on the part of the grantee to use the funds or property made available in accordance with the conditions of the grant. GAO Accounting Principles and Standards for Federal Agencies, Chapter 2, Section 16.8(c)]							
All previous Grant Requirements and Program Terms and Conditions still apply							
SPECIAL CONDITIONS (Grant funds cannot be expended until these conditions have been met. See Obligating Award for details)							
None							
AGENCY INFORMATION							
ADDRESS	Division of Homeland Security and Emergency Management PO Box 5750 JBER, AK 99505-5750				WEBSITE	http://ready.alaska.gov	
					EMAIL	mva.grants@alaska.gov	
					PHONE	907-428-7000	
					FAX	907-428-7009	
STATE PROJECT MANAGER		PHONE	FAX	EMAIL			
Tiffany Peltier		(907) 428-7026	(907) 428-7009	tiffany.peltier@alaska.gov			
AGENCY APPROVAL				RECIPIENT ACCEPTANCE			
NAME AND TITLE OF APPROVING AGENCY OFFICIAL				NAME AND TITLE OF AUTHORIZED RECIPIENT OFFICIAL			
William A. Dennis, Administrative Operations Mgr.				Charlie Pierce, Mayor			
SIGNATURE OF APPROVING AGENCY OFFICIAL				SIGNATURE OF AUTHORIZED RECIPIENT OFFICIAL			
				DATE		DATE	
				9-7-2022			
FOR STATE USE ONLY							
GAE:	210002423	Division File Number:			Date Returned		



Project Budget Details **2020 State Homeland Security Program** **Kenai Peninsula Borough** **Reported Revision 2**

PBD #	Expense Category	Solution Area	Discipline		Budgeted Cost	PBD Amount Spent	PBD Balance
1	Equipment	Intervention	Public Safety Communications	State:	\$0.00	\$0.00	\$0.00
<input checked="" type="checkbox"/> EHP	3/12/2021	<input type="checkbox"/> Canceled		Federal:	\$380,537.38	\$74,873.56	\$305,663.82
Item: Areawide Warning Siren Upgrades Description: Design, engineer, purchase and installation of upgrades to the Kenai Peninsula Borough siren broadcast system. This project includes new siren controllers, voice audio storage, as well as communications for activation and maintenance to a satellite/VHF radio based combination for increased resiliency. Investment: 05. Strengthen Whole Community Preparedness							
2	Exercise	Prog: Des,Dev,Cond,Eval	Emergency Management	State:	\$0.00	\$0.00	\$0.00
<input type="checkbox"/> EHP		<input type="checkbox"/> Canceled		Federal:	\$20,000.00	\$0.00	\$20,000.00
Item: Incident Management Team Table Top Exercise Description: Hiring of an independent contractor to design, facilitate, and evaluate a table top exercise for KPB's incident management team to simulate large scale, moderate impact incident that requires significant coordination and response. Investment: 05. Strengthen Whole Community Preparedness							
3	Equipment	Inspect.Screen	Fire Service	State:	\$0.00	\$0.00	\$0.00
<input type="checkbox"/> EHP		<input type="checkbox"/> Canceled		Federal:	\$52,000.00	\$52,000.00	\$0.00
Item: Ninilchik Fire EMS Breathing Air Compressor Description: Purchase and installation of a breathing air compressor for the Ninilchik Fire/ Emergency Services to refill SCBA breathing air bottles. Investment: 05. Strengthen Whole Community Preparedness							
					Adjusted Grant Total	Total PBD Allocations	Summary Balance
					State:	\$0.00	\$0.00
					Federal:	\$452,537.38	\$126,873.56
					Grand Total:	\$452,537.38	\$325,663.82

Introduced by:	Johnson
Date:	10/11/22
Hearing:	10/25/22
Action:	
Vote:	

**KENAI PENINSULA BOROUGH
ORDINANCE 2022-19-19**

**AN ORDINANCE CALLING FOR A SPECIAL MAYORAL ELECTION, SETTING
THE SPECIAL ELECTION DATE, AND APPROPRIATING NECESSARY FUNDS**

WHEREAS, Mayor Pierce’s resignation from the office of the mayor effective September 30, 2022, was accepted by the Assembly at the September 6, 2022 regular Assembly meeting; and

WHEREAS, on September 6, 2022, the Assembly unanimously declared a vacancy in the office of the mayor; and

WHEREAS, KPB 4.10.050(A), states, “The assembly, by motion, resolution, or adoption of an ordinance, may call a special election at any time at least 75 days prior to the date of the election;” and

WHEREAS, AS 29.20.280(b) states, “a vacancy in the office of mayor occurring six months before a regular election shall be filled by the governing body. The person appointed serves until the next regular election when a successor is elected to serve the balance of the term. If a member of the governing body is appointed mayor, the member shall resign the seat on the governing body. If a vacancy occurs more than six months before a regular election, the governing body shall call a special election to fill the unexpired term;” and

WHEREAS, the vacancy occurred more than six months before a regular election for the office of the mayor, therefore a special election is required by law; and

WHEREAS, funds need to be appropriated to administer the special mayoral election and, potentially, a runoff election in the event no candidate receives a majority of the votes cast pursuant to KPB 4.10.070(A);

NOW, THEREFORE, BE IT ORDAINED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH:

SECTION 1. That the Assembly directs the Borough Clerk acting in her capacity as the Election Supervisor to conduct a Special Mayoral Election on _____, 2023.

SECTION 2. That the Assembly appropriates \$250,000 from the General Fund to the Assembly Elections Division, project account No. 100.11130.23VOT.49999., for the purpose

of conducting the Special Mayoral Election and the Special Mayoral Runoff Election, if necessary.

SECTION 3. That this ordinance shall become effective immediately upon enactment.

ENACTED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH THIS * DAY OF * 2022.

Brent Johnson, Assembly President

ATTEST:

Johni Blankenship, MMC, Borough Clerk

Yes:

No:

Absent:

Kenai Peninsula Borough Assembly

MEMORANDUM

TO: Members, Kenai Peninsula Borough Assembly
FROM: Brent Johnson, Assembly President *Bj*
DATE: October 11, 2022
RE: Ordinance 2022-19-19 Calling for a Special Mayor Election, Setting the Special Election Date, and Appropriating Necessary Funds (Johnson)

On September 6, 2022, the Kenai Peninsula Borough (Borough) Assembly, accepted Mayor Pierce's resignation from the office of Borough Mayor and declared a vacancy in the office of the mayor.

The Borough Clerk's Office and Legal Department, respectively, provided public memorandums recommending that the Assembly call a special mayoral election and set a special election date no sooner than 75 days after calling for the special election per KPB 4.10.050.

KPB 4.10.050(A), states, "The assembly, by motion, resolution, or adoption of an ordinance, may call a special election at any time at least 75 days prior to the date of the election;"

Pursuant to AS 29.20.280(b), I have determined that a special election is required by law.

The Borough Clerk estimates that a special election and subsequent runoff election, if necessary, may cost up to \$250,000. Therefore, this ordinance calls for a special election, will set a special election date, and will appropriate fund balance from the General Fund necessary to conduct the special mayoral election and a runoff election in the event a runoff election is necessary in the event no candidate receives a majority of the votes cast.

Your consideration of the ordinance is appreciated.

FINANCE DEPARTMENT ACCOUNT / FUNDS VERIFIED	
Acct. No.	<u>100,27910</u>
Amount:	<u>\$ 250,000</u>
By: <i>Bx</i>	Date: <u>9/22/22</u>

Introduced by: Johnson at the Request of
the Borough Attorney
Date: 10/11/22
Hearing: 10/25/22
Action:
Vote:

**KENAI PENINSULA BOROUGH
ORDINANCE 2022-19-20**

**AN ORDINANCE APPROPRIATING \$100,000 TO THE LEGAL DEPARTMENT TO
COVER COSTS OF HIRING HEARING OFFICERS FOR PLANNING COMMISSION
APPEALS**

- WHEREAS,** in effort to provide for added consistency and professionally trained administrative law judges, the Kenai Peninsula Borough transitioned in 2021 to engaging the State of Alaska, Office of Administrative Hearings to serve as the hearing officer to adjudicate all administrative appeals from decisions of the planning commission; and
- WHEREAS,** the cost of these appeal hearings varies depending upon the complexity of the issues and the number of parties involved; and
- WHEREAS,** the cost of hearing officers are paid from the legal department's Legal Services account which is also used to pay for hiring of outside counsel in cases where a conflict of interest may exist; and
- WHEREAS,** it would be a conflict of interest for the Borough's Legal Department to serve as the hearing officer; and
- WHEREAS,** the unencumbered balance available in the legal department's Legal Services account is currently \$21,000;
- WHEREAS,** there are currently pending three appeals to a hearing officer from planning commission decisions; and
- WHEREAS,** it is estimated that additional funds of \$100,000 may be needed for appeals to the hearing officer from planning commission decisions; and
- WHEREAS,** moving forward it is anticipated that either the Borough's Legal Department or Planning Department will include estimated hearing officer costs in the annual budget; and
- WHEREAS,** in the interim is necessary to appropriate funds to retain a hearing officer in order provide due process for adjudication of administrative appeals from planning commission decisions;

NOW, THEREFORE, BE IT ORDAINED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH:

SECTION 1. The sum of \$100,000 is hereby appropriated from the General Fund, fund balance to account 100.11310.23HOA.43034 Legal Services to fund the services of hearing officers in appeals from planning commission decisions and the hiring of outside counsel in situations where a conflict of interest may exist.

SECTION 2. That the appropriations made in this ordinance are of a project length nature and as such do not lapse at the end of any particular fiscal year.

SECTION 3. That upon enactment this ordinance is effective retroactive to July 1, 2022.

ENACTED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH THIS * DAY OF * 2022.

Assembly President

ATTEST:

Johni Blankenship, MMC, Borough Clerk

Yes:

No:

Absent:

Kenai Peninsula Borough

Legal Department

MEMORANDUM

TO: Members, Kenai Peninsula Borough Assembly

THRU: Brent Johnson, Assembly President *BJ*
Brandi Harbaugh, Finance Director *BH*

FROM: Sean Kelley, Borough Attorney *SK*

DATE: October 11, 2022

RE: Ordinance 2022-19-20, Appropriating \$100,000 to the Legal Department to Cover Costs of Hiring Hearing Officers for Planning Commission Appeals (Johnson)

In FY2021, the Kenai Peninsula Borough (Borough) transitioned from hiring outside counsel on a case-by-case basis to utilizing the State of Alaska, Office of Administrative Hearings to serve as the hearing officer to adjudicate planning commission appeals. Currently, there are three pending appeals from planning commission decisions.

Ordinance 2021-19-15 appropriated \$150,000 for the payment of services of hearing officers in appeals from planning commission decisions and for the hiring of outside counsel in conflict cases. Of the \$150,000 appropriated in FY22, \$44,215 is encumbered for payment of two of the current pending appeals which were filed in FY22, and approximately \$19,600 lapsed back to the General Fund on July 1, 2022. With the final costs of the two ongoing appeals unknown, approximately 88 percent of the funds appropriated for hearing officers in FY22 were utilized.

While it is difficult to predict in any one given year how many appeals or conflict cases will require the services of a hearing officer or outside counsel, recent history suggests that the majority of the Planning Commission's conditional land use permit decisions will result in an appeal to the hearing officer.

It is currently estimated that an additional \$100,000 will be required to pay for hearing officers to adjudicate planning commission appeals.

Your consideration of the ordinance is appreciated.

FINANCE DEPARTMENT ACCOUNT / FUNDS VERIFIED	
Acct. No.	<u>100.27910</u>
Am	<u>100,000</u>
By: <i>SK</i>	Date: <u>9/26/2022</u>

Introduced by:	Mayor
Date:	10/11/22
Hearing:	10/25/22
Action:	
Vote:	

**KENAI PENINSULA BOROUGH
ORDINANCE 2022-19-21**

**AN ORDINANCE APPROPRIATING SUPPLEMENTAL FUNDING TO COMPLETE
THE UNINTERRUPTED POWER SUPPLY REPLACEMENT PROJECT LOCATED IN
THE EMERGENCY RESPONSE CENTER**

WHEREAS, the 2023 fiscal year budget includes an appropriation in the amount of \$115,404 to replace the uninterrupted power supply located at the Kenai Peninsula Borough (“Borough”) Emergency Response Center; and

WHEREAS, the total costs of the project exceed the estimate by \$34,596; and

WHEREAS, it is in the best interest of the Borough to replace the failing uninterrupted power supply unit to maintain a power source in the event of a commercial power outage for vital communications equipment that supports emergency management functions;

NOW, THEREFORE, BE IT ORDAINED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH:

SECTION 1. That \$17,298 is appropriated from the General Government Capital Project Fund fund balance to account 407.11250.23471.49999 to provide additional funds for the uninterrupted power supply project.

SECTION 2. That \$17,298 is appropriated from the 911 Communications Capital Project Fund fund balance to account 455.11255.23431.49999 to provide additional funds for the uninterrupted power supply project.

SECTION 3. That the appropriations made in this ordinance are of a project length nature and as such do not lapse at the end of any particular fiscal year.

SECTION 4. This ordinance shall be effective immediately upon enactment.

**ENACTED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH THIS * DAY
OF * 2022.**

Brent Johnson, Assembly President

ATTEST:

Johni Blankenship, MMC, Borough Clerk

Yes:

No:

Absent:

Kenai Peninsula Borough

Office of Emergency Management

MEMORANDUM

TO: Brent Johnson, Assembly President
Members, Kenai Peninsula Borough Assembly

THRU: Mike Navarre, Mayor *MN*
Brandi Harbaugh, Finance Director *BH*
Tammy Goggia, 911 Emergency Communications Coordinator *TGc*
Ben Hanson, IT Director *BH*
John Hedges, Purchasing & Capital Projects Director *JH*

FROM: Brenda Ahlberg, Emergency Manager *BA*

DATE: October 11, 2022

RE: Ordinance 2022-19-21, Appropriating Supplemental Funding to Complete the Uninterrupted Power Supply Replacement Project Located in the Emergency Response Center (Mayor)

The Borough's FY 2023 budget appropriated \$115,404 to replace an Uninterrupted Power Supply (UPS) located at the Emergency Response Center. This UPS unit is necessary to maintain a power source in the event of a commercial power outage for vital communications equipment that supports emergency management functions.

The total project costs exceed the original appropriation by approximately \$34,596. This is due to an increase in costs, which includes the labor for removal of the old system, site preparation, and installation of the new UPS unit.

This ordinance approves and appropriates supplemental funding in the amount of \$34,596 to complete this project.

Your consideration of the ordinance is appreciated.

FINANCE DEPARTMENT FUNDS/ACCOUNT VERIFIED

Account: 407.11250.23471.49999 - Amount: \$17,298

Account: 455.11255.23431.49999 - Amount: \$17,298

By: *CJ*

Date: 9/27/2022

Introduced by:	Mayor
Date:	10/11/22
Hearing:	10/25/22
Action:	
Vote:	

**KENAI PENINSULA BOROUGH
ORDINANCE 2022-19-22**

**AN ORDINANCE ACCEPTING AND APPROPRIATING \$441,000 FROM THE STATE
OF ALASKA DEPARTMENT OF MILITARY AND VETERAN AFFAIRS, DIVISION
OF HOMELAND SECURITY AND EMERGENCY MANAGEMENT FOR AREAWIDE
WARNING SIRENS AND CYBERSECURITY UPGRADES**

WHEREAS, the State of Alaska Department of Military and Veterans Affairs, Division of Homeland Security and Emergency Management (“DHS&EM”) provides funds to enhance the capability of local governments to prevent, deter, respond to and recover from all-hazard incidents and to enhance regional preparedness efforts; and

WHEREAS, the DHS&EM 2022 State Homeland Security Program is a federal grant pass through program with the Federal Emergency Management Agency which provides funding for planning, equipment, training and exercises; and

WHEREAS, DHS&EM approved the Borough’s request for \$316,000 to install sirens in Anchor Point and Kachemak Selo as well as \$125,000 to purchase software and equipment for critical cybersecurity functions; and

WHEREAS, it is in the best interest of the Borough to accept the grant funds;

NOW, THEREFORE, BE IT ORDAINED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH:

SECTION 1. That the mayor is authorized to accept \$441,000 from the State of Alaska Department of Military and Veteran Affairs, Division of Homeland Security and Emergency Management and to execute a grant agreement and any other documents deemed necessary to accept and to expend the grant funds and to fulfill the intents and purposes of this ordinance.

SECTION 2. That grant funds in the amount of \$441,000 are appropriated to the account 271.94910.22HSP.49999.

SECTION 3. That appropriations made in this ordinance are project length in nature and as such do not lapse at the end of any particular fiscal year.

SECTION 4. That this ordinance shall be effective retroactive to October 1, 2022.

**ENACTED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH THIS * DAY
OF * 2022.**

Brent Johnson, Assembly President

ATTEST:

Johni Blankenship, MMC, Borough Clerk

Yes:

No:

Absent:

Kenai Peninsula Borough

Office of Emergency Management

MEMORANDUM

TO: Brent Johnson, Assembly President
Members, Kenai Peninsula Borough Assembly

THRU: Mike Navarre, Mayor *MN*
Brandi Harbaugh, Finance Director *BH*
Ben Hanson, IT Director *BH*

FROM: Brenda Ahlberg, Emergency Manager *BA*

DATE: October 11, 2022

RE: Ordinance 2022-19-22 Accepting and Appropriating \$441,000 from the State of Alaska Department of Military and Veteran Affairs, Division of Homeland Security and Emergency Management for Areawide Warning Sirens and Cybersecurity Upgrades (Mayor)

The Alaska Division of Homeland Security and Emergency Management (DHS&EM) approved two projects to be funded under the federal fiscal year 2022 State Homeland Security Program (SHSP), in the amount of \$441,000, as follows:

1. Areawide Warning Sirens Upgrades (Ahlberg project manager): Purchase and install two sirens, one in Anchor Point and another siren in Kachemak Selo. This project also includes conducting acoustics study to determine the proper locations for both sides as well as addressing the expanding inundation areas in Kachemak and Resurrection bays.
2. Cybersecurity Upgrades (Hanson project manager): Purchase and implement key software and equipment to improve cybersecurity posture at all Borough locations. The project objectives are based upon recommendations from the KPB Cybersecurity Assessment completed December 2021.

Brenda Ahlberg, Emergency Manager will oversee grant compliance; the grant performance period is 10/01/22 through 09/30/24.

Attachment: DHS&EM Announcement by jurisdiction email 09/07/22.

FINANCE DEPARTMENT FUNDS/ACCOUNT VERIFIED	
Acct. No. <u>271.94910.22HSP.49999</u>	
Amc	—
By: <i>CJ</i>	Date: <u>9/27/2022</u>

2022 State Homeland Security Program (SHSP) Grant Jurisdiction Total Allocations

Jurisdiction	Funding
AK Department of Public Safety-Criminal Intelligence Center	\$230,125.00
Anchorage, Municipality	\$664,600.00
Bethel, City of	\$39,000.00
Denali, Borough	\$100,340.00
Fairbanks North Star Borough	\$156,000.00
Homer, City of	\$43,702.43
Juneau, City and Borough	\$288,325.86
Kenai, Peninsula Borough	\$441,000.00
Kenai, City of	\$229,500.00
Matanuska Susitna Borough	\$435,000.00
North Pole, City of	\$110,000.00
Palmer, City of	\$322,177.71
Saint Paul, City of	\$45,000.00
Wrangell, City and Borough	\$427,804.00
Total Allocations	\$3,532,575.00

From: [MVA DHSEM Grants \(MVA sponsored\)](#)
To: [MVA DHSEM Grants \(MVA sponsored\)](#)
Cc: [Dennis, Bill A \(MVA\)](#); [Fisher, Bryan J \(MVA\)](#); [Hildreth, Richard K \(MVA\)](#); [Lafferty, Jeffrey S \(MVA\)](#); [Woody, Jared B \(MVA\)](#); [Edwards, Eva J \(MVA\)](#); [McKenzie, Jeffrey M \(MVA\)](#); [Torres, Michelle G \(MVA\)](#); [Little, Jj \(MVA\)](#)
Subject: <EXTERNAL-SENDER>Fiscal Year 2022 Homeland Security Grant Program Allocation Announcement
Date: Wednesday, September 7, 2022 1:24:19 PM
Attachments: [Jurisdiction Total Allocations.pdf](#)

CAUTION: This email originated from outside of the KPB system. Please use caution when responding or providing information. Do not click on links or open attachments unless you recognize the sender, know the content is safe and were expecting the communication.

To: Local Jurisdiction Administrative Agency Heads
Local Jurisdiction Agency Points of Contact

Subject: Fiscal Year 2022 Homeland Security Grant Program Allocation Announcement

The Alaska Division of Homeland Security and Emergency Management (DHS&EM) is pleased to announce the final award allocations for the Fiscal Year (FY) 2022 State Homeland Security Program (SHSP). The total award amount for each successful local jurisdiction is included as an attachment with this electronic notification. Grant award letters with Project Budget Details (PBDs) will be emailed out by November 1st.

The local signatory official from each jurisdiction will receive an emailed packet containing the SHSP grant award, approved projects, and any applicable attachments. Other identified points of contact will be cc'd on the email correspondence. Please note, attendance by programmatic and financial representatives at a Grant Kick-off Meeting, to be held in the fall is mandatory for jurisdictions receiving awards. These kickoff meetings will be held virtually and a separate message will be sent with further information. The award performance period start date for subrecipients will be October 1, 2022.

The US Department of Homeland Security FY 2020 HSGP is one tool among a comprehensive set of measures authorized by Congress and implemented by the Administration to help strengthen the Nation against risks associated with potential terrorist attacks and the larger, coordinated effort to strengthen homeland security preparedness. This program implements objectives addressed in a series of post-9/11 laws, strategy documents, plans, and Homeland Security Presidential Directives (HSPDs).

The Grants Section can be reached at 907-428-7000, toll-free 800-478-2337, or by email at mva.grants@alaska.gov for any questions regarding process or allocations.

Please do not call or email inquiries about projects funded, as we are diligently trying to get all awards out timely and efficiently.

Kris Jedlicki
Grants Administrator

Division of Homeland Security & Emergency Management
Department of Military & Veterans Affairs
Direct (907)428-7064



Introduced by:	Mayor
Date:	10/11/22
Hearing:	10/25/22
Action:	
Vote:	

**KENAI PENINSULA BOROUGH
ORDINANCE 2022-19-23**

**A ORDINANCE ACCEPTING \$200,000 FROM THE STATE OF ALASKA
DEPARTMENT OF MILITARY AND VETERANS AFFAIRS, DIVISION OF
HOMELAND SECURITY & EMERGENCY MANAGEMENT FOR EMERGENCY
MANAGEMENT OPERATIONS AND APPROPRIATING \$40,000 FOR THE
REMAINING MATCH REQUIREMENT**

- WHEREAS,** the Kenai Peninsula Borough’s (“Borough”) Office of Emergency Management (“OEM”) is responsible for disaster management and activities; and
- WHEREAS,** the State of Alaska receives funding from the Federal Emergency Management Agency to support the efforts of local governments in emergency preparedness and response; and
- WHEREAS,** OEM applied for funding under the 2022 Emergency Management Performance Grant program administered by the Alaska Department of Military and Veterans Affairs, Division of Homeland Security & Emergency Management (“DHS & EM”); and
- WHEREAS,** the Borough received notice from DHS & EM of a grant award in the amount of \$200,000 to support personnel and activities essential to local emergency management; and
- WHEREAS,** the grant program requires a local match of non-federal funds on a 50/50 ratio, or dollar-to-dollar match, for expenditures made from July 1, 2022 through September 30, 2023; and
- WHEREAS,** the \$160,000 match requirement will be met through operational expenditures of OEM and the planning department as part of the FY2023 budget; and
- WHEREAS,** the increased award makes it necessary to appropriate an additional \$40,000 to meet the 50/50 ratio match requirement for the performance period ending September 30, 2023; and
- WHEREAS,** it is in the best interest of the Borough to accept this grant and to appropriate the \$40,000 to meet the grant objectives and performance period;

NOW, THEREFORE, BE IT ORDAINED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH:

SECTION 1. That the mayor is authorized to accept grant funds in the amount of \$200,000 from the State of Alaska Department of Military and Veterans Affairs, Division of Homeland Security & Emergency Management, for emergency management operations and is authorized to execute all documents deemed necessary to accept the grant.

SECTION 2. That \$160,000 was appropriated to personnel accounts 100.11250.00000.40XXX as part of the FY2023 budget ordinance 2022-19 to meet the 50/50 ratio match requirement.

SECTION 3. That \$40,000 is appropriated from the General Fund fund balance to account 100.11250.EMP23.49999 to meet the 50/50 ratio match requirement for the performance period ending September 30, 2023.

SECTION 4. That expenditures associated with the grant funds in the amount of \$200,000 will be recorded to account 100.11250.EMP23.49999.

SECTION 5. That appropriations made in this ordinance are project length in nature and as such do not lapse at the end of any particular fiscal year.

SECTION 6. That upon enactment this ordinance is effective retroactive to July 1, 2022.

ENACTED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH THIS * DAY OF * 2022.

Brent Johnson, Assembly President

ATTEST:

Johni Blankenship, MMC, Borough Clerk

Yes:

No:

Absent:

Kenai Peninsula Borough

Office of Emergency Management

MEMORANDUM

TO: Brent Johnson, Assembly President
Members, Kenai Peninsula Borough Assembly

THRU: Mike Navarre, Mayor *MN*
Brandi Harbaugh, Finance Director *BH*
Robert Ruffner, Planning Director *RR*

FROM: Brenda Ahlberg, Emergency Manager *BA*

DATE: October 11, 2022

SUBJECT: Ordinance 2022-19-23, Accepting \$200,000 from the State of Alaska Department of Military and Veterans Affairs, Division of Homeland Security & Emergency Management for Emergency Management Operations and Appropriating \$40,000 for the Remaining Match Requirement (Mayor)

The Kenai Peninsula Borough (Borough) has received funding from the State of Alaska Division of Homeland Security and Emergency Management for disaster management activities. This funding is provided by the Federal Emergency Management Agency under the Emergency Management Performance Grant ("EMPG") program.

The purpose of the EMPG program is to assist in the development, maintenance and improvement of state and local emergency management capabilities in responding to disasters that may result from natural or man-made events.

The Borough's Office of Emergency Management ("OEM") applied for this funding and received a notice of award in the amount of \$200,000. The grant will offset staff salary percentages directly associated with the EMPG program. There is a 50/50 matching fund ratio of non-federal funds. The match funds will be supplied from the balance of the OEM and Planning departments FY2023 annual budget. Furthermore, it is necessary to appropriate \$40,000 to meet the match requirement for activities that will be generated July 1 through September 30, 2023, which is part of the Borough's FY2024.

Activities eligible for reimbursement include personnel and activity costs associated with public education on emergency response plans and individual emergency planning, improving borough emergency response plans, developing hazard and risk assessments and evacuation planning activities.

Page -2-
October 11, 2022
Re: O2022-19-23

The OEM Senior Manager will provide grant management and project completion. Project performance period ends September 30, 2023.

Your consideration of the ordinance is appreciated.

Attachment: Award letter

**FINANCE DEPARTMENT
MATCH ACCOUNT/FUNDS VERIFIED**

Acct. No. 100.11250.00000.4XXXX Amt: \$160,000.00

Acct. No. 100 27910 Amt: \$40,000

By:  Date: 9/27/2022



THE STATE
of **ALASKA**
GOVERNOR MIKE DUNLEAVY

**Department of Military and
Veterans Affairs**

Division of Homeland Security and
Emergency Management

P.O. Box 5750
JBER, AK 99505-0800
Main: 907.428.7000
Fax: 907.428.7009
ready.alaska.gov

September 12, 2022

The Honorable Charlie Pierce, Mayor
144 N Binkley Street
Soldotna, AK 99669

RE: 2022 Emergency Management Performance Grant, EMS-2022-EP-00004-S01
State Grant No.: 22EMPG-GY22

Mayor Pierce:

We received funds from the Federal Emergency Management Agency (FEMA) under the 2022 Emergency Management Performance Grant (EMPG). We are pleased to award the Kenai Peninsula Borough the amount of \$200,000.00 under this grant.

EMPG performance includes but is not limited to the following:

- Accomplishment of activities identified in the jurisdiction's 2022 EMPG Work Plan.
- Update or completion of the Whole Community Input Form (WCIF)
- Development of a local jurisdiction multi-year Training and Exercise Plan (TEP) to be submitted to Division of Homeland Security and Emergency Management by March 1, 2023.
- Participate in the state multi-year Integrated Preparedness Planning Workshop (IPPW) to be held in conjunction with the 2023 Preparedness Conference.
- EMPG-funded personnel should make every attempt to participate in no less than three exercises during the performance period. Exercises may be discussion-based (seminars, workshops, tabletop simulations) or operations-based (drills, functional exercises, full scale exercises). Sponsored opportunities by us may be available during the performance period. Real world events may not always count as exercise participation
- Continued utilization and work towards adoption and implementation of the National Incident Management System (NIMS). The Alaska Assessment is the required means to report NIMS adoption and implementation
- Complete the FEMA Independent Study Professional Development Series
- Timely quarterly progress report submissions
- Dollar-for-dollar, local, in-kind match

New for this grant year, the EMPG grant will cover a 15-month period of performance from July 1, 2022 through September 30, 2023. The following years will go back to a 12-month performance period and will follow the federal fiscal calendar. This information will be discussed during the 2022 Grant Kick-Off Meetings. Participation at a Kick-Off Meeting is required.

Mayor Pierce
September 12, 2022
Page 2 of 2

EMPG funding allocations to local jurisdictions are a direct result of continued reporting on actual funds spent at the local level on emergency management activities. With that in mind, we encourage reporting all funds spent on emergency management activities even if they exceed the required match.

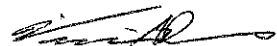
Federal regulations (CFR Part 200.430) require charges for federal awards for salaries, and wages must be based on records that accurately reflect the work performed, and after the fact determination of the actual total activity of the employee. This includes all funding sources and all hours for the pay period to be accounted for when submitting for reimbursement. The required documentation for reimbursement includes payroll reports or timesheets signed and certified that capture the employee's name, position, payroll time period, breakdown of all hours charged to each allocation to total 100% of the employee's worked time, amount paid, and copies of the corresponding pay warrants.

Attached is a pre-signed Obligating Award Document (OAD). Please review the information for accuracy and review any Special Conditions. Please print the document, sign the OAD, and send a scanned copy to mva.grants@alaska.gov within 30 days of subrecipient receipt. Keep a fully executed copy for your records. If the OAD cannot be returned within 30 days due to local jurisdiction policies, a Notice of Intent to Accept Grant Award form must be submitted. If signatory points of contact have changed since submittal of the application, please complete and return a Signatory Authority Form with the signed OAD.

Submitted Funded Staff Worksheets and Annual Work Plans have been reviewed and are approved at the funding amount stated on your OAD. Authorized funded positions are listed in the Project Budget Details.

If you have any questions, please contact the Division Project Manager for this grant, JJ Little, at (907) 428-7019 or by email at jj.little@alaska.gov.

Sincerely,



William A. Dennis
Administrative Operations Manager

Enclosure(s): Obligating Award Document
Project Budget Details Report

cc: Brenda Ahlberg, Jurisdiction Project Manager
Brandi Harbaugh, Jurisdiction Chief Financial Officer

Introduced by:	Mayor
Date:	10/11/22
Hearing:	10/25/22
Action:	
Vote:	

**KENAI PENINSULA BOROUGH
ORDINANCE 2022-19-24**

**AN ORDINANCE APPROPRIATING \$653,900 FROM THE GENERAL FUND FOR
INCREASED COSTS OF CONTRACT SERVICES FOR OPERATION OF THE
SEWARD, KENAI, NIKISKI AND STERLING TRANSFER FACILITIES**

WHEREAS, both the Seward Transfer Facility Operation and Maintenance Contract and the Kenai, Nikiski and Sterling Transfer Facilities Operation and Maintenance Contract are expiring on December 31, 2022; and

WHEREAS, these contracts were recently bid out for operations and the costs to perform the services and increased \$653,900 more than originally budgeted for in the FY2023 annual budget; and

WHEREAS, the contract bids are very similar to the previous scopes of work; and

WHEREAS, the Solid Waste Department recommends appropriation of \$236,700 for operation and maintenance of the Seward Transfer Facility and \$417,200 for operation and maintenance of the three manned transfer sites in Kenai, Nikiski and Sterling from the General Fund fund balance to maintain solid waste services at these sites through the remainder of FY22;

NOW, THEREFORE, BE IT ORDAINED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH:

SECTION 1. That \$236,700 is appropriated from the General Fund fund balance to be transferred to account 290.32150.00000.43011 to provide supplemental funds for operation and maintenance of the Seward Transfer Facility.

SECTION 2. That \$417,200 is appropriated from the General Fund fund balance to be transferred to account 290.32570.00000.43011 to provide supplemental funds for operation and maintenance of the three manned transfer sites in Kenai, Nikiski and Sterling.

SECTION 3. That appropriations made in this ordinance are project length in nature and as such do not lapse at the end of any particular fiscal year

SECTION 4. That this ordinance shall be effective immediately upon enactment.

**ENACTED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH THIS * DAY
OF * 2022.**

Brent Johnson, Assembly President

ATTEST:

Johni Blankenship, MMC, Borough Clerk

Yes:

No:

Absent:

Kenai Peninsula Borough

Solid Waste Department

MEMORANDUM

TO: Brent Johnson, Assembly President
Members, Kenai Peninsula Borough Assembly

THRU: Mike Navarre, Mayor *MN*
Brandi Harbaugh, Finance Director *BH*
John Hedges, Purchasing and Contracting Director *JH*

FROM: Lee Frey, Solid Waste Director *LF*

DATE: October 11, 2022

RE: Ordinance 2022-19-24, Appropriating \$653,900 from the General Fund for Increased Costs of Contract Services for Operation of the Seward, Kenai, Nikiski and Sterling Transfer Facilities (Mayor)

The Seward Transfer Facility Operation and Maintenance Contract and the Kenai, Nikiski and Sterling Transfer Facilities Operation and Maintenance Contract are expiring on December 31, 2022. Both contracts were recently bid out for operations and the costs to perform the services and have increased \$653,900 more than originally budgeted for in the FY2023 annual budget.

The contract bids are very similar to the previous scopes of work. The Seward Transfer Facility contract added pay items for inert waste handling and recycling hauling that were previously being done as part of the operations and maintenance. The manned transfer facilities contract changed snow removal to being incidental to operations and maintenance, and added annual brushing of the facility.

The Solid Waste Department recommends appropriation of \$236,700 for operation and maintenance of the Seward Transfer Facility and \$417,200 for operation and maintenance of the three manned transfer sites in Kenai, Nikiski and Sterling from the general fund to maintain Solid Waste services at these sites through the remainder of FY22. Corresponding increases will be included in the proposed FY23 Solid Waste budget.

Your consideration of the ordinance is appreciated.

FINANCE DEPARTMENT
FUNDS VERIFIED

Acct. No.: 100.27910

Amount: \$ 653,900.00

By: *CJ* Date: 9/27/2022

Introduced by:	Mayor
Date:	10/11/22
Hearing:	11/15/22
Action:	
Vote:	

**KENAI PENINSULA BOROUGH
ORDINANCE 2022-42**

**APPROVING THE 2023 ASSET ALLOCATION FOR THE LAND TRUST INVESTMENT
FUND INVESTMENTS AND AMENDING KPB 5.10.200(B) TO UPDATE AND ADD NEW
SUBSECTIONS UNDER AUTHORIZED INVESTMENTS**

WHEREAS, pursuant to KPB 5.10.200(B) the financial asset investments of the Land Trust Investment Fund (“LTIF”) must be approved annually; and

WHEREAS, the asset allocation plan must specify categories of investments for the fund with percentage targets that allow for reasonable fluctuations above and below the target performance; and

WHEREAS, Alaska Permanent Capital Management (“APCM”), the Borough’s Land Trust Fund Investment Manager, is not recommending changes to the current asset allocation for calendar year 2023; and

WHEREAS, APCM recommends changes to KPB 5.10.200(B) to update indices that are currently being utilized in management of the LTIF investment portfolio;

NOW, THEREFORE, BE IT RESOLVED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH:

SECTION 1. That KPB 5.10.200(B) is hereby amended to update subsections 7 and 9 and to add two new subsections, 12 and 13, to read as follows:

5.10.200. –Authorized Investments for the Land Trust Investment Fund.

B. Authorized Investments—Financial Assets. Moneys in the Land Trust Investment Fund shall be invested only in the following instruments and subject to the applicable limitations and requirements

...

7. International equities, which taken as a whole, attempt to replicate the MSCI EAFE Index or another index of similar characteristics, including both mutual funds and exchange traded funds (ETFs).

8. Equities, which taken as a whole, attempt to replicate the universe of domestic real estate investment trusts as represented by the Standard and Poor's REIT composite index or another index of similar characteristics including both mutual funds and exchange traded funds (ETFs).
9. Emerging market equities, which taken as a whole, attempt to replicate the MSCI Emerging Markets Index or another index of similar characteristics including both mutual funds and exchange traded funds (ETFs).
-
12. Implementation strategies, which taken as whole, attempt to replicate the Wilshire Liquid Alternatives Index or another index of similar characteristics including both mutual funds and exchange traded funds (ETFs).
13. U.S. high yield bonds, which taken as a whole, attempt to replicate the Bloomberg Barclays U.S. Corporate High Yield Very Liquid Index or another index of similar characteristics including both mutual funds and exchange traded funds (ETFs).

SECTION 2. This ordinance shall become effective immediately upon enactment.

ENACTED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH THIS * DAY OF * 2022.

Brent Johnson, Assembly President

ATTEST:

Johni Blankenship, MMC, Borough Clerk

Yes:

No:

Absent:

Kenai Peninsula Borough

Finance Department

MEMORANDUM

TO: Brent Johnson, Assembly President
Members, Kenai Peninsula Borough Assembly

THRU: Mike Navarre, Mayor *MN*

FROM: Brandi Harbaugh, Finance Director *BH*

DATE: October 11, 2022

RE: Ordinance 2022-42, Approving the 2023 Asset Allocation for the Land Trust Investment Fund Investments and Amending KPB Code 5.10.200(B) to Update and Add New Subsections Under Authorized Investments (Mayor)

Pursuant to KPB 5.10.200(A)(2) the financial asset investments of the Land Trust Investment Fund (LTIF) are approved annually by resolution. The asset allocation plan must specify categories of investments for the fund with percentage targets that allow for reasonable fluctuations above and below the target performance. Alaska Permanent Capital Management (APCM), the Borough's Land Trust Fund Investment Manager, is not recommending changes to the current asset allocation for calendar year 2023. The current allocation is as follows:

Asset Class	Strategic Weight	Current Weight	Range
Risk Control	27.00%	27.70%	
US Fixed Income	18.00%	16.50%	8 - 28%
TIPS	2.00%	2.20%	0 - 10%
International Bonds	5.00%	4.50%	0 - 10%
Cash	2.00%	4.50%	0 - 10%
Risk Assets	52.00%	50.00%	
High Yield	5.00%	5.00%	0 - 10%
US Large Cap	22.00%	21.50%	12 - 32%
US Mid Cap	10.00%	9.30%	5 - 15%
US Small Cap	5.00%	4.70%	0 - 10%

Page -2-
 October 11, 2022
 Re: O2022-42

International Equity	6.00%	5.60%	0 - 12%
Emerging Markets	4.00%	3.90%	0 - 8%
Alternatives	21.00%	22.30%	
Real Estate	3.00%	2.70%	0 - 6%
Infrastructure	5.00%	4.90%	0 - 10%
Commodities	3.00%	3.00%	0 - 6%
Alternative Beta	10.00%	11.70%	0 - 15%

APCM recommends the below updates to KPB 5.10.200(B) to update indices that are that are currently being utilized in management of the LTIF investment portfolio.

The code changes will update KPB 5.10.200(B) subsections 7 and 9, and add two new subsections, numbered 12 and 13, as follows:

7. International equities, which taken as a whole, attempt to replicate the MSCI EAFE Index or another index of similar characteristics, including both mutual funds and exchange traded funds (ETFs).
9. Emerging market equities, which taken as a whole, attempt to replicate the MSCI Emerging Markets Index or another index of similar characteristics including both mutual funds and exchange traded funds (ETFs).
- ...
12. Implementation strategies, which taken as whole, attempt to replicate the Wilshire Liquid Alternatives Index or another index of similar characteristics including both mutual funds and exchange traded funds (ETFs).
13. U.S. high yield bonds, which taken as a whole, attempt to replicate the Bloomberg Barclays U.S. Corporate High Yield Very Liquid Index or another index of similar characteristics including both mutual funds and exchange traded funds (ETFs).

Your consideration of the ordinance is appreciated.

Kenai Peninsula Borough Assembly

MEMORANDUM

TO: Brent Johnson, Assembly President
Kenai Peninsula Borough Assembly Members

THRU: Johni Blankenship, Borough Clerk (JB)

FROM: Jenny Ratky, Borough Clerk Secretary

DATE: Tuesday, October 11, 2022

RE: Restaurant Designation Permit – Anglers Lodge LLC – License 6094

Kenai Peninsula Borough Code § 7.10.010 provides for a mandatory Assembly review of applications for restaurant designation permits at locations within the Borough. Accordingly, the attached application for a restaurant designation permit as filed by Mark Burner dba Anglers Lodge LLC located in the Kenai Peninsula Borough, Alaska, is being submitted to you for review and action.

The granting of this permit allows access of persons under 21 years of age to designated licensed premises for purposes of dining, and personnel under age of 20 for employment.

RECOMMENDATION: That the Assembly approve the issuance of the restaurant designation permit requested by Mark Burner dba Anglers Lodge LLC.

cc: Mark Burner



THE STATE
of **ALASKA**
GOVERNOR MIKE DUNLEAVY

Department of Commerce, Community,
and Economic Development

ALCOHOL & MARIJUANA CONTROL OFFICE
550 West 7th Avenue, Suite 1600
Anchorage, AK 99501
Main: 907.269.0350

September 6, 2022

Kenai Peninsula Borough

VIA Email: mjenkins@kpb.us; ivanhooose@kpb.us; jratky@kpb.us; cjackinsky@kpb.us; maldridge@kpb.us; ncarver@kpb.us; slopez@kpb.us; jblankenship@kpb.us; assemblyclerk@kpb.us

License Type:	Outdoor Recreational Lodge – Seasonal	License Number:	6094
Licensee:	Anglers Lodge LLC		
Doing Business As:	Anglers Lodge LLC		
Premises Address	36020 Stephens Drive		

☒ **New Application**

☐ **Transfer of Location Application**

☐ **Transfer of Ownership Application**

☐ **Transfer of Controlling Interest Application**

We have received a completed application for the above listed license (see attached application documents) within your jurisdiction. This is the notice required under AS 04.11.480.

A local governing body may protest the approval of an application(s) pursuant to AS 04.11.480 by furnishing the director **and** the applicant with a clear and concise written statement of reasons for the protest within 60 days of receipt of this notice, and by allowing the applicant a reasonable opportunity to defend the application before a meeting of the local governing body, as required by 3 AAC 304.145(d). If a protest is filed, the board will deny the application unless the board finds that the protest is arbitrary, capricious, and unreasonable. To protest the application referenced above, please submit your protest within 60 days and show proof of service upon the applicant.

AS 04.11.491 – AS 04.11.509 provide that the board will deny a license application if the board finds that the license is prohibited under as a result of an election conducted under AS 04.11.507.

AS 04.11.420 provides that the board will not issue a license when a local governing body protests an application on the grounds that the applicant's proposed licensed premises are located in a place within the local government where a local zoning ordinance prohibits the alcohol establishment, unless the local government has approved a variance from the local ordinance.

Sincerely,

Joan Wilson, Director

amco.localgovernmentonly@alaska.gov



Alaska Alcoholic Beverage Control Board

Form AB-03: Restaurant Designation Permit Application

Alcohol and Marijuana Control Office
550 W 7th Avenue, Suite 1600
Anchorage, AK 99501
alcohol.licensing@alaska.gov
<https://www.commerce.alaska.gov/web/amco>
Phone: 907.269.0350

Why is this form needed?

A restaurant designation permit application is required for a licensee desiring designation under 3 AAC 304.715 – 3 AAC 304.795 as a bona fide restaurant, hotel, or eating place for purposes of AS 04.16.010(c) or AS 04.16.049. Designation will be granted only to a holder of a beverage dispensary, club, recreational site, golf course, or restaurant or eating place license, and only if the requirements of 3 AAC 304.305, 3 AAC 304.725, and 3 AAC 304.745, as applicable, are met. A menu or expected menu listing the meals, including entrées prepared on-site and offered to patrons, and copy of the DEC Food Service Permit (or corresponding DHHS documentation for licenses located in the Municipality of Anchorage) must accompany this form. Applicants should review AS 04.16.049 – AS 04.16.052 and 3 AAC 304.715 – 3 AAC 304.795. All fields of this form must be completed. The required \$50 permit fee may be made by credit card, check, or money order.

Section 1 – Establishment Information

Enter information for licensed establishment.

Licensee:	Anglers Lodge LLC				
License Type:	Outdoor Recreation Lodge – Seasonal	License Number:			
Doing Business As:	Anglers Lodge LLC				
Premises Address:	36020 Stephens Dr				
City:	Sterling	State:	AK	ZIP:	99672
Contact Name:	Mark L Burner	Contact Phone:			

Section 2 – Type of Designation Requested

This application is for the request of designation as a bona fide restaurant, hotel, or eating place for purposes of AS 04.16.010(c) or AS 04.16.049, and for the request of the following designation(s) (check all that apply):

1. ☒ Dining after standard closing hours: AS 04.16.010(c)
 2. ☒ Dining by persons 16 – 20 years of age: AS 04.16.049(a)(2)
 3. ☒ Dining by persons under the age of 16 years, accompanied by a person over the age of 21: AS 04.16.049(a)(3)
 4. ☒ Employment for persons 16 or 17 years of age: AS 04.16.049(c)
- NOTE: Under AS 04.16.049(d), this permit is not required to employ a person 18 - 20 years of age.

OFFICE USE ONLY	
Transaction #:	Initials:



PO Box 508 Sterling, AK 99672 1-800-548-3474

To Whom it may Concern:

Anglers Lodge plans to always have two employees on duty while alcohol is being served. We plan to have signage at all exits and park perimeter to stop guests from leaving premises with alcohol. We will also give our clients a list of rules to abide by, at check-in, while consuming alcohol at the lodge. There will be signage placed at all entrances of lodge reminding all guests and their children of the law which prohibits the consumption of alcohol by a minor.

We will check ids for age before anyone can be served.

We already have security cameras in place that can be monitored at any time. The cameras can store many days of film.



Alcohol and Marijuana Control Office

550 W 7th Avenue, Suite 1600

Anchorage, AK 99501

alcohol.licensing@alaska.gov<https://www.commerce.alaska.gov/web/amco>

Phone: 907.269.0350

Alaska Alcoholic Beverage Control Board

Form AB-03: Restaurant Designation Permit Application

Section 3 – Minor Access

Review AS 04.16.049(a)(2); AS 04.16.049(a)(3); AS 04.16.049(c)

List where within the premises minors are anticipated to have access in the course of either dining or employment as designated in Section 2. (Example: Minors will only be allowed in the dining area. OR Minors will only be employed and present in the Kitchen.)

Minors will be allowed at all areas of the lodge. We may have minors for dish washing and serving. We will follow all rules that apply.

Describe the policies, practices and procedures that will be in place to ensure that minors do not gain access to alcohol while dining or employed at your premises.

All alcohol will be locked up at all times and only be unlocked while serving drinks. Only certified bartender will be serving the alcohol. We will be checking IDs before serving.

Is an owner, manager, or assistant manager who is 21 years of age or older always present on the premises during business hours?

Yes No



Section 4 – DEC Food Service Permit

Per 3 AAC 304.910 for an establishment to qualify as a Bona Fide Restaurant, a Food Service Permit or (for licenses within the Municipality of Anchorage) corresponding Department of Health and Human Services documentation is required.

Please follow this link to the DEC Food Safety Website: <http://dec.alaska.gov/eh/fss/food/>

Please follow this link to the Municipality Food Safety Website:

<http://www.muni.org/Departments/health/Admin/environment/FSS/Pages/fssfood.aspx>

IF you are unable to certify the below statement, please discuss the matter with the AMCO office:

Initials

I have attached a copy of the current food service permit for this premises OR the plan review approval.



*Please note, if a plan review approval is submitted, a final permit will be required before finalization of any permit or license application.



Alcohol and Marijuana Control Office
550 W 7th Avenue, Suite 1600
Anchorage, AK 99501

alcohol.licensing@alaska.gov
<https://www.commerce.alaska.gov/web/amco>
Phone: 907.269.0350

Alaska Alcoholic Beverage Control Board

Form AB-03: Restaurant Designation Permit Application

Section 5 – Hours of Operation

Review AS 04.16.010(c).

Enter all hours that your establishment intends to be open. Include variances in weekend/weekday hours, and indicate am/pm:

Our hours of operation are 3am to 11pm. Only our alcohol will be served between 4 pm and 11 pm.

7 Days a week

Section 6 – Entertainment & Service

Review AS 04.11.100(g)(2)

Are any forms of entertainment offered or available within the licensed business or within the proposed licensed premises?

Yes

No

☐
☒

If "Yes", describe the entertainment offered or available and the hours in which the entertainment may occur:

Food and beverage service offered or anticipated is:

☒

table service

☐

buffet service

☐

counter service

☐

other

If "other", describe the manner of food and beverage service offered or anticipated:



Alaska Alcoholic Beverage Control Board

Form AB-03: Restaurant Designation Permit Application

Section 7 – Certifications and Approvals

Read each line below, and then sign your initials in the box to the right of each statement:

Initials

There are tables or counters at my establishment for consuming food in a dining area on the premises.

MB

I have included with this form a menu, or an expected menu, listing the meals to be offered to patrons.
 This menu includes entrées that are regularly sold and prepared by the licensee at the licensed premises.

MB

I certify that the license for which I am requesting designation is either a beverage dispensary, club, recreational site, golf course, or restaurant or eating place license.

MB

I have included with this application a copy of the most recent AB-02 or AB-14 for the premises to be permitted.

*(AB-03 applications that accompany a new or transfer license application will
 not be required to submit an additional copy of their premises diagram.)*

MB

I hereby certify that I am the person herein named and subscribing to this application and that I have read the complete application, and I know the full content thereof. I declare that all of the information contained herein, and evidence or other documents submitted are true and correct. I understand that any falsification or misrepresentation of any item or response in this application, or any attachment, or documents to support this application, is sufficient grounds for denying or revoking a license/permit. I further understand that it is a Class A misdemeanor under Alaska Statute 11.56.210 to falsify an application and commit the crime of unsworn falsification.

MB

Mark L BURNER
 Printed name of licensee

Mark L Burner
 Signature of licensee

Local Government Review (to be completed by an appropriate local government official):

Approved

Denied

☐
☐

Signature of local government official

Date

Printed name of local government official

Title

AMCO

AUG 25 2022



Alaska Alcoholic Beverage Control Board

Form AB-03: Restaurant Designation Permit Application

AMCO Enforcement Review:

Enforcement Recommendation:

Approve

Deny

☐☐

Signature of AMCO Enforcement Supervisor

Printed name of AMCO Enforcement Supervisor

Date

Enforcement Recommendations:

AMCO Director Review:

Approved

Denied

☐☐

Signature of AMCO Director

Printed name of AMCO Director

Date

Limitations:



PO Box 508 Sterling, AK 99672 1-800-548-3474

To Whom it may Concern:

This is a menu for Anglers Lodge. Lunches are a packed lunch with sandwiches, soft drinks, and water.

Breakfast can be a full breakfast, including all types of eggs, pancakes, sausage, bacon or just breakfast burrito or egg sandwich.

Dinner:

Sunday soup, spaghetti and meatballs, desert

Monday Salad. Fish and chips, desert

Tuesday soup, seafood pasta, desert

Wednesday Salad, brisket and ribs, desert

Thursday Soup, Chicken, desert

Friday Salad, Salmon, desert

Saturday Soup, Prime rib, desert

AMCO
AUG 25 2022



Alaska Food Code 2022 Establishment Permit

Division of Environmental Health
Food Safety & Sanitation Program

Permit Number: 3509
Issued to: Anglers Lodge
For: Anglers Lodge
For Operation of: FF-1 Food Service
Located at: 36020 Stephens DR Sterling, AK 99672

This permit, issued under the provisions of 18 AAC 31, is valid until the noted expiration date or unless suspended or revoked by the department.

This permit is not transferable for change of ownership, facility location, or type of operation. It must be posted in plain view in the establishment and is the property of the State of Alaska.

Expiration Date:
December 31, 2022

Program Manager:

A handwritten signature in black ink, appearing to read "Amy E. O'Neil", is written over the printed name of the Program Manager.

**If you have questions or concerns regarding
safe food handling practices call toll free:**

(in Anchorage call 334-2560)



AMCO

AUG 25 2022



Alaska Alcoholic Beverage Control Board

Form AB-02: Premises Diagram

Why is this form needed?

A detailed diagram of the proposed licensed premises is required for all liquor license applications, per AS 04.11.260 and 3 AAC 304.185. Your diagram must include dimensions and must show all entrances and boundaries of the premises, walls, bars, fixtures, and areas of storage, service, consumption, and manufacturing. If your proposed premises is located within a building or building complex that contains multiple businesses and/or tenants, please provide an additional page that clearly shows the location of your proposed premises within the building or building complex, along with the addresses and/or suite numbers of the other businesses and/or tenants within the building or building complex.

The second page of this form may not be required. Blueprints, CAD drawings, or other clearly drawn and marked diagrams may be submitted in lieu of the second page of this form. The first page must still be completed, attached to, and submitted with any supplemental diagrams. An AMCO employee may require you to complete the second page of this form if additional documentation for your premises diagram is needed.

This form must be completed and submitted to AMCO's Anchorage office before any license application will be considered complete.

Yes No

I have attached blueprints, CAD drawings, or other supporting documents in addition to, or in lieu of, the second page of this form.

☒☐

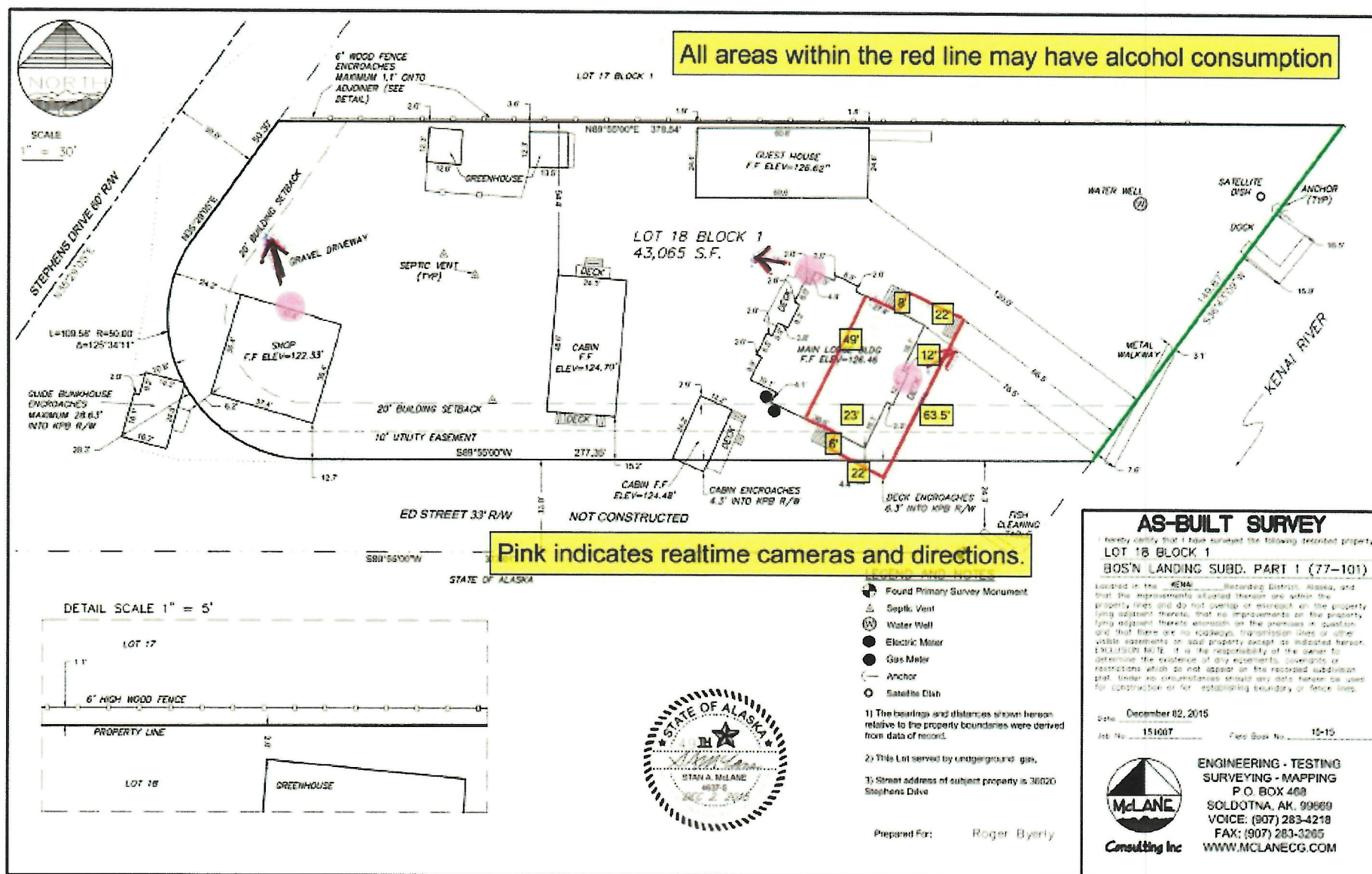
Section 1 – Establishment Information

Enter information for the business seeking to be licensed, as identified on the license application.

Licensee:	Anglers Lodge LLC	License Number:	
License Type:	Outdoor Recreation Lodge - Seasonal		
Doing Business As:	Anglers Lodge LLC		
Premises Address:	36020 Stephens Dr		
City:	Sterling	State:	AK
		ZIP:	99672

Not to Scale

17.00 x 11.00



Measurement Type : Imperial

AMCO Received 9/1/2022



PO Box 508 Sterling, AK 99672 1-800-548-3474

To Whom it may Concern:

Anglers Lodge plans to always have two employees on duty while alcohol is being served. We plan on serving alcohol within dinning hall. This hall is enclosed on all four sides with two doors exiting the building. One on the northeast corner and one on the southeast corner. These doors are leading out to the deck. This room also has one door into the kitchen area which is located on the northwest dividing wall. The deck is surrounded by a handrail on all sides. There are three sets of steps leading to the lawn area. These steps are clearly marked on the plan. All of this area can be seen from the bar area inside as the front of the building is mostly glass. We may serve alcohol at the deck during sunny weather.

We will also give our clients a list of rules to abide by, at check-in, while consuming alcohol at the lodge. There will be signage placed at all entrances of lodge and outdoor steps leading onto the deck reminding all guests and their children of the law which prohibits the consumption of alcohol by a miner.

We will check ids for age before anyone can be served.

We already have security cameras in place that can be monitored at any time. The cameras can store many days of film.



Alaska Alcoholic Beverage Control Board

Form AB-00: New License Application

Why is this form needed?

This new license application form is required for all individuals or entities seeking to apply for a new liquor license. Applicants should review **Title 04** of **Alaska Statutes** and **Chapter 304** of the **Alaska Administrative Code**. All fields of this form must be completed, per AS 04.11.260 and 3 AAC 304.105.

This form must be completed and submitted to AMCO's Anchorage office, along with all other required forms and documents, before any license application will be considered complete.

Section 1 – Establishment and Contact Information

Enter information for the business seeking to be licensed.

Licensee:	Anglers Lodge LLC				
License Type:	Outdoor Recreation Lodge - <i>Seasonal</i>	Statutory Reference:	04.11.225		
Doing Business As:	Anglers Lodge LLC				
Premises Address:	36020 Stephens Dr.				
City:	Sterling	State:	AK	ZIP:	99672
Local Governing Body:	Kenai Peninsula Borough				
Community Council:	<i>NONE</i>				

Mailing Address:	PO Box 508				
City:	Sterling	State:	AK	ZIP:	99672

Designated Licensee:	Mark L Burner				
Contact Phone:	907-262-1747	Business Phone:	800-548-3474		
Contact Email:	<i>mark@alaskanfishing.com</i>				

Seasonal License? ☒ Yes ☐ No
If "Yes", write your six-month operating period: May 1st - September 31st

OFFICE USE ONLY

Complete Date:	<i>9-6-2022</i>	License Years:		License #:	<i>6094</i>
Board Meeting Date:	<i>9-20-2022</i>	Transaction #:	<i>100403460</i>		
Issue Date:		Examiner:	<i>KRS</i>		



Alaska Alcoholic Beverage Control Board

Form AB-00: New License Application

Section 2 – Premises Information

Premises to be licensed is:

☒

an existing facility

☐

a new building

☐

a proposed building

The next two questions must be completed by beverage dispensary (including tourism) and package store applicants only:

What is the distance of the shortest pedestrian route from the public entrance of the building of your proposed premises to the outer boundaries of the nearest school grounds? Include the unit of measurement in your answer.

What is the distance of the shortest pedestrian route from the public entrance of the building of your proposed premises to the public entrance of the nearest church building? Include the unit of measurement in your answer.

Section 3 – Sole Proprietor Ownership Information

This section must be completed by any sole proprietor who is applying for a license. Entities should skip to Section 4.

If more space is needed, please attach a separate sheet with the required information.

The following information must be completed for each licensee and each affiliate (spouse).

This individual is an: ☐ applicant ☐ affiliate

Name:					
Address:					
City:		State:		ZIP:	

This individual is an: ☐ applicant ☐ affiliate

Name:					
Address:					
City:		State:		ZIP:	



Alaska Alcoholic Beverage Control Board

Form AB-00: New License Application

Section 4 – Entity Ownership Information

This section must be completed by any entity, including a corporation, limited liability company (LLC), partnership, or limited partnership, that is applying for a license. Sole proprietors should skip to Section 5.

If more space is needed, please attach a separate sheet with the required information.

- If the applicant is a corporation, the following information must be completed for each *stockholder who owns 10% or more* of the stock in the corporation, and for each *president, vice-president, secretary, and managing officer*.
- If the applicant is a limited liability organization, the following information must be completed for each *member with an ownership interest of 10% or more*, and for each *manager*.
- If the applicant is a partnership, including a limited partnership, the following information must be completed for each *partner with an interest of 10% or more*, and for each *general partner*.

Entity Official:	Mark L Burner				
Title(s):	Owner Member	Phone:	907-262-1747	% Owned:	50
Address:	36020 Stephens Dr				
City:	Sterling	State:	AK	ZIP:	99672

Entity Official:	Julie E Burner				
Title(s):	Owner Member	Phone:	970-319-0180	% Owned:	50
Address:	36020 Stephens Dr				
City:	Sterling	State:	AK	ZIP:	99672

Entity Official:					
Title(s):		Phone:		% Owned:	
Address:					
City:		State:		ZIP:	

Entity Official:					
Title(s):		Phone:		% Owned:	
Address:					
City:		State:		ZIP:	



Alcohol and Marijuana Control Office
550 W 7th Avenue, Suite 1600
Anchorage, AK 99501
alcohol.licensing@alaska.gov
<https://www.commerce.alaska.gov/web/amco>
Phone: 907.269.0350

Alaska Alcoholic Beverage Control Board

Form AB-00: New License Application

This subsection must be completed by any applicant that is a corporation or LLC. Corporations and LLCs are required to be in good standing with the Alaska Division of Corporations (DOC) and have a registered agent who is an individual resident of the state of Alaska.

DOC Entity #:	10033162	AK Formed Date:	11/03/2015	Home State:	Alaska
Registered Agent:	Mark Plumb	Agent's Phone:	907-775-1930		
Agent's Mailing Address:	2231 Carriage Ln				
City:	Wasilla	State:	Alaska	ZIP:	99623

Residency of Agent:

Yes No

Is your corporation or LLC's registered agent an individual resident of the state of Alaska?

☒ ☐

Section 5 - Other Licenses

Ownership and financial interest in other alcoholic beverage businesses:

Yes No

Does any representative or owner named in this application have any direct or indirect financial interest in any other alcoholic beverage business that does business in or is licensed in Alaska?

☐ ☒

If "Yes", disclose which individual(s) has the financial interest, what the type of business is, and if licensed in Alaska, which license number(s) and license type(s):

Section 6 - Authorization

Communication with AMCO staff:

Yes No

Does any person other than a licensee named in this application have authority to discuss this license with AMCO staff?

☒ ☐

If "Yes", disclose the name of the individual and the reason for this authorization:

Julie E Burner Wife and 50% owner



Alaska Alcoholic Beverage Control Board

Form AB-00: New License Application

Section 7 – Certifications

Read each line below, and then sign your initials in the box to the right of each statement:

Initials

I certify that all proposed licensees (as defined in AS 04.11.260) and affiliates have been listed on this application.

MB

I certify that all proposed licensees have been listed with the Division of Corporations.

MB

I certify that I understand that providing a false statement on this form or any other form provided by AMCO is grounds for rejection or denial of this application or revocation of any license issued.

MB

I certify that all licensees, agents, and employees who sell or serve alcoholic beverages or check the identification of a patron will complete an approved alcohol server education course, if required by AS 04.21.025, and, while selling or serving alcoholic beverages, will carry or have available to show a current course card or a photocopy of the card certifying completion of approved alcohol server education course, if required by 3 AAC 304.465.

MB

I agree to provide all information required by the Alcoholic Beverage Control Board in support of this application.

MB

I hereby certify that I am the person herein named and subscribing to this application and that I have read the complete application, and I know the full content thereof. I declare that all of the information contained herein, and evidence or other documents submitted are true and correct. I understand that any falsification or misrepresentation of any item or response in this application, or any attachment, or documents to support this application, is sufficient grounds for denying or revoking a license/permit. I further understand that it is a Class A misdemeanor under Alaska Statute 11.56.210 to falsify an application and commit the crime of unsworn falsification.

MB

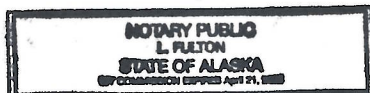
Mark L. Burner
Signature of licensee

[Signature]
Signature of Notary Public

MARK L BURNER
Printed name of licensee

Notary Public in and for the State of ALASKA

My commission expires: 04/21/25



Subscribed and sworn to before me this 23rd day of August, 2022.

Kenai Peninsula Borough

Planning Department

MEMORANDUM

TO: Brent Johnson, Assembly President
Kenai Peninsula Borough Assembly Members

FROM: Robert Ruffner, Planning Director *RR*

DATE: September 28, 2022

RE: Right-Of-Way Vacation: Vacation of the cul-de-sac bulb of Ivy Avenue; KPB File 2022-130V

In accordance with AS 29.40.140, no vacation of a Borough right-of-way and/or easement may be made without the consent of the Borough Assembly.

During their regularly scheduled meeting of September 26, 2022 the Kenai Peninsula Borough Planning Commission granted approval of the above proposed vacation by unanimous vote based on the means of evaluating public necessity established by KPB 20.65 (10-Yes, 2-Absent, 2-Vacant). This petition is being sent to you for your consideration and action.

A draft copy of the unapproved minutes of the pertinent portion of the meeting and other related materials are attached.

September 26, 2022 Draft PC Minutes
September 26, 2022 Meeting Packet Materials

ITEM E2 - RIGHT OF WAY VACATION CUL-DE-SAC BULB OF IVY AVENUE

KPB File No.	2022-130V
Planning Commission Meeting:	September 26, 2022
Applicant / Owner:	Alain R and Virginia J Wilkinson of Ninilchik, AK
Surveyor:	Jason Schollenberg / Peninsula Surveying, LLC
General Location:	Lothrop Park Drive and Ivy Avenue, Ninilchik
Legal Description:	Ivy Avenue, Leisure Time Estates HM 80-32, Township 2 South, Range 14 West, Section 3

Staff report given by Platting Manager Vince Piagentini.

Chair Brantley opened the item for public comment.

Alain Wilkinson, Petitioner; P.O. Box 39404, Ninilchik, AK 99639: Mr. Wilkinson requested that staff's recommendation for a 30' x 30' portion of Ivy cul-de-sac bulb remain be removed. He would request that the commission approve the vacation of the entire cul-de-sac bulb. He noted that over time Deep Creek's alignment has moved. The realignment of Deep Creek has negatively affected his property by limiting the usable space on his lot. The only useable area left is the radius of the cul-de-sac bulb. He understands that staff is recommending leaving a 30' x 30' portion of the bulb for the possibility of a future dedication for Ivy Street, should the lot to the south ever be subdivided. He noted there is a slew on the adjacent property that runs down to the river. If the adjacent lot were to subdivide, and a road was built in the area that staff is proposing for a dedication, it would block the runoff from the slew and cause the area to flood. He stated it would not be a good area to build a road.

Seeing and hearing no one else wishing to comment, public comment was closed and discussion was opened among the commission.

MOTION: Commissioner Staggs moved, seconded by Commissioner Gillham, to approve the vacation as petitioned based on the means of evaluating public necessity established by KPB 20.70, subject to staff recommendations and compliance with borough code.

Commissioner Morgan stated she did not feel comfortable approving the petitioner's request without additional information. Platting Specialist Hindman then pulled up several maps and displayed them on the room screens and explained in greater detail what the petitioner was requesting. Commissioner Morgan then noted for the commission that on page E2-6 (page 3 of the staff report) of the packet materials there was a small map showing the area that the petitioner is referring to.

Commissioner Slaughter stated he would support the petitioner's request to vacate the entire bulb. The usable area of his lot is small and vacating the entire cul-de-sac bulb would give him more usable space and would not create any access issues for neighboring lots.

AMENDMENT MOTION: Commissioner Slaughter moved, seconded by Commissioner Tautfest to remove staff's recommendation for a 30' x 30' portion of the Ivy Avenue dedication to remain.

Commissioner Gillham stated she is inclined to support the petitioner's request to vacate the entire cul-de-sac bulb. His property has been negatively affected by the realignment of Deep Creek, which is something that was beyond his control. She will be voting in support of the petitioner's request.

Commissioner Brantley stated he would be supporting the petitioner's request to vacate the entire cul-de-sac bulb. He understands staff's recommendation to keep the 30' x 30' area, on paper it makes sense and looks good. However, vacating the entire cul-de-sac bulb does not create any access issues. It also would not create any issues related to road maintenance or snow removal.

Hearing no objection or further discussion, the motion was carried by the following vote:

AMENDMENT MOTION PASSED BY UNANIMOUS VOTE:

Yes - 10	Brantley, Fikes, Gillham, Hooper, Martin, Morgan, Slaughter, Staggs, Tautfest, Venuti
No - 0	

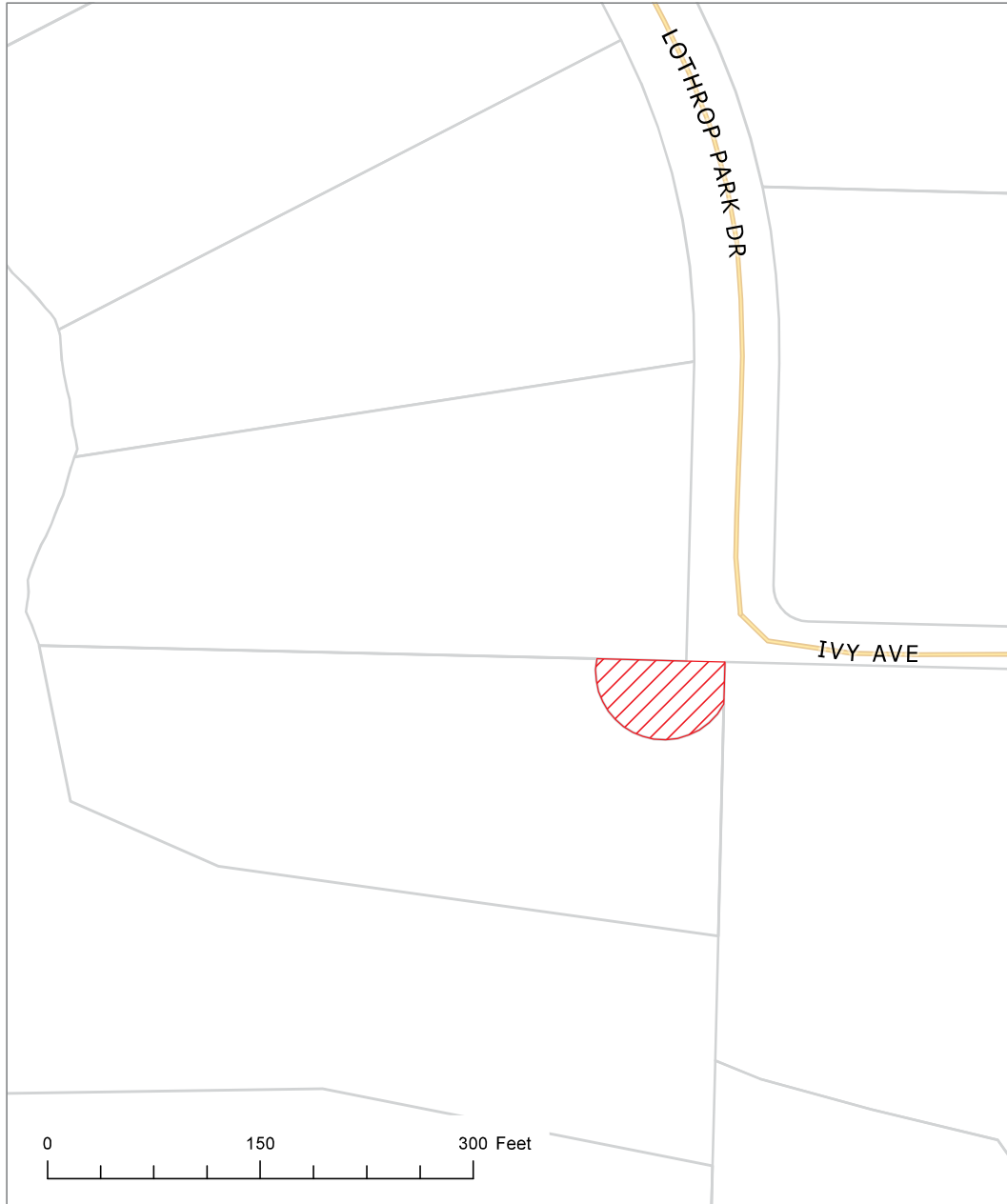
Hearing no objection or further discussion, the main motion was carried by the following vote:

MOTION PASSED AS AMENDED BY UNANIMOUS VOTE:

Yes - 10	Brantley, Fikes, Gillham, Hooper, Martin, Morgan, Slaughter, Staggs, Tautfest, Venuti
No - 0	

E. NEW BUSINESS

- 2. Right-of-Way Vacation – KPB 2022-130V**
Peninsula Surveying, LLC / Wilkinson, Leonard & Johnson
Request: Vacate the entire cul-de-sac where Lothrop
Park Dr. & Ivy Ave. meet at Lot 1, Block 4 of
Leisure Time Estates HM 80-32
Ninilchik Area



KPB File # 2022-130V
S03 T02S R14W
Ninilchik



The information depicted hereon is for a graphical representation only of best available sources. The Kenai Peninsula Borough assumes no responsibility for any errors on this map.

AGENDA ITEM E. NEW BUSINESS

**ITEM 2 - RIGHT OF WAY VACATION
CUL-DE-SAC BULB OF IVY AVENUE**

KPB File No.	2022-130V
Planning Commission Meeting:	September 26, 2022
Applicant / Owner:	Alain R and Virginia J Wilkinson of Ninilchik, AK
Surveyor:	Jason Schollenberg / Peninsula Surveying, LLC
General Location:	Lothrop Park Drive and Ivy Avenue, Ninilchik
Legal Description:	Ivy Avenue, Leisure Time Estates HM 80-32, Township 2 South, Range 14 West, Section 3

STAFF REPORT

Specific Request / Purpose as stated in the petition: Lot 1, Blk 4, Leisure Time Estate, sits on the edge of Deep Creek at the intersection of Ivy Avenue and Lothrop Park Drive. In 2002, there was a flood that drastically moved the alignment of the river. Deep Creek now flows only 30 feet from Ivy Avenue as it crosses this property. With such limited usable space on the lot, the owner's cabin encroaches in the right-of-way. There is also a shed that is entirely within the right-of-way.

This portion of Ivy Avenue is only used to access Lot 1. The lots to the north and to the east have more practical access that is not affected by this part of Ivy Avenue near Lot 1.

Notification: Public notice appeared in the September 14, 2022 issue of the Homer News as a separate ad. The public hearing notice was published in the September 21, 2022 issue of the Homer News as part of the Commission's tentative agenda.

The public notice was posted on the Planning Commission bulletin board at the Kenai Peninsula Borough George A. Navarre Administration building. Additional notices were mailed to the following with the request to be posted for public viewing.

Library of Ninilchik

Post Office of Ninilchik

Sixteen certified mailings were sent to owners of property within 300 feet of the proposed vacation. Ten receipts had been returned when the staff report was prepared.

Public hearing notices were sent by regular mail to seven owners within 600 feet of the proposed vacation. One receipt had been returned when the staff report was prepared.

Eighteen public hearing notices were emailed to agencies and interested parties as shown below;

State of Alaska Dept. of Fish and Game
State of Alaska DNR
State of Alaska DOT
State of Alaska DNR Forestry
Emergency Services of Ninilchik
Kenai Peninsula Borough Office

Ninilchik Traditional Council
Alaska Communication Systems (ACS)
ENSTAR Natural Gas
General Communications Inc, (GCI)
Homer Electric Association (HEA)

Legal Access (existing and proposed): The proposed vacation is located at the intersection of Lothrop Park Drive, a 60 foot wide borough maintained right-of-way, and Ivy Avenue, a 30 foot wide borough maintained right-

of-way. Ivy Avenue is located at the end of borough maintained Bluff Drive that is off state maintained Oil Well Road that is near mile 136 of the Sterling Highway.

The portion to be vacated is a partial right-of-way bulb located to the southwest of the Lothrop Park Drive and Ivy Avenue intersection. Three lots abut portions of the bulb. The lot to the north and east have existing access from Lothrop Park Drive and Ivy Avenue respectively. The lot to which the land would revert back to, uses the right-of-way as their access. The vacation of the right-of-way will not impact the others access as it is only Lot 1 driveway within the dedication. The lot will continue to have access to Ivy Avenue. The access width appears to be around 22 feet in width.

The bulb was dedicated on Leisure Time Estates, Plat HM 80-32. The dedications of Ivy Avenue and Lothrop Park Drive had already been dedicated by previous plats. The southern 30 foot dedication for Ivy Avenue has not yet been granted. If the lot located to the east of this proposal is ever subdivided, a 30 foot dedication of Ivy Avenue will be required per KPB code. This will provide additional access to the lot.

The block length is not compliant due to the location of Deep Creek. The right-of-way bulb as it exists does not improve the block length. The vacation will not change the status of the block compliance.

KPB Roads Dept. comments	Out of Jurisdiction: No Roads Director: Uhlin, Dil Comments: This partial cul-de-sac is not necessary. RSA supports the vacation
SOA DOT comments	

Site Investigation: The proposed vacation is for a partial right-of-way bulb that currently has encroachments within the dedication. When the lot was created in 1980 Deep Creek, an anadromous stream, defined the western and southern boundary of the lot. Staff reviewed older available imagery for the area and between 2000 and 2003, Deep Creek changed course and has split the lot. This resulted in the portion with the proposed vacation to be the only portion accessible by right-of-way. Per KPB Assessing data, the structures on the property were added in 2009 and 2014. Due to the location of Deep Creek, the lot has minimal area for improvements.

Per the supplied as-built, there is a cabin and shed located on the property. The shed is completely within the right-of-way and the cabin has a portion within the cul-de-sac. The location of the cabin appears to be closer than allowed to the edge of Deep Creek. The owner has stated to staff that he has documentation that allowed the location. This is an issue to be reviewed by the River Center and KPB Code Compliance.

KPB River Center review	<p>A. Floodplain Reviewer: Carver, Nancy Floodplain Status: Not within flood hazard area Comments: No comments</p> <p>B. Habitat Protection Reviewer: Aldridge, Morgan Habitat Protection District Status: IS totally or partially within HPD Comments: i:0#.w kpb\maldridge</p> <p>C. State Parks Reviewer: Russell, Pam Comments: No Comments</p>
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Staff Analysis: The right-of-way was dedicated by Leisure Time Estates, Plat HM 80-32. The dedication occurred at the end of Lothrop Park Drive and Ivy Avenue. Both of those rights-of-way were dedicated as currently exists by Deep Creek Estates, Plat HM 76-84. Staff is not aware of the intent of the dedication. Lot 8 Block 3 of Deep Creek

Estates did not provide a portion of the bulb when created. Staff has reviewed the bulb and does not see an advantage to the area existing as the rights-of-way in the area are dedicated, constructed, and borough maintained.

Due to the location of Deep Creek, both when the dedication occurred and as it is now, there is no need for access for the bulb. There does not appear to have a future continuation of right-of-way in this area.

Ivy Avenue was dedicated as a 30 foot wide right-of-way by Deep Creek Estates, Plat HM 76-84. The lot south of the dedication and east of the proposal is an unsubdivided piece of property. If this thirty-one acre parcel is ever subdivided, a 30 foot wide dedication will be required by KPB Code. The future dedication will result in an offset if this area is vacated. **Staff recommends a portion of the right-of-way remain that will be in line with existing Lothrop Park Drive dedication that goes south 30 feet in line with the future Ivey Avenue dedication.** (Please see image for approximate location.)



20.65.050 – Action on vacation application

- D. The planning commission shall consider the merits of each vacation request and in all cases the planning commission shall deem the area being vacated to be of value to the public. It shall be incumbent upon the applicant to show that the area proposed for vacation is no longer practical for the uses or purposes authorized, or that other provisions have been made which are more beneficial to the public. In evaluating the merits of the proposed vacation, the planning commission shall consider whether:
1. The right-of-way or public easement to be vacated is being used;
Staff comments: *It is currently being used as driveway to the subject lot.*
 2. A road is impossible or impractical to construct, and alternative access has been provided;
Staff comments: *Construction is possible as currently used as a driveway. No other lots require this for access.*
 3. The surrounding area is fully developed and all planned or needed rights-of-way and utilities are constructed;
Staff comments: *Lots surrounding or abutting the proposed vacation currently have improvements and utility easements will be requested along the new lot lines adjacent to rights-of-way and any requests for easements will be reviewed.*
 4. The vacation of a public right-of-way provides access to a lake, river, or other area with public interest or value, and if so, whether equal or superior access is provided;
Staff comments: *The cul-de-sac provides access to private property and does not abut or provide access to Deep Creek.*
 5. The proposed vacation would limit opportunities for interconnectivity with adjacent parcels, whether developed or undeveloped;
Staff comments: *This is a partial bulb that does not impact or limit adjacent parcels.*
 6. Other public access, other than general road use, exist or are feasible for the right-of-way;
Staff comments: *Would not provide access to any public use areas to justify other public use.*
 7. All existing and future utility requirements are met. Rights-of-way which are utilized by a utility, or which logically would be required by a utility, shall not be vacated, unless it can be demonstrated that equal or superior access is or will be available. Where an easement would satisfactorily serve the utility interests, and no other public need for the right-of-way exists, the commission may approve the vacation and require that a utility easement be granted in place of the right-of-way.

Staff comments: *Provide for requested easements and grant easements along any portions of right-of-way as outlined in KPB Code 20.30.060(D).*

8. Any other factors that are relevant to the vacation application or the area proposed to be vacated.

Staff comments: *This will provide more useable area for a lot that has been greatly impacted by an unforeseen natural occurrence of the Deep Creek meandering.*

A KPB Planning Commission decision denying a vacation application is final. A KPB Planning Commission decision to approve the vacation application is subject to consent or veto by the KPB Assembly, or City Council if located within City boundaries. The KPB Assembly, or City Council must hear the vacation within thirty days of the Planning Commission decision.

The Assembly will hear the vacation at their scheduled October 11, 2022 meeting.

If approved, the vacation will need to be finalized by a plat. A right-of-way vacation plat does not require a hearing by the Plat Committee but due to the requests and some of the issues with the subject property, staff will bring the preliminary plat before the Plat Committee once a complete application is submitted.

KPB department / agency review:

Planner	Reviewer: Raidmae, Ryan There are not any Local Option Zoning District issues with this proposed plat. Material Site Comments: There are not any material site issues with this proposed plat.
Code Compliance	Reviewer: Ogren, Eric Comments: Is currently a Code Compliance case for structure in the ROW and In the 20ft Building Setback
Addressing	Reviewer: Haws, Derek Affected Addresses: 66247 IVY AVE Existing Street Names are Correct: Yes List of Correct Street Names: LOTHROP PARK DR Existing Street Name Corrections Needed: All New Street Names are Approved: No List of Approved Street Names: List of Street Names Denied: Comments: 66247 IVY AVE will remain with lot 1 block 4.
Assessing	Reviewer: Windsor, Heather Comments: No comment

Utility provider review:

HEA	Provide a 10 foot wide easement adjoining the right of way dedication that extends 20 feet west of Lothrop Park ROW to coincide with the 20 foot platted utility easement within Lot 8 Block 3.
ENSTAR	No requests or recommendations
ACS	No objections

GCI	Approved as shown
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RECOMMENDATION:

Based on consideration of the merits as per KPB 20.65.050(D) as outlined by Staff comments, Staff recommends APPROVAL as petitioned, subject to:

1. Consent by KPB Assembly.
2. Compliance with the requirements for preliminary plats per Chapter 20 of the KPB Code.
3. Grant utility easements requested by the utility providers.
4. Provide an approximate 30 by 30 portion of right-of-way to remain.
5. Submittal of a final plat within a timeframe such that the plat can be recorded within one year of vacation consent (KPB 20.70.130).

KPB 20.65.050 – Action on vacation application

- H. A planning commission decision to approve a vacation is not effective without the consent of the city council, if the vacated area to be vacated is within a city, or by the assembly in all other cases. The council or assembly shall have 30 days from the date of the planning commission approval to either consent to or veto the vacation. Notice of veto of the vacation shall be immediately given to the planning commission. Failure to act on the vacation within 30 days shall be considered to be consent to the vacation. This provision does not apply to alterations of utility easements under KPB 20.65.070 which do not require the consent of the assembly or city council unless city code specifically provides otherwise.**
- I. Upon approval of the vacation request by the planning commission and no veto by the city council or assembly, where applicable, the applicant shall have a surveyor prepare and submit a plat including the entire area approved for vacation in conformance with KPB 20.10.080. Only the area approved for vacation by the assembly or council may be included on the plat. The final plat must be recorded within one year of the vacation consent.**
- J. A planning commission decision denying a vacation application is final. No reapplication or petition concerning the same vacation may be filed within one calendar year of the date of the final denial action except in the case where new evidence or circumstances exist that were not available or present when the original petition was filed.**
- K. An appeal of the planning commission, city council or assembly vacation action under this chapter must be filed in the superior court in accordance with the Alaska Rules of Appellate Procedure.**

The 2019 Kenai Peninsula Borough Comprehensive Plan adopted November, 2019 by Ordinance No. 2019-25. The relevant objectives are listed.

Goal 3. Preserve and improve quality of life on the Kenai Peninsula Borough through increased access to local and regional facilities, activities, programs and services.

- *Focus Area: Energy and Utilities*
 - o *Objective A - Encourage coordination or residential, commercial, and industrial development with extension of utilities and other infrastructure.*
 - *Strategy 1. Near – Term: Maintain existing easements (especially section line easements) in addition to establishing adequate utility rights of way or easements to serve existing and future utility needs.*
 - *Strategy 2. Near – Term: Maintain regular contact with utility operators to coordinate and review utility easement requests that are part of subdivision plat approval.*

Page 5 of 6

- *Strategy 3. Near – Term: Identify potential utility routes on Borough lands.*
- *Housing*
 - *Objective D. Encourage efficient use of land, infrastructure and services outside incorporated cities by prioritizing future growth in the most suitable areas.*
 - *Strategy 1. Near – Term: Collaborate with the AK Department of Transportation, incorporated cities within the borough, utility providers, other agencies overseeing local services, and existing communities located adjacent to the undeveloped areas that are appropriate for future growth, to align plans for future expansion of services to serve future residential development and manage growth.*

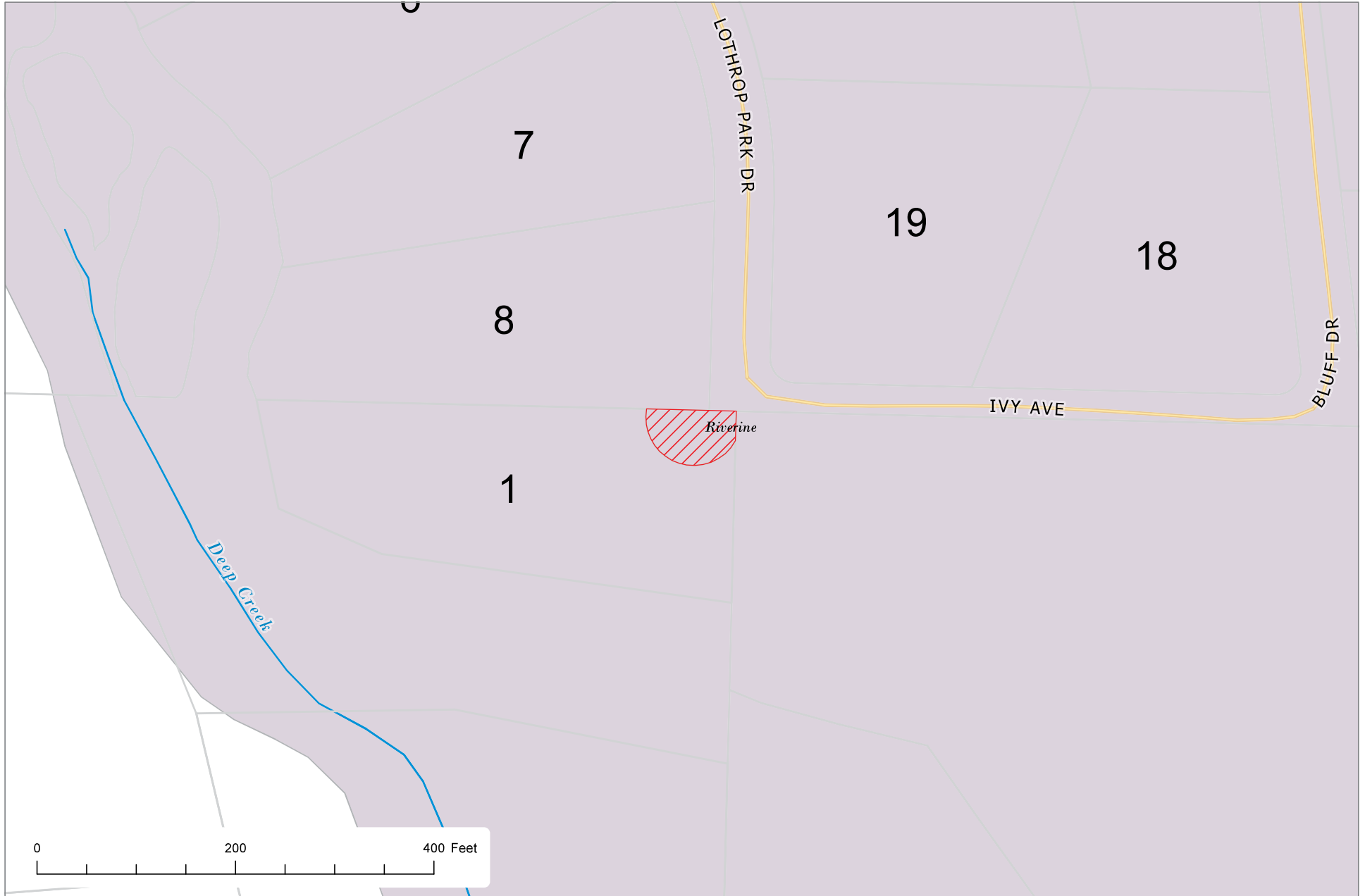
Goal 4. Improve access to, from and connectivity within the Kenai Peninsula Borough

- *Focus Area: Transportation*
 - *Objective B. Ensure new roads are developed in alignment with existing and planned growth and development.*
 - *Strategy 2. Near – Term: Establish subdivision codes that dictate road construction standards to accommodate future interconnectivity and/or public safety.*
 - *Strategy 3. Near – Term: Identify areas of anticipated growth to determine future access needs.*

END OF STAFF REPORT



The information depicted hereon is for a graphical representation only of best available sources. The Kenai Peninsula Borough assumes no responsibility for any errors on this map.

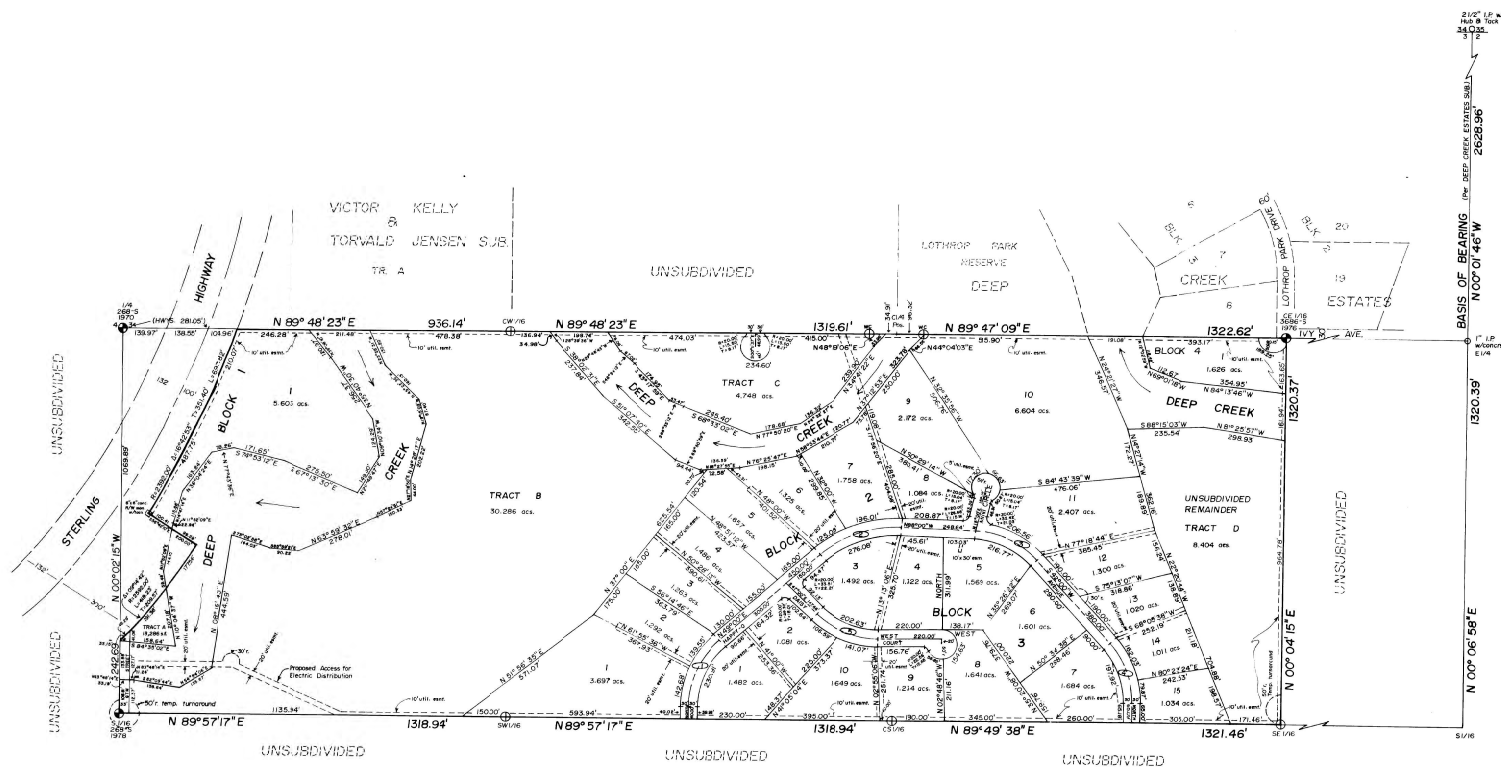


The information depicted hereon is for a graphical representation only of best available sources. The Kenai Peninsula Borough assumes no responsibility for any errors on this map.



KPB NOTE: See PC Resolutions 84-8 Amended and 95-14

CURVE	DELTA	RADIUS	LENGTH	TANGENT
1	49°06'00"	300.00'	256.57'	156.79'
2	43°06'00"	397.86'	298.59'	156.72'
3	44°06'00"	300.00'	157.18'	121.34'
4	42°06'00"	300.00'	119.91'	115.16'
5	43°06'00"	300.00'	125.15'	118.11'



LEGEND AND NOTES

- ① Found Brass Cap monument
- ② Found Iron Pipe
- ③ Set 1/2" x 30" steel rebar
- ④ Set 1/2" Aluminum Cap monument (1300-S 1979)

All lots are subject to a 20' strip setback along all dedicated R/W's.

All datum of record shown thus ().

All wastewater disposal and treatment systems shall comply with existing law at time of construction.

Lots 1 and 2, Block 1 shall share a single common drive.

Tract A cannot be conveyed separately except as a portion of Tract B.

80-32

RECORDED 11/10

DATE 11-10-80

TIME 11:00 AM

RECORDED BY [Signature]

PLAT APPROVAL

This plat having been approved by the Kenai Peninsula Borough Planning Commission as recorded in the official minutes of the meeting of December 4, 1980, is hereby acknowledged and accepted as the official plat, subject to city and all conditions and requirements of ordinances and law pertaining thereto.

KENAI PENINSULA BOROUGH

By: Philip Hanning

CERTIFICATE OF OWNERSHIP AND DEDICATION

We hereby certify that we are the owners of the property shown and described herein and that we hereby adopt this plan of subdivision, and dedicate all streets, alleys, walks, parks, utility easements, and other open spaces to public use.

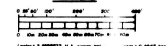
William J. Forteau Sharon L. Forteau
 William J. Forteau, Rte. 1 Box 205, Shore L. Paddock
 Kenai, AK 99611

NOTARY'S ACKNOWLEDGEMENT

Subscribed and sworn to before me this 9th day of January, 1980.

Carlton L. Thompson
 Notary Public for Alaska
 My Commission Expires: 9-21-80

SCALE



LEISURE TIME ESTATES

DESCRIPTION: Located within the NW1/4SE1/4 and the NW2SW1/4 lying Easement of the Sterling Highway in Sec. 3, T15S, R14W, S1E, AK and the Kenai Peninsula Borough containing 119.771 acres more or less

OWNER: William J. and Sharon L. Forteau
 Rte. 1 Box 205
 Kenai, AK 99611


P.O. Box 478
 Geologist, Registered Land Surveyor
 Date Surveyed: November 1979 Scale: 1" = 800' Sh. No. 111

Mapping by: P & T Surveyors, Inc. 1111 South W. Valley

Kenai Peninsula Borough
Office of the Borough Mayor

MEMORANDUM

TO: Brent Johnson, Assembly President
Members of the Borough Assembly

FROM: Mike Navarre, Borough Mayor 

DATE: October 3, 2022

RE: Appointments to Advisory Planning Commission

In accordance to KPB 21.02.060, the applicants listed below have been verified residents within the boundaries to be represented, as well as registered voters within the precincts covered by the commission boundaries.

I hereby submit my recommendations for confirmation by the Assembly.

COOPER LANDING ADVISORY PLANNING COMMISSION

Laura Johnson	Seat G	Term Expires 09/30/2025
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MOOSE PASS ADVISORY PLANNING COMMISSION

Jennifer Boyle	Seat F	Term Expires 09/30/2025
Jeff Hetrick	Seat G	Term Expires 09/30/2025

Thank you for your consideration.

Kenai Peninsula Borough
Office of the Borough Clerk

MEMORANDUM

TO: Mike Navarre, Borough Mayor
THRU: Robert Ruffner, Planning Director *RR*
THRU: Johni Blankenship, Borough Clerk *(JB)*
FROM: Michele Turner, Deputy Borough Clerk *(MT)*
DATE: October 3, 2022
RE: Advisory Planning Commission Applications for Appointment

The annual notice of vacancy for the Advisory Planning Commission Seats was advertised on August 1, 2022. The application period closed on August 30, 2022. Seats have remained open until filled.

Per KPB 21.02.060, the applicants listed below have been verified as:

- 1.) residents within the commission boundaries in which they are applying, and
- 2.) registered voters within the precincts covered by the commission boundaries.

The following applications are being submitted for your consideration.

COOPER LANDING ADVISORY PLANNING COMMISSION

Seat G

Laura Johnson

MOOSE PASS ADVISORY PLANNING COMMISSION

Seat F

Jennifer Boyle

Seat G

Jeff Hetrick

Thank you.

Kenai Peninsula Borough

Planning Department

Advisory Planning Commission Application Submitted 2022-08-24 20:28:55

APC/Seat: Cooper Landing – Seat ^GA (Term Expires 09/30/2025)

Name Laura Johnson	Mobile Phone
Home Phone 907-595-1598	Work Phone 907-205-0801
Email Ljohnsonak@gmail.com	Date of Birth [REDACTED]
SSN 458-89-7989	Voter #
Residence Address ,	Mailing Address PO Box 761 Cooper landing, Alaska 99572
How long have you lived in the area served by this Advisory Planning Commission? 22 years	What knowledge, experience, or expertise will you bring to this board? Background in urban geography, GIS, and urban planning.

Kenai Peninsula Borough

Planning Department

Advisory Planning Commission Application Submitted 2022-09-08 21:28:09

APC/Seat: Moose Pass – Seat F (Term Expires 09/30/2025)

Name Jennifer Boyle	Mobile Phone 907-382-0667
Home Phone	Work Phone 907-599-0643
Email jendboyle@gmail.com	Date of Birth [REDACTED]
SSN	Voter # [REDACTED]
Residence Address 34815 Seward Highway Moose Pass, AK 99631	Mailing Address PO Box 121 Moose Pass, AK 99631

How long have you lived in the area served by this Advisory Planning Commission?

Since April 2020

What knowledge, experience, or expertise will you bring to this board?

With my diverse background, I am confident in my ability to take on this new challenge to serve on the Moose Pass Advisory Planning Commission. Below are a few key points regarding my background and experience that I believe would benefit this board.

-I have a background in recruitment, training and operations management which required me to stay current with technology and social media platforms while overseeing up to 60 seasonal employees within the tourism industry annually. I also have 5 years of experience working in the trades as a boat builder. I am able to relate to many different people with a variety of backgrounds and experiences.

-I held the volunteer role of Community Engagement Chair for a fast growing, technology start-up company and organized events that allowed our company and the community to engage in a positive way.

-I have unique interactions with a variety of individuals within our community as the President of the Moose Pass School Site Based Council and as a member of the Moose Pass Library Board. -I was also a manager at Trail Lake Lodge for two years, which allowed me the opportunity to build relationships with many Moose Pass residents.

-I'm currently a business owner in Moose Pass with a deep interest in where we came from and where we are going. My business, Moose Pass Adventures, operates kayak tours on Trail Lake and the surrounding area, which gives me a unique understanding of our community's natural features from the water and from the road.

I would greatly appreciate the opportunity to serve my community on the Moose Pass Advisory Planning Commission.

JENNIFER BOYLE

1-907-382-0667 • jendboyle@gmail.com • linkedin.com/in/jennifer-durham-boyle

PROFESSIONAL EXPERIENCE

Owner and Operator

January 2021 – Present

Moose Pass Adventures, Moose Pass, AK

Develop and operate kayak tours in and around Moose Pass, Alaska.

Manager of Special Events & Guest Services

May 2020 – April 2022

Trail Lake Lodge, Moose Pass, AK

Project manager for weddings and events, from initial contact, site visits, follow-up, detailed planning to the delivery of the final product. Trained staff on use of our hospitality management software. Negotiated contract and oversaw relationship with our linen supply company. Assisted in the management of both Back of House and Front of House Operations. Implemented a highly successful scheduling system to handle a dynamic team of up to 25 staff members across all departments.

Composite Technician & Community Engagement Chair

March 2018 – April 2020

Saildrone Inc, Alameda, CA

Responsibilities included all aspects of composite drone manufacturing from prepreg layup, wet layup, part trimming, sanding, fairing, and assembly. Aided in Saildrone's recruitment efforts by working with Daughters of Rosie and assisted in the creation of a composites training program for women. Served as the Community Engagement Chair and hosted various events.

Regional Trip Operations Specialist

April 2017 – March 2018

Backroads, Berkeley, CA

Helped build tour programs and maintain the quality and integrity of itineraries with a primary focus on vendors by building strong relationships with hotels and other key vendors in Eastern Canada, United States, Bermuda, Caribbean, Mexico and Central America.

Brand Deputy Operations Manager

June 2012 – January 2014

PEAK Adventure Travel, Santa Rosa, CA

Main point of contact between the UK Sales team and North American DMC. Led research efforts to create and launch new tours into the North American market while overseeing existing tour itineraries to ensure continued client satisfaction. Managed up to 60 employees as well as provided pre and post tour briefings and on the road support.

Recruitment and Training Manager

January 2010 – May 2012

PEAK Adventure Travel, Santa Rosa, CA

Recruited, interviewed, trained and supervised up to 80 guides annually. Supervised Assistant Recruitment and Training Manager and two Operations Coordinators. Oversaw with first year leader development. Reorganized training program to run efficiently post merger for several brands while incorporating best practices as outlined by global headquarters.

PREVIOUS EXPERIENCE & INTERESTS

K-8 Spanish Teacher, Wilderness First Responder, Camping Tour Guide, Road Trip Aficionado, Sailing Enthusiast, Dual Sport Motorcycle Rider, Boat Builder, National Park Stamp Collector, Lifelong Student

EDUCATION

University of Memphis, Memphis, TN

Bachelor of Arts in Spanish, minor in English, *magna cum laude*

Kenai Peninsula Borough

Planning Department

Advisory Planning Commission Application Submitted 2022-09-09 05:51:18

APC/Seat: Moose Pass – Seat G (Term Expires 09/30/2025)

Name Jeff Hetrick	Mobile Phone 907 362 2378
Home Phone 907 288 3667	Work Phone 907 224 5181
Email jjh@seward.net	Date of Birth [REDACTED]
SSN	Voter #
Residence Address 41843 Seward Highway Moose Pass, Alaska 99631	Mailing Address Box 7 Moose Pass, G 99631
How long have you lived in the area served by this Advisory Planning Commission? 34	What knowledge, experience, or expertise will you bring to this board? 20 years on APC

Kenai Peninsula Borough
Office of the Borough Mayor

MEMORANDUM

TO: Brent Johnson, Assembly President
Members of the Borough Assembly

FROM: Mike Navarre, Borough Mayor *MN*

DATE: October 3, 2022

RE: Appointments to Service Area Boards

In accordance with KPB Title 16, the applicants listed below have been verified as qualified voters and reside within the service area to be represented.

I hereby submit my recommendations for confirmation by the Assembly.

BEAR CREEK FIRE SERVICE AREA BOARD

Wolfgang V. Kurtz	Seat A	Term Expires 10/2025
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NIKISKI FIRE SERVICE AREA BOARD

Tony Jackson	Seat A	Term Expires 10/2025
Paul M. Walukewicz	Seat B	Term Expires 10/2025
Kathryn Walukewicz	Seat C	Term Expires 10/2025

ROAD SERVICE AREA BOARD

Heidi Covey	At-Large Seat #2	Term Expires 09/30/2025
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SELDOVIA RECREATIONAL SERVICE AREA BOARD

Elizabeth Diamant	Seat D	Term Expires 10/2025
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WESTERN EMERGENCY SERVICE AREA BOARD

Dawson Slaughter	Seat B	Term Expires 10/2025
Katherine Covey	Seat D	Term Expires 10/2025

Thank you for your consideration.

Kenai Peninsula Borough
Office of the Borough Clerk

MEMORANDUM

TO: Mike Navarre, Borough Mayor
THRU: Johni Blankenship, Borough Clerk (JB)
FROM: Michele Turner, Deputy Borough Clerk (MT)
DATE: October 3, 2022
RE: Verification of Service Area Board Applicants

The annual notice of vacancy for Service Area Board seats was advertised on September 1, 2022. The application period closed on September 21, 2022.

Pursuant to KPB Title 16, the applicants below have been verified as registered voters of the Borough and reside within the service area listed.

The applications are being submitted for your consideration.

BEAR CREEK FIRE SERVICE AREA BOARD

Seat A Wolfgang V. Kurtz

NIKISKI FIRE SERVICE AREA BOARD

Seat A Tony Jackson
Seat B Paul M. Walukewicz
Seat C Katheryn Walukewicz

ROADS SERVICE AREA BOARD

At-Large Seat #2 Heidi Covey

SELDOVIA RECREATIONAL SERVICE AREA BOARD

Seat D Elizabeth Diamant

WESTERN EMERGENCY SERVICE AREA BOARD

Seat B Dawson Slaughter
Seat D Katherine Covey

Thank you.

Kenai Peninsula Borough

Office of the Borough Clerk

Service Area Board Application Submitted 2022-09-18 15:05:13

Service Area: Bear Creek Fire, Seat A (Term Expires 10/2025)

Applicant Name Wolfgang V Kurtz	Daytime Phone (907) 491-1069
Email	Date of Birth [REDACTED]
Physical Residence Address 12358 Roundtable Drive Seward, AK 99664	Mailing Address ,
SS #	Voter #
I have been a Resident of the Kenai Peninsula Borough for: 10 years, 0 months	I have been a Resident of the selected Service Area for: 8 years, 0 months
What knowledge, experience, or expertise will you bring to this board? State of Alaska Firefighter 1 (2014), EMT 2 (2018) currently active on the rolls with Bear Creek Fire Department and/or Seward Volunteer Ambulance Corps, respectively Further, I can make the meetings regularly in the flesh	

Kenai Peninsula Borough

Office of the Borough Clerk

Service Area Board Application Submitted 2022-09-14 19:06:39

Service Area: Nikiski Fire, Seat A (Term Expires 10/2025)

Applicant Name Tony Jackson	Daytime Phone 9072527818
Email Mrjacksonteaches@yahoo.com	Date of Birth [REDACTED]
Physical Residence Address 52500 Leah Street Kenai, AK 99611	Mailing Address ,
SS #	Voter #
I have been a Resident of the Kenai Peninsula Borough for: 30 years, 4 months	I have been a Resident of the selected Service Area for: 29 years, 6 months
What knowledge, experience, or expertise will you bring to this board? I have lived in Nikiski since 1993, I have taught at Nikiski Middle High School for 16 years. In the wild I have met many people that still reside in Nikiski. I have good relationships and an able to talk to a lot of people about local issues.	

Kenai Peninsula Borough

Office of the Borough Clerk

Service Area Board Application Submitted 2022-09-11 21:12:36

Service Area: Nikiski Fire, Seat B (Term Expires 10/2025)

Applicant Name Paul M. Walukewicz	Daytime Phone 7373959056
Email pmwalukewicz@gmail.com	Date of Birth [REDACTED]
Physical Residence Address 51904 Holt Lamplight Rd Nikiski, Alaska 99635	Mailing Address 51904 Holt Lamplight Rd Kenai, Alaska 99611
SS # [REDACTED]	Voter # [REDACTED]
I have been a Resident of the Kenai Peninsula Borough for: 6 years, 1 months	I have been a Resident of the selected Service Area for: 6 years, 1 months
What knowledge, experience, or expertise will you bring to this board? 22 years military service BA Management, currently pursuing Master in Management. Prior experience as Firefighter with Woodlawn volunteer Fire department, Baltimore Maryland. Well versed in government project management and project specification development.	

Kenai Peninsula Borough

Office of the Borough Clerk

Service Area Board Application Submitted 2022-09-11 21:11:39

Service Area: Nikiski Fire, Seat C (Term Expires 10/2025)

Applicant Name Kathryn Walukewicz	Daytime Phone 2066186611
Email warneckekc@gmail.com	Date of Birth [REDACTED]
Physical Residence Address 51904 Holt Lamplight Rd. Nikiski, AK 99635	Mailing Address 51904 Holt Lamplight Rd. Kenai, AK 99611
SS #	Voter # [REDACTED]
I have been a Resident of the Kenai Peninsula Borough for: 6 years, 1 months	I have been a Resident of the selected Service Area for: 6 years, 1 months
What knowledge, experience, or expertise will you bring to this board? -20 years military service. -10 years coordinating and executing search and rescue missions. -BS in Criminal Justice -Currently pursuing MA in Legal Studies -Currently employed at Nikiski Hardware and Supply; customer service and commercial accounts.	

Kenai Peninsula Borough

Office of the Borough Clerk

Service Area Board Application Submitted 2022-09-20 15:47:12

Service Area: Roads, At-Large Seat #2 (Term Expires 09/30/2025)

Applicant Name Heidi Covey	Daytime Phone 9073988640
Email hcoveyak@yahoo.com	Date of Birth [REDACTED]
Physical Residence Address 49690 Two Junes Avenue Kenai, Alaska 99611	Mailing Address ,
SS #	Voter # [REDACTED]
I have been a Resident of the Kenai Peninsula Borough for: 47 years, 2 months	I have been a Resident of the selected Service Area for: 47 years, 2 months
What knowledge, experience, or expertise will you bring to this board? Service area experience and the understanding of service to community. I currently serve on the CAC board and still stand as Vice Chair for the AKLnG local advisory committee.	

Kenai Peninsula Borough

Office of the Borough Clerk

Service Area Board Application Submitted 2022-10-03 14:43:34

Service Area: Seldovia Recreational, Seat D (Term Expires 10/2025)

Applicant Name elizabeth diament	Daytime Phone 9145880332
Email lizdiament@yahoo.com	Date of Birth [REDACTED]
Physical Residence Address 1931 Jakolof Bay Road Seldovia, AK 99663	Mailing Address PO Box 54 Seldovia, AK 99663
SS #	Voter #
I have been a Resident of the Kenai Peninsula Borough for: 18 years, 1 months	I have been a Resident of the selected Service Area for: 1 years, 1 months
What knowledge, experience, or expertise will you bring to this board? <p>I am a long time volunteer with many organisations on the Kenai Peninsula. I volunteered for the curling club at the Kevin Bell Ice Arena, and helped get Pickleball up and rolling in the Homer area. I value recreation and what it can bring to a community. I moved to Seldovia and was excited to find there is a service area for recreation. I will bring meeting experience, detailed attention to documentation and public process, and a passion for the mission of this board.</p>	

Kenai Peninsula Borough

Office of the Borough Clerk

Service Area Board Application Submitted 2022-09-02 16:05:40

Service Area: Western Emergency, Seat B (Term Expires 10/2025)

Applicant Name Dawson Slaughter	Daytime Phone 9072994775
Email Slaughterdawson1@gmail.com	Date of Birth [REDACTED]
Physical Residence Address 34290 Eason lane Anchor Point , AK 99556	Mailing Address PO Box 1065 Anchor Point , AK 9956
SS # [REDACTED]	Voter # [REDACTED]
I have been a Resident of the Kenai Peninsula Borough for: 27 years, 0 months	I have been a Resident of the selected Service Area for: 27 years, 0 months
What knowledge, experience, or expertise will you bring to this board? I have continued to support the service area and the wishes of the community members in providing an excellent service. Please extend my wishes to be reappointed to the board. Thank you !	

Kenai Peninsula Borough

Office of the Borough Clerk

Service Area Board Application Submitted 2022-09-03 10:12:54

Service Area: Western Emergency, Seat D (Term Expires 10/2025)

Applicant Name Katherine Covey	Daytime Phone 9073981773
Email Katco907.nes@gmail.com	Date of Birth [REDACTED]
Physical Residence Address 16699 Easy st Ninilchik, AK 99639	Mailing Address PO BOX 39521 Ninilchik, AK 99639
SS # [REDACTED]	Voter #
I have been a Resident of the Kenai Peninsula Borough for: 39 years, 6 months	I have been a Resident of the selected Service Area for: 39 years, 6 months
What knowledge, experience, or expertise will you bring to this board? Present Seat D board member President of Ninilchik Emergency Services Former EMTII	

MEMORANDUM

TO: Brent Johnson, Assembly President
Members of the Borough Assembly

FROM: Mike Navarre, Borough Mayor *MN*

DATE: October 3, 2022

RE: Appointments to Resilience and Security Advisory Commission

Pursuant to Ordinance 2022-25, commissioners shall be appointed by the Mayor and confirmed by the Assembly.

I hereby submit my recommendation for confirmation.

**RESILIENCE AND SECURITY ADVISORY COMMISSION
SOUTHWEST PENINSULA SEAT**

(areas of Seldovia, Port Graham, Homer, Kachemak City, Nanwalek)

Bretwood Higman

Term Expires 09/30/2025

Thank you for your consideration.

Kenai Peninsula Borough
Office of the Borough Clerk

MEMORANDUM

TO: Mike Navarre, Borough Mayor
THRU: Robert Ruffner, Planning Director
THRU: Johni Blankenship, Borough Clerk (B)
FROM: Michele Turner, Deputy Borough Clerk (MT)
DATE: October 3, 2022
RE: Verification of Resilience and Security Advisory Commission Applicants

The annual notice of vacancy for the Resilience and Security Advisory Commission was advertised on August 1, 2022. The filing period closed on August 30, 2022. Seats have remained opened until filled.

Per Ordinance 2020-25, appointed members shall have experience in at least one of the ten areas defining the scope of the commission. Sustainability commissioners shall submit a resume with their application to be appointed by the mayor and approved by the assembly.

The attached applications are submitted herewith for your consideration.

SOUTHWEST PENINSULA (areas of Seldovia, Port Graham, Homer Kachemak City, Nanwalek)

- Bretwood Higman 1119 W. Boone Lane, Seldovia

Thank you.

Kenai Peninsula Borough

Planning Department

Resilience & Security Advisory Commission Application Submitted 2022-09-16 15:45:53

Seat: Southwest Borough Seat (Seldovia, Port Graham, Homer, Kachemak City, Nanwalek)
Term Expires 09/30/2025

Name: Bretwood Higman
Mailing Address: PO Box 164 Seldovia, AK 99663
Residential Address (if different from mailing address): 1119 S. Boone Lane Seldovia, AK 99663
Email: hig314@gmail.com
Mobile: 9072906992
{Work:caption} {Work:value}
Home Phone: 9072906992
Occupation or place of employment: Ground Truth Trekking
{HowLongLived:caption} {HowLongLived:value}
In which of the 10 areas defining the scope of the commission do you have experience? 2, 4, 5, 8, 9, 10
{Expertise:caption} {Expertise:value}
{CurrentlyServe:caption} {CurrentlyServe:value}

{Available:caption}

{Available:value}

Comments (areas of interest, additional experience or qualifications, etc.):

I'm particularly interested to support resilience through energy system improvement and study of natural hazards.

Curriculum vitae with track record (for researchers)

Role in the project Project manager ☐ Project participant ☒

Personal information

First name, Surname:	Bretwood Higman		
Date of birth:	8 November, 1976	Sex:	Male
Nationality:	USA		
Researcher unique identifier(s) (ORCID, ResearcherID, etc.):	ORCID 0000-0002-8462-3656		
URL for personal website:	www.groundtruthalaska.org		

Education

Year	Faculty/department - University/institution - Country
2007 (dissertation defended)	PhD: Dept. of Earth and Space Science, University of Washington, Seattle

Positions - current and previous

Year	Job title – Employer - Country
2007 - present	Executive Director, Ground Truth Alaska, USA
2009 - present	Geologist & Data Analyst, Nuka Research and Planning, USA

Project management experience

Year	Project owner - Project - Role - Funder
2016-2019	2015 Taan landslide and tsunami interdisciplinary study - project coordination, researcher - US National Science Foundation
2020 - Present	Ground Truth Alaska - Inventory of Alaska landslides and instabilities - Project lead - US Geological Survey & US National Science Foundation
2020 - Present	Arctic Tsunamigenic Slope Instabilities Partnership (Arctic T-SLIP) - Collaboration on research into climate-driven landslide hazards in Alaska - coordination co-lead - Unfunded
2019 - Present	RWTH Aachen - Study of landslide hazards at Grewingk Lake - logistical coordinator - Deutsche Forschungsgemeinschaft (German Research Foundation)

Supervision of students

Master's students	Ph.D. students	University/institution - Country
2		Central Washington University

Other relevant professional experiences

Year	Description - Role
2019 - present	Adjunct Member, Quaternary Research Center, USA
2020 - present	Borough Commissioner on the Resilience and Security Commission for the Kenai Peninsula Borough

Track record

Number of publications (Google Scholar): 55 H-Index 14, 885 citations


- Atwater, B.F., Bourgeois, J., Yeh, H., Abbott, D., Cisternas, M., Glawe, U., Higman, B., Horton, B., Peters, R., Rajendran, K., 2005. Tsunami geology and its role in hazard mitigation.
- Bloom, C.K., MacInnes, B., Higman, B., Shugar, D.H., Venditti, J.G., Richmond, B., Bilderback, E.L., 2020. Catastrophic landscape modification from a massive landslide tsunami in Taan Fiord, Alaska. *Geomorphology* 353, 107029.
- Dai, C., Higman, B., Lynett, P.J., Jacquemart, M., Howat, I.M., Liljedahl, A.K., Dufresne, A., Freymueller, J.T., Geertsema, M., Ward Jones, M., 2020. Detection and assessment of a large and potentially tsunamigenic periglacial landslide in Barry Arm, Alaska. *Geophysical research letters* 47, e2020GL089800.
- Dufresne, A., Geertsema, M., Shugar, D., Koppes, M., Higman, B., Haeussler, P., Stark, C., Venditti, J., Bonno, D., Larsen, C., 2018. Sedimentology and geomorphology of a large tsunamigenic landslide, Taan Fiord, Alaska. *Sedimentary Geology* 364, 302–318.
- Higman, B., Bourgeois, J., 2021. Deposits of the 1992 Nicaragua tsunami, in: *Tsunamiites*. Elsevier, pp. 85–107.
- Higman, B., Shugar, D.H., Stark, C.P., Ekström, G., Koppes, M.N., Lynett, P., Dufresne, A., Haeussler, P.J., Geertsema, M., Gulick, S., 2018. The 2015 landslide and tsunami in Taan Fiord, Alaska. *Scientific reports* 8, 1–12.
- Jaffe, B.E., Borrero, J.C., Prasetya, G.S., Peters, R., McAdoo, B., Gelfenbaum, G., Morton, R., Ruggiero, P., Higman, B., Dengler, L., 2006. Northwest Sumatra and offshore islands field survey after the December 2004 Indian Ocean tsunami. *Earthquake Spectra* 22, 105–135.
- Liu, P.L.-F., Lynett, P., Fernando, H., Jaffe, B.E., Fritz, H., Higman, B., Morton, R., Goff, J., Synolakis, C., 2005. Observations by the international tsunami survey team in Sri Lanka. *Science* 308, 1595–1595.
- Pedoja, K., Bourgeois, J., Pinegina, T., Higman, B., 2006. Does Kamchatka belong to North America? An extruding Okhotsk block suggested by coastal neotectonics of the Ozernoi Peninsula, Kamchatka, Russia. *Geology* 34, 353–356.
- Schwaiger, H., Higman, B., 2007. Lagrangian hydrocode simulations of the 1958 Lituya Bay tsunamigenic rockslide. *Geochemistry, Geophysics, Geosystems* 8.

Kenai Peninsula Borough

Office of the Borough Mayor

MEMORANDUM

TO: Brent Johnson, Assembly President
Members, Kenai Peninsula Borough Assembly

FROM: Mike Navarre, Mayor 

DATE: October 11, 2022

RE: Designation of Administrative Officer & Alternate Administrative Officer

Pursuant to the attached, I am designating my Chief of Staff, Max Best, as the administrative officer to exercise the powers and duties of the mayor when I am unable to discharge the duties of my office due to absence or incapacity.

Additionally, I am designating Brandi Harbaugh, Director of Finance, as the alternate administrative officer to exercise the powers and duties of the borough mayor at such times when both Max Best and I are absent or incapacitated and unable to discharge the duties of my office.

These designations are made pursuant to AS 29.20.260 and KPB 2.04.030 and are submitted for approval by the assembly.



Office of the Borough Mayor

144 N. Binkley Street, Soldotna, Alaska 99669 • (907) 714-2120 • (907) 714-2379 Fax


Mike Navarre
Borough Mayor

DESIGNATION OF ADMINISTRATIVE OFFICER AND ALTERNATE ADMINISTRATIVE OFFICER AUTHORIZED TO ACT ON BEHALF OF THE MAYOR

Pursuant to AS 29.20.260 and KPB 2.04.030, I am designating Max Best, Chief of Staff, as the administrative officer to exercise the powers and duties of the borough mayor at such times as I may be absent or incapacitated and unable to discharge the duties of my office.

Additionally, I am designating Brandi Harbaugh, Director of Finance, as the alternate administrative officer to exercise the powers and duties of the borough mayor at such times when both Max Best and I are absent or incapacitated and unable to discharge the duties of my office.

These designations are effective on October 11, 2022, upon approval by the assembly.


Mike Navarre, Borough Mayor

MAYOR'S REPORT TO THE ASSEMBLY

TO: Brent Johnson, Assembly President
Members, Kenai Peninsula Borough Assembly

FROM: Charlie Pierce, Kenai Peninsula Borough Mayor

DATE: October 11, 2022

Assembly Request / Response

None

Agreements and Contracts

- a. Authorization to Award a Contract for ITB23-015 Brushing Vegetation Control-Central Region
- b. Authorization to Award a Contract for ITB23-021 Brushing Vegetation Control-West Region, Units 6 & 7
- c. Authorization to Award a Contract for ITB23-020 Kwechak Creek Maintenance
- d. Purchase of Motorola Radios, Under the National Association of State Procurement Officials (NASPO) Contract
- e. Authorization to Award a Contract for ITB23-016 Brushing Vegetation Control- North Region
- f. Authorization to Award a Contract for ITB23-017 Brushing Vegetation Control- South Region
- g. Authorization to Award a Contract for ITB23-018 Brushing Vegetation Control- East Region, Unit 3
- h. Authorization to Award a Contract for ITB23-019 Brushing Vegetation Control- West Region, Units 3, 4 & 5
- i. FutureSync Sole Source Waiver

Other

Litigation Status Report- Quarter Ending 9/30/22

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Kenai Peninsula Borough

Purchasing & Contracting

MEMORANDUM

TO: Charlie Pierce, Mayor

THRU: John Hedges, Purchasing & Contracting Director *JH*

FROM: Dil Uhlin, Road Service Area Director *DU*

DATE: September 20, 2022

RE: Authorization to Award a Contract for ITB23-015 Brushing Vegetation Control – Central Region

The Purchasing and Contracting Office formally solicited and received bids for the ITB23-015 Brushing Vegetation Control – Central Region. Bid packets were released on August 26, 2022 and the Invitation to Bid was advertised in the Peninsula Clarion on August 26, 2022, Homer News on August 25, 2022 and Seward Journal on August 24, 2022.

The project consists of the contractor providing all labor and materials to perform vegetation control services in the Central Region.

On the due date of September 8, 2022, two (2) bids were received and reviewed to ensure that all the specifications and delivery schedules were met. The low bid of \$41,110 was submitted by River City Construction, LLC.

Your approval for this bid award is hereby requested. Funding for this project is in account number 236.33950.00000.43952.

Charlie Pierce for CP

Charlie Pierce, Mayor

9/20/2022

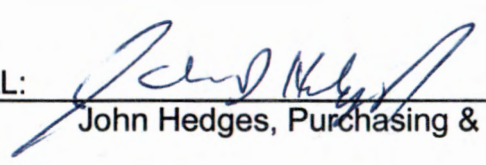
Date

FINANCE DEPARTMENT FUNDS VERIFIED	
Acct. No.	236.33950.00000.43952
Amount	\$41,110.00
By: <i>CJ BH</i>	Date: 9/20/2022

NA

**KENAI PENINSULA BOROUGH
PURCHASING & CONTRACTING****BID TAB FOR: ITB23-015 BRUSHING VEGETATION CONTROL - Central Region**

CONTRACTOR	LOCATION	BASE BID
Todaly Unlimited, Inc.	Soldotna, Alaska	NON-RESPONSIVE
River City Construction, LLC	Soldotna, Alaska	\$41,110.00
Get Plowed Sno-Removal	Soldotna, Alaska	\$46,312.00

DUE DATE: September 8, 2022**KPB OFFICIAL:**
John Hedges, Purchasing & Contracting Director

Kenai Peninsula Borough

Purchasing & Contracting

MEMORANDUM

TO: Charlie Pierce, Mayor

THRU: John Hedges, Purchasing & Contracting Director *JH*

FROM: Dil Uhlin, Road Service Area Director *DU*

DATE: September 20, 2022

RE: Authorization to Award a Contract for ITB23-021 Brushing Vegetation Control – West Region, Units 6 & 7

The Purchasing and Contracting Office formally solicited and received bids for the ITB23-021 Brushing Vegetation Control – West Region, Units 6 & 7. Bid packets were released on August 26, 2022 and the Invitation to Bid was advertised in the Peninsula Clarion on August 26, 2022, Homer News on August 25, 2022 and Seward Journal on August 24, 2022.

The project consists of the contractor providing all labor and materials to perform vegetation control services in the West Region, Units 6 & 7.

On the due date of September 8, 2022, three (3) bids were received and reviewed to ensure that all the specifications and delivery schedules were met. The low bid of \$11,615 was submitted by Get Plowed Sno-Removal.

Your approval for this bid award is hereby requested. Funding for this project is in account number 236.33950.00000.43952.

Charlie Pierce for CP

Charlie Pierce, Mayor

9/20/2022

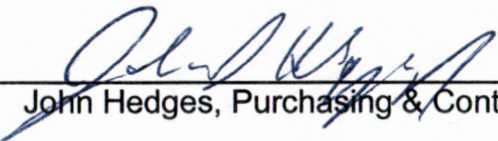
Date

FINANCE DEPARTMENT FUNDS VERIFIED	
Acct. No.	236.33950.00000.43952
Amount	\$11,615.00
By: <i>CF BH</i>	Date: 9/20/2022

NA

**KENAI PENINSULA BOROUGH
PURCHASING & CONTRACTING****BID TAB FOR: ITB23-021 BRUSHING VEGETATION CONTROL - West Region , Units 6 & 7**

CONTRACTOR	LOCATION	BASE BID
Get Plowed Sno-Removal	Soldotna, Alaska	\$11,615.00
River City Construction, LLC	Soldotna, Alaska	\$12,350.00
Todaly Unlimited, Inc.	Soldotna, Alaska	\$15,306.50

DUE DATE: September 8, 2022**KPB OFFICIAL:**
John Hedges, Purchasing & Contracting Director

Kenai Peninsula Borough

Purchasing & Contracting

MEMORANDUM

TO: Charlie Pierce, Mayor

THRU: John Hedges, Purchasing & Contracting Director *JH*

THRU: Stephanie Presley, Seward Bear Creek Service Area *SP*

FROM: Andrew Walsh, Project Manager *KK*

DATE: September 16, 2022

RE: Authorization to Award a Contract for ITB23-020 Kwechak Creek Maintenance

The Purchasing and Contracting Office formally solicited and received bids for the ITB23-020 Kwechak Creek Maintenance. Bid packets were released on August 24, 2022 and the Invitation to Bid was advertised in the Peninsula Clarion and Seward Journal on August 24, 2022.

The project consists of furnishing all labor, materials, and equipment for restoration of the Kwechak Creek channel and gravel embankments on the right and left banks. Heavy equipment will be used to extract river run material from the active channel of the creek from approximately 1,500 feet downstream of the Bruno Road bridge. Gravel embankments will be restored along 2,600 feet of river left and 1,400 feet of river right. The channel will be excavated and embankments restored as designed in the Seward-Bear Creek Flood Service Area Kwechak Creek Sediment Management & Embankment Maintenance 2021 plans.

On the due date of September 7, 2022, two (2) bids were received and reviewed to ensure that all the specifications and delivery schedules were met. The low bid of \$51,997 was submitted by Andrews and Sons, LLC, Seward, Alaska.

Your approval for this bid award is hereby requested. Funding for this project is in account number 259.21212.00000.43011.

Charlie Pierce for CP

Charlie Pierce, Mayor

9/20/2022

Date

NA

FINANCE DEPARTMENT FUNDS VERIFIED	
Acct. No.	259.21212.00000.43011
Amount	\$51,997.00
By: <i>CS BH</i>	Date: 9/19/2022

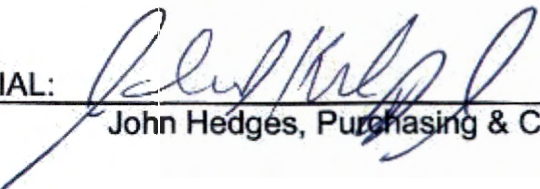
**KENAI PENINSULA BOROUGH
PURCHASING & CONTRACTING**

BID TAB FOR: ITB23-020 KWECHAK CREEK MAINTENANCE

CONTRACTOR	LOCATION	BASE BID
Metco Alaska, LLC	Seward, Alaska	\$62,580.00
Andrews and Sons LLC	Seward, Alaska	\$51,997.00

DUE DATE: September 7, 2022

KPB OFFICIAL:


John Hedges, Purchasing & Contracting Director

Kenai Peninsula Borough

Western Emergency Services

MEMORANDUM

TO: Charlie Pierce, Mayor

THRU: John Hedges, Purchasing & Contracting Director *JH*

FROM: Jon Marsh, WESA Fire Chief *JM*

DATE: September 13, 2022

RE: Purchase of Motorola Radios, Under the National Association of State Procurement Officials (NASPO) Contract

Western Emergency Services (WES) has Motorola XTL mobile and XTS portable radios that are nearing their end of service life and will soon need to be replaced. The new purchase of APX series radios required consists of 6 portable radios, 30 mobile radios and 3 consolettes, along with miscellaneous accessories. WES has chosen to continue with the Motorola APX series as we already have over sixty APX portables currently in service, and Resolution 2011-093 authorized the standardization of Borough communications equipment to the Motorola brand. \$217,800 was budgeted for this purchase in a capital improvement project in the FY2023 budget in addition to the remaining \$36,831 remaining in the same project from FY2022 budget.

Motorola Solutions is the manufacturer and only vendor that can supply these radios. Western Emergency Services has received a proposal from Motorola Solutions that includes group purchasing organization (GPO) involvement, specifically the National Association of State Procurement Officials (NASPO) Contract. Utilizing the established NASPO pricing structure, Motorola Solutions has provided a quotation for the sum of \$229,082.37, to provide the needed radios and accessories. The Motorola Alaska proposal meets our needs and is over \$25,000 less than our original anticipated cost estimate.

For reasons stated above, Western Emergency Services would like to award Motorola Solutions with the contract to purchase our radios. The main qualifiers restated: replacement of non-serviceable radios that have reached the end of their useful life, Borough standardization of communications equipment, as well as the satisfaction of procurement code through NASPO involvement.

Your approval is hereby requested. Funding for this project is in account numbers 444.51410.23441.48311 and 444.51410.22441.48311.

Charlie Pierce for CP

Charlie Pierce, Mayor

9/20/2022

Date

FINANCE DEPARTMENT FUNDS VERIFIED	
Acct: <u>444.51410.23441.48311</u>	
Amount: <u>\$217,800.00</u>	
Acct: <u>444.51410.22441.48311</u>	
Amount: <u>\$36,831.06</u>	
By: <u>CJ BH</u>	Date: <u>9/15/2022</u>
NOTES: NA	

Introduced by:	Mayor
Date:	09/06/11
Action:	Adopted
Vote:	9 Yes, 0 No, 0 Absent

**KENAI PENINSULA BOROUGH
RESOLUTION 2011-093**

**A RESOLUTION AUTHORIZING STANDARDIZATION OF COMMUNICATION
EQUIPMENT FOR FIRE SERVICE AREAS BOROUGH-WIDE**

WHEREAS, the need for standardization was recognized when the narrow banding project identified that 95 percent of radios and repeaters across the Kenai Peninsula Borough are the Motorola brand; and

WHEREAS, the Motorola brand communication devices have demonstrated their durability, reliability and overall ease of programming; and

WHEREAS, Motorola is the only brand of radio that has a local provider that can respond immediately for repairs to repeaters, mobiles and radios; and

WHEREAS, the Soldotna Dispatch Center software and equipment is mainly Motorola and has allowed for seamless interoperability with respective service areas and state agencies; and

WHEREAS, the Kenai Peninsula Borough has been able to maintain a spare parts inventory and can complete most simple repairs in-house, resulting in a cost savings to the respective service areas; and

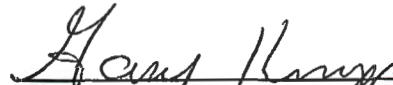
WHEREAS, at the Kenai Peninsula Fire Chiefs' Meeting held on August 11, 2011, this standardization was unanimously supported by all attendees;

NOW, THEREFORE, BE RESOLVED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH:


SECTION 1. That the Kenai Peninsula Borough Assembly authorizes the standardization of emergency services communication equipment throughout the Kenai Peninsula Borough to be the Motorola brand.

SECTION 2. That this resolution shall take effect immediately upon its adoption.

ADOPTED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH THIS 6TH DAY OF SEPTEMBER, 2011.

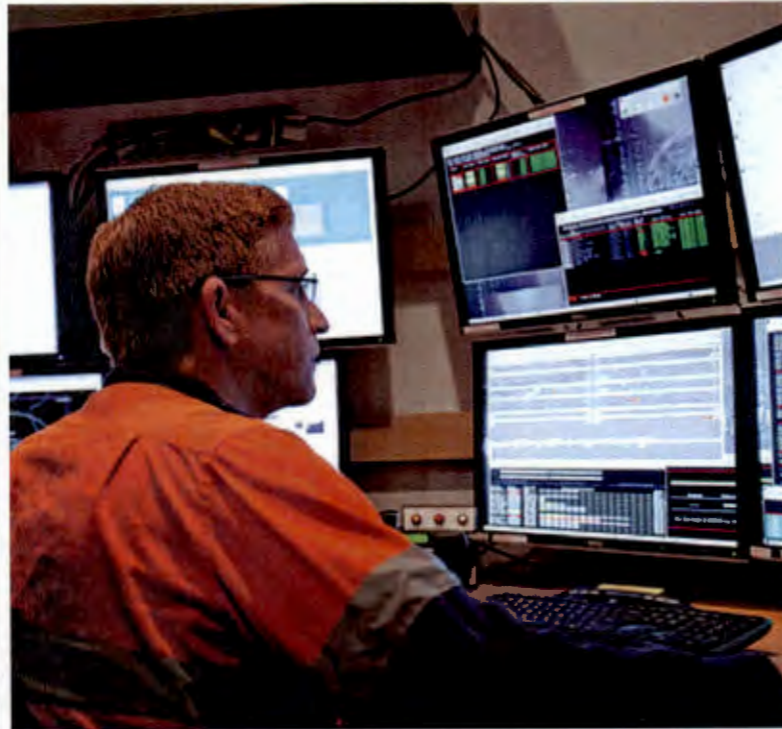
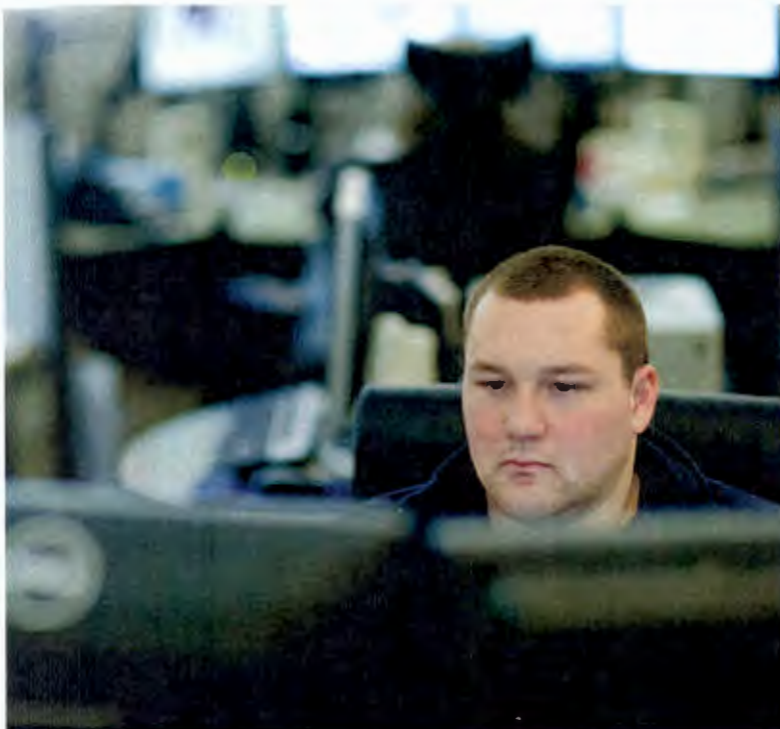

Gary Knopp, Assembly President

ATTEST:


Johni Blankenship, Borough Clerk



Yes: Haggerty, Johnson, McClure, Murphy, Pierce, Smalley, Smith, Tauriainen, Knopp
No: None
Absent: None



KENAI PENINSULA BOROUGH FIRE DEPT

WESA System Upgrade

08/23/2022



QUOTE-1815764

08/23/2022

KENAI PENINSULA BOROUGH FIRE DEPT
Western Emergency Services
15727 Kingsley Road
Ninilchik, Alaska 99639

RE: Motorola Quote for WESA System Upgrade
Dear Robert Mathis,

Motorola Solutions is pleased to present KENAI PENINSULA BOROUGH FIRE DEPT with this quote for quality communications equipment and services. The development of this quote provided us the opportunity to evaluate your requirements and propose a solution to best fulfill your communications needs.

This information is provided to assist you in your evaluation process. Our goal is to provide KENAI PENINSULA BOROUGH FIRE DEPT with the best products and services available in the communications industry. Please direct any questions to Cheryl Moore at cmoore@procommak.com.

We thank you for the opportunity to provide you with premier communications and look forward to your review and feedback regarding this quote.

Sincerely,

Cheryl Moore

Motorola Solutions Manufacturer's Representative

Billing Address:
KENAI PENINSULA BOROUGH
FIRE DEPT
Western Emergency Services
15727 Kingsley Road
Ninilchik, Alaska 99639

Quote Date:08/23/2022
Expiration Date:11/21/2022
Quote Created By:
Cheryl Moore
cmoore@procommak.com
907-563-1176 x147

End Customer:
KENAI PENINSULA BOROUGH FIRE
DEPT
Robert Mathis
rmathis@kpb.us
907-235-6700

Contract: NASPO

Line #	Item Number	Description	Qty	List Price	Sale Price	Ext. Sale Price
	APX™ 6500 / Enh Series	ENHANCEDAPX6500				
1	M25KSS9PW1BN	APX6500 ENHANCED VHF MOBILE	30	\$3,253.00	\$2,374.69	\$71,240.70
1a	QA01648AA	ADD: HW KEY SUPPLEMENTAL DATA	30	\$6.00	\$4.38	\$131.40
1b	G996AS	ENH: OVER THE AIR PROVISIONING	30	\$110.00	\$80.30	\$2,409.00
1c	GA00580AA	ADD: TDMA OPERATION	30	\$495.00	\$361.35	\$10,840.50
1d	G66BJ	ADD: DASH MOUNT E5 APXM	30	\$138.00	\$100.74	\$3,022.20
1e	G51AU	ENH: SMARTZONE OPERATION APX6500	30	\$1,320.00	\$963.60	\$28,908.00
1f	G78AT	ENH: 3 YEAR ESSENTIAL SVC	30	\$176.00	\$176.00	\$5,280.00
1g	GA01606AA	ADD: NO GPS/WI-FI ANTENNA NEEDED	30	\$0.00	\$0.00	\$0.00
1h	B18CR	ADD: AUXILIARY SPKR 7.5 WATT APX	30	\$66.00	\$48.18	\$1,445.40
1i	G89AC	ADD: NO RF ANTENNA NEEDED	30	\$0.00	\$0.00	\$0.00



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Motorola Solutions, Inc.: 500 West Monroe, United States - 60661 - #: 36-1115800



QUOTE-1815764
WESA System Upgrade

Line #	Item Number	Description	Qty	List Price	Sale Price	Ext. Sale Price
1j	G444AH	ADD: APX CONTROL HEAD SOFTWARE	30	\$0.00	\$0.00	\$0.00
1k	G806BL	ENH: ASTRO DIGITAL CAI OP APX	30	\$567.00	\$413.91	\$12,417.30
1l	GA01670AA	ADD: APX E5 CONTROL HEAD	30	\$717.00	\$523.41	\$15,702.30
1m	W22BA	ADD: STD PALM MICROPHONE APX	30	\$79.00	\$57.67	\$1,730.10
1n	G193AK	ADD: ADP ONLY (NON-P25 CAP COMPLIANT) (US ONLY)	30	\$0.00	\$0.00	\$0.00
1o	G361AH	ENH: P25 TRUNKING SOFTWARE APX	30	\$330.00	\$240.90	\$7,227.00
2	NNTN7624C	CHARGER,CHR IMP VEH EXT NAEU KIT	10	\$509.76	\$372.12	\$3,721.20
APX™ Consolette						
3	L37TSS9PW1AN	ALL BAND CONSOLETTTE	3	\$9,551.00	\$6,972.23	\$20,916.69
3a	L998AB	ADD: LIMITED FRONT PANEL W/CLOCK/VU	3	\$528.00	\$385.44	\$1,156.32
3b	G996AS	ENH: OVER THE AIR PROVISIONING	3	\$110.00	\$80.30	\$240.90
3c	GA00580AA	ADD: TDMA OPERATION	3	\$495.00	\$361.35	\$1,084.05
3d	G51AT	ENH:SMARTZONE	3	\$1,650.00	\$1,204.50	\$3,613.50
3e	GA05507AA	DEL: DELETE 7/800MHZ BAND	3	-\$800.00	-\$584.00	-\$1,752.00
3f	GA05509AA	DEL: DELETE UHF BAND	3	-\$800.00	-\$584.00	-\$1,752.00
3g	G78AR	ADD: 3Y ESSENTIAL SERVICE	3	\$176.00	\$176.00	\$528.00
3h	G806BL	ENH: ASTRO DIGITAL CAI OP APX	3	\$567.00	\$413.91	\$1,241.73
3i	G193AK	ADD: ADP ONLY (NON-P25 CAP COMPLIANT) (US ONLY)	3	\$0.00	\$0.00	\$0.00
3j	G361AH	ENH: P25 TRUNKING SOFTWARE APX	3	\$330.00	\$240.90	\$722.70
MCD 5000 Deskset System						



Any sales transaction following Motorola's quote is based on and subject to the terms and conditions of the valid and executed written contract between Customer and Motorola (the "Underlying Agreement") that authorizes Customer to purchase equipment and/or services or license software (collectively "Products"). If no Underlying Agreement exists between Motorola and Customer, then Motorola's Standard Terms of Use and Motorola's Standard Terms and Conditions of Sales and Supply shall govern the purchase of the Products.

Motorola Solutions, Inc.: 500 West Monroe, United States - 60661 - #: 36-1115800



QUOTE-1815764
WESA System Upgrade

Line #	Item Number	Description	Qty	List Price	Sale Price	Ext. Sale Price
4	HKVN4865A	LICENSE,CD, MCD 5000 DOCUMENTATION	1	\$0.00	\$0.00	\$0.00
5	F2380A	SM,MCD 5000 DESKSET	2	\$2,275.00	\$1,820.00	\$3,640.00
6	FHN7469A	ASSY,P/S,MCD 5000 DESKSET / RGU PWR SPLY W/ USA PWR CORD	3	\$100.00	\$80.00	\$240.00
7	F7879B	SM, RADIO GATEWAY UNIT (RGU) Land switch not included in this quote, but may be required.	1	\$2,275.00	\$1,820.00	\$1,820.00
8	RMN5138B	AUDIO ACCESSORY-HEADSET,3M PELTOR MT SERIES 2-WAY COMM HDST MT7H79B-97-UL-34, NECKBAND	10	\$475.48	\$347.10	\$3,471.00
	APX™ 6000 Series	APX6000				
9	H98KGF9PW6BN	APX6000 VHF MHZ MODEL 2.5 PORTABLE	6	\$3,595.00	\$2,624.35	\$15,746.10
9a	QA01648AA	ADD: HW KEY SUPPLEMENTAL DATA	6	\$6.00	\$4.38	\$26.28
9b	G996AU	ADD: PROGRAMMING OVER P25 (OTAP)	6	\$110.00	\$80.30	\$481.80
9c	Q667BB	ADD: ADP ONLY (NON-P25 CAP COMPLIANT) (US ONLY)	6	\$0.00	\$0.00	\$0.00
9d	Q361AR	ADD: P25 9600 BAUD TRUNKING	6	\$330.00	\$240.90	\$1,445.40
9e	Q58AL	ADD: 3Y ESSENTIAL SERVICE	6	\$121.00	\$121.00	\$726.00
9f	QA00580AC	ADD: TDMA OPERATION	6	\$495.00	\$361.35	\$2,168.10
9g	H842AU	ADD: SINGLE UNIT PACKING	6	\$0.00	\$0.00	\$0.00
9h	H38BT	ADD: SMARTZONE OPERATION	6	\$1,320.00	\$963.60	\$5,781.60
9i	Q806BM	ADD: ASTRO DIGITAL CAI OPERATION	6	\$567.00	\$413.91	\$2,483.46
10	NNTN8860A	CHARGER, SINGLE-UNIT, IMPRES 2, 3A, 115VAC, US/NA	6	\$169.56	\$123.78	\$742.68



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Motorola Solutions, Inc.: 500 West Monroe, United States - 60661 - #: 36-1115800



QUOTE-1815764
WESA System Upgrade

Line #	Item Number	Description	Qty	List Price	Sale Price	Ext. Sale Price
11	HKN6184C	CBL ASSY:CABLE CH, PROGRAMMING, USB	1	\$57.20	\$45.76	\$45.76
12	HAD4021A	VHF ANT WIDEBAND 136-174 MHZ	4	\$64.80	\$47.30	\$189.20
Grand Total				\$229,082.37(USD)		

Notes:

- Unless otherwise noted, this quote excludes sales tax or other applicable taxes (such as Goods and Services Tax, sales tax, Value Added Tax and other taxes of a similar nature). Any tax the customer is subject to will be added to invoices.



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Motorola Solutions, Inc.: 500 West Monroe, United States - 60661 ~ #: 36-1115800



Purchase Order Checklist	
Marked as PO/ Contract/ Notice to Proceed on Company Letterhead (PO will not be processed without this)	
PO Number/ Contract Number	
PO Date	
Vendor = Motorola Solutions, Inc.	
Payment (Billing) Terms/ State Contract Number	
Bill-To Name on PO must be equal to the Legal Bill-To Name	
Bill-To Address	
Ship-To Address (If we are shipping to a MR location, it must be documented on PO)	
Ultimate Address (If the Ship-To address is the MR location then the Ultimate Destination address must be documented on PO)	
PO Amount must be equal to or greater than Order Total	
Non-Editable Format (Word/ Excel templates cannot be accepted)	
Bill To Contact Name & Phone # and EMAIL for customer accounts payable dept	
Ship To Contact Name & Phone #	
Tax Exemption Status	
Signatures (As required)	

Kenai Peninsula Borough

Purchasing & Contracting

MEMORANDUM

TO: Charlie Pierce, Mayor

THRU: John Hedges, Purchasing & Contracting Director *JH*

FROM: Dil Uhlin, Road Service Area Director *DU*

DATE: September 20, 2022

RE: Authorization to Award a Contract for ITB23-016 Brushing Vegetation Control – North Region

The Purchasing and Contracting Office formally solicited and received bids for the ITB23-016 Brushing Vegetation Control – North Region. Bid packets were released on August 26, 2022 and the Invitation to Bid was advertised in the Peninsula Clarion on August 26, 2022, Homer News on August 25, 2022 and Seward Journal on August 24, 2022.

The project consists of the contractor providing all labor and materials to perform vegetation control services in the North Region.

On the due date of September 8, 2022, four (4) bids were received and reviewed to ensure that all the specifications and delivery schedules were met. The low bid of \$27,179.25 was submitted by Today Unlimited, Inc.

Your approval for this bid award is hereby requested. Funding for this project is in account number 236.33950.00000.43952.

Baron Rhoades for CP

Charlie Pierce, Mayor

9/26/2022

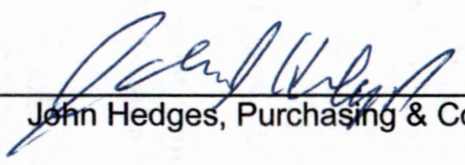
Date

FINANCE DEPARTMENT FUNDS VERIFIED	
Acct. No.	236.33950.00000.43952
Amount	\$27,179.25
By: <i>CH</i> <i>BH</i>	Date: 9/22/2022

NA

**KENAI PENINSULA BOROUGH
PURCHASING & CONTRACTING****BID TAB FOR: ITB23-016 BRUSHING VEGETATION CONTROL - North Region**

CONTRACTOR	LOCATION	BASE BID
Todaly Unlimited, Inc.	Soldotna, Alaska	\$27,179.25
River City Construction, LLC	Soldotna, Alaska	\$27,220.00
Get Plowed Sno-Removal	Soldotna, Alaska	\$28,695.00
Chumley's Inc.	Nikiski, Alaska	\$36,818.43

DUE DATE: September 8, 2022**KPB OFFICIAL:**
John Hedges, Purchasing & Contracting Director

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Kenai Peninsula Borough

Purchasing & Contracting

MEMORANDUM

TO: Charlie Pierce, Mayor

THRU: John Hedges, Purchasing & Contracting Director *JH*

FROM: Dil Uhlin, Road Service Area Director *DU*

DATE: September 20, 2022

RE: Authorization to Award a Contract for ITB23-017 Brushing Vegetation Control – South Region

The Purchasing and Contracting Office formally solicited and received bids for the ITB23-017 Brushing Vegetation Control – South Region. Bid packets were released on August 26, 2022 and the Invitation to Bid was advertised in the Peninsula Clarion on August 26, 2022, Homer News on August 25, 2022 and Seward Journal on August 24, 2022.

The project consists of the contractor providing all labor and materials to perform vegetation control services in the South Region.

On the due date of September 8, 2022, five (5) bids were received and reviewed to ensure that all the specifications and delivery schedules were met. The low bid of \$45,768 was submitted by Todaly Unlimited, Inc.

Your approval for this bid award is hereby requested. Funding for this project is in account number 236.33950.00000.43952.

Charlie Pierce for CP

Charlie Pierce, Mayor

9/26/2022

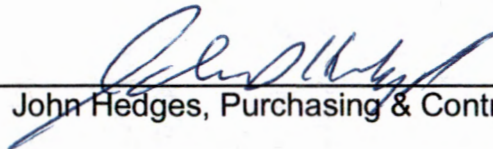
Date

FINANCE DEPARTMENT FUNDS VERIFIED	
Acct. No.	236.33950.00000.43952
Amount	\$45,768.00
By: <i>CJ BH</i>	Date: 9/22/2022

NA

**KENAI PENINSULA BOROUGH
PURCHASING & CONTRACTING****BID TAB FOR: ITB23-017 BRUSHING VEGETATION CONTROL - South Region**

CONTRACTOR	LOCATION	BASE BID
Todaly Unlimited, Inc.	Soldotna, Alaska	\$45,768.00
River City Construction, LLC	Soldotna, Alaska	\$48,860.00
Get Plowed Sno-Removal	Soldotna, Alaska	\$69,687.00
Paul's Services	Anchor Point, Alaska	\$78,000.00
East Road Services, Inc.	Homer, Alaska	\$286,785.00

DUE DATE: September 8, 2022**KPB OFFICIAL:**
John Hedges, Purchasing & Contracting Director

Kenai Peninsula Borough
Purchasing & Contracting

MEMORANDUM

TO: Charlie Pierce, Mayor

THRU: John Hedges, Purchasing & Contracting Director *JH*

FROM: Dil Uhlin, Road Service Area Director *DU*

DATE: September 20, 2022

RE: Authorization to Award a Contract for ITB23-018 Brushing Vegetation Control – East Region, Unit 3

The Purchasing and Contracting Office formally solicited and received bids for the ITB23-018 Brushing Vegetation Control – East Region, Unit 3. Bid packets were released on August 26, 2022 and the Invitation to Bid was advertised in the Peninsula Clarion on August 26, 2022, Homer News on August 25, 2022 and Seward Journal on August 24, 2022.

The project consists of the contractor providing all labor and materials to perform vegetation control services in the East Region, Unit 3.

On the due date of September 8, 2022, five (5) bids were received and reviewed to ensure that all the specifications and delivery schedules were met. The low bid of \$11,250 was submitted by Todaly Unlimited, Inc.

Your approval for this bid award is hereby requested. Funding for this project is in account number 236.33950.00000.43952.

Charlie Pierce for CP

Charlie Pierce, Mayor

9/26/2022

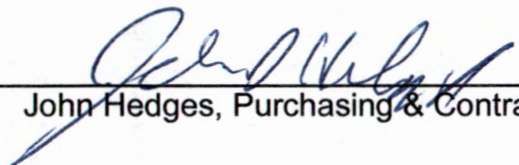
Date

FINANCE DEPARTMENT FUNDS VERIFIED	
Acct. No.	<u>236.33950.00000.43952</u>
Amount	<u>\$11,250.00</u>
By: <i>CS BH</i>	Date: <u>9/22/2022</u>

NA

**KENAI PENINSULA BOROUGH
PURCHASING & CONTRACTING****BID TAB FOR: ITB23-018 BRUSHING VEGETATION CONTROL - East Region**

CONTRACTOR	LOCATION	BASE BID
Todaly Unlimited, Inc.	Soldotna, Alaska	\$11,250.00
Metco, Inc.	Seward, Alaska	\$12,050.00
River City Construction, LLC	Soldotna, Alaska	\$21,500.00
Get Plowed Sno-Removal	Soldotna, Alaska	\$25,060.00
Andrews and Sons LLC	Seward, Alaska	\$177,000.00

DUE DATE: September 8, 2022**KPB OFFICIAL:**
John Hedges, Purchasing & Contracting Director

Kenai Peninsula Borough
Purchasing & Contracting

MEMORANDUM

TO: Charlie Pierce, Mayor

THRU: John Hedges, Purchasing & Contracting Director *JH*

FROM: Dil Uhlin, Road Service Area Director *DU*

DATE: September 20, 2022

RE: Authorization to Award a Contract for ITB23-019 Brushing Vegetation Control
– West Region, Units 3, 4 & 5

The Purchasing and Contracting Office formally solicited and received bids for the ITB23-019 Brushing Vegetation Control – West Region, Units 3, 4 & 5. Bid packets were released on August 26, 2022 and the Invitation to Bid was advertised in the Peninsula Clarion on August 26, 2022, Homer News on August 25, 2022 and Seward Journal on August 24, 2022.

The project consists of the contractor providing all labor and materials to perform vegetation control services in the West Region, Units 3, 4 & 5.

On the due date of September 8, 2022, four (4) bids were received and reviewed to ensure that all the specifications and delivery schedules were met. The low bid of \$22,590 was submitted by Totally Unlimited, Inc.

Your approval for this bid award is hereby requested. Funding for this project is in account number 236.33950.00000.43952.

Charlie Pierce for CP

Charlie Pierce, Mayor

9/26/2022

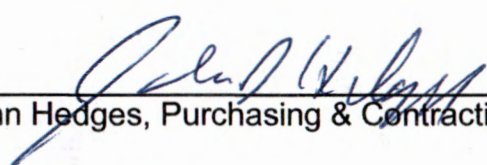
Date

FINANCE DEPARTMENT FUNDS VERIFIED	
Acct. No.	236.33950.00000.43952
Amount	\$22,590.00
By: <i>CH</i> <i>BH</i>	Date: 9/22/2022

NA

**KENAI PENINSULA BOROUGH
PURCHASING & CONTRACTING****BID TAB FOR: ITB23-019 BRUSHING VEGETATION CONTROL - West Region , Units 3, 4 & 5**

CONTRACTOR	LOCATION	BASE BID
Todaly Unlimited, Inc.	Soldotna, Alaska	\$22,590.00
River City Construction, LLC	Soldotna, Alaska	\$25,830.00
Mountain Vista Estates dba Captain Cook Construcion	Clam Gulch, Alaska	\$48,000.00
Get Plowed Sno-Removal	Soldotna, Alaska	\$83,419.00

DUE DATE: September 8, 2022**KPB OFFICIAL:**
John Hedges, Purchasing & Contracting Director

Kenai Peninsula Borough
Human Resources Department

MEMORANDUM

TO: Charlie Pierce, Borough Mayor
THRU: John D. Hedges, Purchasing and Contracting Director JH
FROM: Justen Huff, Director of Human Resources JH
DATE: September 27, 2022
RE: FutureSync Sole Source Waiver

In FY22 the assembly, through resolution 2021-076, authorized a sole source award of leadership training services to FutureSync International. The authorization was for a not to exceed amount of \$61,000.00. The total final cost of those leadership-training services was \$40,100.00.

Funding was included in the 2023 fiscal year budget to provide the same FutureSync International leadership training to the next group Borough staff. It was the intent of this appropriation to provide consistency in the previous years training to the next group of Borough leaders.

Utilizing the remaining \$20,900.00 from FY22 and the funds from the FY23 budget, Human Resources is requesting to sole source to FutureSync International for this year's training services.

Based on last years' experience, it is in the best interest of the Borough to provide consistent training to all Borough leaders. Funding for this service is proposed by FutureSync International at a not to exceed amount of \$29,000.00.

Thank you for your consideration of this request.

Approved: Aaron Rhoades for CP
Charlie, Pierce, Mayor

 9/28/2022
Date

**FINANCE DEPARTMENT
FUNDS VERIFIED**

Acct. No: 100.11230.00000.43011, Amount: \$8,100.00

Acct. No: 100.94910.FCLTY.43011, Amount: \$20,900.00

By: CJ Bit Date: 9/28/2022

NA



Legal Department

144 N. Binkley Street, Soldotna, Alaska 99669 • (907) 714-2120 • (907) 714-2379 Fax

Charlie Pierce
Borough Mayor

LITIGATION STATUS REPORT

TO: Brent Johnson, Assembly President
Zen Kelly, President, Board of Education
Members, Kenai Peninsula Borough Assembly
Members, Kenai Peninsula Borough School District

THRU: Charlie Pierce, Mayor *AK for CP*

FROM: Sean Kelley, Borough Attorney *SK*

DATE: September 29, 2022

RE: Litigation Status Report – Quarter Ending 09/30/22

This report includes brief descriptions of pending non-routine court cases, as well as administrative appeals and code compliance enforcement actions set for hearing before the administrative hearing officer.

A. The following is a summary of the non-routine litigation in which name the Borough and/or School District as parties. This list does not include the real property tax foreclosures and numerous standard tax collection cases pursued by the Borough:

1. Halstead v. Anderson and Kenai Peninsula School District, Case No. 3KN-18-00744CI. Plaintiff has sued Mr. Anderson and the Kenai Peninsula Borough School District for damages relating to Mr. Anderson's sexual abuse of her as a minor. The complaint against the school district claims it failed to protect her from Mr. Anderson and seeks damages and actual attorney fees. Trial scheduled for the week of October 17, 2022, was vacated. A conference has been set for October 24, 2022, to schedule a new trial date. Discovery is ongoing.
2. Kenai Peninsula Borough School District v. Fischer, Case No. 3KN-19-00185CI. This is a subrogation case that was filed against a School District employee to recover substantial health care costs paid by the health care plan ("Plan"). The trial set for September 26, 2022, was vacated due to summary judgment

Page -2-

September 29, 2022

Re: Litigation Status Report

entered in favor of plaintiff. Currently pending before the court is a request from the defendant seeking an extension of time to file a motion of reconsideration of the court's order on summary judgment.

3. Furie Operating Alaska, LLC. v. State of Alaska, Department of Revenue, and State Assessment Review Board, Case No. 3AN-21-06462CI. The owner of oil and gas production property appealed the State Assessment Review Board's decision upholding the tax assessment of the property performed by the State of Alaska, Department of Revenue pursuant to AS 43.56. The borough entered an appearance in this matter and has engaged Jessica Dillon a partner at the firm Dillon & Findley in Anchorage to act as lead counsel in this matter. This appeal has been consolidated with the taxpayer's 2022 tax assessment appeal. A non-jury trial is currently scheduled in this matter for the week of July 24, 2023.

B. The following is a summary of open or recently resolved administrative appeals from Planning Commission decisions:

1. Case No. 2020-01 PCA, Beachcomber. Neighboring property owners appealed a planning commission's decision approving a modification of a conditional use material site permit. The Borough filed a notice of non-participation in the matter and is not a party to the appeal. This case is stayed currently.
2. Case No. 2022-04 PCA, Bilben, et al. v. KPB PC, Beachcomber LLC, et al., This case involves a second appeal to the Office of Administrative Hearings ("OAH") of a planning commission conditional land use permit (CLUP) approval after the matter was remanded from the superior court. The Borough did not participate in the superior court appeal because only private interests were at stake. The superior court issued its decision remanding the matter back to the planning commission for additional findings. Subsequently, Beachcomber, LLC filed an appeal to the Alaska Supreme Court. The Supreme Court denied the petition for review and the matter went before the planning commission on remand. In January 2022, the planning commission determined not to reopen the record for new evidence or public comment, and to deliberate in adjudicative session. On April 11, 2022, the planning commission voted to deny the CLUP on remand. Opening statements were filed with the OAH on Wednesday, September 21, 2022. The hearing is set for November 7.

3. Case No. 2022-02 PCA and 2022-03 PCA, Rosenberg & Schielbein v CIRI. Neighboring property owners appealed the planning commission's decision in 2021-03 PCA, Rosenberg v. CIRI, approving a modification of a conditional land use permit which was subsequently upheld by the planning commission. Mr. Rosenberg and Mr. Schiefelbien have now appealed the decision in 2021-03 PCA. Mr. Rosenberg's case was subsequently dismissed on lack of standing grounds. The hearing on the Schiefelbien appeal was held on July 27, 2022. Thirty days later, the OAH issued its decision upholding the planning commission's decision. OAH's decision was not timely appealed to the superior court. This matter is resolved and closed.
4. Case No. 2022-05 PCA, Kossler. This is an appeal of the planning commission's decision to uphold the June 23, 2022 Plat Committee's conditional preliminary approval of East Oyster Cove Subdivision Preliminary Plat as requested by applicant, Alaska Mental Health Trust Authority. This appeal has just recently been referred to the OAH which will establish the pre-hearing and hearing schedule.

Introduced by:	Johnson, Chesley
Date:	08/09/22
Hearing:	09/06/22 & 09/20/22
Action:	Introduced and set for public hearing
Vote:	7 Yes, 2 No, 0 Absent
Date:	09/06/22
Action:	Postponed to 10/25/22
Vote:	9 Yes, 0 No, 0 Absent
Date:	10/25/22
Action:	
Vote:	

KENAI PENINSULA BOROUGH ORDINANCE 2022-36

AN ORDINANCE AMENDING KPB CHAPTER 21.25 AND KPB CHAPTER 21.29 REGARDING CONDITIONAL LAND USE PERMITS AND MATERIAL SITE PERMITS, UPDATING NOTICE, APPLICABILITY, PERMIT TYPES, APPLICATION REQUIREMENTS, STANDARDS AND PERMITS CONDITIONS

WHEREAS, there are goals and objectives within the 2019 Kenai Peninsula Borough Comprehensive Plan to establish policies that better guide land use to minimize land use conflicts, maintain property values, protect natural systems and support individual land use freedoms, as well as strategy objectives to update the Borough's existing conditional use regulations for gravel extraction and other uses to better address reoccurring land use conflicts; and

WHEREAS, land use conflicts related to earth materials extraction and processing sites remain a point of contention within the Borough; and

WHEREAS, under current state law a first or second class borough shall provide for planning, platting, and land use regulation on an areawide basis, except where such powers have been delegated to a city within the Borough; and

WHEREAS, land use regulation includes zoning powers; and

WHEREAS, the Borough has enacted KPB Chapter 21.04, Zoning Districts, and has established two zoning districts: the municipal district and the rural district; and

WHEREAS, within the rural district, KPB 21.25.040 requires a permit for the commencement of certain land uses within the rural district of the Kenai Peninsula Borough; and

WHEREAS, approximately 253 registered prior existing use material sites and approximately 104 conditional land use permits for material sites have been granted since 1996; and

- WHEREAS,** the assembly established a material site work group by adoption of Resolution 2018-004 (Substitute) to engage in a collaborative discussion involving the public and industry to make recommendations regarding the material site code; and
- WHEREAS,** the ordinance, Ordinance 2019-30, incorporating the final report and work group recommendations, failed enactment following public hearing and a vote during the assembly's October 24, 2019 meeting; and
- WHEREAS,** in late 2021, due to continued conflict including costly administrative and court appeals, the administration brought this land use issue back to the assembly and requested assembly action regarding the permitting process related to earth materials extraction and processing; and
- WHEREAS,** throughout this process the planning department, the material site work group, the planning commission, and the assembly have received many verbal and written public comments from Borough residents, professionals, and site operators; and
- WHEREAS,** the assembly first considered this issue by looking at the same ordinance that failed in 2019, relabeled Ordinance 2021-41; and
- WHEREAS,** Ordinance 2021-41 and a related substitute ordinance were tabled by the assembly at its February 1, 2022 to allow for consideration by the assembly as a committee of the whole, and
- WHEREAS,** the availability of three different types of conditional land use permits for material sites are designed to separate impacts of such uses and tailor applicable conditions and requirements to the associated impacts; and
- WHEREAS,** the Kenai Peninsula Borough recognizes the importance of implementing bonding, as applicable, to ensure neighboring properties and water sources are insured; and
- WHEREAS,** implementing a systematic process to determine a prior-existing use will allow the planning department to better identify the number of and types of pre-existing use sites in existence on the Kenai Peninsula and address complaints regarding nonconforming prior existing material sites; and
- WHEREAS,** requiring all prior-existing use operations to comply with reclamation plan and hours of operation requirements protects public health, safety, and general welfare; and
- WHEREAS,** requiring all prior-existing use operations which extract material below or within four feet of the seasonal highwater table to conduct operations in accordance with the requirements outlined in the relevant sections of code protects public health, safety, and general welfare; and

WHEREAS, buffer zones, dust control, hours of operation, and setbacks as mandatory conditions applicable to all permits, along with the discretionary conditions and conditions specific to processing or extraction with the water table, will reduce dust, noise, and attractive nuisances, thereby promoting public health, safety, and general welfare; and

WHEREAS, providing the planning director or planning commission the ability to add certain discretionary conditions recognizes the unique challenges material sites on the Kenai Peninsula present and that all conditions appropriate for one material site on one part of the Kenai Peninsula may not be appropriate for another site located on another part of the Kenai Peninsula; and

WHEREAS, after many years of work, public input, and public deliberative process, this ordinance enacts a new notice section to align with notice requirements of Title 20 of Borough code and enacts a new chapter of code related to material sites wherein it establishes a multi-permit system with standards and conditions applicable to each permit type that are intended to encourage responsible development while also protecting and promoting the public health, safety, and general welfare of all residents and visitors of the Kenai Peninsula Borough; and

WHEREAS, the planning commission at its regularly scheduled meeting held on _____ 2022, recommended _____;

NOW, THEREFORE, BE IT ORDAINED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH:

SECTION 1. That KPB 21.25.050 is hereby amended as follows.

21.25.050. Permit considerations—Public hearing required.

- A. Within [21]30 days of receiving an application, the planning director or designee shall review the submitted application for completeness and compliance with this chapter. If it is incomplete or does not meet the requirements of this chapter, the planning director shall notify the applicant in writing. The planning director shall thereafter either return the application to the applicant or schedule the application to be considered by the planning commission at the next appropriate scheduled meeting.

...

SECTION 2. That the Kenai Peninsula Borough Code of Ordinances is hereby amended by repealing and reenacting KPB Chapter 21.25.060, Notice, which shall read as follows:

21.25.060. Notice.

- A. Except for counter permits for material sites issued under KPB 21.29.020(A) or expressly excepted elsewhere in this title, notice of any pending application required under this title shall be given in accordance with this section.
- B. Required forms of notice are as follows:

 - 1. Notice of the pending application will be published on the borough website.
 - 2. When available, the notice will also be posted on a public bulletin of the impacted community.
 - 3. At the beginning of the notice period a copy of the notice will be sent by First Class U.S. Mail to all owners and/or leaseholders of record of property located with a radius of one-half mile of the subject property.
- C. The notice must contain a description of the proposed location, the type of proposed land use or a description of the action requested, as applicable, the applicant's name, where written comments may be submitted, the last deadline for submitting written comments to the planning commission, and the date, time and location of the public hearing.
- D. The failure of any person to receive any notice required under this section, where the records of the borough indicate the notice was provided in a timely and proper manner, shall not affect the validity of any proceeding under this title or be basis for appeal.

SECTION 3. That the Kenai Peninsula Borough Code of Ordinances is hereby amended by repealing and reenacting KPB Chapter 21.29, Material Site Permits, which shall read as follows:

21.29.005. Intent and Purpose.

The purpose of this chapter is to provide a land use permitting process to regulate the operation, scope, and duration of earth materials extraction and processing within the borough while promoting the public health, safety, and general welfare of the Kenai Peninsula Borough. It is the further purpose of this chapter to promote compatible, orderly development.

21.29.010. Applicability.

- A. This chapter applies to all private and public lands in the borough except where the use is prohibited by ordinance within a local option zoning district or exempt under KPB 21.29.015.
- B. This chapter does not apply within the incorporated cities of the Kenai Peninsula Borough.
- C. Earth material extraction within 300 linear feet from riparian wetlands and the seasonal high-water level of naturally-occurring open water bodies, such as a lake, pond, river, stream, or ocean, is prohibited. This prohibition does not apply to man-made water bodies or isolated ponds of less than one acre on private property.
- D. All operations must be conducted in accordance with the current publication of the State of Alaska, Alaska DEC User's Manual Best Management Practices for Gravel/Rock Aggregate Extraction Projects. In the event a provision of this chapter conflicts with the State of Alaska's manual, this chapter controls.

21.29.015. Material extraction exempt from obtaining a permit.

- A. Material extraction which disturbs an area of less than one acre that is not in a mapped flood plain or subject to 21.29.010(B), does not enter the water table, and does not cross property boundaries, does not require a permit. There will be no excavation within 32 feet of a lot line.
- B. Material extraction taking place on dewatered bars within the confines of the Snow River and the streams within the Seward-Bear Creek Flood Service Area do not require a permit, however, operators subject to this exemption must provide the planning department with the information required by KPB 21.29.030(A)(1), (2), (6), (7) and a current flood plain development permit prior to beginning operations.
- C. A prior existing use under KPB 21.29.120 does not require a material extraction permit. Notwithstanding the foregoing, on or before January 1, 2026, a prior existing use under KPB 21.29.120 must: (1) provide a reclamation plan under KPB 21.29.060 that is approved by the planning director or designee; and (2) come into compliance with the buffer zone requirements under KPB 21.29.050(A)(1).

21.29.020. Types of permits available.

- A. Counter permit. A counter permit is required for earth material extraction which disturbs more than one acre and less than 10 cumulative un-reclaimed acres. Material processing, screening, or crushing, and material extraction within four feet of the seasonal high-water table is prohibited under a counter permit. A

counter permit is valid for a period of two years. Upon request from the applicant, the planning director, or designee, may grant one 12-month extension on a counter permit. Counter permits are approved by the planning director, or designees, and are not subject to notice requirements under KPB 21.25.060. The planning director's decision to approve or deny a counter permit may be appealed to the planning commission, which must act as the hearing officer, in accordance with KPB 21.20.

B. Conditional land use permit. A conditional land use permit (CLUP) is required for the following types of earth material extraction or uses:

1. Earth Materials Extraction CLUP. An Earth Materials Extraction CLUP is required for any material extraction which disturbs 10 or more cumulative acres. Material processing, screening or crushing, or extraction within four feet of the seasonal high-water table is prohibited under this permit. The standard conditions set out in KPB 21.29.050 are applicable to this type of CLUP.
2. Earth Materials Processing CLUP. An Earth Materials Processing CLUP is required for any operation that includes earth materials processing, screening, or crushing activities. The conditions set forth in KPB 21.29.050 plus the conditions set out in KPB 21.29.055 for material extraction processing area applicable to this type of CLUP.
3. Earth Materials Extraction Within Water Table CLUP. An Earth Materials Extraction within Water Table CLUP is required for material extraction and operations of any size within four feet of the seasonal high-water table. The conditions set forth in KPB 21.29.050 plus the requirements and conditions set forth in KPB 21.29.057 for material extraction within four feet of the seasonal high-water table are applicable to this type of CLUP.

An applicant may request a CLUP that includes one, two or all three of the above permit types. A CLUP is valid for a period of five years. A CLUP may be renewed in accordance with KPB 21.29.070. The provisions of KPB Chapter 21.25 are applicable to material site CLUPs and the provisions of KPB 21.25 and 21.29 are read in harmony. If there is a conflict between the provisions of KPB 21.25 and 21.29, the provisions of KPB 21.29 are controlling.

21.29.030. Application procedure.

A. In order to obtain a counter permit or CLUP under this chapter, an applicant must first complete and submit to the borough planning department a permit application, along with the fee listed in the most current Kenai Peninsula Borough Schedule of Rates, Charges and Fees. The planning director may determine that certain

contiguous parcels are eligible for a single permit. The application must include the following items, without which the application will be deemed incomplete:

1. Legal description of the parcel, KPB tax parcel ID number, and identification of whether the permit is for the entire parcel, or a specific location within a parcel;
2. Expected life span of the material site;
3. A buffer plan consistent with KPB 21.29.050(A)(1);
4. Reclamation plan consistent with KPB 21.29.060;
5. The depth of excavation;
6. Type of material to be extracted;
7. A site map provided by a professional surveyor licensed in the State of Alaska to include the following:
 - a. Location of excavation, and, if the site is to be developed in phases, the life span and expected reclamation date for each phase;
 - b. Proposed buffers consistent with KPB 21.29.050(A)(1), or alternate buffer plan;
 - c. Identification of all encumbrances, including but not limited to, easements;
 - d. Points of ingress and egress. Driveway permits must be acquired from either the state or borough as appropriate prior to submitting the application;
 - e. Anticipated haul routes, contingent on approval from the governmental agency with regulatory jurisdiction over the road;
 - f. Location of any processing areas on the parcel, if applicable;
 - g. North arrow;
 - h. The scale to which the site plan is drawn;
 - i. Preparer's name and date; and
 - j. Field verification must include staking the boundary of the parcel at sequentially visible intervals. The planning director may grant an exemption in writing to the staking requirements if the parcel boundaries are obvious or staking is unnecessary.
8. A site plan, prepared by a qualified independent civil engineer licensed and active in the State of Alaska to include the following:
 - a. Surface water protection measures, if any, for adjacent properties, including the use of diversion channels, interception ditches, on-site collection ditches, sediment ponds and traps, and silt fence;

2. Mining permit as required by the Alaska State Department of Natural Resources (ADNR) if extraction activities are to take place on state land;
3. Reclamation plan as required by ADNR, pursuant to A.S. 27.19;
4. Notice of intent for construction general permit or multi-sector general permit and storm water pollution prevention plan, and other associated permits or plans required by the Department of Environmental Conservation (DEC) pursuant to the Alaska Pollutant Discharge Elimination System (APDES) requirements;
5. United States Army Corps of Engineers (USACE) permit pursuant to Section 404 of the Clean Water Act, 33 U.S.C. 1344, if material extraction activity requires USACE approval; and
6. Any other applicable state or federal agency with regulatory authority of mining activities or earth materials extraction.

B. In addition to the requirements in subsection (A) of this section, all activity must be conducted in compliance with state or federal regulations governing the items listed below. Written documentation of compliance with these regulations is not required. Complaints received by the borough of violations of requirements within this section will be forwarded to the appropriate agency for enforcement, this includes but is not limited to:

1. Air quality.

- a. EPA air quality control permit is required for asphalt plants and crushers;
- b. ADNR burn permit is required for brush or stump burning. Combustibles must be stockpiled separate from noncombustibles, and burn permit requirements must be followed; and
- c. ADEC dust control and air quality regulations pertaining to burning activities must be followed.

2. Water quality. EPA or ADEC regulations controlling spills, spill reporting, storage and disposal of oil, anti-freeze and hydrocarbons.

3. Hazardous Materials. Use and storage of hazardous materials, waste and explosives.

- a. EPA regulations controlling use of hazardous materials must be followed; and
- b. U.S. Bureau of Alcohol, Tobacco, Firearms and Explosives regulations must be followed when storing or using explosives.

- C. Failure to comply with any of the requirements in subsections (A) and (B) of this section is a violation of the permit, and is subject to enforcement pursuant to KPB Chapter 21.50.

21.29.050. Permit conditions applicable to all permits.

- A. The planning commission or planning director, as applicable, must impose the following mandatory conditions prior to approval of a permit under this chapter:

1. Buffer Zone.

- a. A buffer area of 32 feet must be established between the area of excavation and the parcel boundaries. The buffer area may include one or more of the following: undisturbed natural vegetation that provides sufficient noise and street-level visual screening; an eight-foot earthen berm with a 2:1 slope; or a minimum eight-foot fence;
- b. A 2:1 slope must be maintained between the buffer zone and excavation floor on all inactive site walls. Material from the area designated for the 2:1 slope may be removed if the site plan provides the timeframe for removal and verification that suitable, stabilizing material will replace the removed material within 30 days of removal;
- c. Where an easement exists, a buffer must not overlap the easement, unless otherwise conditioned by the planning commission or planning director, as applicable; and
- d. This requirement may only be waived upon a finding by the planning director or planning commission, as applicable, that a lot line where the waiver is requested is directly adjacent to another material site.

2. Water source separation.

- a. Material extraction below or within four feet of the seasonal high-water table is prohibited unless the applicant is issued a CLUP Material Extraction Within Water Table Permit and the requirements and conditions set forth in KPB 21.29.057 are satisfied;
- b. Dewatering either by pumping, ditching or some other form of draining that removes water from the site or causes water to leave the site is prohibited;
- c. All permits shall be issued with a condition which prohibits any material extraction within 100 linear feet of any private well or water source existing prior to original permit issuance; and

- d. On site movement of water may be permitted pursuant to KPB 21.29.057 and if: (i) the operator provides a statement under seal and supporting data from a qualified independent civil engineer licensed and active in the State of Alaska that the dewatering will not lower any known water systems; and (ii) the applicant posts a bond for liability for potential accrued damages in an amount equivalent to the cost to replace each water wells within a 300-foot radius of the site. The rebuttable presumption is that the cost per well is a minimum of \$10,000.
- 3. Roads. Operations that impact borough roads must be conducted in accordance with the requirements and remedies of KPB Chapter 14.40.
- 4. Dust control. Dust suppression is required on haul roads within the boundaries of the material site by application of water or calcium chloride.
- 5. Hours of operation. Material extraction activities, including equipment operation, may only occur between the hours of 6:00 a.m. and 9:00 p.m. Alaska Standard Time (AKST), or as determined by the planning commission or planning director, as applicable, to be appropriate based on information presented.
 - a. Seasonal, project-based waiver. An applicant may request a seasonal, project-based waiver of the hours of operation requirements under this subsection. A waiver granted under this subsection is valid for six consecutive calendar months. To grant a waiver under this subsection, the commission must find that the waiver is necessary for a specific project, and that the waiver is not harmful to the public health, safety, and general welfare of borough residents.
- 6. Groundwater elevation. All material sites must maintain one monitoring well four feet below the proposed excavation per ten acres of excavated area.
- 7. Setback. Material site excavation areas must be 250 feet from the property boundaries of any local option zoning district, existing public school ground, private school ground, college campus, childcare facility, multi-purpose senior center, assisted living home, and licensed health care facility. If overlapping, the buffer areas of the excavation must be in addition to the 250-foot setback.

8. Permit boundaries. The buffers and any easements or right-of-way abutting the proposed permit area must be staked at sequentially visible intervals. Field verification and staking will require the services of a professional land surveyor. Stakes must be in place prior to issuance of the permit.
 9. Processing. Material extraction of any size that includes processing, screening, or crushing activities is prohibited unless the applicant is issued an Earth Materials Processing CLUP and the conditions set forth in KPB 21.29.055 are imposed on the permit.
- B. Discretionary Conditions. The planning commission or planning director, as applicable, may set conditions of approval for issuance of a counter permit or CLUP, as appropriate for the area in which the development is sited, for the following:
1. Setbacks/Buffer Area.
 - a. The mandatory buffer area condition in subsection (A) above may be increased, up to a maximum of 100 feet between the area of excavation and the parcel boundaries, if the planning commission finds based on substantial evidence presented that increasing the buffer area is necessary for the public health, welfare and safety of the surrounding community;
 - i. Upon request of the applicant, in lieu of any additional buffer area under this subsection designed to separate the use of material site activities from neighboring parcel boundaries, an eight-foot-high berm above the preexisting elevation may be constructed, prior to excavation, around the excavation area. If the excavation site area expands, the berm may move toward the permitted boundary until such limits of the permitted area are exhausted. The berm must be maintained at eight-foot height while permitted activity is occurring.
 - b. All other requirements of KPB 21.29.050(A)(1) apply; and
 - c. When a buffer area has been denuded prior to review of the application by the planning commission or planning director revegetation may be required.
 2. Road maintenance and repair. In consultation with the Road Service Area Director, road maintenance or repair of public right-of-way haul routes may be required of the permittee.

3. Ingress and egress. The planning commission or planning director may determine the points of ingress and egress for the material site. The permittee is not required to construct haul routes outside the parcel boundaries of the material site. Driveway authorization must be acquired, from either the state through an “Approval to Construct” or the borough road service area, as appropriate, prior to issuance of a material site permit when accessing a public right-of-way.
4. Dust suppression. Dust suppression may be required when natural precipitation is not adequate to suppress the dust generated by the material site traffic on public right-of-way haul routes.
5. Surface water protection. Use of surface water protection measures as specified in KPB 21.29.030(A)(8)(a).
6. Street-level screening. Street-level visual screening, noise mitigation, and lighting restrictions as appropriate for the surrounding area and in accordance with the standards set forth in KPB 21.29.040.

21.29.055. Earth materials processing.

In accordance with KPB 21.29.020(B)(2), a n Earth Materials Processing CLUP is required for earth materials processing activities, such as material screening or crushing. Prior to issuing a permit under this subsection, the planning commission must impose the mandatory conditions set forth in KPB 21.29.050(A) and discretionary conditions as the planning commission deems appropriate. In addition, the following requirements and permit conditions specific to an Earth Materials Processing CLUP apply:

- A. Setback. In the case of a CLUP, any equipment which conditions or processes material must be operated at least 300 feet from the parcel boundaries. At its discretion, the planning commission may waive the 300-foot processing distance requirement, or allow a lesser distance in consideration of and in accordance with existing uses of the properties in the vicinity at the time of approval of the permit.
- B. Hours of operation.
 1. Processing equipment may only be operated between 8:00 a.m. and 7:00 p.m. AKST, or as determined by the planning commission.
 2. The planning commission may grant exceptions to increase the hours of operation and processing in the event of an emergency or a good-cause finding that the increased hours of operation serve a public purpose and are not harmful to the public health, safety, and general welfare of borough residents. Such an exception shall not exceed 120 days.

3. Seasonal, project-based waiver. An applicant may request a seasonal, project-based waiver of the hours of operation requirements under this section. A waiver granted under this subsection is valid for six consecutive calendar months. To grant a waiver under this subsection, the commission must find that the waiver is necessary for a specific project, and that the waiver is not harmful to the public health, safety, and general welfare of borough residents.

21.29.057. Material extraction below or within four feet of the seasonal high-water table.

In accordance with KPB 21.29.020(B)(3), a CLUP is required for material extraction of material below or within four feet of the seasonal high water table. Prior to a permit being issued the planning commission must impose the mandatory conditions set forth in KPB 21.29.050(A) and discretionary conditions as deemed appropriate. In accordance with KPB 21.29.050(A)(2)(b) dewatering is prohibited. The following additional application requirements and permit conditions specific to a Material Extraction within the Water Table CLUP apply:

- A. Prior to application for a water table extraction permit, the following requirements must be met:
 1. Installation of a sufficient number of monitoring wells and test pits, as recommended by a qualified professional, to adequately determine groundwater flow direction, hydraulic gradient, water table and seasonal high-water table elevation. Monitoring well and test pit locations must provide the qualified professional with adequate information to characterize the entire property that will be permitted for material extraction. Well casing elevations must be surveyed to a vertical accuracy of 0.01 feet by a registered land surveyor and tied to NAVD 1988.
 2. Determination of seasonal high-water table elevation, groundwater flow direction, hydraulic gradient, and water table elevation for the site must be measured under the supervision of a qualified professional.
 3. A written report must be completed by a qualified professional that makes a determination about the potential adverse effects to groundwater and surface water body elevation, groundwater and surface water quality, surrounding water users and adjacent properties. The determination must be based on available data, interpretations of the data and knowledge of groundwater processes.
 4. The report must be submitted with the CLUP application and must:
 - a. Identify existing public water system sources (i.e., wells, springs, surface water intakes), as identified by the state, that are located

within one-half mile of the boundary of the property on which the activity will take place;

- b. Identify actual or presumed private drinking water wells located within one-half mile of the boundary of the property on which the activity will take place and include a copy of the available well logs;
- c. Identify existing regulated potential sources of contamination within at least one-half mile of the boundary of the property on which the activity will take place;
- d. Contain maps at appropriate scales presenting the results of the well search, the setbacks required by subsection (C)(7) of this section, and illustrating wetlands and water bodies; at least one map must show identified potential sources of contamination;
- e. Include the water table elevation monitoring data, monitoring well logs and records of any test pits, and a discussion of the seasonal high-water table determination; and
- f. Evaluate subsurface hydrologic conditions and identify potential adverse effects that may occur as a result of material extraction. The evaluation of the hydrologic conditions must include identifying confining layers.

B. In addition to the application requirements for a CLUP for earth materials extraction, the application for a water table extraction permit must include:

- 1. A description of the proposed extent and depth of material extraction beneath the seasonal high-water table.
- 2. A written report that meets the requirements of subsection (A)(4) of this section, a monitoring plan, and a spill prevention, control, and countermeasures plan as required by this section.

C. *Conditions.* In addition to the requirements of KPB 21.29.050, operating conditions for extraction within or below four feet of the seasonal high-water table are as follows:

- 1. Implement a monitoring plan that meets the requirements of this chapter. If existing wells will provide sufficient data, no additional wells are required.
- 2. Implement the spill prevention, control and countermeasures plan in accordance with Environmental Protection Agency's requirements for above ground storage tank operations regardless of the quantity of petroleum products on site.
- 3. Groundwater flow direction, hydraulic gradient, and groundwater table elevation for the subject parcel must be measured at least monthly during active extraction. Monitoring wells must be maintained or replaced with equivalent monitoring wells.

4. Water elevation monitoring data must be retained for two years following completion of reclamation activities and must be provided to the planning director upon request.
5. A qualified professional must annually submit a report to the department that includes water table elevation monitoring data.
6. Operations must not breach or extract material from a confined aquifer or a confining layer beneath a perched aquifer.
 - a. If evidence suggests a confined aquifer or confining layer has been breached, or if groundwater or surface water elevation changes rapidly or beyond natural variation, the director must be notified within 24 hours.
 - i. A hydrologic assessment, conducted by a qualified professional, to determine the affected area and the nature and degree of effects and a description of potential repair or mitigation options must be submitted to the director within 14 calendar days of notification; and
 - ii. Repair or mitigation sufficient to address identified effects must be initiated as soon as practical, not to exceed 45 calendar days from the date the assessment is received by the director.
7. Operations must maintain the following setbacks:
 - a. 500 feet from the nearest down-gradient drinking water source;
 - b. 350 feet from the nearest cross-gradient drinking water source;
 - c. 200 feet from the nearest up-gradient drinking water source; and
 - d. Minimum separation distances do not apply to drinking water sources constructed after a permit to extract material below the water table has been issued.

21.29.060. – Reclamation plan.

- A. All material site permit applications require an overall reclamation plan. A site plan for reclamation must be required including a scaled drawing with finished contours. A five-year reclamation plan must be submitted with a permit renewal request.

- B. The applicant may revegetate and must reclaim all disturbed land within the time period approved with the reclamation plan so as to leave the land in a stable condition wherein a 2:1 slope is maintained. Any revegetation must be done with a non-invasive plant species. Bonding must be required at \$750.00 per acre for all acreage included in the current five-year reclamation plan. In the alternative, the planning director may accept a qualified professional's estimate for determining the amount of bonding. If the applicant is bonded with the state, the borough's bonding requirement is waived. Compliance with reclamation plans will be enforced under KPB 21.50.
- C. The following measures must be considered in the preparation, approval and implementation of the reclamation plan, although not all will be applicable to every reclamation plan:
1. The area will be backfilled, graded and re-contoured using strippings, overburden, and topsoil so that it will be stabilized to a condition that will allow for revegetation under KPB 21.29.060(B).
 2. The topsoil used for reclamation must be reasonably free from roots, clods, sticks, and branches greater than 3 inches in diameter. Areas having slopes greater than 2:1 require special consideration and design for stabilization by an independent, professional civil engineer licensed and active in the State of Alaska.
 3. Exploration trenches or pits will be backfilled. Brush piles and unwanted vegetation must be removed from the site, buried or burned. Topsoil and other organics will be spread on the backfilled surface to inhibit erosion and promote natural revegetation.
 4. Topsoil mine operations must ensure a minimum of four inches of suitable growing medium is left or replaced on the site upon completion of the reclamation activity (unless otherwise authorized).
 5. Ponding may be used as a reclamation method as approved by the planning commission.
 6. The area will be reclaimed in a manner that screens the site from becoming a public attractive nuisance and in a manner that is not harmful to public health, safety, and general welfare.
- D. The five-year reclamation plan must describe the total acreage to be reclaimed relative to the total excavation plan.
- E. Close-out. Reclamation plans and requirements survive expiration, termination, or revocation of a permit granted under this chapter. In order to close-out a permit, the planning director must be provided adequate proof that reclamation has been

conducted in accordance with the reclamation plan. If a permit expires, terminates, or is revoked prior to permit close-out, the remedies under KPB 21.50 apply and the planning director may hold applicable fines and remedies in abeyance upon a finding that reclamation is actively ongoing.

21.29.065. Effect of permit denial.

- A. No reapplication concerning the same counter permit application may be filed within one calendar year of the date of the planning director's final denial action except in the case where new evidence or circumstances exist that were not available or present when the original application was filed.
- B. No reapplication concerning the same CLUP may be filed within one calendar year of the date of the final denial action except in the case where new evidence or circumstances exist that were not available or present when the original application was filed.
- C. For the purposes of this section, the applicant bears the burden of proof of demonstrating that new evidence or circumstances exist and that they were not available or present with the original application was filed.

21.29.070. Permit renewal, modification and revocation.

- A. Conditional land use permittees must submit a renewal application every five years after the permit is issued. A renewal application must be submitted at least 90 days prior to expiration of the CLUP.
- B. The planning director may administratively approve a renewal application that meets the following requirements: (i) the permittee is in compliance with all permit conditions and no modification to operations or conditions are proposed; and (ii) the borough did not issue a notice of violation under the permit during the two calendar years preceding the renewal application. If the renewal application does not satisfy the foregoing requirements or if the planning director determines a review by the planning commission is warranted, then the planning commission will hear the renewal application.
- C. In the event the renewal application is heard by the planning commission, the planning commission must hold a public hearing on the renewal application. If the applicant is complying with all permit conditions and requirements and is not in violation of borough code, then the renewal must be granted by the planning commission. Notwithstanding the foregoing, if the commission determines, after public hearing, that discretionary conditions are appropriate on renewal then the commission may modify the CLUP by imposing conditions as deemed appropriate under the circumstances. Permit renewal applications will be denied if the permittee is in violation of the original permit requirements and conditions or

borough code. A renewal application heard by the planning commission must be processed in accordance with the notice requirements of KPB 21.25.060.

- D. A permittee may request a modification of a CLUP or counter permit, as needed. A modification application will be processed pursuant to KPB 21.29.030 through KPB 21.29.050 with public notice given as provided by KPB 21.25.060. A permit modification is required if the permittee's operations are no longer consistent with the original permit application.
- E. The fee for a permit renewal or modification is the same as an original permit application in the amount listed in the most current Kenai Peninsula Borough Schedule of Rates, Charges and Fees.
- F. Failure to submit a permit renewal will result in the expiration of the permit. The borough may issue a permit termination document upon expiration pursuant to KPB 21.29.080. Once a permit has expired, a new permit application approval process is required in order to operate the material site.
- G. Permits may be revoked pursuant to KPB 21.50.

21.29.080. Permit Close-out.

When a permit expires, is revoked, or a permittee requests close-out of their permit, a review of permit conditions and site inspections will be conducted by the planning department to ensure code compliance and verify site reclamation prior to close-out. When the planning director determines that a site qualifies for close-out, a permit close-out document will be issued to the permittee to terminate the permit and associated requirements. Reclamation plans and requirements survive permit expiration and revocation. The planning director is only authorized to close-out a permit following reclamation. A permit close-out determination shall release any bonding associated with the permit.

21.29.100. Recordation.

All permits, permit extensions, modified permits, prior existing uses, and terminations shall be recorded. Failure to record a material site document does not affect the validity of the documents. The operator or owner of the material site is responsible for all associated permit recording fees.

21.29.110. Violations.

Violations of this chapter shall be governed by KPB 21.50 and this chapter.

21.29.115. Permit transfers.

Permits issued under this chapter do not automatically transfer upon a conveyance or transfer of the applicable real property. The planning director will issue a letter of approval or disapproval upon receipt of the following: (1) a written permit transfer request is provided to the planning department that includes: legal description of the parcel, former owner name, new owner name, and a copy of the approved permit or the legal PEU status; and (2) a recorded conveyance instrument listing the new owner. The requesting party may appeal a disapproval letter to the planning commission. Permit transfer approvals are not subject to administrative appeal.

21.29.120. Prior-existing uses.

- A. *Determination.* Prior-existing uses (PEU) in effect on October 1, 2022 are allowed to continue operation subject to the requirements of this section. The burden of proof that the prior-existing use existed before October 1, 2022 is on the applicant. If the planning director denies prior-existing use status, the applicant must comply with the permit requirements of this chapter. Failure to apply for a prior-existing use determination by January 1, 2024 will result in termination of all rights to continued operation as a nonconforming use and require full compliance with all provisions of this chapter.
- B. *Decision.* The planning director will give notice of the application for a prior-existing use determination to property owners within 100 feet of the subject parcel boundaries. The notice shall include a summary of the application, a vicinity map, and a deadline for submitting written comments or evidence regarding the existence of the use prior to the planning director issuing a decision. The planning director will issue a decision regarding the prior-existing use status based on the written application, written comments, or evidence regarding the existence of the use. The planning director's decision may be appealed by the applicant or affected property owners to the planning commission within 15 days of distribution of the decision.
- C. *Discontinuance.* Any prior-existing use which has ceased by discontinuance for an uninterrupted period of 365 days must thereafter conform to the permit requirements of this chapter. Lack of intent to cease use or abandon the use does not suspend the 365-day time period. If a prior-existing use is discontinued or abandoned, it may not be recommenced.
- D. *Expansion Prohibited.* A prior-existing use may not be increased, intensified, or expanded or moved to any other part of the lot, tract, or parcel it occupies after October 1, 2022, nor may the prior-existing use be moved to a parcel which is subject to this chapter. If a parcel is subdivided, the pre-existing use may not be expanded to any lot, tract, or parcel where material extraction or processing had not previously occurred or was not lawfully established in accordance with this section.
- E. *Standards.* In order to qualify as a legal prior-existing use, the use must meet the following standards, on or before October 1, 2022:

1. A use must have been legally established under prior law.
2. A use must be operational in accordance with the type of use.
- F. In accordance with 21.29.015, on or before January 1, 2026, all legal prior-existing-use extraction operations shall comply with KPB 21.29.060 (reclamation plan) and applicable hours of operation requirements under this chapter.
- G. Materials extraction operations with legal prior-existing use status which extract material below or within four feet of the seasonal highwater table shall conduct operations in accordance with the requirements outlined in KPB 21.29.057, except that KPB 21.29.057(C)(7) will not apply.
- H. For the purposes of this section, "increased, intensified, or expanded" means: (1) enlarging the area of excavation; (2) increasing the depth of excavation to go within four feet of the seasonal high-water table; or (3) adding a use that was not in existence as of the date of the PEU status determination, to include adding earth materials processing to a use that did not previously include processing.

21.29.130. Definitions.

- A. Unless the context requires otherwise, the following definitions apply to material site permits and activities:
 1. *Abandon* means to cease or discontinue a use without intent to resume, but excluding short-term interruptions to use or activity during periods of remodeling, maintaining, or otherwise improving or rearranging a facility or during normal periods of vacation or seasonal closure. An "intent to resume" can be shown through continuous operation of a portion of the facility, maintenance of utilities, or outside proof of continuance, e.g., bills of lading or delivery records. Abandonment also means the cessation of use, regardless of voluntariness, for a specified period of time.
 2. *Aggrieved Party* means a party of record adversely impacted by the decision of the hearing officer who participated before the hearing officer either by written or oral presentation.
 3. *Aquifer* means a subsurface formation that contains sufficient water-saturated permeable material to yield economical quantities of water to wells and springs.
 4. *Aquifer-confining layer* means that layer of relatively impermeable soil below an aquifer, typically clay, which confines water.
 5. *Assisted-living home* means a residential facility to which AS 47.33 applies, as described in AS 47.33.010.
 6. *Commercial* means any provision of services, sale of goods, or use operated for production of income whether or not income is derived, including sales, barter, rental, or trade of goods and services.

7. Conditioning or processing material means a value-added process including batch plants, asphalt plants, screening, washing, and crushing by use of machinery.
8. Exhausted means that all material of a commercial quality in a sand, gravel, or material site has been removed.
9. Groundwater means, in the broadest sense, all subsurface water, more commonly that part of the subsurface water in the saturated zone.
10. Inactive site walls means a wall with a slope steeper than 1.5:1 where there has been no excavation activity for 180 consecutive days.
11. Isolated pond means no surface water inlet or outlet is present at any time of the year.
12. Person shall include any individual, firm, partnership, association, corporation, cooperative, or state or local government.
13. Qualified professional means a licensed professional engineer, hydrologist, hydrogeologist, or other similarly-licensed professional.
14. Quarter or Quarterly means January through March, April through June, July through September, or October through December;
15. Sand, gravel or material site means an area used for extracting, quarrying, or conditioning gravel or substances from the ground that are not subject to permits through the state location (mining claim) system (e.g., gold, silver, and other metals), nor energy minerals including but not limited to coal, oil, and gas.
16. Seasonal high groundwater table means the highest level to which the groundwater rises on an annual basis.
17. Stable condition means the rehabilitation, where feasible, of the physical environment of the site to a condition that allows for the reestablishment of renewable resources on the site within a reasonable period of time by natural processes.
18. Surface water means water on the earth's surface exposed to the atmosphere such as rivers, lakes, and creeks.
19. Topsoil means material suitable for vegetative growth.
20. Waterbody means any lake, pond, stream, riparian wetland, or groundwater into which stormwater runoff is directed.
21. Water source means a well, spring or other similar source that provides water for human consumptive use.

SECTION 4. That this ordinance is effective immediately upon enactment.

**ENACTED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH THIS * DAY
OF * 2022.**

Brent Johnson, Assembly President

ATTEST:

Johni Blankenship, MMC, Borough Clerk

08/09/22 Vote on motion to introduce and set for public hearing:

Yes: Bjorkman, Chesley, Cox, Ecklund, Hibbert, Tupper, Johnson

No: Elam, Derkevorkian

Absent: None

09/06/22 Vote on motion to postpone to 10/25/22:

Yes: Bjorkman, Chesley, Cox, Derkevorkian, Ecklund, Elam, Hibbert, Tupper, Johnson

No: None

Absent: None

Yes:


No:

Absent:

Kenai Peninsula Borough Assembly

MEMORANDUM

TO: Brent Johnson, Assembly President
Members, Kenai Peninsula Borough Assembly

FROM: Richard Derkevorkian, Assembly member 

DATE: September 20, 2022

SUBJECT: **LAYDOWN Derkevorkian Amendment #1** Amending Ordinance 2022-36, Amending KPB 21.29, KPB 21.25, and KPB 21.50.055 Regarding Conditional Land Use Permits and Material Site Permits, Updating Notice, Applicability, Permit Types, Application Requirements, Standards and Permits Conditions (Johnson, Chesley)

[Please note the bold underlined language is new and the strikeout bold language in brackets is to be deleted.]

➤ Amend KPB 21.29.010, as follows:

21.29.010. Applicability.


- A. This chapter applies to all private and public lands in the borough except where the use is prohibited by ordinance within a local option zoning district or exempt under KPB 21.29.015.
- B. This chapter does not apply within the incorporated cities of the Kenai Peninsula Borough.
- C. Earth material extraction within 300 linear feet from riparian wetlands and the seasonal high-water level of naturally occurring open water bodies, such as a lake, pond, river, **fish-bearing** stream, or ocean, is prohibited. This prohibition does not apply to **existing** man-made water bodies or isolated ponds of less than one acre on private property **or the construction of waterbodies within the permitted area.**
- D. All operations must be conducted in accordance with the current publication of the State of Alaska, Alaska DEC User's Manual Best Management Practices for Gravel/Rock Aggregate Extraction Projects. In the event a provision of this chapter conflicts with the State of Alaska's manual, this chapter controls.

Your consideration of this amendment is appreciated.

Kenai Peninsula Borough Assembly

MEMORANDUM

TO: Brent Johnson, Assembly President
Members, Kenai Peninsula Borough Assembly

FROM: Richard Derkevorkian, Assembly member 

DATE: September 20, 2022

SUBJECT: **LAYDOWN Derkevorkian Amendment #2** Amending Ordinance 2022-36, Amending KPB 21.29, KPB 21.25, and KPB 21.50.055 Regarding Conditional Land Use Permits and Material Site Permits, Updating Notice, Applicability, Permit Types, Application Requirements, Standards and Permits Conditions (Johnson, Chesley)

[Please note the bold underlined language is new and the strikeout bold language in brackets is to be deleted.]

➤ Amend KPB 21.29.015, as follows:

21.29.015. Material extraction exempt from obtaining a permit.

- A. Material extraction which disturbs an area of less than one acre that is not in a mapped flood plain or subject to 21.29.010(B), does not enter the water table, and does not cross property boundaries, does not require a permit. There will be no excavation within [32]10 feet of a lot line.
- B. Material extraction taking place on dewatered bars within the confines of the Snow River and the streams within the Seward-Bear Creek Flood Service Area do not require a permit, however, operators subject to this exemption must provide the planning department with the information required by KPB 21.29.030(A)(1), (2), (6), (7) and a current flood plain development permit prior to beginning operations.
- C. A prior existing use under KPB 21.29.120 does not require a material extraction permit. Notwithstanding the foregoing, on or before January 1, 2026, a prior existing use under KPB 21.29.120 must: (1) provide a reclamation plan under KPB 21.29.060 that is approved by the planning director or designee; and (2) come into compliance with the buffer zone requirements under KPB 21.29.050(A)(1).


D. Material extraction from a public or private property which is necessary for the construction of a public or private development on the same property does not require a material extraction permit.

Your consideration of this amendment is appreciated.

Kenai Peninsula Borough Assembly

MEMORANDUM

TO: Brent Johnson, Assembly President
Members, Kenai Peninsula Borough Assembly

FROM: Richard Derkevorkian, Assembly member 

DATE: September 20, 2022

SUBJECT: **LAYDOWN Derkevorkian Amendment #3** Amending Ordinance 2022-36, Amending KPB 21.29, KPB 21.25, and KPB 21.50.055 Regarding Conditional Land Use Permits and Material Site Permits, Updating Notice, Applicability, Permit Types, Application Requirements, Standards and Permits Conditions (Johnson, Chesley)

[Please note the bold underlined language is new and the strikeout bold language in brackets is to be deleted.]

➤ Amend KPB 21.29.020, as follows:

21.29.020. Types of permits available.

- A. Counter permit. A counter permit is required for earth material extraction which disturbs more than one acre and less than ~~[10]~~**2.5** cumulative unreclaimed acres. Material ~~[processing,]~~ screening **over 500 cubic yards per day, [or]** crushing, ~~[and material extraction within four feet of the seasonal high-water table]~~ **and excavation within two feet of a confining layer** is prohibited under a counter permit. **A maximum of five feet excavation, and 7,500 square feet below seasonal high-water table is allowed. The excavation below water table must be 200 feet from the nearest potable water well.** A counter permit is valid for a period of two years. Upon request from the applicant, the planning director, or designee, may grant one 12-month extension on a counter permit. Counter permits are approved by the planning director, or designees, and are not subject to notice requirements under KPB 21.25.060. The planning director's decision to approve or deny a counter permit may be appealed to the planning commission, which must act as the hearing officer, in accordance with KPB 21.20. **The limited excavation within two feet of the seasonal high-water table included in this permit is exempt from KPB 21.29.057.**

B. Conditional land use permit. A conditional land use permit (CLUP) is required for the following types of earth material extraction or uses:

1. ~~[Earth Materials Extraction CLUP. An Earth Materials Extraction CLUP is required for any material extraction which disturbs 10 or more cumulative acres. Material processing, screening or crushing, or extraction within four feet of the seasonal high-water table is prohibited under this permit. The standard conditions set out in KPB 21.29.050 are applicable to this type of CLUP.]~~ A Type 1 CLUP. A Type 1 CLUP permit is required for earth material extraction which disturbs more than 2.5 cumulative un-reclaimed acres. Material screening over 500 cubic yards per day, or crushing, is prohibited under a type 1 permit. A maximum of five feet excavation below seasonal high-water table is allowed. The excavation below water table must be 200 feet from the nearest potable water well. Excavation within two feet of a confining layer is prohibited. No more than ten percent of the parcels total acreage may be in the water table. The conditions set forth in KPB 21.29.050 plus the conditions set out in KPB 21.29.055 for material extraction processing area applicable to this type of CLUP. The limited excavation within two feet of seasonal high-water table included in this permit is exempt from KPB 21.29.057.
2. ~~[Earth materials processing]~~ A Type 2 CLUP. A ~~[n Earth Materials Processing]~~ Type 2 CLUP is required for any operation that includes earth materials ~~[processing,]~~ screening over 500 cubic yards per day, or crushing activities. A maximum of eight feet excavation below seasonal high-water table is allowed. The excavation below water table must be 200 feet from the nearest potable water well. Excavation within two feet of a confining layer is prohibited. No more than ten percent of the parcels total acreage may be in the water table. The conditions set forth in KPB 21.29.050 plus the conditions set out in KPB 21.29.055 for material extraction processing area applicable to this type of CLUP. The limited excavation within two feet of seasonal high-water table included in this permit is exempt from KPB 21.29.057.
3. ~~[Earth Materials Extraction Within Water Table]~~ A Type 3 CLUP. A ~~[n Earth Materials Extraction Within Water Table]~~ Type 3 CLUP is required for material extraction and operations of any size within ~~[four]~~ two feet of the seasonal high-water table unless specified exempt from KPB 21.29.057. The excavation below water table must be 200 feet from the nearest

potable water well. Excavation within two feet of a confining layer is prohibited. Screening and crushing is allowed. The conditions set forth in KPB 21.29.050 plus the requirements and conditions set forth in KPB 21.29.057 for material extraction within ~~four~~ **two** feet of the seasonal high-water table are applicable to this type of CLUP.


An applicant may request a CLUP that includes one, two or all three of the above permit types. A CLUP is valid for a period of five years. A CLUP may be renewed in accordance with KPB 21.29.070. The provisions of KPB Chapter 21.25 are applicable to material site CLUPs and the provisions of KPB 21.25 and 21.29 are read in harmony. If there is a conflict between the provisions of KPB 21.25 and 21.29, the provisions of KPB 21.29 are controlling.

Your consideration of this amendment is appreciated.

Kenai Peninsula Borough Assembly

MEMORANDUM

TO: Brent Johnson, Assembly President
Members, Kenai Peninsula Borough Assembly

FROM: Richard Derkevorkian, Assembly member 

DATE: September 20, 2022

SUBJECT: **LAYDOWN Derkevorkian Amendment #4** Amending Ordinance 2022-36, Amending KPB 21.29, KPB 21.25, and KPB 21.50.055 Regarding Conditional Land Use Permits and Material Site Permits, Updating Notice, Applicability, Permit Types, Application Requirements, Standards and Permits Conditions (Johnson, Chesley)

[Please note the bold underlined language is new and the strikeout bold language in brackets is to be deleted.]

➤ Amend KPB 21.29.030, as follows:

21.29.030. Application procedure.

- A. In order to obtain a counter permit or CLUP under this chapter, an applicant must first complete and submit to the borough planning department a permit application, along with the fee listed in the most current Kenai Peninsula Borough Schedule of Rates, Charges and Fees. The planning director may determine that certain contiguous parcels are eligible for a single permit. The application must include the following items, without which the application will be deemed incomplete:
1. Legal description of the parcel, KPB tax parcel ID number, and identification of whether the permit is for the entire parcel, or a specific location within a parcel;
 2. Expected life span of the material site;
 3. A buffer plan consistent with KPB 21.29.050(A)(1);
 4. Reclamation plan consistent with KPB 21.29.060;
 5. The depth of excavation;
 6. Type of material to be extracted;

7. A site map professional surveyor licensed in the State of Alaska to include the following:
- a. Location of excavation, and, if the site is to be developed in phases, the life span and expected reclamation date for each phase;
 - b. Proposed buffers consistent with KPB 21.29.050(A)(1), or alternate buffer plan;
 - c. Identification of all encumbrances, including but not limited to, easements;
 - d. Points of ingress and egress. Driveway permits must be acquired from either the state or borough as appropriate prior to submitting the application;
 - e. Anticipated haul routes; [~~contingent on approval from the governmental agency with regulatory jurisdiction over the road;~~]
 - f. Location of any processing areas on the parcel, if applicable;
 - g. North arrow;
 - h. The scale to which the site plan is drawn;
 - i. Preparer's name and date; and
 - j. Field verification must include staking the boundary of the parcel at sequentially visible intervals. The planning director may grant an exemption in writing to the staking requirements if the parcel boundaries are obvious or staking is unnecessary.
8. A site plan, [~~prepared by a qualified independent civil engineer licensed and active in the State of Alaska~~] to include the following:
- a. Surface water protection measures, if any, for adjacent properties, including the use of diversion channels, interception ditches, on-site collection ditches, sediment ponds and traps, and silt fence;
 - b. Location and elevation of test holes, and depth of groundwater, based on the seasonal high-water table. At least one test hole per ten acres of excavated area is required to be dug. The test holes must be at least four feet below the proposed lowest elevation of excavation depth **unless proposed depth is deeper than conventional equipment can dig without stage excavation;**
 - c. Location of all private wells of adjacent property owners within 300 feet of the proposed parcel boundary; and
 - d. Location of any water body on the parcel, including the location of any riparian wetland as determined by best available data.

9. A statement by the operator of the site that the requirements of KPB 21.29.045 have been satisfied.


B. In order to aid the planning commission or planning director's decision-making process, the planning director may provide vicinity, aerial, land use, and ownership maps for each application and may include additional information.

Your consideration of this amendment is appreciated.

Kenai Peninsula Borough Assembly

MEMORANDUM

TO: Brent Johnson, Assembly President
Members, Kenai Peninsula Borough Assembly

FROM: Richard Derkevorkian, Assembly member 

DATE: September 20, 2022

SUBJECT: **LAYDOWN Derkevorkian Amendment #5** Amending Ordinance 2022-36, Amending KPB 21.29, KPB 21.25, and KPB 21.50.055 Regarding Conditional Land Use Permits and Material Site Permits, Updating Notice, Applicability, Permit Types, Application Requirements, Standards and Permits Conditions (Johnson, Chesley)

[Please note the bold underlined language is new and the strikeout bold language in brackets is to be deleted.]

➤ Amend KPB 21.29.050, as follows:

21.29.050. Permit conditions applicable to all permits.

A. The planning commission or planning director, as applicable, must impose the following mandatory conditions prior to approval of a permit under this chapter:

1. Buffer Zone.

a. ~~[A buffer area of 32 feet must be established between the area of excavation and the parcel boundaries. The buffer area may include one or more of the following: undisturbed natural vegetation that provides sufficient noise and street-level visual screening; an eight-foot earthen berm with a 2:1 slope; or a minimum eight-foot fence;]~~
The buffer zone for counter permits and CLUPs shall be of sufficient height, density, and setback to provide noise screening of the proposed use to parcels in the vicinity as deemed appropriate by the planning commission or planning director. Buffer requirements shall be made in consideration of and in accordance with existing uses of properties in the vicinity at the time of approval of the permit. There is no requirement to buffer the material site from uses which commence after the approval of the permit.

- b. A buffer zone shall be established between the area of excavation and the parcel boundaries. The buffer zone for a Type 1 CLUP shall consist of one of the following in any geographical area: fifty feet of natural vegetation, a minimum six-foot fence, or a minimum six-foot earthen berm with a 2:1 slope. The buffer zone for a Type 2 or Type 3 CLUP shall consist of one of the following in any geographical area: fifty feet of natural vegetation, a minimum eight-foot fence, or a minimum ten-foot earthen berm with a 2:1 slope. If the minimum buffers are insufficient to approve the permit, the applicant may modify the proposed buffers with evidence to a sufficient size in consideration of, and in accordance with the existing uses of properties in the vicinity for approval of a permit.**
- [b.]c. A 2:1 slope must be maintained between the buffer zone and excavation floor on all inactive site walls. Material from the area designated for the 2:1 slope may be removed if the site plan provides the timeframe for removal and verification that suitable, stabilizing material will replace the removed material within 30 days of removal;**
- [c.]d. Where an easement exists, a buffer must not overlap the easement, unless otherwise conditioned by the planning commission or planning director, as applicable; and**
- [d.]e. This requirement may only be waived upon a finding by the planning director or planning commission, as applicable, that a lot line where the waiver is requested is directly adjacent to another material site.**
- f. GIS, LIDAR, and photogrammetry may be utilized in the design of the buffer zone when differing elevations exist between the proposed site and properties in the vicinity. Using this technology's line of sight profile drawings from the uppermost inhabitable level of existing properties located in the vicinity may be utilized in the determination of sufficiency of the buffer zone.**
- g. At its discretion the planning director or planning commission (as applicable) may waive or reduce buffer requirements when screening proves to be not necessary or not feasible.**
- 2. Water source separation.**
- a. Material extraction below or within ~~[four]~~ two feet of the seasonal high-water table is prohibited unless the applicant is issued a CLUP Material Extraction Within Water Table Permit and the requirements and conditions set forth in KPB 21.29.057 are satisfied or the depth and**

size of excavation is exempt from KPB 21.29.057 as specified in the permit:

- b. Dewatering either by pumping, ditching or some other form of draining that removes **more than 5,000 gallons of water per day** from the site or causes water to leave the site is prohibited **unless permitted by State of Alaska, Department of Natural Resources**;
 - c. All permits shall be issued with a condition which prohibits any material extraction within 100 linear feet of any private well or **applicable** water source existing prior to original permit issuance; and
 - d. On site movement of water may be permitted pursuant to KPB 21.29.057 and if: (i) the operator provides a statement under seal and supporting data from a qualified independent civil engineer licensed and active in the State of Alaska that the dewatering will not lower any known water systems; and (ii) the applicant posts a bond for liability for potential accrued damages in an amount equivalent to the cost to replace each water wells within a 300-foot radius of the site. The rebuttable presumption is that the cost per well is a minimum of \$10,000.
3. Roads. Operations that impact borough roads must be conducted in accordance with the requirements and remedies of KPB Chapter 14.40.
4. Dust control. Dust suppression is required on haul roads within the boundaries of the **CLUP** material site by application of water or calcium chloride.
5. Hours of operation. Material extraction activities, including equipment operation, may only occur between the hours of 6:00 a.m. and 9:00 p.m. Alaska Standard Time (AKST), or as determined by the planning commission or planning director, as applicable, to be appropriate based on information presented.
- a. ~~[Seasonal.]~~ Project-based waiver. An applicant may request a ~~[seasonal.]~~ project-based waiver of the hours of operation requirements under this subsection. A waiver granted under this subsection is valid for **up to** six consecutive calendar months. To grant a waiver under this subsection, the commission must find that the waiver is necessary for a specific project, and that the waiver is not harmful to the public health, safety, and general welfare of borough residents.

6. Groundwater elevation. All material sites must maintain one monitoring well four feet below the proposed excavation per ten acres of excavated area.
 7. Setback. Material site excavation areas must be 250 feet from the property boundaries of any ~~[local option zoning district,]~~existing public school ground, private school ground, college campus, **licensed** childcare facility, multi-purpose senior center, assisted living home, and licensed health care facility. **[If overlapping, the buffer areas of the excavation must be in addition to the 250-foot setback.]**
 8. Permit boundaries. The buffers and any easements or right-of-way abutting the proposed permit area must be staked at sequentially visible intervals. Field verification and staking will require the services of a professional land surveyor. Stakes must be in place prior to issuance of the permit.
 9. Processing. Material extraction of any size that includes processing, screening, or crushing activities is prohibited unless the applicant is issued an Earth Materials Processing CLUP and the conditions set forth in KPB 21.29.055 are imposed on the permit.
- B. Discretionary Conditions. The planning commission or planning director, as applicable, may set conditions of approval for issuance of a counter permit or CLUP, as appropriate for the area in which the development is sited, for the following:
1. Setbacks/Buffer Area.
 - a. The mandatory buffer area condition in subsection (A) above may be increased, up to a maximum of 100 feet between the area of excavation and the parcel boundaries, if the planning commission finds based on substantial evidence presented that increasing the buffer area is necessary for the public health, welfare and safety of the surrounding community;
 - i. Upon request of the applicant, in lieu of any additional buffer area under this subsection designed to separate the use of material site activities from neighboring parcel boundaries, an eight-foot-high berm above the preexisting elevation may be constructed, prior to excavation, around the excavation area. If the excavation site

area expands, the berm may move toward the permitted boundary until such limits of the permitted area are exhausted. The berm must be maintained at eight-foot height while permitted activity is occurring.

- b. All other requirements of KPB 21.29.050(A)(1) apply; and
 - c. When a buffer area has been denuded **less than a year** prior to review of the application by the planning commission or planning director revegetation may be required.
2. Road ~~[maintenance and]~~ repair. In consultation with the Road Service Area Director, ~~[road maintenance or]~~ repair of public right-of-way haul routes may be required of the permittee.
 3. Ingress and egress. The planning commission or planning director may **[determine] suggest** the points of ingress and egress for the material site. The permittee is not required to construct haul routes outside the parcel boundaries of the material site. Driveway authorization must be acquired, from either the state through an "Approval to Construct" or the borough road service area, as appropriate, prior to issuance of a material site permit when accessing a public right-of-way.
 4. Dust suppression. Dust suppression may be required when natural precipitation is not adequate to suppress the dust generated by the material site traffic on **[public right-of-way haul routes] haul routes within permit boundaries.**
 5. Surface water protection. Use of surface water protection measures as specified in KPB 21.29.030(A)(8)(a).
 6. Street-level screening. Street-level visual screening, noise mitigation, and lighting restrictions as appropriate for the surrounding area and in accordance with the standards set forth in KPB 21.29.040.

Your consideration of these amendments is appreciated.

Kenai Peninsula Borough Assembly

MEMORANDUM

TO: Brent Johnson, Assembly President
Members, Kenai Peninsula Borough Assembly

FROM: Richard Derkevorkian, Assembly member *RD*

DATE: September 20, 2022

SUBJECT: **LAYDOWN Derkevorkian Amendment #6** Amending Ordinance 2022-36, Amending KPB 21.29, KPB 21.25, and KPB 21.50.055 Regarding Conditional Land Use Permits and Material Site Permits, Updating Notice, Applicability, Permit Types, Application Requirements, Standards and Permits Conditions (Johnson, Chesley)

[Please note the bold underlined language is new and the strikeout bold language in brackets is to be deleted.]

➤ Amend KPB 21.29.055(B), as follows:

21.29.055. Earth materials processing.

~~[In accordance with KPB 21.29.020(B)(2), an Earth Materials Processing CLUP is required for earth materials processing activities, such as material screening or crushing.]~~ Prior to issuing a Type 2 CLUP [permit] under this subsection, the planning commission must impose the mandatory conditions set forth in KPB 21.29.050(A) and discretionary conditions as the planning commission deems appropriate. In addition, the following requirements and permit conditions specific to a Type 2 CLUP ~~[an Earth Materials Processing CLUP]~~ apply:

...

B. Hours of operation.

1. Processing equipment may only be operated between ~~[8:00]~~ 7:00 a.m. and 7:00 p.m. AKST, or as determined by the planning commission.

...

Your consideration of this amendment is appreciated.

Kenai Peninsula Borough Assembly

MEMORANDUM

TO: Brent Johnson, Assembly President
Members, Kenai Peninsula Borough Assembly

FROM: Richard Derkevorkian, Assembly member (RD)

DATE: September 20, 2022

SUBJECT: **LAYDOWN Derkevorkian Amendment #7** Amending Ordinance 2022-36, Amending KPB 21.29, KPB 21.25, and KPB 21.50.055 Regarding Conditional Land Use Permits and Material Site Permits, Updating Notice, Applicability, Permit Types, Application Requirements, Standards and Permits Conditions (Johnson, Chesley)

[Please note the bold underlined language is new and the strikeout bold language in brackets is to be deleted.]

➤ Amend KPB 21.29.057, as follows:

21.29.057. Material extraction below or within ~~[four]~~ two feet of the seasonal high-water table.

In accordance with KPB 21.29.020(B)(3), a CLUP is required for material extraction of material below or within ~~[four]~~ two feet of the seasonal high water table. Prior to a permit being issued the planning commission must impose the mandatory conditions set forth in KPB 21.29.050(A) and discretionary conditions as deemed appropriate. In accordance with KPB 21.29.050(A)(2)(b) dewatering **over 5,000 gallons per day** is prohibited **unless permitted by the State of Alaska, Department of Natural Resources.** The following additional application requirements and permit conditions specific to a Material Extraction within the Water Table CLUP apply:

....

Your consideration of this amendment is appreciated.

Kenai Peninsula Borough Assembly

MEMORANDUM

TO: Brent Johnson, Assembly President
Members, Kenai Peninsula Borough Assembly

FROM: Richard Derkevorkian, Assembly member (RD)

DATE: September 20, 2022

SUBJECT: **LAYDOWN Derkevorkian Amendment #8** Amending Ordinance 2022-36, Amending KPB 21.29, KPB 21.25, and KPB 21.50.055 Regarding Conditional Land Use Permits and Material Site Permits, Updating Notice, Applicability, Permit Types, Application Requirements, Standards and Permits Conditions (Johnson, Chesley)

[Please note the bold underlined language is new and the strikeout bold language in brackets is to be deleted.]

➤ Amend KPB 21.29.060 as follows:

21.29.060. Reclamation plan.

- A. All material site permit applications require an overall reclamation plan. A site plan for reclamation must be required including a scaled drawing with finished contours. A five-year reclamation plan must be submitted with a permit renewal request. **All acreage planned for a post-mining use is exempt from reclamation.**
- B. The applicant may revegetate and must reclaim all disturbed land within the time period approved with the reclamation plan **if the planned resource extraction has been exhausted and no post-mining use is planned**, so as to leave the land in a stable condition wherein a 2:1 slope is maintained. Any revegetation must be done with a non-invasive plant species. Bonding must be required at \$750.00 per acre for all acreage included in the current five-year reclamation plan. In the alternative, the planning director may accept a qualified professional's estimate for determining the amount of bonding. If the applicant is bonded with the state, the borough's bonding requirement is waived. Compliance with reclamation plans will be enforced under KPB 21.50.
- C. The following measures must be considered in the preparation, approval and implementation of the reclamation plan, although not all will be applicable to every reclamation plan:


1. The area will be backfilled, graded and re-contoured using strippings, overburden, and topsoil so that it will be stabilized to a condition that will allow for revegetation under KPB 21.29.060(B).
 2. The topsoil used for reclamation must be reasonably free from roots, clods, sticks, and branches greater than 3 inches in diameter. Areas having slopes greater than 2:1 require special consideration and design for stabilization by an independent, professional civil engineer licensed and active in the State of Alaska.
 3. Exploration trenches or pits will be backfilled. Brush piles and unwanted vegetation must be removed from the site, buried or burned. Topsoil and other organics will be spread on the backfilled surface to inhibit erosion and promote natural revegetation.
 4. Topsoil mine operations must ensure a minimum of four inches of suitable growing medium is left or replaced on the site upon completion of the reclamation activity (unless otherwise authorized).
 5. Ponding may be used as a reclamation method as approved by the planning commission.
 6. The area will be reclaimed in a manner ~~[that screens the site from becoming a public attractive nuisance and in a manner]~~ that is not harmful to public health, safety, and general welfare.
- D. The five-year reclamation plan must describe the total acreage to be reclaimed relative to the total excavation plan.
- E. Close-out. Reclamation plans and requirements survive expiration, termination, or revocation of a permit granted under this chapter. In order to close-out a permit, the planning director must be provided adequate proof that reclamation has been conducted in accordance with the reclamation plan. If a permit expires, terminates, or is revoked prior to permit close-out, the remedies under KPB 21.50 apply and the planning director may hold applicable fines and remedies in abeyance upon a finding that reclamation is actively ongoing.

Your consideration of this amendment is appreciated.

Kenai Peninsula Borough Assembly

MEMORANDUM

TO: Brent Johnson, Assembly President
Members, Kenai Peninsula Borough Assembly

FROM: Richard Derkevorkian, Assembly member 

DATE: September 20, 2022

SUBJECT: **LAYDOWN Derkevorkian Amendment #9** Amending Ordinance 2022-36, Amending KPB 21.29, KPB 21.25, and KPB 21.50.055 Regarding Conditional Land Use Permits and Material Site Permits, Updating Notice, Applicability, Permit Types, Application Requirements, Standards and Permits Conditions (Johnson, Chesley)

[Please note the bold underlined language is new and the strikeout bold language in brackets is to be deleted.]

- Amend KPB Chapter 21.29 by adding Section 21.29.063, as follows:

21.29.063. Decision.


The planning commission or planning director, as applicable, shall approve permit applications whereby mandatory standards under KPB 21.29.040 have been met through implementation of conditions set forth in KPB 21.29.050, KPB 21.29.055, and KPB 21.29.057 or shall deny applications when conditions do not meet the mandatory standards in KPB 21.29.040. The decision shall include written findings detailing how the conditions under KPB 21.29.050, KPB 21.29.055, and KPB 21.29.057 meet, or do not meet the mandatory standards set forth in KPB 21.29.040 and evidence to support those findings. The decision shall be distributed to the parties of record before the planning commission, with notice of right to appeal.

Your consideration of this amendment is appreciated.

Kenai Peninsula Borough Assembly

MEMORANDUM

TO: Brent Johnson, Assembly President
Members, Kenai Peninsula Borough Assembly

FROM: Richard Derkevorkian, Assembly member 

DATE: September 20, 2022

SUBJECT: **LAYDOWN Derkevorkian Amendment #10** Amending Ordinance 2022-36, Amending KPB 21.29, KPB 21.25, and KPB 21.50.055 Regarding Conditional Land Use Permits and Material Site Permits, Updating Notice, Applicability, Permit Types, Application Requirements, Standards and Permits Conditions (Johnson, Chesley)

[Please note the bold underlined language is new and the strikeout bold language in brackets is to be deleted.]

- Amend KPB Chapter 21.29 by removing Section 21.29.065 in its entirety, as follows:

[21.29.065. Effect of permit denial.]


- A. ~~No reapplication concerning the same counter permit application may be filed within one calendar year of the date of the planning director's final denial action except in the case where new evidence or circumstances exist that were not available or present when the original application was filed.~~**
- B. ~~No reapplication concerning the same CLUP may be filed within one calendar year of the date of the final denial action except in the case where new evidence or circumstances exist that were not available or present when the original application was filed.~~**
- C. ~~For the purposes of this section, the applicant bears the burden of proof of demonstrating that new evidence or circumstances exist and that they were not available or present with the original application was filed.]~~**

Your consideration of this amendment is appreciated.

Kenai Peninsula Borough Assembly

MEMORANDUM

TO: Brent Johnson, Assembly President
Members, Kenai Peninsula Borough Assembly

FROM: Richard Derkevorkian, Assembly member 

DATE: September 20, 2022

SUBJECT: **LAYDOWN Derkevorkian Amendment #11** Amending Ordinance 2022-36, Amending KPB 21.29, KPB 21.25, and KPB 21.50.055 Regarding Conditional Land Use Permits and Material Site Permits, Updating Notice, Applicability, Permit Types, Application Requirements, Standards and Permits Conditions (Johnson, Chesley)

[Please note the bold underlined language is new and the strikeout bold language in brackets is to be deleted.]

➤ Amend KPB 21.29.070, as follows:

21.29.070. Permit renewal, modification and revocation.

- A. Conditional land use permittees must submit a renewal application every five years after the permit is issued. A renewal application must be submitted at least 90 days prior to expiration of the CLUP.
- B. The planning director may administratively approve a renewal application that meets the following requirements: (i) the permittee is in compliance with all permit conditions and no modification to operations or conditions are proposed; and (ii) the borough did not issue a notice of violation under the permit during the two calendar years preceding the renewal application. If the renewal application does not satisfy the foregoing requirements or if the planning director determines a review by the planning commission is warranted, then the planning commission will hear the renewal application.
- C. In the event the renewal application is heard by the planning commission, the planning commission must hold a public hearing on the renewal application. If the applicant is complying with all permit conditions and requirements and is not in violation of borough code, then the renewal must be granted by the planning commission. **Notwithstanding the foregoing, if the commission determines, after public hearing, that discretionary**

~~conditions are appropriate on renewal then the commission may modify the CLUP by imposing conditions as deemed appropriate under the circumstances.]~~ Permit renewal applications will be denied if the permittee is in violation of the original permit requirements and conditions or borough code. **The permittee will be given ninety days to correct violations. If the corrections are met, the permit will be renewed.** A renewal application heard by the planning commission must be processed in accordance with the notice requirements of KPB 21.25.060.


- D. A permittee may request a modification of a CLUP or counter permit, as needed. A modification application will be processed pursuant to KPB 21.29.030 through KPB 21.29.050 with public notice given as provided by KPB 21.25.060. A permit modification is required if the permittee's operations are no longer consistent with the original permit application.
- E. The fee for a permit renewal or modification is the same as an original permit application in the amount listed in the most current Kenai Peninsula Borough Schedule of Rates, Charges and Fees.
- F. Failure to submit a permit renewal will result in the expiration of the permit. The borough may issue a permit termination document upon expiration pursuant to KPB 21.29.080. Once a permit has expired, a new permit application approval process is required in order to operate the material site.
- G. Permits may be revoked pursuant to KPB 21.50.

Your consideration of this amendment is appreciated.

Kenai Peninsula Borough Assembly

MEMORANDUM

TO: Brent Johnson, Assembly President
Members, Kenai Peninsula Borough Assembly

FROM: Richard Derkevorkian, Assembly member 

DATE: September 20, 2022

SUBJECT: **LAYDOWN Derkevorkian Amendment #12** Amending Ordinance 2022-36, Amending KPB 21.29, KPB 21.25, and KPB 21.50.055 Regarding Conditional Land Use Permits and Material Site Permits, Updating Notice, Applicability, Permit Types, Application Requirements, Standards and Permits Conditions (Johnson, Chesley)

[Please note the bold underlined language is new and the strikeout bold language in brackets is to be deleted.]

➤ Amend KPB 21.29.115, as follows:

21.29.115. Permit transfers.


~~[Permits issued under this chapter do not automatically transfer upon a conveyance or transfer of the applicable real property. The planning director will issue a letter of approval or disapproval upon receipt of the following: (1) a written permit transfer request is provided to the planning department that includes: legal description of the parcel, former owner name, new owner name, and a copy of the approved permit or the legal PEU status; and (2) a recorded conveyance instrument listing the new owner. The requesting party may appeal a disapproval letter to the planning commission. Permit transfer approvals are not subject to administrative appeal.]~~ Permits must transfer with the sale or transfer of the real property unless the permittee is currently in violation of the original permit requirements and conditions or borough code. The permittee will be given ninety days to correct violations.

Your consideration of this amendment is appreciated.

Kenai Peninsula Borough Assembly

MEMORANDUM

TO: Brent Johnson, Assembly President
Members, Kenai Peninsula Borough Assembly

FROM: Richard Derkevorkian, Assembly member 

DATE: September 20, 2022

SUBJECT: **LAYDOWN Derkevorkian Amendment #13** Amending Ordinance 2022-36, Amending KPB 21.29, KPB 21.25, and KPB 21.50.055 Regarding Conditional Land Use Permits and Material Site Permits, Updating Notice, Applicability, Permit Types, Application Requirements, Standards and Permits Conditions (Johnson, Chesley)

[Please note the bold underlined language is new and the strikeout bold language in brackets is to be deleted.]

➤ Amend KPB 21.29.120, as follows:

21.29.120. Prior-existing uses.

- A. Determination. Prior-existing uses (PEU) in effect on October 1, 2022 are allowed to continue operation subject to the requirements of this section. The burden of proof that the prior-existing use existed before October 1, 2022 **and after May 21, 1996**, is on the applicant. **All other PEUs prior to May 21, 1996, are already recorded with the borough and are recognized.** If the planning director denies prior-existing use status, the applicant must comply with the permit requirements of this chapter. Failure to apply for a prior-existing use determination by January 1, 2024 will result in termination of all rights to continued operation as a nonconforming use and require full compliance with all provisions of this chapter.
- B. Decision. The planning director will give notice of the application for a prior-existing use determination to property owners within 100 feet of the subject parcel boundaries. The notice shall include a summary of the application, a vicinity map, and a deadline for submitting written comments or evidence regarding the existence of the use prior to the planning director issuing a decision. The planning director will issue a decision regarding the prior-existing use status based on the written application, **[written comments,]** or evidence regarding the existence of the use. The planning director's decision may be appealed by the applicant or affected property

owners to the planning commission within 15 days of distribution of the decision.

C. *Discontinuance.* Any prior-existing use which has ceased by discontinuance for an uninterrupted period of ~~[365 days]~~ **five years** must thereafter conform to the permit requirements of this chapter. Lack of intent to cease use or abandon the use does not suspend the ~~[365-day]~~ **five-year** time period. If a prior-existing use is discontinued or abandoned, it may not be recommenced. **Any activity such as extraction, excavation, processing, or reclamation is considered valid and a continuance of site use.**

D. *Expansion Prohibited.* ~~[A prior-existing use may not be increased, intensified, or expanded or moved to any other part of the lot, tract, or parcel it occupies after October 1, 2022, nor may the prior-existing use be moved to a parcel which is subject to this chapter.] The prior-existing use may not be moved to a parcel that is subject to this chapter. If a parcel is subdivided, the pre-existing use may not be expanded to any lot, tract, or parcel where material extraction or processing had not previously occurred or was not lawfully established in accordance with this section.~~

E. *Standards.* In order to qualify as a legal prior-existing use, the use must meet the following standards, on or before October 1, 2022:

1. A use must have been legally established under prior law.
2. A use must be operational in accordance with the type of use.

F. In accordance with 21.29.015, on or before January 1, 2026, all legal prior-existing-use extraction operations shall comply with KPB 21.29.060 (reclamation plan) and applicable hours of operation requirements under this chapter.

~~[G. Materials extraction operations with legal prior-existing use status which extract material below or within four feet of the seasonal highwater table shall conduct operations in accordance with the requirements outlined in KPB 21.29.057, except that KPB 21.29.057(C)(7) will not apply.]~~

~~[H. For the purposes of this section, "increased, intensified, or expanded" means: (1) enlarging the area of excavation; (2) increasing the depth of excavation to go within four feet of the seasonal high-water table; or (3) adding a use that was not in existence as of the date of the PEU status~~


determination, to include adding earth materials processing to a use that did not previously include processing.]

Your consideration of this amendment is appreciated.

Kenai Peninsula Borough Assembly

MEMORANDUM

TO: Brent Johnson, Assembly President
Members, Kenai Peninsula Borough Assembly

FROM: Richard Derkevorkian, Assembly member 

DATE: September 20, 2022

SUBJECT: **LAYDOWN Derkevorkian Amendment #14** Amending Ordinance 2022-36, Amending KPB 21.29, KPB 21.25, and KPB 21.50.055 Regarding Conditional Land Use Permits and Material Site Permits, Updating Notice, Applicability, Permit Types, Application Requirements, Standards and Permits Conditions (Johnson, Chesley)

[Please note the bold underlined language is new and the strikeout bold language in brackets is to be deleted.]

➤ Amend KPB 21.29.130, as follows:

21.29.130. Definitions.

A. Unless the context requires otherwise, the following definitions apply to material site permits and activities:

...

8. Earthen berm means a berm constructed of aggregate or soil not to contain slash or brush that maintains a 2:1 slope. The berm is to be constructed above the preexisting elevation.

...

21. Vicinity means 1,000 linear feet from permitted boundary.

Your consideration of this amendment is appreciated.

TAKINGS OVERVIEW

INTRODUCTION

TAKINGS OVERVIEW

BACKGROUND PRINCIPLES

FEDERAL CONSTITUTION'S FIFTH AMENDMENT

“Takings Clause” or
“Just Compensation
Clause”

- Gov’t cannot take “private property...for public use, without just compensation.”
 - Gov’t’s power to take property (or lesser interests in property) = “eminent domain”
 - Exercise of eminent domain also called “condemnation”
 - “Just compensation” has been interpreted to mean FMV for property taken
- **Fundamental principle: Avoid unfairly burdening some individuals with expense of accomplishing public purposes**

ALASKA CONSTITUTION'S ARTICLE 1, SECTION 18

- “Private property shall not be taken or damaged for public use without just compensation.”

BACKGROUND PRINCIPLES

(CONT'D)

- A taking can only occur where a private property interest exists.
- People own property subject to government's reserved power to reasonably regulate
- Nonetheless, a regulation of property still can go too far and become an indirect taking
 - Excessive government regulation of property can amount to compensable taking (i.e. “**Regulatory taking**” / “inverse condemnation”)

TAKINGS

DOES A REGULATION AMOUNT TO AN
ACT OF EMINENT DOMAIN REQUIRING
COMPENSATION?

Significant “Takings” Cases

- ***Pennsylvania v. Mahon (1922)***: Excessive gov’t regulation could amount to a compensable taking.
- ***Penn Central Transportation v. New York City (1978)***: Delineated factors determining when gov’t regulation evolve into a taking: (1) the regulations economic impact on the property, (2) the extent to which the regulation has interfered with distinct investment-backed expectations and (3) the character of the government’s action. (“Government hardly could go on if to some extent values incident to property could not be diminished without paying for every such change in the general law.” ... “where State “reasonably conclude[s] that ‘the health, safety, morals, or general welfare’ would be promoted by prohibiting particular contemplated uses of land,” compensation need not accompany prohibition.”)
- ***Nollan v. California Coastal Commission (1987)***: an excessive exaction amounts to taking if there is no nexus between the condition and the purpose of the restriction/exaction. (“Our cases have not elaborated on the standards for determining what constitutes a ‘legitimate state interest[,]’ [but] [t]hey have made clear ... that a broad range of governmental purposes and regulations satisfy these requirements”)
- ***Lucas v. South Carolina Coastal Council (1992)***: Total deprivation of productive or economically beneficial use of land requires compensation. (“regulations that leave the owner of land without economically beneficial or productive options for its use—typically, as here, by requiring land to be left substantially in its natural state—carry with them a heightened risk that private property is being pressed into some form of public service under the guise of mitigating serious public harm”)
- ***Dolan v. City of Tigard (1994)***: excessive exaction (green space dedication and pedestrian plan required for permit approval) gov’t may not condition a permit on certain requirements unless those requirements have a “rough proportionality” to the proposed development’s impacts.

Types of “Takings”

- A Plaintiff seeking to challenge a government regulation as an uncompensated taking of private property must allege one of the following:
 - 1) A “Physical” taking
 - 2) A “*Lucas-type*” total regulatory taking
 - 3) A “*Penn Central* taking”
 - 4) A land-use exaction violating Nollan and Dolan “*per se* physical taking”

EXCESSIVE REGULATION = COMPENSATORY TAKING

- Regulation requires property owner to submit to **physical invasion of land/permanent physical occupation** of real/personal property
 - Right to exclude others is fundamental to private property ownership
- (Case is *Loretto*)
- Regulation deprives property owner of **all economically beneficial/productive** use of the land
- Even if it is, still may be justified by background principles of property law/nuisance law
- (Case is *Lucas*)

NOLLAN & DOLAN'S UNIQUE CIRCUMSTANCES: EXACTIONS

- “**Exaction**” = conditioning approval of development on dedication of property to public use, and they also can include conditioning development approval, e.g., permit subdivision plat, etc., upon developer making some financial commitment, such as requiring construction of public street, this is known as a “monetary exaction”.
- The term “**exaction**” encompasses both requirements that land be dedicated for street rights-of-way, parks, or utility easements and requirements that developers pay “impact” or “facility” fees reflecting their respective prorated shares of the cost of providing new roads, utility systems, parks, and similar facilities serving the entire area.

Nollan

- Gov't conditioned development request on condition the owner give the gov't unrelated property interest
- U.S. Supreme Court:
 - Exaction is unconstitutional if it doesn't somehow mitigate public harms that would justify outright denial of permission
 - *Dolan* calls this the “nexus” requirement

Dolan

- Exaction required property owner to dedicate land to the public for a bike and pedestrian path in order to obtain permission to expand owner's store
- Explained *Nollan* as an application of “unconstitutional conditions doctrine”:
 - Gov't can't require property owner to surrender constitutional right in exchange for discretionary public benefit
- U.S. Supreme Court said an exaction must:
 1. Mitigate harms of the proposed development (the “nexus” requirement from *Nollan*); **and**
 2. Condition must also be roughly proportional to public harms threatened by proposed development.

*OTHERWISE,
THERE'S NO
DEFINITE LINE.*

Difficulty is determining when a regulation is “excessive”, requiring compensation

- Requires complex consideration of various factors
- “Ad hoc” / case-by-case determination
- But, the **greater the negative economic impact of the regulation, the more likely courts will consider it a taking**

HOW WILL COURTS ANALYZE A REGULATION THAT'S NOT SO CLEARLY DEFINED?

- *Penn Central's* balancing test:
 - **The character of the governmental action involved in the regulation;**
 - Remember, if the government's action is a physical action, rather than a "regulatory invasion", then the action is almost certainly a taking.
 - **The extent to which the regulation has interfered with the owner's reasonable investment-backed expectations for the parcel as a whole; and**
 - **The regulation's economic impact on the affected property owner.**

A FINAL CONSIDERATION: THE “NOXIOUS USE” TEST

- If a regulation adopted under the police power to protect the public health, safety or welfare, courts have said it is not a taking, even if the taking reduces the value of the property.

TAKINGS OVERVIEW

CONCLUSION/QUESTIONS

Code Section	ORD 2022-36	Current Code	Highlighted Changes	Potential amendments Planning Director
KPB 21.25.050	30-day staff review period of an application.	21-day staff review period of an application.	Increase from 21 to 30 days.	
KPB 21.25.060 - Notice	Notice published on KPB website; public bulletin; mailed to all owners/leaseholders within ½ mile radius of proposed site.	Requires notice published two times in newspaper, posted in the post office, copy of the notice sent by regular mail to all owners and/or leaseholders within one-half mile.	Expressly does not apply to counter permits. No longer requires newspaper publication but allows for publication on KPB website.	
KPB 21.29.005 - Intent and Purpose	Establishes an intent and purpose section for KPB Chapter 21.29 with focus on public health, safety and general welfare, and to promote compatible, orderly development.	N/A	New code section.	
KPB 21.29.010 - Applicability	<p>A. Applies to all private and public lands, except as preempted by other law;</p> <p>B. Does not apply within the incorporated cities;</p> <p>C. Prohibits extraction within 300 feet of riparian wetlands and naturally-occurring open water bodies;</p>	N/A	New code section to clarify applicability of chapter and fact that it does apply to both public and private lands outside of the incorporated cities unless otherwise exempt.	

Code Section	ORD 2022-36	Current Code	Highlighted Changes	Potential amendments Planning Director
	D. Operations must be conducted in accordance with current Alaska DEC Manual for extraction projects.			
KPB 21.29.015 -Material extraction exempt from obtaining a permit	<p>A. Exempts extraction disturbing less than one acre if: -Not in floodplain; -Does not enter water table; and -Does not cross property boundaries.</p> <p>No excavation within 32' of lot line.</p> <p>B. Exempts dewatered bars within SBCFSA/Snow River.</p> <p>C. Exempts PEUs but by 2026 must: -Provide reclamation plan -Comply with buffer zone requirements</p>	<p>Currently 21.29.010</p> <p>A. Exempts extraction disturbing less than one acre if: -Not in floodplain; -Does not enter water table; and -Does not cross property boundaries.</p> <p>No excavation within 20 feet of ROW or 10 feet of lot line.</p> <p>B. Exempts dewatered bars within SBCFSA/ Snow River.</p> <p>C. PEUs exempt but floodplain permit required within mapped special flood hazard area.</p>	<p>New code section.</p> <p>No excavation within 32' of lot lines.</p> <p>PEUs exempt but must provide reclamation plan & comply with buffer zone requirements by 2026.</p>	<p>Require registration of excavation <1 acre. Addresses the concern of how can KPB state no permit required yet stipulate buffer requirements, clarify that the buffer is not part of the 1 acre limitation.</p>

Code Section	ORD 2022-36	Current Code	Highlighted Changes	Potential amendments Planning Director
KPB 21.29.020- Types of permits available	Counter permit -1 to 10 acres -No processing -No water table extraction -Only 21.29.050 conditions apply.	Counter permit and generic CLUP only. CLUP application requires all mandatory conditions and covers all uses.	Counter permit and three types of CLUPs.	Counter Permits and Earth Materials Extraction CLUP - Allow for up to 5k gallons of water withdrawal/ day, from well. Require proof of ADNR water withdrawal for amount in excess of 5k/ gallons/ day from a well, not create open pond with active excavation. Open water allowable, but requires water CLUP
	Earth Materials Extraction CLUP -Activity disturbing more than 10 acres -No processing -No water table extraction -Only 21.29.050 conditions apply		1 to 10 acres eligible for counter permit if no processing or water table extraction.	
	Earth Materials Processing CLUP -Required for all on- site processing, screening, or crushing -21.29.050 and 21.29.055 conditions apply		Three different CLUP categories: earth materials extraction (more than ten acres), earth materials processing, and earth materials extraction within water table.	Allow for up to 500 cubic yards of processing material between hours of 8AM to 6PM.
	Earth Materials Extraction within Water Table CLUP -Required for all earth materials extraction within water table -21.29.050 and		Applicant may apply for one, two, or all CLUP types.	Earth Materials Processing CLUP Add blasting as a type of processing. Clarify processing does not mean striping and

Code Section	ORD 2022-36	Current Code	Highlighted Changes	Potential amendments Planning Director
	21.29.057 conditions apply			segregation with excavation equipment.
KPB 21.29.030- Application procedure	Very similar to current procedure. Requires site map from professional surveyor and site plan from professional engineer	-Legal description -Life span -Buffer plan -Reclamation plan -Excavation depth -Type of materials and equipment -Any voluntary permit conditions -Site plan	Breaks apart site map (professional surveyor) from site plan (professional engineer) Application will be deemed incomplete without all items listed. (Not in current code.)	Revise to stipulate that Survey function is limited to existing site conditions prior to any activity. Require engineer w/seal for all future site lay out plans
KPB 21.29.040- Standards for sand, gravel or material sites	Planning Director (counter permits) or Planning Commission (CLUPs) must find: -Use is not inconsistent with applicable comp plan -Use will not be harmful to public's health, safety and general welfare -Provides sufficient setbacks, buffer zones, and other safeguards -Reclamation plan	-Protects against lowering of water sources serving other properties and damage to other properties -Minimizes off-site dust movement, noise disturbance, visual impacts & alternate post-mining land uses	All new standards/"may issue" Focus on legitimate public purpose to protect against damage to public roads and adjacent properties as well as dust, noise and other impacts through setbacks, buffer zones, and street-level visual screening.	Amount of visual screening, if any, is a significant question, which we recognize from public testimony. Significant policy call with legal input.
KPB 21.29.045	Applicants required to demonstrate compliance with state and federal law through written	N/A	New code section. Requires compliance with applicable	

Code Section	ORD 2022-36	Current Code	Highlighted Changes	Potential amendments Planning Director
	<p>documentation from pertinent authorities:</p> <ul style="list-style-type: none"> -Mining license (AK Dept of Revenue) -Mining permit (ADNR) -Permits and plans required by DEC -Permits from USACE, if applicable -Other applicable permits from other regulatory bodies authorized to regulate mining activities or earth materials extraction <p>Must comply with other regulations such as air and water quality, and hazardous materials</p> <p>Violations subject to enforcement under 21.50</p>		<p>state/federal agencies prior to approval of KPB permit.</p> <p>All activity must comply with state/federal regulations governing air/water quality and hazardous materials.</p> <p>Violations subject to enforcement under 21.50.</p>	<p>Explicitly add ADNR for temporary water withdrawals</p>
KPB 21.29.050	<p>NINE MANDATORY CONDITIONS</p> <p>1. Buffers: 32-foot buffer/may include natural vegetation for street-level visual and noise screening; 8-foot fence or berm with a 2:1</p>	<p>Buffers: 50' of undisturbed natural vegetation, or 6' berm with at least 2:1 slope, or 6' fence. Material from slope may be removed if site plan provides removal timeframe and verification material will</p>	<p>Allows flexibility to meet demands of a specific application vs. "one size fits all" of current code.</p> <p>Buffers:</p> <ul style="list-style-type: none"> -Street-level noise and visual screening (as 	<p>Berm height needs to be more flexible if screening requirements are to consider more 8' above elevation at property boundaries.</p>

Code Section	ORD 2022-36	Current Code	Highlighted Changes	Potential amendments Planning Director
	<p>slope; 2:1 slope between buffer zone and floor on all inactive site walls. Material from slope may be removed if site plan provides removal timeframe and verification material will be replaced within 30 days.</p> <p>2. Water source separation: No extraction below or within 4' of seasonal high-water table unless new section 21.29.057 conditions are met (Material Extraction within Water Table CLUP/see below); no off-site dewatering; no extraction within 100 feet of private well.</p> <p>3. Roads: Operations impacting KPB roads must comply with 14.40 and subject to remedies in 14.40.</p> <p>4. Dust control: Water or calcium chloride on haul</p>	<p>be replaced within 30 days. Planning Commission may waive where topography or placement of natural barriers make screening not feasible or unnecessary</p> <p>Water source separation: No material extraction within 100 horizontal feet of any water source existing prior to permit issuance. Counter permits require four-foot vertical separation from seasonal high water table. CLUPs require two-foot vertical separation from seasonal high water table. No dewatering unless PC grants exemption.</p> <p>Roads: Operations impacting KPB roads must comply with KPB 14.40.175 and subject to remedies in 14.40.</p>	<p>opposed to generic "noise and visual screening/impacts -Decrease from 50' vegetation to 32' -Increase from 6' to 8' minimum -Decision-maker may waive if lot line is directly adjacent to another material site</p> <p>Water source separation: -Operations within water table governed by new section, 21.29.057 (see below) and require Material Extraction within Water Table CLUP -On site water movement permitted if qualified independent civil engineer provides statement under seal that dewatering will not lower any known water systems and applicant posts bond for potential accrued</p>	<p>Clarify that street level means elevation at property boundaries.</p> <p>"Note adjacent means adjoining in this instance, not separated by a ROW"</p>

Code Section	ORD 2022-36	Current Code	Highlighted Changes	Potential amendments Planning Director
	<p>roads within boundaries of material site</p> <p>5. Hours of operation: 6 am-9m but decision-maker may waive for specific seasonal project. Waiver valid for six consecutive months.</p> <p>6. Groundwater elevation: Requires groundwater monitoring/one well 4' below proposed excavation per ten acres of excavated area.</p> <p>7. Setback: 250' from LOZD/school/senior center/child care facility/etc.</p> <p>8. Boundaries: Must stake buffers, ROWs, easements at visible intervals by professional land surveyor. Stakes must be placed prior to permit issuance.</p>	<p>Dust control: Water or calcium chloride on haul roads within boundaries of material site</p> <p>Hours of operation: Rock crushing equipment shall not be operated between 10 pm and 6 am.</p> <p>Boundaries: Staked at sequentially visible intervals where boundaries are within 300' of excavation perimeter. Verification and staking by professional land surveyor.</p> <p>Processing: See below.</p>	<p>damages in amount equivalent to replace each water well within 300-foot radius of site. Rebuttable presumption is each well is minimum of \$10,000.</p> <p>Roads/Dust control: Essentially the same.</p> <p>Hours of operation: For all extraction activities, 6 am to 9 pm but decision-maker can waive or adjust for specific seasonal project for period of six consecutive months.</p> <p>Groundwater elevation: Requires groundwater monitoring.</p> <p>Setback: 250' from LOZD/school/senior center/child care facility/etc.</p>	

Code Section	ORD 2022-36	Current Code	Highlighted Changes	Potential amendments Planning Director
	<p>9. Processing: Must comply with conditions in new section 21.29.055 (Earth Materials Processing CLUP/see below.)</p> <p>SIX DISCRETIONARY CONDITIONS</p> <p>1. Setbacks/Buffer Areas: Up to maximum of 100' if PC finds based on substantial evidence that increase is necessary for public health, welfare, and safety; potential for rolling berms instead.</p> <p>2. Road maintenance and repair: Permittee may be required to maintain/repair damaged public roads; requires consultation with RSA Director.</p> <p>3. Ingress/egress: Decision-maker may require driveway authorization.</p>		<p>Boundaries: Stakes must be placed prior to permit issuance rather than time of application.</p> <p>Processing: Requires compliance with new section 21.29.055 and Earth Materials Processing CLUP.</p> <p>Adds discretionary conditions: -Additional setbacks or rolling berms -Maintenance and repair of damaged public roads -Driveway authorization -Dust suppression on public ROWs -Surface water protections as set forth in 21.29.030(A)(8)(a) -Street-level screening as appropriate for surrounding area and</p>	

Code Section	ORD 2022-36	Current Code	Highlighted Changes	Potential amendments Planning Director
	<p>4. Dust suppression: On public ROWs when natural precipitation inadequate to suppress dust generated by material site traffic.</p> <p>5. Surface water protection: As specified in 21.29.030(A)(8)(a).</p> <p>6. Street-level screening: Street-level visual screening, noise mitigation, & lighting restrictions as appropriate for the surrounding area and in accordance with 21.29.040 standards set to protect against attractive nuisance issues.</p>		to protect against attractive nuisances	
KPB 21.29.055- Earth materials processing	<p>In addition to mandatory conditions in 21.29.050(A).</p> <p>A. Conditioning or processing equipment must be operated at least 300' from parcel boundaries. PC may waive or reduce distance</p>	<p>300' setback for conditioning or processing equipment.</p> <p>PC may waive or reduce in consideration of and in accordance with existing uses of adjacent property at the time.</p>	<p>New code section.</p> <p>PC may waive or reduce in consideration of and in accordance with existing uses of the "properties in the vicinity". Present code</p>	

Code Section	ORD 2022-36	Current Code	Highlighted Changes	Potential amendments Planning Director
	<p>requirement in consideration of and in accordance with existing uses of properties in the vicinity.</p> <p>B. Hours of operation for processing equipment between 8am and 7pm or as PC determines.</p> <p>PC may also grant exceptions (not to exceed 120 days) for:</p> <ul style="list-style-type: none"> -Emergencies -Good cause finding that increase serves public purpose and is not harmful to public health, safety, and general welfare <p>Applicant may request waiver (not to exceed six consecutive months) for specific seasonal project. PC must also find waiver is not harmful to the public health, safety and general welfare.</p>		<p>is "adjacent property".</p> <p>Processing equipment may only be operated between 8am and 7pm, may be increased for emergencies, to serve a public purpose or for specific, seasonal project.</p>	

Code Section	ORD 2022-36	Current Code	Highlighted Changes	Potential amendments Planning Director
KPB 21.29.057- Material extraction in water table	<p>In addition to mandatory conditions in 21.29.050(A).</p> <p>Dewatering prohibited (21.29.050(A)(2)(b)).</p> <p>A. Applicant must meet the following requirements prior to applying:</p> <ol style="list-style-type: none"> 1. Installation of sufficient monitoring wells and test pits to provide qualified professional with adequate information to characterize the entire property that will be permitted for excavation. 2. Under the supervision of a qualified professional, measurement of seasonal high-water table elevation, groundwater flow direction, hydraulic gradient and water table elevation. 	<p>Excavation within 300' horizontal feet of water source may be permitted based on:</p> <ul style="list-style-type: none"> -No negative impact to quantity of an aquifer serving existing water sources; -Minimum of three water monitoring tubes or well casings to determine flow direction, flow rate, and water elevation; and -Quarterly measurements of groundwater elevation, flow direction, and flow rate for at least four quarters prior to application. Tubes or wells must be kept in place for duration of excavation in water table. <p>-Operations shall not breach aquifer-confining layer.</p> <p>No extraction activities within 100 linear feet from waterbodies.</p>	<p>New code section.</p> <p>In addition to 21.29.050 conditions, sets forth additional requirements and conditions primarily to protect water quantity.</p> <p>Qualified professional must be able to characterize entire property permitted for excavation through sufficient monitoring wells and test pits.</p> <p>Qualified professional must supervise measurement of seasonal high-water table elevation, groundwater flow direction, hydraulic gradient and water table elevation.</p> <p>Based upon available data, interpretations of data and knowledge of groundwater</p>	

Code Section	ORD 2022-36	Current Code	Highlighted Changes	Potential amendments Planning Director
	<p>3. A qualified professional's report determining the potential adverse effects to groundwater and surface water body elevation and quality, surrounding water users and adjacent properties. Determination based upon available data, interpretations of data and knowledge of groundwater processes.</p> <p>4. Report must be submitted with CLUP application. Subsection lists what must be included in the report.</p> <p>B. Must also include:</p> <p>1. Description of proposed extent and depth of material extraction beneath seasonal high-water table.</p> <p>2. Report 21.29.057(A)(4) report, monitoring plan</p>	<p>Additional setback from lakes, rivers, anadromous streams and riparian wetlands may be required.</p> <p>-Permits may contain additional conditions addressing surface water diversion.</p>	<p>processes, qualified professional will report potential detrimental adverse effects to groundwater and surface water body elevation and quality, surrounding water users and adjacent properties. Must be submitted with application and also include extent and depth of extraction beneath seasonal high-water table, spill prevention/control/countermeasures plan.</p> <p>Conditions: -Implementation of monitoring and spill prevention/control/countermeasures plan; -Monthly measurement of groundwater and retention of groundwater data for two years after</p>	

Code Section	ORD 2022-36	Current Code	Highlighted Changes	Potential amendments Planning Director
	<p>and spill prevention/control/countermeasures plan.</p> <p>C. Conditions</p> <ol style="list-style-type: none"> 1. Implement monitoring plan 2. Implement spill prevention/control/countermeasures plan 3. Monthly measurement (during active extraction) of groundwater flow direction, hydraulic gradient and groundwater table elevation 4. Retain water elevation monitoring data for two years after completion of reclamation activities 5. Annual report including water table elevation monitoring data from qualified professional 6. Operations must not breach or extract material from a confined 		<p>completion of reclamation activities;</p> <ul style="list-style-type: none"> -Annual report from qualified professional; -No breach or extraction from a confined aquifer or a confining layer beneath a perched aquifer; and -Setbacks from existing drinking water sources. 	

Code Section	ORD 2022-36	Current Code	Highlighted Changes	Potential amendments Planning Director
	<p>aquifer or a confining layer beneath a perched aquifer. Subsection sets forth what must be done if there is a breach.</p> <p>7. Setbacks: -500' from nearest down-gradient drinking water source -350' from nearest cross-gradient drinking water source -200' from nearest up-gradient drinking water source -Do not apply to drinking water sources constructed after permit issued</p>			
KPB 21.29.060 -Reclamation plan	<p>A. Reclamation with site plan required. 5 year reclamation plan must be submitted with permit renewal request.</p> <p>B. Applicant may re-vegetate and reclaim all disturbed land upon exhausting the material site or time determined</p>	<p>A. Reclamation Plan required.</p> <p>B. Applicant shall vegetate and reclaim all disturbed land upon exhausting the material site or time determined by plan to leave land in a stable condition.</p>	<p>"May" rather than "shall" revegetate.</p> <p>Bonding required.</p> <p>Plan survives permit termination and must list total acreage to be reclaimed.</p>	

Code Section	ORD 2022-36	Current Code	Highlighted Changes	Potential amendments Planning Director
	<p>by plan to leave land in a stable condition. 2:1 slope must be maintained. \$750 per acre bond required unless state bond. Enforcement under KPB 21.50.</p> <p>C. Measures listed must be considered as part of every reclamation plan, 6 reclamation measures including ponding and protection against public nuisance.</p> <p>D. Plan must list total acreage to be reclaimed.</p> <p>E. Close-out – reclamation survives permit expiration, termination or revocation.</p>	<p>Reclamation must occur for area exceeding 5 acres prior to 5 year renewal or as PC specifies.</p> <p>C. Measures listed must be considered as part of every reclamation plan, 6 reclamation measures including ponding.</p> <p>D. Plan must list total acreage to be reclaimed each year, a list of equipment and a time schedule for reclamation measures.</p>	Protection against public nuisance.	
KPB 21.29.065 -Effect of permit denial	A. Applicant denied counter permit cannot reapply within same calendar year w/out new evidence or circumstances.	N/A	An applicant cannot immediately reapply for a permit after denial.	

Code Section	ORD 2022-36	Current Code	Highlighted Changes	Potential amendments Planning Director
	<p>B. Applicant denied CLUP permit cannot reapply within same calendar year w/out new evidence or circumstances.</p> <p>C. Applicant bears burden of proof.</p>			
KPB 21.29.070 -Permit renewal, modification and revocation	<p>A. Renewal by application every 5 years.</p> <p>B. Administrative approval if compliance with all conditions, no modification and no violation in prior 2 years.</p> <p>C. Public hearing on renewal required when there is a modification, permit violation, or as determined by planning director. Permit in compliance with no violations must be approved for renewal but the commission can add additional conditions where appropriate.</p>	<p>A. Must request permit extension every 5 years, 30 days prior to expiration.</p> <p>B. If no modification to operations or conditions proposed, a permit extension certificate may be issued by planning director.</p> <p>C. Extension may be denied if: (1) not in compliance with reclamation requirements; (2) non-compliance with permit conditions; (3) permit violation in last 2 years and still in non-compliance.</p>	<p>Renewal application not request in writing.</p> <p>Possibility for public hearing on renewal and additional discretionary conditions on renewal.</p>	

Code Section	ORD 2022-36	Current Code	Highlighted Changes	Potential amendments Planning Director
	<p>D. Modifications processed per KPB 21.29.030 -.050</p> <p>E. Renewal fee is same as original permit fee.</p> <p>F. Failure to apply for renewal = permit expiration.</p> <p>G. Permits revoked per KPB 21.50.</p>	<p>D. Modification processed per KPB 21.29.030-.050.</p> <p>E. No fee for permit extensions approved by planning director. The fee for a permit modification processed under KPB 21.29.070(D) requires original permit fee.</p> <p>F. Failure to apply for renewal = permit expiration.</p> <p>G. Permits revoked per KPB 21.50.</p>		
KPB 21.29.080 -Permit Close-out	<p>Requires permittee to request close-out of permit and verification of reclamation compliance.</p> <p>Bonding released at close-out.</p>	<p>Current code section is titled "Permit Termination" and provides for a termination document and verification of site reclamation.</p>	<p>Terminology change from permit "termination" to "close-out". Explicit that reclamation requirement survives permit expiration or revocation & that bonds are released upon close-out.</p>	

Code Section	ORD 2022-36	Current Code	Highlighted Changes	Potential amendments Planning Director
KPB 21.29.100 -Recordation	Provides for recordation of permits, etc. issued under KPB 21.29. Owner/operator responsible for cost.	Similar recordation requirement.	Owner/operator responsible for recording costs.	
KPB 21.29.110 -Violations	Violations governed by KPB 21.50.	Same but also has subsection (B) which provides for bonding if owner/operator has 3 violations within a 3-year period.	Violations governed by KPB 21.50 remain unchanged. No subsection B related to bonding requirement if there are 3 violations in 3 year period.	
KPB 21.29.115 -Permit transfers	Planning director approves or disapproves permit transfers. Permits do not run with the land.	N/A	New section of code.	
KPB 21.29.120 -Prior-existing uses	<p>A. Determination – mirrors process under KPB 21.44 (LOZD) for nonconforming-use determination</p> <p>B. Director provides notice of application and issues decision. Decision can be appealed to the Planning Commission.</p> <p>C. Establishes 365-day period for abandonment.</p>	<p>A. Requires determination that use as a material site commenced or operated after May 21, 1986 and prior to May 21, 1996. Limited subdivision rights. PEU runs with land.</p> <p>B. Must have applied to be registered as a PEU prior to January 1, 2001.</p>	<p>By 1/1/2026, PEUs required to come into compliance with:</p> <ul style="list-style-type: none"> -Reclamation requirements; -Hours of operation; & -Buffer area. <p>365 period of nonuse/ no operations = Abandonment</p>	Modify 365 days of no use to: 5years=abandonment

Code Section	ORD 2022-36	Current Code	Highlighted Changes	Potential amendments Planning Director
	<p>D. Prohibits increasing, intensifying or expanding or moving the use.</p> <p>E. Establishes standards to guide decision-making process.</p> <p>F. Requires PEU compliance with KPB 21.29 reclamation plan and hours of operation by January 1, 2026.</p> <p>G. Requires PEU compliance with code requirements for extraction within water table under KPB 21.29.057, except the water source separation requirements do not apply.</p>	<p>C. Abandonment if no operation as a material site between 5/21/1996 and 5/21/2011. Owner may protest finding of abandonment and may appeal decision to the Planning Commission.</p>		<p>F. ADD some flexibility to the acceptable reclamation plans for PEUs that can demonstrate hardship in achieving standards.</p> <p>i.e.: Topsoil requirements <i>Sites that have not planned for this may have undue hardship.</i></p>

Kenai Peninsula Borough Assembly

MEMORANDUM

TO: Members, Kenai Peninsula Borough Assembly

FROM: Brent Johnson, Assembly President BJ
Lane Chesley, Assembly Member (B)

DATE: July 28, 2022

RE: Ordinance 2022-36, Amending KPB Chapter 21.25 and KPB Chapter 21.29 Regarding Conditional Land Use Permits and Material Site Permits, Updating Notice, Applicability, Permit Types, Application Requirements, Standards and Permits Conditions (Johnson, Chesley)

In 2021, the Borough administration brought the issue of land use conflicts related to earth material extraction and processing sites back before the Assembly and requested Assembly consideration and action to address the regulatory process related to conditional land use permits issued under KPB Chapter 21.29, Material sites.

After receiving public comment on Ordinance 2021-41, the Assembly ultimately tabled the ordinance and a related substitute ordinance. The Assembly formed a committee of the whole to review the permitting process with a fresh perspective.

This ordinance will repeal and re-enact KPB Chapter 21.29. This ordinance shifts the conditional land use permit (CLUP) process for earth materials extraction and processing away from a "one size fits all" approach and instead establish a multi-permit structure wherein activities related to materials processing and extraction within the water table require heightened protections for the public good but activities of lesser impact to surrounding properties do not require the same level of protections. This ordinance maintains important mandatory conditions found in current code that are necessary to protect the public health, safety, and general welfare of Borough residents. This ordinance also presents a permitting system that will provide for more flexibility to meet the needs of the particular application through discretionary conditions that may only apply when appropriate under the circumstances.

Your consideration of the ordinance is appreciated.

Kenai Peninsula Borough

Legal Department

MEMORANDUM

TO: Brent Johnson, Assembly President
Members, Kenai Peninsula Borough Assembly
Blair Martin, Planning Commission Chair
Members, Kenai Peninsula Borough Planning Commission

FROM: Robert Ruffner, Planning Director
Sean Kelley, Borough Attorney
A. Walker Steinhage, Deputy Borough Attorney

COPY: Charlie Pierce, Mayor

DATE: August 30, 2022

SUBJECT: Ordinance 2022-36: Sectional Analysis

The following provides a sectional analysis for Ordinance 02022-36, An Ordinance Amending KPB Chapter 21.25 and KPB Chapter 21.29 Regarding Conditional Land Use Permits and Material Site Permits, Updating Notice, Applicability, Permit Types, Application Requirements, Standards and Permit Conditions ("Ordinance 02022-36").

The purpose of this Sectional Analysis is to provide an easy reference to compare present KPB code with Ordinance 02022-36. Ideally it will supplement and cement the presentation to the Committee of the Whole on August 23, 2022. For the quickest summation of the changes proposed in Ordinance 02022-06, simply refer to the final column, "Highlighted Changes".

Finally, many of the features in Ordinance 02022-36—especially dimensional or durational descriptions like the 365-day period for prior-existing use abandonment—are intended to act as "springboards" for Assembly legislative policy decisions.

ORDINANCE 02022-36 SECTIONAL ANALYSIS

Code Section	O2022-36	Current Code	Highlighted Changes
KPB 21.25.050	30-day staff review period of an application.	21-day staff review period of an application.	Increase from 21 to 30 days.
KPB 21.25.060 - Notice	Notice published on KPB website; public bulletin; mailed to all owners/leaseholders within ½ mile radius of proposed site.	Requires notice published two times in newspaper, posted in the post office, copy of the notice sent by regular mail to all owners	Expressly does not apply to counter permits. No longer requires newspaper publication but allows

		and/or leaseholders within one-half mile.	for publication on KPB website.
KPB 21.29.005 - Intent and Purpose	Establishes an intent and purpose section for KPB Chapter 21.29 with focus on public health, safety and general welfare, and to promote compatible, orderly development.	N/A	New code section.
KPB 21.29.010 - Applicability	<p>A. Applies to all private and public lands, except as preempted by other law;</p> <p>B. Does not apply within the incorporated cities;</p> <p>C. Prohibits extraction within 300 feet of riparian wetlands and naturally-occurring open water bodies;</p> <p>D. Operations must be conducted in accordance with current Alaska DEC Manual for extraction projects.</p>	N/A	New code section to clarify applicability of chapter and fact that it does apply to both public and private lands outside of the incorporated cities unless otherwise exempt.
KPB 21.29.015 -Material extraction exempt from obtaining a permit	<p>A. Exempts extraction disturbing less than one acre if: -Not in floodplain; -Does not enter water table; and -Does not cross property boundaries.</p> <p>No excavation within 32' of lot line.</p> <p>B. Exempts dewatered bars within SBCFSA/Snow River.</p>	<p>Currently 21.29.010</p> <p>A. Exempts extraction disturbing less than one acre if: -Not in floodplain; -Does not enter water table; and -Does not cross property boundaries.</p> <p>No excavation within 20 feet of ROW or 10 feet of lot line.</p> <p>B. Exempts dewatered bars within SBCFSA/</p>	<p>New code section.</p> <p>No excavation within 32' of lot lines.</p> <p>PEUs exempt but must provide reclamation plan & comply with buffer zone requirements by 2026.</p>

	<p>C. Exempts PEUs but by 2026 must:</p> <ul style="list-style-type: none"> -Provide reclamation plan -Comply with buffer zone requirements 	<p>Snow River.</p> <p>C. PEUs exempt but floodplain permit required within mapped special flood hazard area.</p>	
<p>KPB 21.29.020-Types of permits available</p>	<p>Counter permit</p> <ul style="list-style-type: none"> -1 to 10 acres -No processing -No water table extraction -Only 21.29.050 conditions apply. <p>Earth Materials Extraction CLUP</p> <ul style="list-style-type: none"> -Activity disturbing more than 10 acres -No processing -No water table extraction -Only 21.29.050 conditions apply <p>Earth Materials Processing CLUP</p> <ul style="list-style-type: none"> -Required for all on-site processing, screening, or crushing -21.29.050 and 21.29.055 conditions apply <p>Earth Materials Extraction within Water Table CLUP</p> <ul style="list-style-type: none"> -Required for all earth materials extraction within water table -21.29.050 and 21.29.057 conditions apply 	<p>Counter permit and generic CLUP only.</p> <p>CLUP application requires all mandatory conditions and covers all uses.</p>	<p>Counter permit and three types of CLUPs.</p> <p>1 to 10 acres eligible for counter permit if no processing or water table extraction.</p> <p>Three different CLUP categories: earth materials extraction (more than ten acres), earth materials processing, and earth materials extraction within water table.</p> <p>Applicant may apply for one, two, or all three CLUP types.</p>
<p>KPB 21.29.030-Application procedure</p>	<p>Very similar to current procedure. Requires site map from professional surveyor and site plan</p>	<ul style="list-style-type: none"> -Legal description -Life span -Buffer plan -Reclamation plan 	<p>Breaks apart site map (professional surveyor)</p>

	from professional engineer	-Excavation depth -Type of materials and equipment -Any voluntary permit conditions -Site plan	from site plan (professional engineer) Application will be deemed incomplete without all items listed. (Not in current code.)
KPB 21.29.040- Standards for sand, gravel or material sites	Planning Director (counter permits) or Planning Commission (CLUPs) must find: -Use is not inconsistent with applicable comp plan -Use will not be harmful to public's health, safety and general welfare -Provides sufficient setbacks, buffer zones, and other safeguards -Reclamation plan	-Protects against lowering of water sources serving other properties and damage to other properties -Minimizes off-site dust movement, noise disturbance, visual impacts & alternate post-mining land uses	All new standards/"may issue" Focus on legitimate public purpose to protect against damage to public roads and adjacent properties as well as dust, noise and other impacts through setbacks, buffer zones, and street-level visual screening.
KPB 21.29.045	Applicants required to demonstrate compliance with state and federal law through written documentation from pertinent authorities: -Mining license (AK Dep't of Revenue) -Mining permit (ADNR) -Permits and plans required by DEC -Permits from USACE, if applicable -Other applicable permits from other regulatory bodies authorized to regulate mining activities or earth materials extraction Must comply with other regulations such as air	N/A	New code section. Requires compliance with applicable state/federal agencies prior to approval of KPB permit. All activity must comply with state/federal regulations governing air/water quality and hazardous materials. Violations subject to enforcement under 21.50.

	and water quality, and hazardous materials		
	Violations subject to enforcement under 21.50		
KPB 21.29.050	<p>NINE MANDATORY CONDITIONS</p> <p>1. Buffers: 32-foot buffer/may include natural vegetation for street-level visual and noise screening; 8-foot fence or berm with a 2:1 slope; 2:1 slope between buffer zone and floor on all inactive site walls. Material from slope may be removed if site plan provides removal timeframe and verification material will be replaced within 30 days.</p> <p>2. Water source separation: No extraction below or within 4' of seasonal high-water table unless new section 21.29.057 conditions are met (Material Extraction within Water Table CLUP/see below); no off-site dewatering; no extraction within 100 feet of private well.</p> <p>3. Roads: Operations impacting KPB roads must comply with 14.40 and subject to remedies in 14.40.</p> <p>4. Dust control: Water or calcium chloride on haul</p>	<p>Buffers: 50' of undisturbed natural vegetation, or 6' berm with at least 2:1 slope, or 6' fence. Material from slope may be removed if site plan provides removal timeframe and verification material will be replaced within 30 days. Planning Commission may waive where topography or placement of natural barriers make screening not feasible or unnecessary</p> <p>Water source separation: No material extraction within 100 horizontal feet of any water source existing prior to permit issuance. Counter permits require four-foot vertical separation from seasonal high water table. CLUPs require two-foot vertical separation from seasonal high water table. No dewatering unless PC grants exemption.</p> <p>Roads: Operations impacting KPB roads must comply with KPB 14.40.175 and subject to remedies in 14.40.</p>	<p>Allows flexibility to meet demands of a specific application vs. "one size fits all" of current code.</p> <p>Buffers:</p> <ul style="list-style-type: none"> -Street-level noise and visual screening (as opposed to generic "noise and visual screening/impacts") -Decrease from 50' vegetation to 32' -Increase from 6' to 8' minimum -Decision-maker may waive if lot line is directly adjacent to another material site <p>Water source separation:</p> <ul style="list-style-type: none"> -Operations within water table governed by new section, 21.29.057 (see below) and require Material Extraction within Water Table CLUP -On site water movement permitted if qualified independent civil engineer provides statement under seal that dewatering will not lower any known water systems and applicant posts bond for potential accrued

	<p>roads within boundaries of material site</p> <p>5. Hours of operation: 6 am-9m but decision-maker may waive for specific seasonal project. Waiver valid for six consecutive months.</p> <p>6. Groundwater elevation: Requires groundwater monitoring/one well 4' below proposed excavation per ten acres of excavated area.</p> <p>7. Setback: 250' from LOZD/school/senior center/child care facility/etc.</p> <p>8. Boundaries: Must stake buffers, ROWs, easements at visible intervals by professional land surveyor. Stakes must be placed prior to permit issuance.</p> <p>9. Processing: Must comply with conditions in new section 21.29.055 (Earth Materials Processing CLUP/see below.)</p> <p>SIX DISCRETIONARY CONDITIONS</p> <p>1. Setbacks/Buffer Areas: Up to maximum of 100' if PC finds based on substantial evidence that increase is necessary for</p>	<p>Dust control: Water or calcium chloride on haul roads within boundaries of material site</p> <p>Hours of operation: Rock crushing equipment shall not be operated between 10 pm and 6 am.</p> <p>Groundwater elevation: See below.</p> <p>Setback: Not addressed.</p> <p>Boundaries: Staked at sequentially visible intervals where boundaries are within 300' of excavation perimeter. Verification and staking by professional land surveyor.</p> <p>Processing: See below.</p> <p>No provision for discretionary conditions.</p>	<p>damages in amount equivalent to replace each water well within 300-foot radius of site. Rebuttable presumption is each well is minimum of \$10,000.</p> <p>Roads/Dust control: Essentially the same.</p> <p>Hours of operation: For all extraction activities, 6 am to 9 pm but decision-maker can waive or adjust for specific seasonal project for period of six consecutive months.</p> <p>Groundwater elevation: Requires groundwater monitoring.</p> <p>Setback: 250' from LOZD/school/senior center/child care facility/etc.</p> <p>Boundaries: Stakes must be placed prior to permit issuance rather than time of application.</p> <p>Processing: Requires compliance with new section 21.29.055 and Earth Materials Processing CLUP.</p>
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	<p>public health, welfare, and safety; potential for rolling berms instead.</p> <p>2. Road maintenance and repair: Permittee may be required to maintain/repair damaged public roads; requires consultation with RSA Director.</p> <p>3. Ingress/egress: Decision-maker may require driveway authorization.</p> <p>4. Dust suppression: On public ROWs when natural precipitation inadequate to suppress dust generated by material site traffic.</p> <p>5. Surface water protection: As specified in 21.29.030(A)(8)(a).</p> <p>6. Street-level screening: Street-level visual screening, noise mitigation, & lighting restrictions as appropriate for the surrounding area and in accordance with 21.29.040 standards set to protect against attractive nuisance issues.</p>		<p>Adds discretionary conditions:</p> <ul style="list-style-type: none"> -Additional setbacks or rolling berms -Maintenance and repair of damaged public roads -Driveway authorization -Dust suppression on public ROWs -Surface water protections as set forth in 21.29.030(A)(8)(a) -Street-level screening as appropriate for surrounding area and to protect against attractive nuisances
KPB 21.29.055-Earth materials processing	<p>In addition to mandatory conditions in 21.29.050(A).</p> <p>A. Conditioning or processing equipment must be operated at</p>	<p>300' setback for conditioning or processing equipment.</p> <p>PC may waive or reduce in consideration of and in accordance with</p>	<p>New code section.</p> <p>PC may waive or reduce in consideration of and in accordance with existing uses of the</p>

	<p>least 300' from parcel boundaries. PC may waive or reduce distance requirement in consideration of and in accordance with existing uses of properties in the vicinity.</p> <p>B. Hours of operation for processing equipment between 8am and 7pm or as PC determines.</p> <p>PC may also grant exceptions (not to exceed 120 days) for:</p> <ul style="list-style-type: none"> -Emergencies -Good cause finding that increase serves public purpose and is not harmful to public health, safety, and general welfare <p>Applicant may request waiver (not to exceed six consecutive months) for specific seasonal project. PC must also find waiver is not harmful to the public health, safety and general welfare.</p>	existing uses of adjacent property at the time.	<p>"properties in the vicinity". Present code is "adjacent property".</p> <p>Processing equipment may only be operated between 8am and 7pm, may be increased for emergencies, to serve a public purpose or for specific, seasonal project.</p>
KPB 21.29.057- Material extraction in water table	<p>In addition to mandatory conditions in 21.29.050(A).</p> <p>Dewatering prohibited (21.29.050(A)(2)(b)).</p> <p>A. Applicant must meet the following requirements prior to applying:</p>	<p>Excavation within 300' horizontal feet of water source may be permitted based on:</p> <ul style="list-style-type: none"> -No negative impact to quantity of an aquifer serving existing water sources; -Minimum of three water monitoring tubes or well casings to determine flow direction, flow rate, 	<p>New code section.</p> <p>In addition to 21.29.050 conditions, sets forth additional requirements and conditions primarily to protect water quantity.</p> <p>Qualified professional must be able to characterize entire</p>

	<p>1. Installation of sufficient monitoring wells and test pits to provide qualified professional with adequate information to characterize the entire property that will be permitted for excavation.</p> <p>2. Under the supervision of a qualified professional, measurement of seasonal high-water table elevation, groundwater flow direction, hydraulic gradient and water table elevation.</p> <p>3. A qualified professional's report determining the potential adverse effects to groundwater and surface water body elevation and quality, surrounding water users and adjacent properties. Determination based upon available data, interpretations of data and knowledge of groundwater processes.</p> <p>4. Report must be submitted with CLUP application. Subsection lists what must be included in the report.</p> <p>B. Must also include:</p> <p>1. Description of proposed extent and depth of material extraction beneath</p>	<p>and water elevation; and</p> <p>-Quarterly measurements of groundwater elevation, flow direction, and flow rate for at least four quarters prior to application. Tubes or wells must be kept in place for duration of excavation in water table.</p> <p>-Operations shall not breach aquifer-confining layer. No extraction activities within 100 linear feet from waterbodies.</p> <p>Additional setback from lakes, rivers, anadromous streams and riparian wetlands may be required.</p> <p>-Permits may contain additional conditions addressing surface water diversion.</p>	<p>property permitted for excavation through sufficient monitoring wells and test pits.</p> <p>Qualified professional must supervise measurement of seasonal high-water table elevation, groundwater flow direction, hydraulic gradient and water table elevation. Based upon available data, interpretations of data and knowledge of groundwater processes, qualified professional will report potential detrimental adverse effects to groundwater and surface water body elevation and quality, surrounding water users and adjacent properties. Must be submitted with application and also include extent and depth of extraction beneath seasonal high-water table, spill prevention/control/countermeasures plan.</p> <p>Conditions: -Implementation of monitoring and spill prevention/control/countermeasures plan;</p>
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	<p>seasonal high-water table.</p> <p>2. Report 21.29.057(A)(4) report, monitoring plan and spill prevention/control/countermeasures plan.</p> <p>C. Conditions</p> <p>1. Implement monitoring plan</p> <p>2. Implement spill prevention/control/countermeasures plan</p> <p>3. Monthly measurement (during active extraction) of groundwater flow direction, hydraulic gradient and groundwater table elevation</p> <p>4. Retain water elevation monitoring data for two years after completion of reclamation activities</p> <p>5. Annual report including water table elevation monitoring data from qualified professional</p> <p>6. Operations must not breach or extract material from a confined aquifer or a confining layer beneath a perched aquifer. Subsection sets forth what must be done if there is a breach.</p> <p>7. Setbacks:</p>		<p>-Monthly measurement of groundwater and retention of groundwater data for two years after completion of reclamation activities;</p> <p>-Annual report from qualified professional;</p> <p>-No breach or extraction from a confined aquifer or a confining layer beneath a perched aquifer; and</p> <p>-Setbacks from existing drinking water sources.</p>
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	<p>-500' from nearest down-gradient drinking water source</p> <p>-350' from nearest cross-gradient drinking water source</p> <p>-200' from nearest up-gradient drinking water source</p> <p>-Do not apply to drinking water sources constructed after permit issued</p>		
KPB 21.29.060 -Reclamation plan	<p>A. Reclamation with site plan required. 5-year reclamation plan must be submitted with permit renewal request.</p> <p>B. Applicant may re-vegetate and reclaim all disturbed land upon exhausting the material site or time determined by plan to leave land in a stable condition. 2:1 slope must be maintained. \$750 per acre bond required unless state bond. Enforcement under KPB 21.50.</p> <p>C. Measures listed must be considered as part of every reclamation plan, 6 reclamation measures including ponding and protection against public nuisance.</p> <p>D. Plan must list total acreage to be reclaimed.</p>	<p>A. Reclamation Plan required.</p> <p>B. Applicant shall vegetate and reclaim all disturbed land upon exhausting the material site or time determined by plan to leave land in a stable condition. Reclamation must occur for area exceeding 5 acres prior to 5 year renewal or as PC specifies.</p> <p>C. Measures listed must be considered as part of every reclamation plan, 6 reclamation measures including ponding.</p> <p>D. Plan must list total acreage to be reclaimed each year, a list of equipment and a time schedule for reclamation measures.</p>	<p>"May" rather than "shall" revegetate.</p> <p>Bonding required.</p> <p>Plan survives permit termination and must list total acreage to be reclaimed.</p> <p>Protection against public nuisance.</p>

	E. Close-out – reclamation survives permit expiration, termination or revocation.		
KPB 21.29.065 -Effect of permit denial	<p>A. Applicant denied counter permit cannot reapply within same calendar year w/out new evidence or circumstances.</p> <p>B. Applicant denied CLUP permit cannot reapply within same calendar year w/out new evidence or circumstances.</p> <p>C. Applicant bears burden of proof.</p>	N/A	An applicant cannot immediately reapply for a permit after denial.
KPB 21.29.070 -Permit renewal, modification and revocation	<p>A. Renewal by application every 5 years.</p> <p>B. Administrative approval if compliance with all conditions, no modification and no violation in prior 2 years.</p> <p>C. Public hearing on renewal required when there is a modification, permit violation, or as determined by planning director. Permit in compliance with no violations must be approved for renewal but the commission can add additional conditions where appropriate.</p>	<p>A. Must request permit extension every 5 years, 30 days prior to expiration.</p> <p>B. If no modification to operations or conditions proposed, a permit extension certificate may be issued by planning director.</p> <p>C. Extension may be denied if: (1) not in compliance with reclamation requirements; (2) non-compliance with permit conditions; (3) permit violation in last 2 years and still in non-compliance.</p> <p>D. Modification processed per</p>	<p>Renewal application, not request in writing.</p> <p>Possibility for public hearing on renewal and additional discretionary conditions on renewal.</p>

	<p>D. Modifications processed per KPB 21.29.030 -.050</p> <p>E. Renewal fee is same as original permit fee.</p> <p>F. Failure to apply for renewal = permit expiration.</p> <p>G. Permits revoked per KPB 21.50.</p>	<p>KPB 21.29.030-.050.</p> <p>E. No fee for permit extensions approved by planning director. The fee for a permit modification processed under KPB 21.29.070(D) requires original permit fee.</p> <p>F. Failure to apply for renewal = permit expiration.</p> <p>G. Permits revoked per KPB 21.50.</p>	
KPB 21.29.080 -Permit Close-out	<p>Requires permittee to request close-out of permit and verification of reclamation compliance.</p> <p>Bonding released at close-out.</p>	<p>Current code section is titled "Permit Termination" and provides for a termination document and verification of site reclamation.</p>	<p>Terminology change from permit "termination" to "close-out". Explicit that reclamation requirement survives permit expiration or revocation & that bonds are released upon close-out.</p>
KPB 21.29.100 -Recordation	<p>Provides for recordation of permits, etc. issued under KPB 21.29. Owner/operator responsible for cost.</p>	<p>Similar recordation requirement.</p>	<p>Owner/operator responsible for recording costs.</p>
KPB 21.29.110 -Violations	<p>Violations governed by KPB 21.50.</p>	<p>Same but also has subsection (B) which provides for bonding if owner/operator has 3 violations within a 3-year period.</p>	<p>Violations governed by KPB 21.50 remain unchanged. No subsection B related to bonding requirement if there are 3 violations in 3 year period.</p>
KPB 21.29.115 -Permit transfers	<p>Planning director approves or disapproves permit transfers. Permits do not run with the land.</p>	<p>N/A</p>	<p>New section of code.</p>

<p>KPB 21.29.120 -Prior-existing uses</p>	<p>A. Determination – mirrors process under KPB 21.44 (LOZD) for nonconforming-use determination</p> <p>B. Director provides notice of application and issues decision. Decision can be appealed to the Planning Commission.</p> <p>C. Establishes 365-day period for abandonment.</p> <p>D. Prohibits increasing, intensifying, expanding or moving the use.</p> <p>E. Establishes standards to guide decision-making process.</p> <p>F. Requires PEU compliance with KPB 21.29 reclamation plan and hours of operation by January 1, 2026.</p> <p>G. Requires PEU compliance with code requirements for extraction within water table under KPB 21.29.057, except the water source separation requirements do not apply.</p>	<p>A. Requires determination that use as a material site commenced or operated after May 21, 1986 and prior to May 21, 1996. Limited subdivision rights. PEU runs with land.</p> <p>B. Must have applied to be registered as a PEU prior to January 1, 2001.</p> <p>C. Abandonment if no operation as a material site between 5/21/1996 and 5/21/2011. Owner may protest finding of abandonment and may appeal decision to the Planning Commission.</p>	<p>By 1/1/2026, PEUs required to come into compliance with: -Reclamation requirements; -Hours of operation; & -Buffer area.</p> <p>365 period of nonuse/ no operations = Abandonment</p>
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O2022-36

Material site permitting process overview

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Section 1

KPB 21.25.050

- Increased review time of application for permit from 21 days to 30 days.

Section 2

KPB 21.25.060

- New notice section applicable to CLUPs
- Tracks Title 20 notice and maintains ½ mile notice radius.
- Provides for notice via borough website

Section 3

New Chapter KPB 21.29, Material Site Permits

- Establishes a multi-permit stratification system intended to increase decision-making flexibility while protecting against uses with highest impacts on public health, safety, and general welfare.
- Four permit types
 - Counter Permit (CP): anything from over 1 acre to 10 acres, no processing, no extraction in water table.
 - 3 Conditional Land Use Permit (CLUP) types:
 - Earth Materials Extraction CLUP: extraction activity disturbs more than 10 acres, no processing, no extraction in water table.
 - Earth Materials Processing CLUP: required for all on-site processing, screening, or crushing.
 - Earth Materials Extraction within Water Table CLUP: provides for heightened protections for uses within water table.

KPB Chapter 21.29

(as proposed in O2022-36)

- KPB 21.29.005 – Intent and Purpose
- KPB 21.29.010 – Applicability
- KPB 21.29.015 – Material extraction exempt
- KPB 21.29.020 – Types of permits available
- KPB 21.29.030 – Application procedure
- KPB 21.29.040 – Standards for sand, gravel or material sites
- KPB 21.29.045 – Required compliance with State/Federal laws
- KPB 21.29.050 – Permit conditions applicable to all permits
- KPB 21.29.055 – Earth materials processing
- KPB 21.29.057 – Material extraction in water table
- KPB 21.29.060 – Reclamation plan
- KPB 21.29.065 – Effect of permit denial
- KPB 21.29.070 – Permit renewal, modification, revocation
- KPB 21.29.080 – Permit close-out
- KPB 21.29.100 – Recordation
- KPB 21.29.110 – Violations
- KPB 21.29.115 – Permit transfers
- KPB 21.29.120 – Prior existing uses
- KPB 21.29.130 – Definitions

Section 3

KPB 21.29.005 – Intent and Purpose

- Sets forth intent and purpose for chapter in borough code regulating material sites.
- General purpose:
 - Promotes the public health, safety, and general welfare of KPB residents and visitors.
 - Promotes compatible, orderly development.

Section 3

KPB 21.29.010 – Applicability

- Chapter applies to all private and public lands in the borough, unless otherwise exempt by law.
- Does not apply within the incorporated cities.
 - Zoning powers have been delegated by the borough to all incorporated cities within the borough
- Prohibits earth materials extraction within 300 feet of riparian wetlands or naturally-occurring open water bodies.
- References State of Alaska, DEC Best Management Practices.

Section 3

KPB 21.29.015 – Material extraction exempt

- Exempts extraction disturbing less than one acre under circumstances set out
- Exempts dewatered bars within SBCFSA
- PEUs exempt BUT
 - Requires that by 2026, a legally established PEU:
 - 1. Provide a reclamation plan per KPB 21.29.060
 - 2. come into compliance with buffer zone requirements under KPB 21.29.050(A)(1)
 - Note: KPB 21.29.120 also requires PEUs to come into compliance with hours of operation requirements – this Section could be amended to include that as well.

Section 3

KPB 21.29.020 – Types of permits available.

- Current code: counter permit and CLUP. CLUP application requires all mandatory conditions and covers all uses.
- Proposed KPB 21.29.020 = 4 permit types
 - Counter Permit (CP): anything from over 1 acre to 10 acres, no processing, no extraction in water table. Only the conditions set forth in KPB 21.29.050 apply.
 - 3 Conditional Land Use Permit (CLUP) types:
 - Earth Materials Extraction CLUP: extraction activity disturbs more than 10 acres, no processing, no extraction in water table, only the conditions set forth in KPB 21.29.050 apply.
 - Earth Materials Processing CLUP: required for all on-site processing, screening, or crushing. Conditions set forth in KPB 21.29.050 + conditions set forth in KPB 21.29.055 apply.
 - Earth Materials Extraction within Water Table CLUP: Required for any earth materials extraction within water table. Conditions set forth in KPB 21.29.050 + conditions set forth in KPB 21.29.057 apply.
 - A CLUP applicant may request 1, 2 or all three CLUP types at the time of application.

Section 3

KPB 21.29.030 – Application procedure

- Very similar to current code application procedure
- Breaks apart a site map (professional surveyor) from site plan (professional engineer)

Section 3

KPB 21.29.040 – Standards for sand, gravel or material sites

- All new standards.
- Regulations serve legitimate public purpose to protect against damage of public roads, physical damage to adjacent properties, dust, noise and other impacts through setbacks, buffer zones, and street-level visual screening.
- In granting a permit the Planning Director or Planning Commission must find:
 - Use is not inconsistent with applicable comp plan.
 - Use will not be harmful to public's health, safety, and general welfare.
 - Sufficient setbacks, buffer zones, and other safeguards are provided.
 - Use provides for a reclamation plan.

Section 3

KPB 21.29.045 – Required compliance with State and Federal laws

- Requires evidence of compliance with applicable state/federal agency prior to approval of KPB permit.
- Requires all activity conducted in manner that complies with state/federal protections including but not limited to air quality, water quality, hazardous materials.

Section 3

KPB 21.29.050 – Permit conditions applicable to all permits

- In lieu of current exhaustive conditions in borough code that apply as a “one size fits all” this section establishes 2 mandatory conditions and provides 6 potentially applicable discretionary conditions.
- Allows for flexibility to meet the demands of a specific application.
- Is a move away from the “one size fits all” system.

Section 3

KPB 21.29.050 – Permit conditions

...Continued

- 9 mandatory conditions:
 1. Buffer Zone: 32 feet, 8 foot berm or fence, 2:1 slope, buffer zone can only be waived when site is next to adjacent pit.
 2. Water source separation: extraction within water table is prohibited unless requirements of KPB 21.29.057 are met; dewatering off site is prohibited; material extraction within 100 feet of any private well is prohibited.
 3. Roads: Operations that impact KPB roads must be in accordance with KPB Chapter 14.40.
 4. Dust control: Dust suppression required within material site haul roads.
 5. Hours of operation: Applicable to all operations, 6am to 9pm, but can be adjusted by decision-maker and/or waived for seasonal project.
 6. Groundwater elevation: Requires monitoring of groundwater.
 7. Setback: 250 ft from LOZD, school, senior center, child care facility, etc.
 8. Permit boundaries: Must stake buffers, ROWs.
 9. Processing: Requires compliance with KPB 21.29.050 conditions and KPB 21.29.055.

Section 3

KPB 21.29.050 – Permit conditions

...Continued

- 6 discretionary conditions:
 1. Setbacks/Buffer Areas: Up to a maximum of 100 feet based on circumstances, potential for “rolling berms”.
 2. Road maintenance and repair: Permittee may be required to maintain/repair damaged roads.
 3. Ingress/Egress: As determined by decision-makers, driveway authorization required.
 4. Dust Suppression: May be required on public ROWs.
 5. Surface water protection: Use of surface water protection measures specified in KPB 21.29.030(A)(8)(a).
 6. Street-level screening: Street-level visual screening, noise mitigation, and lighting restrictions as appropriate for the surrounding area and in accordance with the standards set forth in KPB 21.29.040 to protect against attractive nuisance issues.

Section 3

KPB 21.29.055 – Earth materials processing

- In addition to KPB 21.29.050 conditions, this new Section sets forth 2 additional conditions:
 1. Setback – must process 300 feet from parcel boundaries, or lesser distance as appropriate.
 2. Hours of operation: 8am to 7pm, or as determined by the PC.
 - Provides for exceptions for emergency or good-cause findings.
 - Seasonal, project-based waiver available.

Section 3

KPB 21.29.057 – Material extraction in water table

- In addition to KPB 21.29.050 conditions sets forth additional requirements & conditions aimed primarily at protecting water quantity:
 - 21.29.057(A): establishes 6 additional application requirements when applicant requests to extract within the water table.
 - Requires groundwater study and report from a professional to characterize and monitor the condition of groundwater at the permitted site. Elevations of groundwater will be tied to real-world elevation datum. Focuses on water quantity concern over water quality concerns
 - 21.29.057(C): establishes 7 additional conditions applicable when applicant requests to extract within the water table.
 - Setback: up to 500 feet setback required related to proximity to drinking water source.

Section 3

KPB 21.29.060 – Reclamation plan

- Similar to current code. Requires reclamation plan. Must be submitted with renewal application as well.
- Requires reclamation of site to leave land in stable condition with 2:1 slopes and presumably revegetation.
- Requires \$750 per acre bond.
- Reclamation plan and bond survives close-out, expiration, termination or revocation of permit.

Section 3

KPB 21.29.065 - .115

- KPB 21.29.065 – Effect of permit denial: no reapplication within 1 year without new evidence.
- KPB 21.29.070 – Permit renewal, modification, revocation: renewal required every 5 years, administrative if no changes, violations or complaints; public hearing otherwise.
- KPB 21.29.080 – Permit close-out: adds formal close-out process.
- KPB 21.29.100 – Recordation
- KPB 21.29.110 – Violations
- KPB 21.29.115 – Permit transfers: permits do not run with land, transfers must be approved.

Section 3

KPB 21.29.120 – Prior existing uses

- Recognizes “grandfather” rights, also known as non-conforming uses or prior existing uses (PEU).
- Must apply for PEU status. Determination by Planning Director appealable to Planning Commission (similar to LOZD nonconforming use process).
- Abandonment after 365 days of non-use; expansion prohibited.
- MAJOR CHANGE - BY JANUARY 1, 2026 – PEU must:
 - Comply with KPB 21.29.060 (reclamation plan)
 - Comply with KPB 21.29.057 (extraction within water table)
 - Comply with applicable hours of operation requirements

Issues that O2022-36 addresses to move the conversation forward

- One Size Fits All = rigid, not flexible to meet needs of application
 - Exhaustive list of mandatory conditions, no discretionary conditions, no room for adjustment
- Clarifies standards, and private vs. public viewshed concerns
- Provides for heightened requirements, conditions and protective measures for uses that could have highest detrimental impact on public health, safety, and general welfare.
- Address PEU issues, provides for formal process to establish use and status; requires eventual compliance with reclamation plan, hours of operation, and extraction within water table.



To whom it may concern:

The Kenai Peninsula Aggregate and Contractors Association does not support ordinance 2022-36. We feel that it is flawed in many ways, and in some respects, impossible to follow.

Below is a detailed list of our grievances with this document and reasons why. This includes, but is not limited to our concerns at this time. Our members are still digesting all applied situations applicable.

21.29.010 (c) This regulation gives us no access to any waterbody. It has been common in sites and mining to access non fish bearing streams and creeks within the state and even sometimes divert them for access to a commodity such as gravel or precious metals.

21.29.015 (a) This regulation went from 10ft to 32ft. 32ft buffer on a parcel less than 1 acre does not leave enough land to produce much at all. It would be extremely hard to operate in that space. Renders the exception almost useless.

(c) This regulation imposes current reclamation plans and buffers to PEU sites. While some consideration may be achieved on reclamation plans, the buffers of 32ft are likely impossible to achieve and considerably over-reaching. These PEU sites have been active or existing for sometimes longer than the KPB itself and have buffers less than 32ft. The material needed to comply may not be available and the work and cost associated to place 32ft of earth is enormous. Also, it is unbecoming of the KPB to change the deal struck years ago with the site operator or their successors.

21.29.020 (a) This regulation enlarged total acres from 2.5 to 10 acres, raised the floor 2 more feet, yet prohibits processing, screening, and crushing. This renders the permit useless as by definition, processing is what we do. 95% of our members or site operators screen material. Most have a small plant that makes very little dust or noise. Almost no complaints have been filed from this activity. Most small operations produce less than 750cu yds of material per day. The loss of 2 ft of material from the water table is unsubstantiated, and unnecessary. Not only does it create a loss of opportunity to the operator, but it takes a valuable commodity out of circulation and decreases the life of a site. This will only cause more contention with the public as more CLUP's will need to be applied for more frequently and in more areas. We feel this is going the wrong direction and we should be allowed to dig in the water table a minimum distance with standard conditions to extend the life of sites. Only if a major dig beyond the minimum distance, would a water table permit be needed.

(b) (1) Same grievance and reasoning as above.

(b) (2) Processing CLUP. This should not apply to small operations.

21.29.030 (a)(7)(e) This regulation sort of sheds the government's responsibility to construct and maintain standard roads and puts that responsibility on the site operator. All roads in the KPB should be up to KPB or State of AK standard. We pay taxes too.

(8)(b) This regulation demands we dig test holes 4 ft below proposed elevation. Some areas have deposits of gravel or peat that are deeper than common equipment can dig. It will commonly be an impossible or unnecessary task.

(9)(b) This regulation suggests the planning director may provide additional information. This information should be specifically specified as we may not always have a director that is as knowledgeable as our current director, as written, this promotes possible conflict of process.

21.29.040 (a) You have all heard my testimony on the lawfulness of viewshed rights and the few ways they are regulated or transferred. "Street-level visual screening" is just as unlawful as before, just a different angle of repose. There is no need for this language in the code, as if the operator is complying with the buffers, they will absolutely, inadvertently, achieve the screening.

21.29.050 (a)(1)(a) This regulation imposes 32ft buffer. We proposed a larger berm, and thus a buffer, but with access granted in the water table to offset the loss. One requirement without the other allowance is again, costing the operator, removing a valuable commodity from circulation with the public, and promoting more contention with the public as the frequency of new sites will surely increase because the need is naturally going to increase. The Street-level visual screening is the same as previously explained. The use of Undisturbed natural vegetation is unlawful. Please research *Tigard v. Dolyn*. Without giving the operator a alternative use for the property, it is a takings without just compensation.

(a)(1)(b) This regulation allows for the use of, and replacement of, the buffer slopes. We accept the idea, but 30 days is too short a time frame as material to replace the excavation may need to be hauled in as waste material from construction projects. 90 days is more suitable. Onsite material will surely be needed for reclamation since there is no provision in this document for the average pit to dig shallow ponds, thus shrinking the total area needed to reclaim.

(a)(2) This regulation prohibits use of any on site water. How are we to do any dust suppression? How do we make septic rock with a wash plant? Calcium chloride uses water to apply it as well. Traditionally we have used ponds in our sites to fill water trucks to suppress dust, run a wash plant, or obtain compaction on job sites. Without this availability, we would need outside sources, and truck it in. this goes against the intent of protecting the public safety, health, and welfare, by imposing unnecessary truck traffic. Also, the availability of outside sources is extremely small, as we can not pump out of any fish bearing source, and would not want to as responsible operators. A small pond or minimum dig in the water table should be allowed with every CLUP. Major or deep digs should be looked at with a separate permit and requirements. A minimum amount of dewatering should be allowed with each CLUP. 75,000 gallons per day should suffice. A water truck is 4,000 gal. We have been operating at this level on the KPB for 50 plus years and have no record of incident. The bonding of wells should only apply if the well is close horizontally or vertically to proposed excavation. If the dig is 15ft and the nearest well is 80ft....they are in two different aquifer formations and not connected. No need to burden the operator as we have no record of wells being damaged by a material site.

(a)(4) As explained before, this goes against the intent of this ordinance without access to a water source. May in some areas be an impossible task, as we will not be able to haul water fast enough to keep up.

(a)(6) How are we to install a monitor well if we are not allowed to excavate within 4ft of the water table? Even a drill excavates material by definition.

(a)(7) When will the setback not overlap? So this is really 282ft. Also, child care facility needs to be licensed.

(a)(9) As explained before, a permit without processing is useless. We process material by definition. We would simply be not able to operate.

(b)(1)(a),(i) Giving the planning commission discretion to 100ft eliminates any standard. How are we to speculate a suitable site if we do not have a standard that wont more than triple? Plannings discretion should not be over 300% of the standard. It should be less than 50%. "an eight-foot-high berm above the preexisting elevation may be constructed" may needs to be changed to must.

(b)(2) Roads should be kept to standard by the government. Maintenance is included in the gov. responsibility's. If we damage a road, its on the operator to repair it. Government should not shed it's responsibility. We pay taxes too.

(b)(3) ingress and egress. There is no need for this regulation. No one knows the best choice for placement than the operator. This is sort of a double regulation as we are already regulated to conform to all applicable agencies.

(b)(4) This regulation imposes operators to operate outside their ownership. Some operators don't have equipment designed for work outside the site boundary. Certain accesses may have restrictions or other permits required for activity within their ownership. A site operator can not control outside influences.

(b)(6) As stated before, any visual language should be struck from any ordinance. Viewshed rights don't allow for it.

21.29.055(b)(1) Processing hours have been limited from 6am-10pm to 8am-7pm. This is commonly not enough time to get the necessary projects done in the construction season. 7am-7pm is more appropriate as discussed with our members.

21.29.057 This regulation does not allow for any dewatering. As stated before, we need the tools to do the job. A minimum dig for a water source should be allowed with a maximum dewatering of 75,000gal. in all permits to comply with dust mitigation, wash plants for septic rock and other uses, and to be in harmony with the intent of this ordinance and not create unnecessary truck traffic.

21.29.060 There is no consideration here for post mining uses. We should be promoting post mining uses.

21.29.070 This regulation says if you meet all requirements, the planning commission MUST renew permit...but then says they may impose additional requirements and therefore, would deny the permit, in essence, if the operator did not agree with the new requirements. Government should not make a deal and then change the goal posts! Very unbecoming of the KPB to do so.

21.29.115 This regulation is probably the most egregious. Many PEU's were here before the KPB was. Many came from homesteads. Many have been passed down as a last wish of a generation to ensure the next had a form of value. Also, many sites, PEU and CLUP, have been operated for years, with the sweat equity of the operator, with the intention of someday selling the operation and retiring. This regulation almost guarantees that the value is lost. The site would immediately turn from an asset to a liability as the loss of the PEU or CLUP would initiate immediate reclamation, whether the commodity was exhausted or not. It would go against the Alaska constitution to use our resources to the fullest extent. The reality is that almost surely, the site was there before any surrounding residents were and if the site was forced to reapply for a permit, the half mile radius of opinions would not be in favor. Very unbecoming of the KPB to suggest this.

21.29.120(b) There needs to be clarification and standards in which the director would make a decision to approve or deny. We reserve our grievance on this portion of code until more information is provided.

(c) This regulation is the second most concerning. 365 days is not near enough time. This code also goes against the intent of this ordinance as it, like the lack of water, will create unnecessary truck traffic, dust,

noise, and general activity. Many larger sites sit dormant for very good reasons. Many are reserved quantities of resources for major state projects. Not unlike the four-lane connection between Soldotna and Sterling. It is finally scheduled and there's a few sites that have been waiting years for it to happen. It is not uncommon for an operator to get sick or hurt for a year and skip a construction season. The residents around some of the sites that have been dormant have enjoyed a reprieve from any activity. This regulation would end that enjoyment, and guarantee activity every year. Also, this is another case that the government is changing the deal struck with operators years ago. A longer time frame may be manageable. Our members have discussed 10 years.

(f) As these are old sites, and deals were struck years ago, it will almost surely be hard or impossible for these sites to conform to the new reclamation requirements. The material may not be there to do so. If ponding or post mining uses aren't allowed, it will make it even harder to accomplish. Also, the hours of operation and reclamation plan requirements is again, the government moving the goal posts. Unbecoming.

(h) This needs to be clarified as "permitted excavation" it reads as a cease and desist order as written.

Thank you for your consideration,

Ed Martin III, President, KPACA.

From: [Blankenship, Johni](#)
To: [Warner, Avery](#)
Cc: [Turner, Michele](#)
Subject: FW: <EXTERNAL-SENDER>Fwd: Proposed KPB ordinance 2022-36 regarding CLUPs and MSPs
Date: Tuesday, August 23, 2022 6:08:09 PM

From: Katharine M. Tongue <kmtongue@icloud.com>
Sent: Tuesday, August 23, 2022 5:51 PM
To: Blankenship, Johni <JBlankenship@kpb.us>
Subject: <EXTERNAL-SENDER>Fwd: Proposed KPB ordinance 2022-36 regarding CLUPs and MSPs

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Hi, Johni. I sent this to Mr. Johnson and Mr. Chesley on the 12th. Didn't hear anything back - of course they're super busy - but realized I should've cc'd you. Thanks very much. Enjoy the meeting.
Katie

Begin forwarded message:

From: Katharine Tongue <kmtongue@icloud.com>
Date: August 12, 2022 at 12:20:13 PM AKDT
To: bjohnson@kpb.us, lchesley@kpb.us
Cc: John & Katie <jbandkt@gmail.com>
Subject: **Proposed KPB ordinance 2022-36 regarding CLUPs and MSPs**

Dear Mr. Johnson and Mr. Chesley,

I'm writing with regard to proposed KPB ordinance **2022-36** regarding CLUPs and MSPs.

We are a small Kasilof operation, extracting our material in stages, over the long term, conscious of the wildlife, scenery, and reasonable use of all materials involved. We engage with our neighbors in the years we operate the pit and have very good relationships. While we have sold to large highway projects in the past, we prefer to limit our sales to individual contractors and neighbors.

I'm still working my way through your document, but 3 concerns are immediately apparent:

Under 21.29.120. *Prior-existing uses*, Clause D, *Expansion Prohibited* of your proposed ordinance, it sounds like you are asking that we clarify our footprint prior to October 1st in order to protect our PEU status. Do you mean that our entire PEU property must be cleared of trees? of topsoil? While beetle kill will soon render that suggestion somewhat less ridiculous, stripping our property in order to preserve our pre-existing right to extract our material strikes me as completely contrary to the goals of this amendment process. What is wrong with using current mapped parcel parameters? We can bulldoze our property/forrest but that seems counter to good sense. I think you are trying to prevent adjacent property purchasers from being offended after they did not look at a map when they purchased their land. That seems to be coddling at our expense (as well as current neighbors' when we are forced to clear a current visual and auditory barrier). Give thought to how you can achieve your goals without causing more neighborhood problems - as this directive will. We will be obliged to clear right to property lines which we have avoided thus far.

My second objection regards Clause C, *Discontinuance*. Again, given our historic and long term plan for extraction of material, there have been and may be years where there is no extraction. Why is that a problem? If you are looking to prevent operators from reopening old pits, consider a 3-5 or 10 year 'fallow' rule as opposed to one. One year is too draconian.

Third, regarding A. *Determination* and B. *Decision*, we went through this to comply with 21.29.120. (Prior existing uses. B. Owners of sites must have applied to be registered as a prior existing use prior to January 1, 2001.) Why do you need to impose this burden again? If it is intended to weed out the pits whose owners are no longer engaged, then please make the application process simple for those of us you are imposing this burden upon.

Thank you for your consideration.

Katie Tongue.
Owner, JBKT, LLC

21.29.010. Applicability.

D. All operations must be conducted in accordance with the current publication of the State of Alaska, Alaska DEC User's Manual Best Management Practices for Gravel/Rock Aggregate Extraction Projects. In the event a provision of this chapter conflicts with the State of Alaska's manual, this chapter controls.

21.29.020. Types of permits available.

B. Conditional land use permit. A conditional land use permit (CLUP) is required for the following types of earth material extraction or uses:

3. Earth Materials Extraction Within Water Table CLUP. An Earth Materials Extraction within Water Table CLUP is required for material extraction and operations of any size within four feet of the seasonal high-water table. The conditions set forth in KPB 21.29.050 plus the requirements and conditions set forth in KPB 21.29.057 for material extraction within four feet of the seasonal high-water table are applicable to this type of CLUP.

May want to define "water table" and how this level fluctuates. May also want to differentiate it from a "potentiometric water level", or the water level expressed by a "confined aquifer".

21.29.030. Application procedure.

A. In order to obtain a counter permit or CLUP under this chapter, an applicant must first complete and submit to the borough planning department a permit application, along with the fee listed in the most current Kenai Peninsula Borough Schedule of Rates, Charges and Fees. The planning director may determine that certain contiguous parcels are eligible for a single permit. The application must include the following items, without which the application will be deemed incomplete:

8. A site plan, prepared by a qualified independent civil engineer licensed and active in the State of Alaska to include the following:

21.29.045. Required compliance with State and Federal laws

A. All applicants for permits for earth materials extraction are required to demonstrate compliance with state and federal law. Prior to final approval of the permit, the applicant or agent must provide written documentation from the permitting agency of compliance with the following:

4. Notice of intent for construction general permit or multi-sector general permit and storm water pollution prevention plan, and other associated permits or plans required by the Department of Environmental Conservation (DEC) pursuant to the Alaska Pollutant Discharge Elimination System (APDES) requirements;

B. In addition to the requirements in subsection (A) of this section, all activity must be conducted in compliance with state or federal regulations governing the items listed below. Written documentation of compliance with these regulations is not required. Complaints received by the borough of violations of requirements within this section will be forwarded to the appropriate agency for enforcement, this includes but is not limited to:

2. Water quality. EPA or ADEC regulations controlling spills, spill reporting, storage and disposal of oil, anti-freeze and hydrocarbons.

C. Failure to comply with any of the requirements in subsections (A) and (B) of this section is a violation of the permit, and is subject to enforcement pursuant to KPB Chapter 21.50.

21.29.050. Permit conditions applicable to all permits.

- A. The planning commission or planning director, as applicable, must impose the following mandatory conditions prior to approval of a permit under this chapter:

2. Water source separation.

- a. Material extraction below or within four feet of the seasonal high-water table is prohibited unless the applicant is issued a CLUP Material Extraction Within Water Table Permit and the requirements and conditions set forth in KPB 21.29.057 are satisfied;
- b. Dewatering either by pumping, ditching or some other form of draining that removes water from the site or causes water to leave the site is prohibited;
- c. All permits shall be issued with a condition which prohibits any material extraction within 100 linear feet of any private well or water source existing prior to original permit issuance; and

Does this include PWS sources??

- d. On site movement of water may be permitted pursuant to KPB 21.29.057 and if: (i) the operator provides a statement under seal and supporting data from a qualified independent civil engineer licensed and active in the State of Alaska that the dewatering will not lower any known water systems; and (ii) the applicant posts a bond for liability for potential accrued damages in an amount equivalent to the cost to replace each water wells within a 300-foot radius of the site. The rebuttable presumption is that the cost per well is a minimum of \$10,000.

Re "...any known water systems..." - Does this include PWS sources?? If so, clarify.

6. Groundwater elevation. All material sites must maintain one monitoring well four feet below the proposed excavation per ten acres of excavated area.

Should this be clarified to mean one monitoring well in the same aquifer?

7. Setback. Material site excavation areas must be 250 feet from the property boundaries of any local option zoning district, existing public school ground, private school ground, college campus, childcare facility, multi-purpose senior center, assisted living home, and licensed health care facility. If overlapping, the buffer areas of the excavation must be in addition to the 250-foot setback.

- B. Discretionary Conditions. The planning commission or planning director, as applicable, may set conditions of approval for issuance of a counter permit or CLUP, as appropriate for the area in which the development is sited, for the following:

1. Setbacks/Buffer Area.

- a. The mandatory buffer area condition in subsection (A) above may be increased, up to a maximum of 100 feet between the area of excavation and the parcel boundaries, if the planning commission finds based on substantial evidence presented that increasing the buffer area is necessary for the public health, welfare and safety of the surrounding community;

5. Surface water protection. Use of surface water protection measures as specified in KPB 21.29.030(A)(8)(a).

21.29.057. Material extraction below or within four feet of the seasonal high-water table.

In accordance with KPB 21.29.020(B)(3), a CLUP is required for material extraction of material below or within four feet of the seasonal high water table. Prior to a permit being issued the planning commission must impose the mandatory conditions set forth in KPB 21.29.050(A) and discretionary conditions as deemed appropriate. In accordance with KPB 21.29.050(A)(2)(b) dewatering is prohibited. The following additional application requirements and permit conditions specific to a Material Extraction within the Water Table CLUP apply:

A. Prior to application for a water table extraction permit, the following requirements must be met:

1. Installation of a sufficient number of monitoring wells and test pits, as recommended by a qualified professional, to adequately determine groundwater flow direction, hydraulic gradient, water table and seasonal high-water table elevation Monitoring well and test pit locations must provide the qualified professional with adequate information to characterize the entire property that will be permitted for material extraction. Well casing elevations must be surveyed to a vertical accuracy of 0.01 feet by a registered land surveyor and tied to NAVD 1988.

Seems to conflict with 21.29.050(A)(6) that says "...one monitoring well...per ten acres...". Perhaps add "at least" to 21.29.050(A)(6) and reference this section for more details.

2. Determination of seasonal high-water table elevation, groundwater flow direction, hydraulic gradient, and water table elevation for the site must be measured under the supervision of a qualified professional.

3. A written report must be completed by a qualified professional that makes a determination about the potential adverse effects to groundwater and surface water body elevation, groundwater and surface water quality, surrounding water users and adjacent properties. The determination must be based on available data, interpretations of the data and knowledge of groundwater processes.

4. The report must be submitted with the CLUP application and must:

- a. Identify existing public water system sources (i.e., wells, springs, surface water intakes), as identified by the state, that are located within one-half mile of the boundary of the property on which the activity will take place;

- Recommend changing to "Identify where the property boundary on which the activity will take place intersects a public water system (PWS) Drinking Water Protection Area, as identified by the state."
- See interactive public web map, titled "Alaska DEC Drinking Water Protection Areas", at <https://www.arcgis.com/home/item.html?id=13ed2116e4094f9994775af9a62a1e85>.
- The link could be part of a supplemental fact sheet?

b. Identify actual or presumed private drinking water wells located within one-half mile of the boundary of the property on which the activity will take place and include a copy of the available well logs;

c. Identify existing regulated potential sources of contamination within at least one-half mile of the boundary of the property on which the activity will take place;

d. Contain maps at appropriate scales presenting the results of the well search, the setbacks required by subsection (C)(7) of this section, and illustrating wetlands and water bodies; at least one map must show identified potential sources of contamination;

e. Include the water table elevation monitoring data, monitoring well logs and records of any test pits, and a discussion of the seasonal high-water table determination; and

f. Evaluate subsurface hydrologic conditions and identify potential adverse effects that may occur as a result of material extraction. The evaluation of the hydrologic conditions must include identifying confining layers.

B. In addition to the application requirements for a CLUP for earth materials extraction, the application for a water table extraction permit must include:

1. A description of the proposed extent and depth of material extraction beneath the seasonal high-water table.

2. A written report that meets the requirements of subsection (A)(4) of this section, a monitoring plan, and a spill prevention, control, and countermeasures plan as required by this section.

C. Conditions. In addition to the requirements of KPB 21.29.050, operating conditions for extraction within or below four feet of the seasonal high-water table are as follows:

1. Implement a monitoring plan that meets the requirements of this chapter. If existing wells will provide sufficient data, no additional wells are required.

2. Implement the spill prevention, control and countermeasures plan in accordance with Environmental Protection Agency's requirements for above ground storage tank operations regardless of the quantity of petroleum products on site.

3. Groundwater flow direction, hydraulic gradient, and groundwater table elevation for the subject parcel must be measured at least monthly during active extraction. Monitoring wells must be maintained or replaced with equivalent monitoring wells.

4. Water elevation monitoring data must be retained for two years following completion of reclamation activities and must be provided to the planning director upon request.

5. A qualified professional must annually submit a report to the department that includes water table elevation monitoring data.

6. Operations must not breach or extract material from a confined aquifer or a confining layer beneath a perched aquifer.

Define "confined aquifer", "confining layer", and "perched aquifer".

a. If evidence suggests a confined aquifer or confining layer has been breached, or if groundwater or surface water elevation changes rapidly or beyond natural variation, the director must be notified within 24 hours.

i. A hydrologic assessment, conducted by a qualified professional, to determine the affected area and the nature and degree of effects and a description of potential repair or mitigation options must be submitted to the director within 14 calendar days of notification; and

ii. Repair or mitigation sufficient to address identified effects must be initiated as soon as practical, not to exceed 45 calendar days from the date the assessment is received by the director.

7. Operations must maintain the following setbacks:

- a. 500 feet from the nearest down-gradient drinking water source;
- b. 350 feet from the nearest cross-gradient drinking water source;
- c. 200 feet from the nearest up-gradient drinking water source; and
- d. Minimum separation distances do not apply to drinking water sources constructed after a permit to extract material below the water table has been issued.

21.29.060. – Reclamation plan.

E. **Close-out.** Reclamation plans and requirements survive expiration, termination, or revocation of a permit granted under this chapter. In order to close-out a permit, the planning director must be provided adequate proof that reclamation has been conducted in accordance with the reclamation plan. If a permit expires, terminates, or is revoked prior to permit close-out, the remedies under KPB 21.50 apply and the planning director may hold applicable fines and remedies in abeyance upon a finding that reclamation is actively ongoing.

Is this a good place to include requirements for decommissioning any monitoring wells? See Section 9.2.12 Well Decommissioning of the DEC Gravel Extraction BMP Manual, <https://dec.alaska.gov/water/wastewater/stormwater/gravel/>.



DATE: August 30, 2022

TO: KPB Assembly

SUBJECT: Ordinance 2022-36 Amending 21.25 & 21.29
Regarding CLUP & Material Site Permits

RE: Technical Recommendations

The proposed ordinance does a good job in laying out and addressing different aspects material site permitting and the areas that need improvement regarding material site permitting and management.

After initial review of the proposed ordinance, there are two sections that I am submitting written comment on currently.

21.29.030.A.7 & 21.29.030.A.8

The Application Procedure section designates which parts of site map and site plan should be prepared by a professional surveyor versus a professional engineer. As written, these sections do not properly differentiate responsibilities of the two disciplines. Recommended amendments are as follows:

Part 7 Subsection a. Separated into both professional qualifications as follows: areas of existing excavation should be shown on Surveyor's map & areas of proposed excavation & reclamation should be part of Part 8 Engineering.

Part 7 Subsection b. Proposed buffers should be included in Part 8 Engineering.

Part 7 Subsection d. Separated into both professional qualifications as follows: areas of existing ingress/egress should be shown on Surveyor's map & areas of proposed ingress/egress should be part of Part 8 Engineering.

Part 7 Subsection e. Anticipated haul routes should be included in Part 8 Engineering.

Part 7 Subsection f. Should be separated into both professional qualifications as follows: areas of existing processing should be shown on Surveyor's map & areas of proposed processing should be part of Part 8 Engineering.

Part 8 Subsection b. Locations of test holes and depth to groundwater should be included in Part 7 Surveying.

Part 8 Subsection c. Locations of private wells of adjacent property owners should be included in Part 7 Surveying.

Part 8 Subsection d. Locations of any waterbody on the parcel should be included in Part 7 Surveying.

Page 1 of 2



Basically, any existing conditions should be included Part 7 Surveying and planning related items should be included in Part 8 Engineering.

21.29.055 Earth Material Processing

The Borough needs to add in a reference to blasting. While blasting to mine or process material isn't very common in the Borough there are areas of the borough where hard-rock mining is taking place and should be covered in permitting. Blasting will also become more prevalent in the Borough as the high-quality riverbed deposited gravels are exhausted.

Please feel free to contact me if you have any questions or comments.

Sincerely,

A handwritten signature in black ink, appearing to read 'Gina DeBardelaben', written in a cursive style.

Gina DeBardelaben, P.E.
Vice President

From: Blankenship, Johni
To: Warner, Avery
Subject: FW: <EXTERNAL-SENDER>Material site 2022-36
Date: Thursday, September 1, 2022 1:25:43 PM

Laydown public comment

From: Greg Turner <prudhoedude@gmail.com>
Sent: Thursday, September 1, 2022 1:25 PM
To: G_Notify_AssemblyClerk <G_Notify_AssemblyClerk@kpb.us>
Subject: <EXTERNAL-SENDER>Material site 2022-36

CAUTION:This email originated from outside of the KPB system. Please use caution when responding or providing information. Do not click on links or open attachments unless you recognize the sender, know the content is safe and were expecting the communication.

Unregulated or grandfathered Material Sites and Gravel Pits have a long history of causing harm and pollution in KPB.

We taxpayers need to be protected with regulations and control to work permits and monitoring. Helping to prevent on going problems and issues created by these uncontrolled sites doing what is now illegal in controlled sites. Some examples in my area Kobuk between Spruce and Big Eddy are mining gravel below the aquifer level. Not having proper site slopes adjacent to roads, and high pressure gas transmission lines. Dumping on site of organic or nor organic material. Non functioning Junk heavy equipment and big trucks, pickups and other items, Atco trailers, RV's equipment shops and buildings. These new regulations can help prevent problems.

Recent 8/23/22 unpermitted water release by Glen Martin's Gravel Pit doing business as Northern Enterprises from three large ponds, created by digging 30' below the waters surface that is the exposed aquifer level. This is the natural aquifer level in the area 35-40 ft below Kobuk Rd between Spruce and Big Eddy Road. The surface of those ponds are 12'-15' above Greenridge St, my neighborhood and they are 25-30 feet deep. The released water flowed through Doug Norris's Gravel Pit off of Joplin Ct and Greenridge St covering Greenridge St.

In the past Glen Martin has breached the artisan aquifer twice that we know of in the last seven years. Once resulting in flooding of Greenridge St neighborhood and home crawl spaces yards similar to what we are experiencing now.

If you dig deeply 30' below the natural aquifer level to extract gravel to sell you end up with big deep ponds that are always going to be there. Open exposed deep water ponds are dangerous to humans and animals. Creating hazards for money that could possibly cause harm to citizens from flooding or drowning or impact water quality of the local wells.

This gravel pit has a low side 5' above the pond water level of exposed sand adjacent tp Doug Norris's Pit that looks like a dike separating and containing these elevated ponds. Not ideal as it looks more like a dam.

Filling a pond with beetle kill trees and slash or dirt will displace the water resulting in overflow of the ponds. The water has to go someplace.

Water containment, Junk equipment, miscellaneous scrap and metal, older shop buildings.

Truly amazing to look at the new regulated material sites compared to the older uncontrolled sites.

Help to keep the KPB clean, vote to regulate and control these older unregulated sites and pits.

From: [Blankenship, Johni](#)
To: [Warner, Avery](#)
Subject: FW: <EXTERNAL-SENDER>Visual Screening of a Material Site
Date: Thursday, September 1, 2022 9:57:11 AM

[For laydown packet](#)

From: Hans Bilben <catchalaska@alaska.net>
Sent: Wednesday, August 31, 2022 10:43 AM
To: Blankenship, Johni <JBlankenship@kpb.us>
Subject: <EXTERNAL-SENDER>Visual Screening of a Material Site

CAUTION:This email originated from outside of the KPB system. Please use caution when responding or providing information. Do not click on links or open attachments unless you recognize the sender, know the content is safe and were expecting the communication.

Hi Johni,

Please forward this to all Assembly members and copy to Legal and the Planning Director

Assembly Members,

As you are likely aware, the author/authors of the proposed material site ordinance rewrite have purposely removed visual screening (other than street level, whatever that means) from the ordinance. The result of this action would be that a large number of borough residents will not have equal protection under the law. If you live at street level in a one story structure you're possibly protected, but any multi story dwellings, and all houses at higher elevations will be left totally unprotected from negative visual impact. If the author(s) have a legitimate and legal reason to deny this basic protection, please have them explain it in public. KPB code currently requires visual screening for material sites, marijuana operations, and animal feed lots. MatSu code, which seems to be the foundation for the proposed rewrite, requires visual screening. When a buffer zone is properly designed visual screening and noise screening are both dependent upon visual line of sight. To write the Standard for visual screening out of the ordinance would be a huge step backwards for the residents of this borough.

Please take a couple minutes to read the following information concerning visual

screening and its relevance to the KPB Comprehensive Plan, and please ensure that any new ordinance will continue to provide this basic protection to ALL residents of the borough.

Thank You,

Hans Bilben

The standards and conditions relating to the operation of a material site are to avoid certain land uses which may be potentially damaging to the public health, safety and welfare (21.25.020). Restrictions must be rationally related to a legitimate government objective, and ensuring protection of the public health, safety and welfare is a legitimate objective.

Standards and conditions to “minimize visual impacts” certainly shield surrounding property owners from actually seeing the material site activities. But they also do more – they mitigate against devaluing surrounding land values (a public welfare issue); they mitigate against noise (public health); they mitigate against dust (public health); they mitigate against the potential that a material site turns into an attractive nuisance (which is a dangerous condition on a landowner’s property that may

particularly attract children onto the land and pose a risk to their safety) as essentially what is being created appear to neighboring (public safety); they mitigate against the negative impacts such sites have on preservation of the scenic beauty and furtherance of the tourism industry (public welfare) (Per comprehensive plan, tourism and hospitality are major parts of the Kenai region's economy and represent the second-largest private employment sector after healthcare)

The guiding principals to better regulate land use are

- Balance and integrate multiple interests in land use: the right to use land as you choose; the right to not be excessively impacted by neighbors who exercise that freedom; and the shared value in protecting the underlying health of borough natural systems
- Develop regulations that will minimize conflicts between adjoining uses, maintain property values, maintain and improve neighborhoods, communities and natural systems
- Develop an improved set of Borough land use regulations to reduce reoccurring conflicts on the same narrow set of issues such as gravel pits.

The Comprehensive Plan specifically calls for consideration of establishing conditions that require larger setbacks, safety and visual screening, control on access routes, control on hours of operation, and address

environmental concerns.

Consideration of updating the list of topics that staff and Planning Commission may consider when setting conditions of approval.

Incorporate safety, visual quality, environmental impacts and traffic impacts.

From: [Blankenship, Johni](#)
To: [Warner, Avery](#)
Subject: FW: <EXTERNAL-SENDER>Fwd: Gravel pit in back of 50-51 Greenridge Drive causing flooding and eroding my property. Ordinance 2022-36
Date: Thursday, September 1, 2022 12:22:41 PM

Laydown public comment

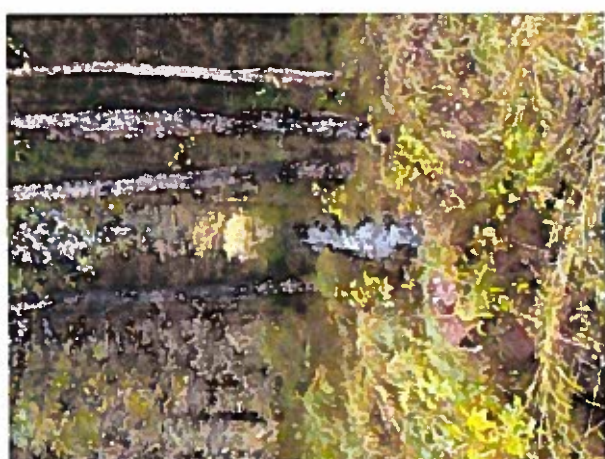
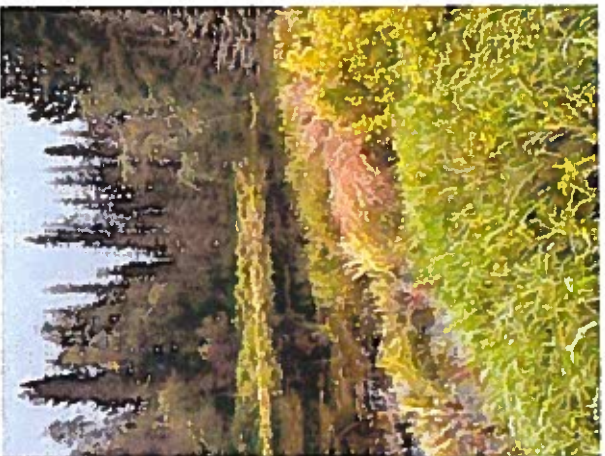
From: DR Lee <dr.lee@live.com>
Sent: Thursday, September 1, 2022 12:09 PM
To: G_Notify_AssemblyClerk <G_Notify_AssemblyClerk@kpb.us>
Subject: <EXTERNAL-SENDER>Fwd: Gravel pit in back of 50-51 Greenridge Drive causing flooding and eroding my property. Ordinance 2022-36

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Sent from my iPhone

Begin forwarded message:

From: DR Lee <dr.lee@live.com>
Date: September 1, 2022 at 12:07:34 PM AKDT
To: assemblyclerk@kpb.com
Cc: Ohare Russ <ro_ua@live.com>, Soldotna Neighbors Elena Staab <elena-joy@hotmail.com>
Subject: Gravel pit in back of 50-51 Greenridge Drive causing flooding and eroding my property. Ordinance 2022-36





Sent from my iPhone

We have owned lots 50-51 Greenridge Street in Ridgeway for over 12 years; and, we have never seen the pond in back of the property overflow or be even high. The pond is usually very low. For the past week the pond has overflowed and it's now eroding our property. Greenridge Street is flooded.

If you drive and observe the pit that is adjacent to Kobuk Street and Spruce Ave E and that now surrounds this area, you will see that the topography and drainage resulting from the pit overreach is changed and flooding; thus, ruining the residential property in the area. This overreach must stop.

Thank you for a quick resolution to this problem.

Sincerely,

Drs Cynthia Lee and Russell James O'Hare
907-3782987

2022-36

From Gary and Eileen D Sheridan, Anchor Point, AK

For State of Alaska residents and tourists health, safety, and sight, Please Add this Amendment to the new KPB Regulations for Gravel Pits Under 21.29.040. Add B. Gravel Pits will not be allowed in a residential area, close to recreational State Parks and Rivers, due to the Silica that can be inhaled and cause Silicosis and other fatal conditions.

Notice in the following articles, what other illnesses the silica dust can cause.

What is Silicosis? Please read the following articles.

<https://www.stopthegravelpit.com/post/crystalline-silica-dust-the-invisible-killer>
attached.

Also, From MedlinePlus - part included

<https://medlineplus.gov/ency/article/000134.htm>

"Causes - Silica is common, naturally-occurring crystal. It is found in most rock bed. Silica dust forms during mining, quarrying, tunnelling, and working with certain metal ores. Silica is a main part of sand, glass workers and sand-blasters are also exposed to silica. Three types of silicosis occur:

Chronic silicosis, which results from long-term exposure (more than 20 years) to low amounts of silica dust. The silica dust causes swelling in the lungs and chest lymph nodes. This disease may cause people to have trouble breathing. This is the most common form of silicosis.

Accelerated silicosis, which occurs after exposure to larger amounts of silica over shorter period of time (5-15 years). Swelling in the lungs and symptoms occur faster than in simple silicosis.

Acute silicosis, which results from short-term exposure to very large amounts of silica. The lungs become very inflamed and can fill with fluid, causing severe shortness of breath and a low blood oxygen level....Intense exposure to silica can cause disease within a year. But it usually takes at least 10 - 15 years of exposure before symptoms occur. Silicosis has become less common since the Occupational Safety and Health Administration (OSHA) created regulations requiring the use of protective equipment, which limits the amount of silica dust workers inhale....."click on the reference above to finish reading.

Also read please

<https://www.sciencedirect.com/topics/medicine-and-dentistry/silicosis>

The noise even a block away can cause such noise to disturbances as it did me this summer after a busy day and needing sleep. Can you imagine being a visitor coming to enjoy the State camp ground on the Anchor River for a week's or holiday vacation and having to deal with the noise of the machines working the gravel pit and trucks.

I don't know how the KPB can possibly agree to have a gravel pit and mining that may cause such illnesses to our families, grandchildren, and tourists. I'm now scared for my grandchildren that came this summer to fish and vacation with grandpa and grandma and enjoyed running around in our yard, riding the bikes grandpa had fixed up for them. Have we unknowingly allowed them to have the start of Silicosis from the gravel pit which was denied but then given 2.5 acres to work? We built a "Beachy Built Home" with an air system never expecting to have

From Gary and Eileen D Sheridan, Anchor Point, AK

a gravel pit being put in 15 years later. That fine dust gets in everything. Look at the different types of cancer that has been shown to be causes of gravel pits and mining. I know what it is like to fight cancer. I had just started treatments in Soldotna when we first found out there was a plan to have a gravel pit in our neighborhood. Our rivers help bring our tourist businesses, and we should protect those businesses, too.

Respectfully submitted to the work group of KPB to update regulations for Gravel Pits,
Eileen and Gary Sheridan



Photo by friend of ours who visits us almost every year.

Crystalline Silica Dust — The Invisible Killer

**How a *Totally Unnecessary* Gravel Mine Would Create
Widely Known Deadly Health Issues
That Would Harm Hundreds of Benzie County Residents**

Developed for and Presented to the
Homestead Inland Joint Planning Commission
December 6, 2019

prepared by



Crystalline Silica Dust — The Invisible Killer

Summary

The proposal of an open pit gravel mine in a district zoned Rural Residential creates numerous very serious consequences. This report primarily examines the devastating health issues created by crystalline silica dust, an unavoidable byproduct produced when mining gravel.

Until recently, few understood the dangers created by crystalline silica dust. Unlike normal sand, crystalline silica dust has razor sharp edges and is microscopic in size. When inhaled, it bypasses the body's natural defenses and become *permanently* lodged in the deepest parts of the lungs. It has proven links to diseases that lead to death including silicosis, lung cancer, COPD, renal failure, and kidney disease as well as causing auto-immune diseases like rheumatoid arthritis. These health issues are so grave that OSHA and MIOSHA have recently adopted new safety standards to deal with crystalline silica dust. Both agencies are involved in a massive educational drive to warn workers about the dangers.

Not only is crystalline silica dust deadly, it is difficult to control. Clouds of it can easily be swept up and carried by the wind for tens of miles. Even in what weather experts call 'calm' winds, this deadly dust can travel for miles settling in the yards and on the homes and innocent bystanders in Inland Township, its three neighboring townships, and even further.

All of the related diseases crystalline silica dust is widely known to cause serve as sufficient proof of a 'very serious consequence' health based issue as required under MCL 125.3205 Sec. 205 (5)(e). Denying the requested special use permit for this totally unnecessary gravel mine at parcel 08-006-007-00 is the only logical, fair, and humane course of action the HIJPC can take.

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Direct any questions
about this report to:

Jim Brouwer
Friends of the Platte River Watershed
jim@platteriverwatershed.org

Crystalline Silica Dust — The Invisible Killer

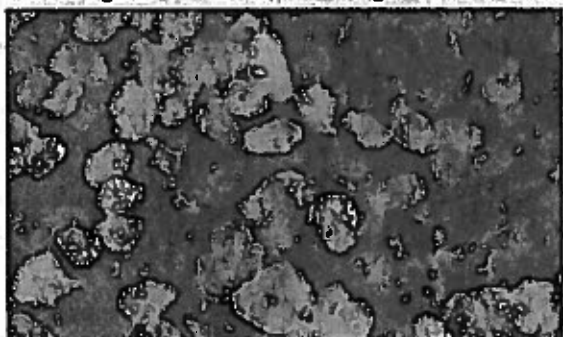
Sand's Tiny Secrets — Size, Material, & Shape

Sand holds some interesting secrets. We think we know what it is, but do we? Technically, 'sand' is any sediment whose particles are 60µm (microns or micrometers) or larger. Granules smaller than 60µm down to 2µm are considered 'silt.' For a point of reference, the hairs on your head are typically 10µm thick.

Sand is often referred to as 'silica.' Most sand deposits are primarily made up of quartz, but other minerals are usually found. Quartz is *crystalline silica*, a silicate mineral made of silicon dioxide (SiO₂), silicon and oxygen. It is the most abundant mineral found in sand.

Figure 1 shows a typical sample of sand, not unlike that which is found all around northern Michigan. It is comprised mostly of crystalline silica (quartz), with some epidote, garnet, potassium feldspar, and a few other minerals.

Figure 1 — 'Sand' (300x Magnification)



Different types of sands are put to work in a wide range of useful applications including: road construction, concrete, filtration, glass, ceramics, and computer chips. They also vary considerably in their marketable value.

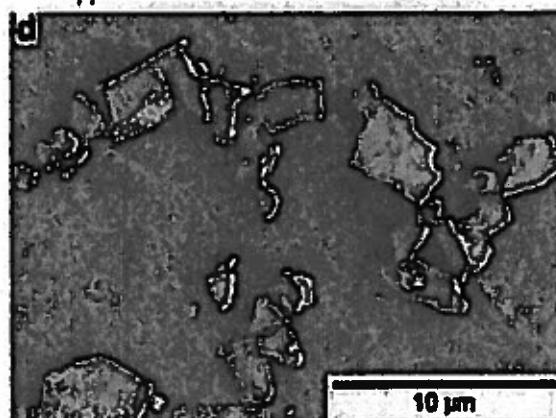
Most sand with which we are familiar is heavily weathered. It has the familiar shape of

stones washed up along the Lake Michigan shoreline. While their sizes may vary a bit, they all have nicely rounded, smooth edges.

Digging into the earth when mining for gravel, the size and shape of these unweathered common sand granules change dramatically.

Figure 2 — Crystalline Silica Dust
(5,000x Magnification)

Appendix A shows three even smaller sizes.



Note the 10µm graphic in Figure 2. That's the width of a typical human hair. Anything smaller than 5µm is invisible to the naked eye, unless there are billions of particles — as in crystalline silica dust clouds (see Appx. D p.4).

These jagged microscopic sub-10µm particles are as sharp as a stone-age flint knife — and they can kill you!¹

Crystalline Silica Dust IS Deadly

Unlike beach sand which is just annoying when it sticks to your skin and swimsuit, crystalline silica dust *is* a killer. Don't take our word for it, just take OSHA's.²

"[Those inhaling] these very small crystalline silica particles are at increased risk of developing serious silica-related diseases."

¹ Silica...It's Not Just Dust: Silica Dust Causes Silicosis - What rock drillers can do to protect their lungs from silica dust, Center for Disease Control and Prevention, National Institute for Occupational Safety and Health, NIOSH Publications, 97-118, July 1998

² *Respirable Crystalline Silica*, Occupational Safety and Health Administration, United States Department of Labor, osha.gov/dsg/topics/silicacrystalline/

Crystalline Silica Dust — The Invisible Killer

In 2017, OSHA completely revamped their requirements for worker safety when engaged in activities where crystalline silica is present.

Plastered all over OSHA's website and materials is the warning graphic shown here.



So, what exactly are those 'serious silica-related diseases?' They include (but are not limited to):

- ☛ Silicosis
- ☛ Lung Cancer
- ☛ COPD (Chronic Obstructive Pulmonary Disease)
- ☛ Kidney Disease

Silicosis is an incurable lung disease that leads to disability and death. We've all heard of 'black lung disease.' Black lung expert, Dr. Robert Cohen, has recently warned that

"[Crystalline] Silica could be even more dangerous to workers than coal dust.

[Crystalline] Silica is actually a lung carcinogen. And it causes renal disease, it causes other auto-immune diseases like rheumatoid arthritis and other things, so silica exposure is a huge problem.³

So serious is this issue that even the Michigan Aggregate Association (the lobbying organization behind the totally discredited MDOT *Michigan Aggregates Market Study Ph I & Ph II Reports*) is actively encouraging its member supporters to attend OSHA approved silica training!⁴ Why does the MAA promote this you ask?

"To increase workers' awareness of the serious health hazards of silica dust and provide the knowledge necessary for employee protections."

Why is Crystalline Silica Dust So Deadly?

Mother Nature provided our respiratory tracts with a host of protective mechanisms to 'filter out' most of the junk that *naturally* occurs in our air. Since most of what nature throws at us is over 10µm in size, we do a pretty good job of keeping the bad stuff out of our bodies.

However, breathing crystalline silica dust is the equivalent of inhaling millions of microscopic razor blades. As shown in Appendix A, these dust particles can be as small as .01µm.

These invisible particles pass all body defense mechanisms and become embedded in the deepest reaches of the lungs. This is where the greatest danger lies as they reach the alveoli, the finest branches of the lungs where the oxygen/carbon dioxide exchange takes place.⁵

When inhaled, particulate matter larger than 5µm usually gets trapped and expelled before it reaches the lung's gas-exchange zone. Particles smaller than 5µm are considered to be 'respirable,' meaning they can reach the deepest parts of the human lungs.

³ Silica safety urged in QLD, OHS Career, March 21, 2017, ohscareer.com.au

⁴ *Protecting and Promoting Your Interests*, Michigan Aggregate Association, November 16, 2019 See Appendix B

⁵ A. Voss and S. Alfano, *The Body's Defenses Against Breathing Dirty Air*, ProRemodler, June 23, 2016

Crystalline Silica Dust — The Invisible Killer

Mother Nature never planned on us being exposed to crystalline silica dust, certainly not in the quantities produced by our many industrial activities. Silicosis can develop very quickly and (short of an entire lung transplant) is completely untreatable.

Think You're Safe? — Wrong!

OSHA is making a tremendous push to raise worker awareness of the real hazards created by crystalline silica dust. Wearing adequate dust protection, respirators, and controlling the dust in the first place will save countless lives. How about those who don't work around this stuff?

Non-occupational exposure to crystalline silica dust is even greater cause for concern. As this 'killer dust' spreads miles past its place of origin it not only lingers in the air but settles everywhere — including *inside* homes.

We spend the majority of our time at home. Depending on our job and lifestyle that can be 70%-100% of our time. Unlike a protected work environment, exposure at home is unprotected and constant. Home settings also includes children and the elderly who are more vulnerable than able bodied workers. Not only do children breath more deeply than adults, their smaller body mass means their comparable exposure risk is much higher.⁶

Exposure limits for crystalline silica differ considerably between work and non-occupational exposure. OSHA's permissible exposure limit is 50 micrograms per cubic meter during an 8-hour workday.⁷ Michigan follows these guidelines which includes an

'action level' set at 25 micrograms per cubic meter. Michigan also requires employers to safeguard employees from exposure, provide them with respiratory protection, maintain medical surveillance, engage in hazard communication, and keep good records.⁸

For those who spend all their time at home, equivalent exposure limits would fall below 12 micrograms per cubic meter for exposure and 6 micrograms per cubic meter for action.

I'm Nowhere Near Silica Dust — Really?

Turns out, size really does matter. For crystalline silica dust, the smaller it is the more threatening it becomes. Not only is this invisible dust respirable, it easily becomes airborne, stays airborne for extended periods of time, and travels incredible distances.⁹

Particles typically need to be under 200µm in size to become airborne. Those smaller than 10µm are invisible and smaller than 5µm penetrate our immune system. As shown in Figure 3, dangerous crystalline silica dust easily travels for miles. It not only affects people at the source but those in surrounding neighborhoods. In some measured cases as far away as 50 miles.¹⁰

Figure 3 – Distance Traveled by Particulate Size

Wind Speed (mph)	Miles Traveled	
	10µm	5µm
3.1	0.55	2.2
6.2	1.1	4.5
12.4	2.3	9
24.8	4.6	18
37.3	6.9	27
49.7	9.2	36.1

⁶ J. Warren, *Silica Monitoring*, Public Lab, publiclab.org, February 22, 2018

⁷ C.A. Epstein, *Everything You Need to Know About OSHA's Respirable Crystalline Silica Final Rule*, February 2, 2018, oshaonline.com

⁸ *Crystalline Silica Exposure*, MIOSHA Fact Sheet, CSH Fact Sheet - #109, Revised October 12, 2017

⁹ *Silica Dust Particle Size Causes Problems*, BossTek, 2019, bosstek.com/silica-dust-compliance/silica-particle-size-behavior

¹⁰ *How Far Can Respirable dust Actually Travel?*, Insider News, NeSilex, September 24, 2019

Crystalline Silica Dust — The Invisible Killer

How Far Will Silica Dust Spread Here?

The only available historic 'local' wind measurements are those taken at the Frankfort and Traverse City airports. Appendix C contains the diagrams of the wind history at both airports for the months of May – October (the busiest times for gravel production).

Roughly one-third of the time the wind is calm (less than 5.8mph). Calm doesn't mean 'dead calm.' Shown as red in Figure 5, at 5.8mph respirable silica would still travel 4.2 miles from the proposed 150-acre gravel mine.

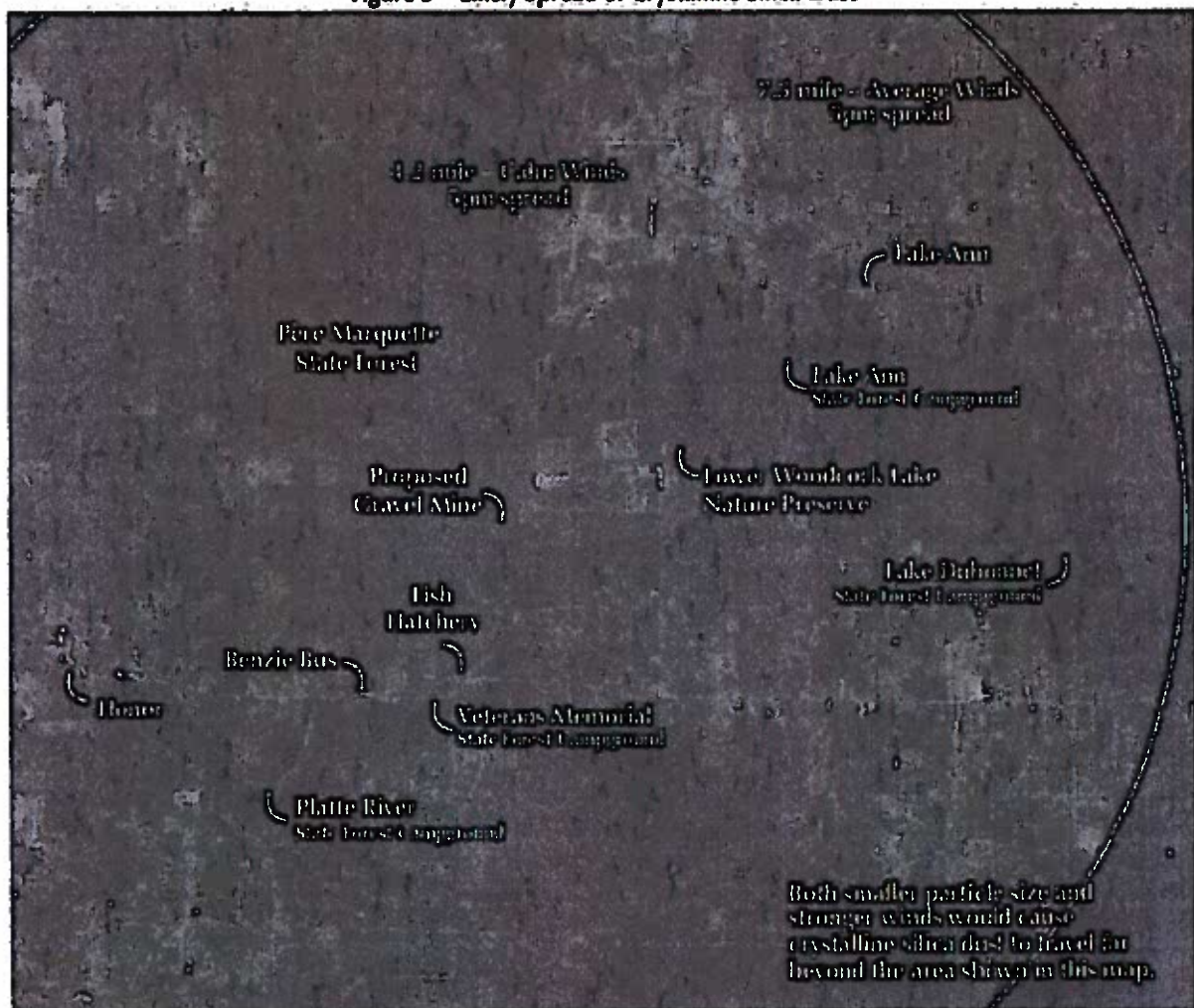
This area's Average windspeed over the past three years for May – October, the average Maximum sustained winds, and average Gusts are shown in Figure 4. The miles that silica dust can be spread relates to particulate size.¹¹

Figure 4 – Crystalline Silica Dust Wind Distribution

	Wind Speed (mph)	Miles Traveled	
		10µm	5µm
Calm	<5.8	<1.0	<4.2
Average	10.3	1.9	7.5
Maximum	23.9	4.4	17.4
Gusts	39.8	7.4	28.9

Note: Silica Dust smaller than 5µm travels even further!

Figure 5 – Likely Spread of Crystalline Silica Dust



¹¹ While wind data was pulled from the Weather Underground, all data originates from the National Centers for Environmental Information, National Oceanic and Atmospheric Administration.

Crystalline Silica Dust — The Invisible Killer

It's easy to understand how these microscopic razor blades carry so far in gentle winds. Strong gusts can carry crystalline silica dust all the way to Traverse City or Frankfort. As duly noted in the Homestead Inland Townships Master Plan, this truly is an issue of "Greater Than Local Concern."

Where's the Problem? – You Can't Be Serious! Mr. Leman has done little to instill confidence that he understands the consequences of his desire to have a hobby gravel mine. In a September 12, 2019, TV 7&4 News interview, Mr. Leman states

"There's no production things we processes that we would do here which would pollute the ground in any way. That sand and gravel is already in the ground."

Seriously? It is obvious he doesn't understand the environmental impact of gravel mining or the dangerous release of crystalline silica dust which mining causes.

Mr. Leman is also quoted in that interview and in papers saying he's only going to work on 4-acres at a time. Yet all of the plans submitted to and described at HIJPC meetings clearly show sections of 6+ acres. If he is so inattentive to these and other details, how can he ever be trusted to understand or look after what's necessary to run a gravel mine safely?

Crystalline silica dust is a serious health issue. Given Mr. Leman's lack of responsiveness to providing a complete and timely application, let alone his inconsistency within those plans, many believe he's not taking things seriously. If that's the case and if his special use permit is granted, many wonder if he would ever follow safety precautions or take any laws seriously.

Given there appears to be no statutory value to the gravel as defined under MCL 125.3205 Sec. 205 (3) and there are considerable health risks, in the opinion of neighboring residents the risks completely outweigh the non-benefit.

Having focused on the harm silica dust does to humans, the same needs to be noted about the local wildlife. Further, local organic farming would also be disrupted as the strict protocols of being organic are unavoidably, unfairly, and unjustifiably violated. Even on a 'calm' day, over 55-square miles are put at risk. Kick the wind up to 'average' speed and the number jumps to over 176-square miles.

It is abundantly obvious that allowing the operation of an open pit gravel mine would create uncontrolled crystalline silica dust.

Beyond the flood of studies readily discoverable online and the recently adopted push by OSHA to protect workers, this report clearly outlines the very serious consequence that would result from granting the requested special use permit. It fulfills the requirement of defining a 'very serious consequence' under MCL 125.3205 Sec. 205 (5)(e)

"The impact on other identifiable health, safety, and welfare interests in the local unit of government."

But It's Just a Small Operation – Yeh, Right! Getting one's foot in the door appears to be a standard ploy. There are dozens (if not hundreds) of stories about little mining operations that were never supposed to grow much bigger — but did — and did so quickly. Here's just one of those stories.

Downstate in Grass Lake Township, just 25 miles west of Ann Arbor, the Bohne Road Gravel Mine started as a little operation.

Crystalline Silica Dust — The Invisible Killer

The local farmer was granted a special use permit to mine sand on his land for his own use on his farm. No big deal, right?

Then the farmer sells his farm to a company that expands the mine's operation into gravel extraction — hey, the special use permit said sand and gravel, not 'just sand.' The mine grew quickly. So did the problems.

In addition to the quality of life disruption and property devaluation experienced by the gravel mine's neighbors, crystalline silica dust became problematic. As some residents shared with their planning commission¹²

"...the dust issue is a HUGE factor here."

"The gravel pit is a serious health risk."

"...my windows haven't been open since the mine was started."

"There is dust all over the plants and trees in the yard as well as the house and car on a daily basis."

"The dust is a nightmare!! It's constantly in the air..."

"We are concerned for the health of our family, my daughter and I have severe asthma ... we will have to continue to wear our masks to try and keep the contaminants out of our lungs. Why do we have to suffer?"

"There is overwhelming evidence regarding longterm silica dust exposure and respiratory disease. Residents near Bohne Road gravel pit testified they now suffer from respiratory diseases such as asthma and COPD."

"Why should the residents be subjected to all these issues from this gravel pit?"

The last comment raises a great question.

Figure 6 – Crystalline Silica Dust Inside a Home
(near the Bohne Road Gravel Mine)



As the years passed, the gravel mine was sold to its new owner who now wants to expand operations even further. What was once a 'little private sand mine' has turned a community upside down with a full-blown gravel mining as shown in the pictures of Figure 7 on the next page.

Don't Tell Us It Can't Happen Here!

It could. Far too easily it could. Need or benefit of this gravel mine does not exist. The damage to the community would be devastating and permanent. The HJPC has evidence of very serious consequences which it can utilize to equitably and justifiably deny the requested special use permit. Crystalline silica dust is perhaps the most compelling of all very serious consequences.

¹² Excerpts from a private Memorandum from Dr. Sandra McCoy, December 3, 2019, full memorandum in Appendix D

Crystalline Silica Dust — The Invisible Killer

Figure 7 – Bohne Road Gravel Mine, Grass Lake Township, Michigan



Conclusion

To the communities' knowledge, Mr. Leman has failed to provide credible evidence that there is a need for more gravel production in Benzie County. With over a dozen-and-a-half gravel mines within 2 – 12 miles with at least two being major operators, supply far exceeds demand.

To underscore Mr. Leman's apparent lack of market awareness, in his September 12, 2019, TV 7&4 News interview, he states

"People want to move to our area and the demand for construction materials is certainly there. Sand and gravel from our community means you don't waste fuel and truck this stuff in from a long ways away. They can get it right down the street."

First, as noted in the newly formed Inland Township Planning Commission's November 27, 2019 draft Master Plan, as reported by the official U.S. Census, Inland's population has fallen 8.6% since 2010. People certainly may want to move here, but the official numbers suggest they aren't doing so. "Demand for construction materials is certainly [here]" — and it is being more than sufficiently met by existing operators. More gravel mines in our area are *not* needed.

Second, there isn't much building going on 'right down the street' from this 150-acre Rural Residential parcel. Even with the horrible mileage a gravel truck gets, given the close proximity of existing gravel mines, any theoretical savings on 'wasted fuel' is meaningless.

Mr. Leman's hasn't and likely can't justify that mining at this Rural Residential

property would produce revenue of a sufficient enough level that he could reasonably expect to operate at a profit, a requirement under Michigan's Zoning Enabling Act, MCL 125.3205 Sec. 205 (3). In the opinion of many, under this act, this lack of profitability precludes finding value in the gravel on that property.

Even if there were valuable minerals to be found there — a hypothetical, not an acknowledgement — the HIJPC must, as required under Michigan's Zoning Enabling Act, balance that value against the very real health issues extracting it would create.

Clearly stated in MCL 125.3205 Sec. 205 (5)(e) and supported by OSHA, MIOSHA, scores of other reputable organizations, and health experts worldwide, the dangers of crystalline silica dust definitely creates a 'very serious consequence' that would

"impact on other identifiable health, safety, and welfare interests in the local unit of government."

The residents of Inland Township and Benzie County would be unduly and unnecessarily punished if the special use permit for parcel 08-006-007-00 were approved.

For the negative financial impacts it would impose on local property values, granting a special use permit would be unfair. For the unavoidable health problems it would unleash, such a decision would be downright cruel.



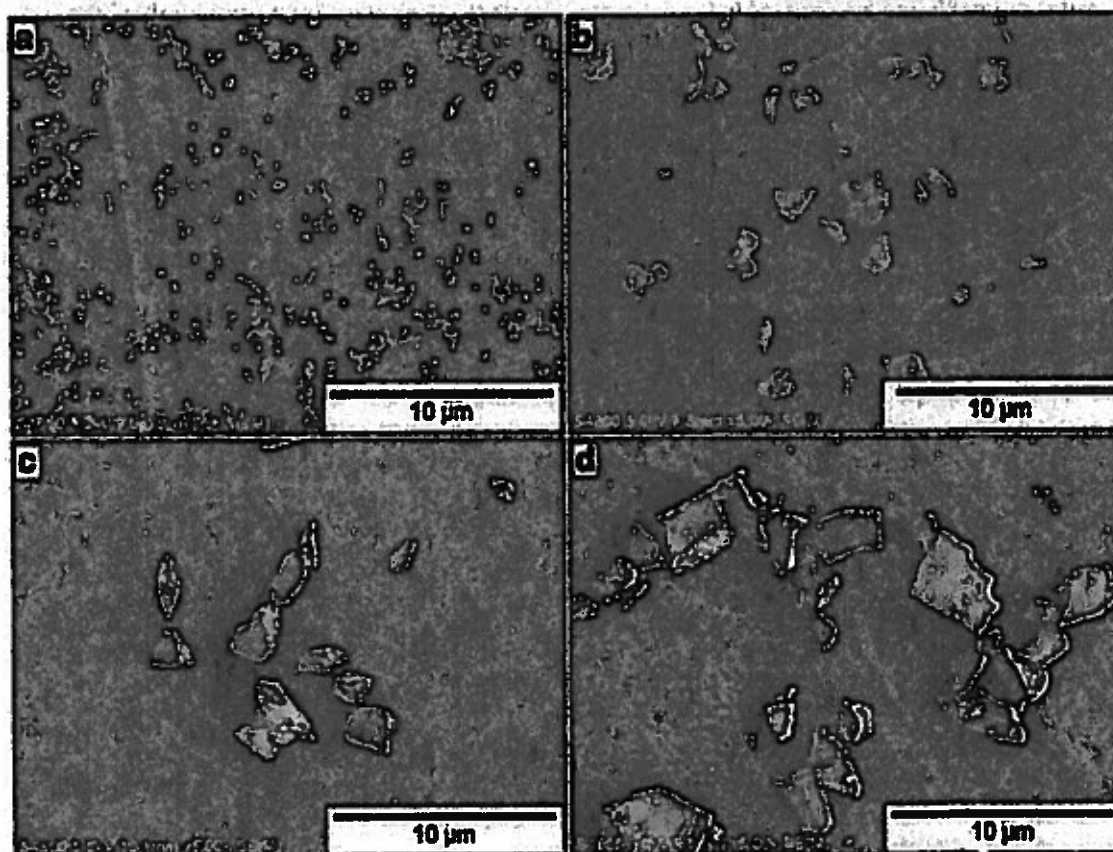
Appendix A

5,000x Images of Crystalline Silica Dust

These electron microscope images of the crystalline silica dust sort their sizes from 'ultra-fine' (as small as $0.01\mu\text{m}$) to 'course' (up to $7\mu\text{m}$). For reference, $10\mu\text{m}$ is the typical width of a human hair, represented here as the graphic insert of each image.

At sizes of $5\mu\text{m}$ and smaller, these microscopic razor blades are not only invisible, they are respirable. That is, when inhaled, they bypass all immune system defenses and can travel all the way to the deepest parts of the human lungs. There they *permanently* imbed themselves and begin creating their havoc on one's health.

As reported here and recognized by the medical community around the world, crystalline silica dust is deadly. It causes silicosis (an *incurable lung disease* that leads to disability and death), lung cancer, COPD (Chronic Obstructive Pulmonary Disease), kidney disease, renal disease, and auto-immune diseases such as rheumatoid arthritis.



Comparison of SEM Images of the four sizes of crystalline silica particles used for this study, (a) Ultrafine (UF), (b) Submicron (S), (c) Respirable (R), and (d) Coarse (C). Images are all at the same magnification (5,000x)

SOURCE: S.E. Mischler et al, *Differential activation of RAW 264.7 macrophages by size-segregated crystalline silica*, Journal of Occupational Medicine and Toxicology, DOI 10.1186/s12995-016-0145-2, December 15, 2016



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OSHA Approved Silica Training



MAA and MTA has partnered with Wayne State University to offer Respirable Crystalline Silica training.

This program was developed through an OSHA Susan Harwood Training Grant and is designed for the construction industry (construction professionals including but not limited to workers, site superintendents, project managers, safety managers) to increase workers' awareness of the serious health hazards of silica dust and provide the knowledge necessary for employee protections.

The training covers the new OSHA Standard on Respirable Crystalline Silica (29 CFR 1926.1153) and it aims to increase workers' awareness on the serious health hazards associated with silica exposure and provide the knowledge necessary to perform work safely when there is silica exposure and ways to limit silica exposure.

Trainees who complete all the training steps will be eligible to receive a certification.

The cost for the training is provided by funds from the grant but space is limited (max 50), so if you are interested please contact the MAA office to register. Space will be filled on first come basis.

Training dates and locations are as follows:

All training times will be from 10:00 am to 12:00 pm.

December 12, 2019

Michigan CAT

Grand Rapids, MI

December 18, 2019

AIS Construction Equipment - Lansing

3600 N Grand River Ave

Lansing, MI 48906

For more information about these sessions, please click here.


(https://gallery.mitchamp.com/d250bd5a823dc5dd5e1625052/files/76fc3d95-753e-44ad-9b3a-b1ae46de08bf/5-1_Silica_Training_Marketing_Flyer.pdf)

If you have any questions, please contact the MAA office at 517-381-1732

https://www.miaagg.org/


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Appendix B (p.2)


**OSHA SUSAN HARWOOD GRANT
RESPIRATORY & ENVIRONMENTAL SILICA SAFETY TRAINING**

In-Class Silica Safety Training for Construction Industry

Effective October 23, 2017, OSHA has been fully enforcing all appropriate provisions of the Silica in Construction standard.



Our OSHA APPROVED TRAINING MATERIALS were developed under an OSHA Susan Harwood training grant and designed for the construction industry to increase workers' awareness of the serious health hazards of silica dust and provide the knowledge necessary for employee protections.

This training is for all the construction professionals including but not limited to workers, site superintendents, project managers, safety managers and employers.

If you are interested in an in-class training for your company or organization, please contact one of the training coordinators below to schedule a session.


Training Session Scheduling or for More Information

Please Contact

Mumtaz A. Usman, PhD, PE
e-mail : musmen@eng.wayne.edu
Phone: (313) 577-3608

Emrah Kazan, PhD
e-mail: ekazan@wayne.edu

TRAINEES WHO PARTICIPATE in and complete the whole training will receive a certificate.



Training contact hours:
1.5 to 2 Hours

Sign-Up

- Demographic Information

Pretest

- We measure trainee's existing knowledge

Presentation

- OSHA approved training module

Posttest

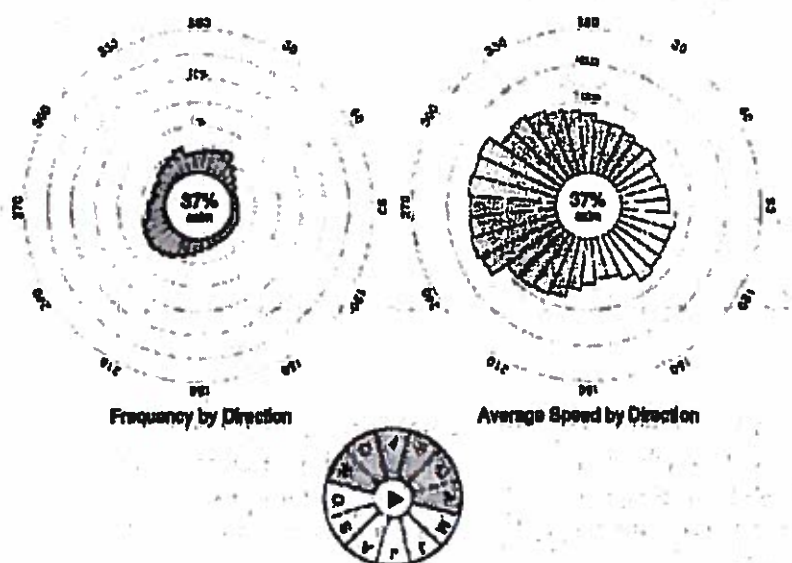
- To assess the knowledge gain after the training

Opinion Survey

- We would like to hear your opinion and feedback on the training

This material was produced under a grant (SH-05039-SH8) from the Occupational Health Administration, U.S. Department of Labor. It does not necessarily reflect the views or policies of the U.S. Department of Labor, nor does the mention of trade names, commercial products, or organization imply endorsement by the U.S. Government.

KTVC: Cherry Capital Airport

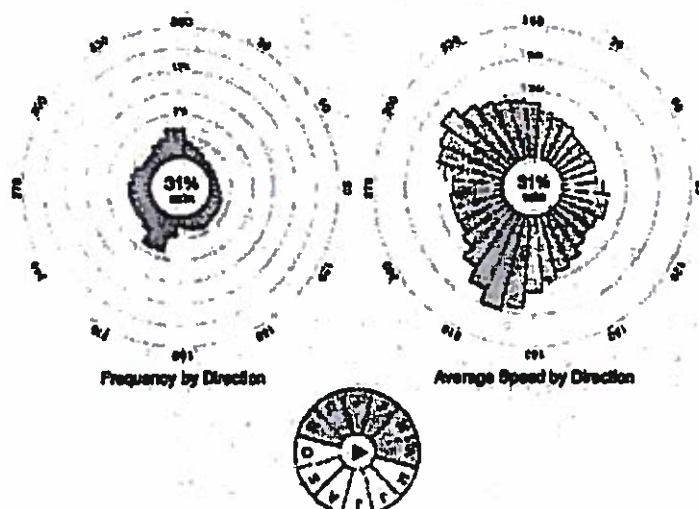


44.7430, -85.585 WeatherSpook Wunderground VFRMap FlightFinder NavMonster

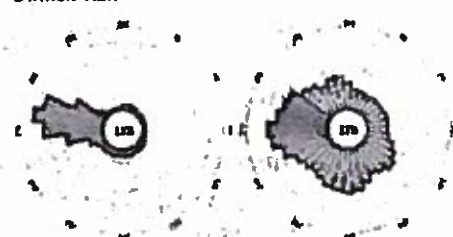
A diagram of the prevailing winds at KTVC: Cherry Capital Airport. The blue diagram at left is a wind rose; the bar length shows the frequency of winds from each direction. In the red diagram at right the bar length shows the average speed of winds when they come from that direction. For more information, see about this site.

WindHistory. Copyright © 2011 Doodah LLC, LLC. All rights reserved.

KFKS: Frankfort, Frankfort Dow Memorial Field Airport



STATION VIEW



The station view shows the prevailing winds for a single weather station. Above is an example image for KSPC, San Francisco airport.

The blue diagram at left is a classic Wind Rose. The length of each bar is proportional to the frequency the wind comes from each direction and the color is proportional to the average speed. At KSPC the wind is pretty much always from the west. The most common direction is 280°, 10% of the time with an average speed of 15kts.

The red diagram at right shows the same data as the wind rose but emphasizes wind speed. Bar length is proportional to frequency. At KSPC northeast winds are rare, and when they come they tend to be light. The strongest winds come from 270°, 15kts 11% of the time.

You may hover the mouse over a bar to see exact textual data. In both diagrams the percentage in the middle indicates how often the winds are less than 4 knots (4Kts at KSPC). There are links on the station page for further information. WeatherSpook is a particularly nice complementary site showing historical weather.

MONTH FILTER

The month filter allows you to display prevailing winds for specific months. Click the extendor wedges to toggle each specific month off and on. Click the play button in the middle to animate your selection through the year.



DATA

The source data for these graphs is the NOAA archive. METARs from 2000 to 2010 were parsed and crunched to calculate average winds for each weather station. Reporting variance and data processing errors mean these diagrams are not true statistical samples.

BROWSER COMPATIBILITY

This site makes extensive use of SVG for graphics. It should work fine in modern versions of Firefox, Safari, Mobile Safari, Chrome, and Microsoft Internet Explorer 9. It will not work in IE 6, 7, or 8 and never will.

FEEDBACK

This site is a labour of love; feedback and suggestions are most welcome. Please mail scoperneto@windhistory.com with any thoughts you have. Some planned enhancements include showing winds for specific months and showing more detailed histograms.

SOURCE: Weather Underground wunderground.com reported data from NOAA (National Centers for Environmental Information) National Oceanic and Atmospheric Administration

MEMORANDUM

TO: Jim Brouwer, Friends of Platte River Watershed

FROM: Sandra McCoy, Ph.D.

DATE: December 3, 2019

RE: Bohne Rd Gravel Mine, Grass Lake, Michigan

Jim,

I moved to Grass Lake Township, Michigan 1-1/2 years ago. Grass Lake is a small town, about 25 minutes West of Ann Arbor. It has a delightful "rural" character and that is what draws many people to settle here. Grass Lake Township has been embroiled in conflicts for many years concerning the incursion of gravel mining into residential areas in our community.

I am pleased to provide some excerpts from letters written by the residents of Grass Lake Township to their Township government over the past several years concerning the Bohne Rd gravel mine which has operated since 2003. These letters were obtained through a FOIA request. Also included are excerpts from Grass Lake Planning Commission meeting minutes. Many of the comments illustrate the negative effects of dust and health concerns related to mining operations in close proximity to residential areas.

"We purchased 5-1/2 acres of land... in 1999 to build our final dream home. Since the start of the sand extraction operation... in August, 2003, our lives have been totally disrupted and our land value has definitely gone down."
"Needless to say the dust issue is a HUGE factor here. The day they were doing this our whole house and deck were covered with dust and still is. I can't even open my windows. These big earth movers were coming by our property every 10 minutes and the noise and dust was unbearable."

"Gravel pits in residential areas undoubtedly cause health and safety concerns and much disturbance for surrounding residents... The gravel pit on Bohne Road as currently operating provides no benefit to Grass Lake Township... We need to consider the more than 200 people that live within a 2 mile radius of the gravel pit with many living within 50-100 feet of pit operations. These people have stated they now must close their windows due to the dust created by gravel pit operations. This certainly is not a desirable condition for them and we can and must protect the value of our homes, the environment and keep our township a safe place to live in."

"The gravel pit is a serious health risk. There are no six foot trees on the berm to eliminate dust. Many people have not been able to walk in the area as a result of the extreme dust and probable air-borne, dangerous silica. There is no monitoring for silica contamination in the air and in the well water." "There has been no MDEQ study done prior to the original SUP to check for environmental health hazards and issues, including aquifer and water table contamination (well water contamination) and negative wildlife issues."

"I would have my windows open to let the fresh air in... Now my windows haven't been open since the mine (then called gravel pit to make it sound smaller and unobtrusive) was started. There is dust all over the plants and trees in the yard as well as the house and car on a daily basis. Inside my house, a layer of dust accumulates within a few days. I don't work in the yard anymore or hang my clothes outside... I've become a prisoner in my home which is supposed to be an enjoyable, safe haven and an investment."

"We live in a log home on Sager road that we built in 2000 and it was supposed to be our dream home." "We couldn't even open our windows at all and still can't. The dust is a nightmare! It's constantly in the air... and it's destroyed the finish on our home & decks and we have to clean it multiple times in a year now versus every 4-5 years." The biggest and closest to me is being diagnosed with a blood cancer called Multiple Myeloma. I went thru chemo for 9 months twice a week and had a stem cell collection. It's been the hardest 2 years of my life!! I asked my dr. at the UpM cancer center what is the cause of Multiple Myeloma?? He said there is a connection from diesel fumes in the air. There are diesel trucks running all day long right behind my house since they opened this sand mine around 2001 or 2002. So this has been going on for around 17 years now."

"We are concerned for the health of our family, my daughter and I have severe asthma and are worried over the silica dust among other gravel pit issues that has caused our asthma to be in a constant state of flux. We are concerned with the location of the gravel pit being so close to our property and our well that we use for water. We don't want our well to be contaminated... We unfortunately are not in a position to move, so we will continue to keep our doors and windows shut, continue to have our house vents, ac and heat checked for contaminants that the gravel pit puts upon us, we are not able to enjoy sitting outside on our deck, swimming in our pool and we will have to continue to wear our masks to try and keep the contaminants out of our lungs. Why do we have to suffer?"

"There is overwhelming evidence regarding longterm silica dust exposure and respiratory disease. Residents near Bohne Road gravel pit testified they now suffer from respiratory diseases such as asthma and COPD."

Appendix D (p3)

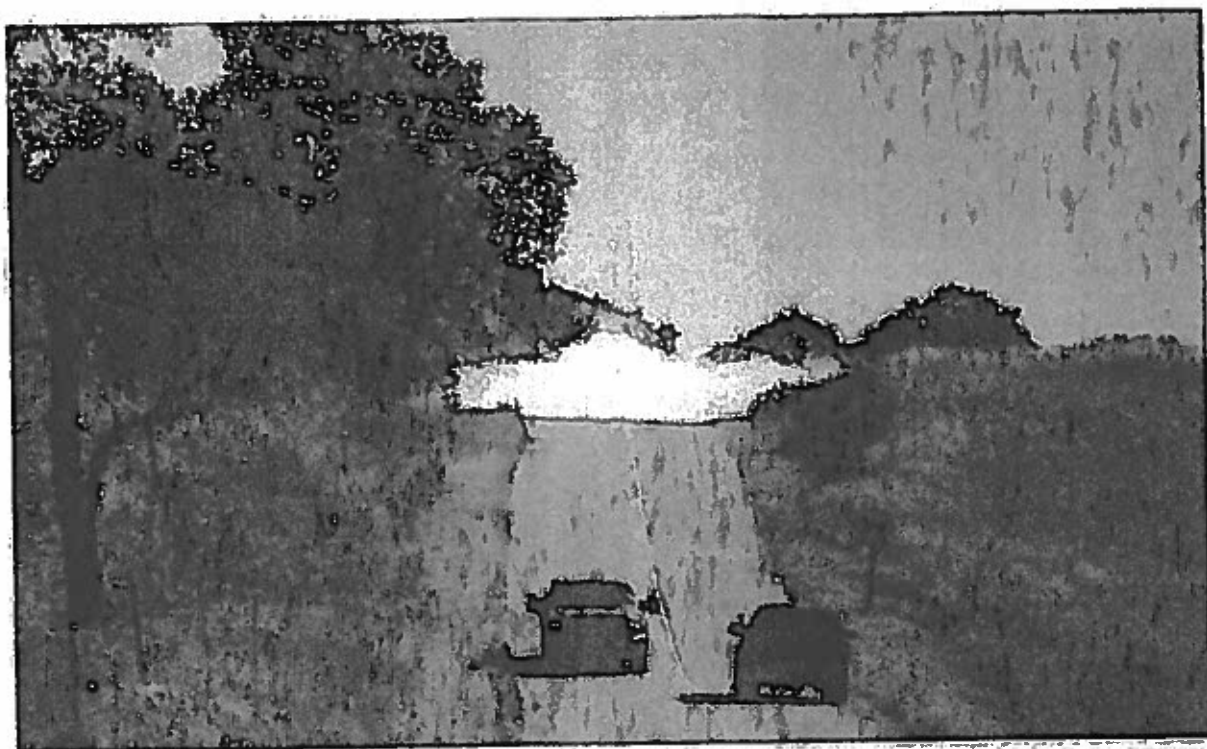
"The site alone is appalling with the noise, dust, contamination of the stream near the gravel pit, the pond, wildlife absent and natural resources. Why is this gravel pit still in operation, from failing to comply with the agreement from 21 March 2018?" "Why should the residents be subjected to all these issues from this gravel pit?"

"8/15/19 1.33pm to 1.40pm, while my husband and I were driving along Bohne Rd, Grass Lake, right near the Bohne Rd Gravel Pit. The dust was so bad we had to pull over on to the side of the road because we couldn't see in front of us." "No only is this mine dangerous to any vehicle who happens to travel along Bohne Rd, the health issues caused by the dust and diesel fumes are catastrophic."

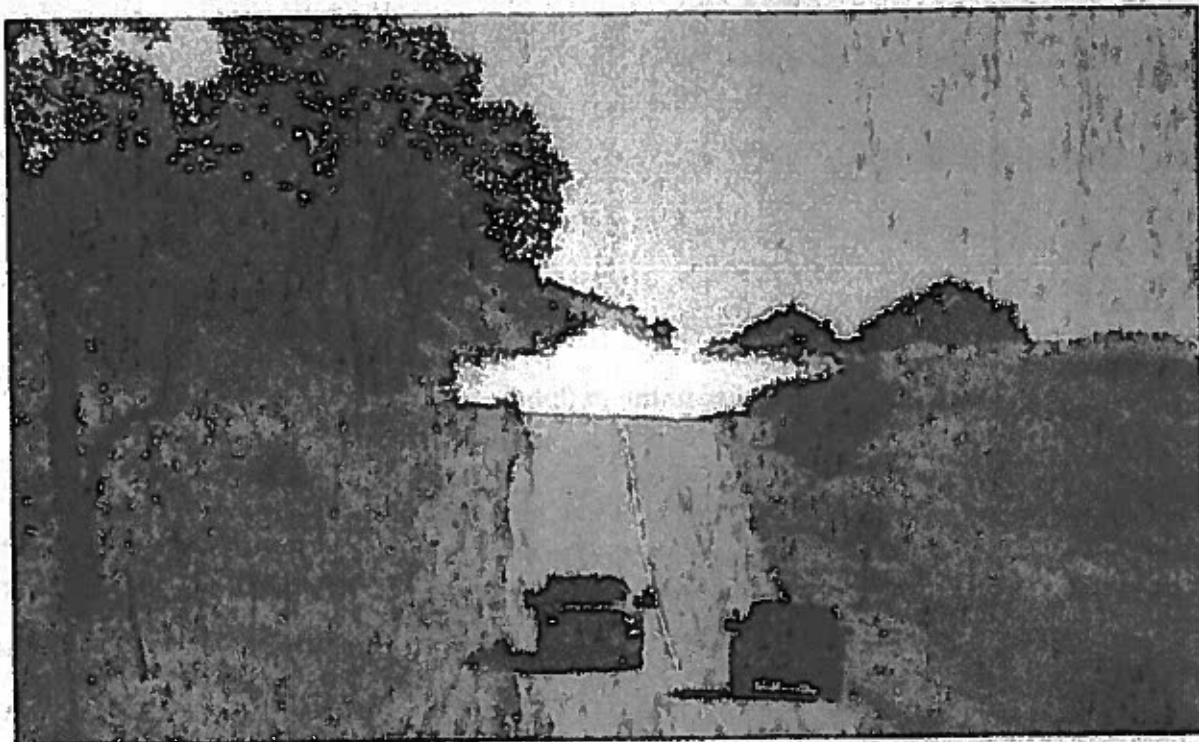
I think the issue is best summed up by one Bohne Road resident in a letter to the Township, urging them not to renew the mine permit:

"The residents need to be able to open their windows, sit outside, children need to play outside, they need sleep, they need peace and quiet, most importantly, they need to breathe, be healthy, and they need to smile and dream again."

Mcloy



Appendix D (p4)





[Home](#) → [Medical Encyclopedia](#) → Silicosis

URL of this page: [//medlineplus.gov/ency/article/000134.htm](https://medlineplus.gov/ency/article/000134.htm)

Silicosis

Silicosis is a lung disease caused by breathing in (inhaling) silica dust.

Causes

Silica is a common, naturally-occurring crystal. It is found in most rock beds. Silica dust forms during mining, quarrying, tunneling, and working with certain metal ores. Silica is a main part of sand, so glass workers and sand-blasters are also exposed to silica.

Three types of silicosis occur:

- Chronic silicosis, which results from long-term exposure (more than 20 years) to low amounts of silica dust. The silica dust causes swelling in the lungs and chest lymph nodes. This disease may cause people to have trouble breathing. This is the most common form of silicosis.
- Accelerated silicosis, which occurs after exposure to larger amounts of silica over a shorter period of time (5 to 15 years). Swelling in the lungs and symptoms occur faster than in simple silicosis.
- Acute silicosis, which results from short-term exposure to very large amounts of silica. The lungs become very inflamed and can fill with fluid, causing severe shortness of breath and a low blood oxygen level.

People who work in jobs where they are exposed to silica dust are at risk. These jobs include:

- Abrasives manufacturing
- Glass manufacturing
- Mining
- Quarrying
- Road and building construction

- Sand blasting
- Stone cutting

Intense exposure to silica can cause disease within a year. But it usually takes at least 10 to 15 years of exposure before symptoms occur. Silicosis has become less common since the Occupational Safety and Health Administration (OSHA) created regulations requiring the use of protective equipment, which limits the amount of silica dust workers inhale.

Symptoms

Symptoms include:

- Cough
- Shortness of breath
- Weight loss

Exams and Tests

Your health care provider will take a medical history. You'll be asked about your jobs (past and present), hobbies, and other activities that may have exposed you to silica. The provider will also do a physical exam.

Tests to confirm the diagnosis and rule out similar diseases include:

- Chest x-ray
- Chest CT scan
- Pulmonary function tests
- Tests for tuberculosis (TB)
- Blood tests for connective tissue diseases

Treatment

There is no specific treatment for silicosis. Removing the source of silica exposure is important to prevent the disease from getting worse. Supportive treatment includes cough medicine, bronchodilators, and oxygen if needed. Antibiotics are prescribed for respiratory infections as needed.

Treatment also includes limiting exposure to irritants and quitting smoking.

People with silicosis are at high risk for developing TB. Silica is believed to interfere with the

body's immune response to the bacteria that cause TB. Skin tests to check for exposure to TB should be done regularly. Those with a positive skin test should be treated with anti-TB drugs. Any change in the appearance of the chest x-ray may be a sign of TB.

People with severe silicosis may need to have a lung transplant.

Support Groups

Joining a support group where you can meet other people with silicosis or related diseases can help you understand your disease and adapt to its treatments.

Outlook (Prognosis)

Outcome varies, depending on the amount of damage to the lungs.

Possible Complications

Silicosis can lead to the following health problems:

- Connective tissue disease, including rheumatoid arthritis, scleroderma (also called progressive systemic sclerosis), and systemic lupus erythematosus
- Lung cancer
- Progressive massive fibrosis
- Respiratory failure
- Tuberculosis

When to Contact a Medical Professional

Call your provider if you suspect that you have been exposed to silica at work and you have breathing problems. Having silicosis makes it easier for you to develop lung infections. Talk to your provider about getting the flu and pneumonia vaccines.

If you've been diagnosed with silicosis, call your provider right away if you develop a cough, shortness of breath, fever, or other signs of a lung infection, especially if you think you have the flu. Since your lungs are already damaged, it's very important to have the infection treated promptly. This will prevent breathing problems from becoming severe, as well as further damage to your lungs.

Prevention

If you work in a high-risk occupation or have a high-risk hobby, always wear a dust mask and do not smoke. You might also want to use other protection recommended by OSHA, such as a

3

respirator.

Alternative Names

Acute silicosis; Chronic silicosis; Accelerated silicosis; Progressive massive fibrosis;
Conglomerate silicosis; Silicoproteinosis

References

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Tarlo SM. Occupational lung disease. In: Goldman L, Schafer AI, eds. *Goldman-Cecil Medicine*. 26th ed. Philadelphia, PA: Elsevier; 2020:chap 87.

Review Date 5/30/2021

Updated by: Denis Hadjiladis, MD, MHS, Paul F. Harron, Jr. Associate Professor of Medicine, Pulmonary, Allergy, and Critical Care, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA. Also reviewed by David Zieve, MD, MHA, Medical Director, Brenda Conaway, Editorial Director, and the A.D.A.M. Editorial team

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National Institutes of Health

From: [Blankenship, Johni](#)
To: [Warner, Avery](#)
Subject: FW: <EXTERNAL-SENDER>Amendments to Material Site Ordinance
Date: Tuesday, September 6, 2022 9:03:27 AM
Attachments: [Bilben Amendments \(dragged\) 2.pdf](#)
[Definitions Amendment 96.pdf](#)
[Decision.pdf](#)
[Standards Amendment.pdf](#)
[Delete Effect of Denial.pdf](#)
[type of CLUP Amendment 96.pdf](#)
[Tsunami Zone Amendment.pdf](#)
[Buffer Zone Amendments 06.pdf](#)
[Conditions Amendments 96.pdf](#)

Public comment

From: Hans Bilben <catchalaska@alaska.net>
Sent: Monday, September 5, 2022 8:18 PM
To: Blankenship, Johni <JBlankenship@kpb.us>
Subject: <EXTERNAL-SENDER>Amendments to Material Site Ordinance

CAUTION:This email originated from outside of the KPB system. Please use caution when responding or providing information. Do not click on links or open attachments unless you recognize the sender, know the content is safe and were expecting the communication.

Hi Johni,

Please forward these amendments to assembly members, legal, and planning director. Also, please plan to project attachments in sequence to the screen as I am speaking to the Committee of the Whole tomorrow. Let me know if there is any technical issues in doing that, and I will try to adjust accordingly..

Thanks,

Hans Bilben

1 of 11

Does Visual Impact really matter??



21.29.050 (A)(1) Buffer Zone (5 amendments)

1st amendment is to replace (1)(a) with:

a. The buffer zone for counter permits and CLUPs shall be of sufficient height, density, and setback to provide visual and noise screening of the proposed use to parcels in the vicinity as deemed appropriate by the planning commission or planning director (as applicable). Buffer requirements shall be made in consideration of and in accordance with existing uses of properties in the vicinity at the time of approval of the permit. There is no requirement to buffer the material site from uses which commence after the approval of the permit.

2nd amendment would replace 21.29.050(A)(1)(b)
Existing (b) becomes (c) etc.

b. A buffer zone shall be established between the area of excavation and the parcel boundaries. The buffer zone for a Counter Permit and a Type 1 CLUP shall consist of one or any combination of the following: Fifty feet of natural vegetation, a minimum six-foot fence, a minimum six-foot earthen berm with a minimum 2/1 slope. The buffer zone for a Type 2 or a Type 3 CLUP shall consist of the following: Minimum

eight-foot fence, or fifty feet of natural vegetation and a minimum ten-foot earthen berm with a minimum 2/1 slope.

3rd amendment would change wording in existing 21.29.050(A)(1)(d) (now e.) to:

e. This requirement may [ONLY] be waived upon a finding by the planning director or planning commission, as applicable, that a lot line where the waiver is requested is [DIRECTLY ADJACENT TO] adjoining another material site or industrial use.

4th amendment is to add a new paragraph 21.29.050(A)(1)(f).

f. Geographic Information System (GIS), Photogrammetry, and LIDAR technology may be utilized in the design of the buffer zone when differing elevations exist between the proposed site and properties in the vicinity. Using this technology, line of sight profile drawings from the uppermost inhabitable level of existing properties located in the vicinity may be utilized in the determination of sufficiency of the buffer zone.

5th amendment is to add another new paragraph to 21.29.050(A)(1)(g).

g. At its discretion the planning director or planning commission, as applicable, may waive or reduce buffer requirements when screening proves to be not necessary or not feasible.

Four amendments to amend 21.29.050. Permit Conditions

1st — Deleting Discretionary Conditions 21.29.050(B)(1)(a).

If GIS and LIDAR technology is utilized the buffer zone will be defined under (A)(1). Setting a maximum of 100 feet would deny protections laid out in Standards in some cases. One size does not fit all!!

***Justification for this amendment is that if the buffer zone is designed correctly by using evidence and technology there is no need for this discretionary condition. The tools, and the discretion, for the correct design are spelled out in amendments which I have written to the buffer zone language.

2nd — Amend 21.29.050(B)(1)(i) to read:

i. Upon request of the applicant [IN LIEU OF ANY ADDITIONAL BUFFER AREA THIS SUBSECTION DESIGNED TO SEPARATE THE USE OF MATERIAL SITE ACTIVITIES FROM NEIGHBORING PARCEL BOUNDARIES, AN EIGHT-FOOT-BERM ABOVE THE PREEXISTING ELEVATION MAY BE CONSTRUCTED PRIOR TO EXCAVATION, AROUND THE EXCAVATION AREA.] an earthen berm with a minimum 2:1 slope of the height determined by the planning commission under KPB 21.29.050 shall be constructed above preexisting elevation around the excavation area. If the excavation site area expands, the berm may move toward [THE PERMITTED BOUNDARY] negatively impacted properties in the vicinity

until such limits of the permitted area are exhausted. The berm must be maintained at [EIGHT-FOOT HEIGHT] the predetermined height while permitted activity is occurring. This earthen berm may be in addition to other buffer zone conditions imposed by the planning commission, or required by KPB 21.29.050.

3rd — 21.29.050(B)(6) should be deleted. If enacted, only borough residents living at street level or below will be protected from visual, noise, and dust impacts.

4th — Amend 21.29.050(2) Discretionary Conditions to add:

6. *Noise suppression.* At the discretion of the planning commission or planning director (as applicable) multi frequency (white noise) back-up alarms may be required on all equipment and vehicular traffic on site as a condition to help meet the noise impact standard in accordance with and in consideration of existing uses in the vicinity.

Amendment to add new section **KPB 21.29.063. Decision.**

21.29.063. Decision.

The planning commission or planning director, as applicable, shall approve permit applications whereby mandatory standards under KPB 21.29.040 have been met through implementation of conditions as set forth in KPB 21.29.050, or shall disapprove applications when the conditions do not meet the mandatory standards in KPB 21.29.040. The decision shall include written findings detailing how the conditions under KPB 21.29.050 meet, or do not meet the mandatory standards set forth in KPB 21.29.040 and evidence to support those findings. The decision shall be distributed to the parties of record before the planning commission, with a notice of right to appeal.

*** Justification is to give the Planning Commission and the Planning Director direction as they approve, modify, or disapprove an application based upon its compliance with the requirements of the ordinance as currently spelled out in KPB 21.25.050(B). This new paragraph is based upon **"21.29.055. Decision"** as taken from the material site working group document.

Amending **21.29.130 Definitions** to add two items:

1. Vicinity means 1,000 horizontal feet from the parcel boundary of the proposed earth materials site.

***Justification for this is that in the past the word “adjacent” was often used to determine the extent of protecting neighbors. An adjacent property might be as small as a quarter acre, in which case the property owners further out might be left without adequate protection. An adjacent property might be eighty acres which leaves the applicant at risk because of the planning commission’s interpretation of the ordinance. By having a stated distance it protects both the applicant, and neighboring property owners. The material site working group defined “vicinity” as the notification area meaning 1/2 mile or 2,640 feet. This is a compromise distance.

2. Earthen Berm means a berm constructed above the preexisting elevation, consisting of topsoil or aggregate, suitable for revegetation, not to contain more than 10% organic material, and maintaining a 2:1 slope on both sides.

***Justification for this is to aid the compliance officer in determining if berms are constructed in a fashion that will meet the standards. A pile of brush with a couple inches of dirt on top is not an adequate protection for properties in the vicinity. A properly constructed berm could provide sufficient noise, visual, and some dust screening for the duration of the project, plus it would aid in the reclamation process.

Section **21.29.065 Effect of permit denial** amended by **DELETION** of entire section.

***Justification: There is currently a process in place that allows either party to **appeal** a decision that they feel is unjust. This process may proceed all the way to the Alaska Supreme Court and the final decision rendered, whether it is approval or denial of a permit, should be adhered to. To subject neighboring property owners and KPB to the costs, both in dollars and time spent on a first appeal, only to restart the cycle again in one year or less is ludicrous. In the 16 year history of the current ordinance there has never been a denial that stood up on appeal—**ZERO**—so just who is this written for? Certainly not for the benefit of the vast majority of Borough residents!

Including this section in the ordinance undermines the credibility of the planning commission, the planning director, the entire appeal process, and is the ultimate slap in the face to the residents of this borough who may have successfully (and legally) defended their neighborhood as spelled out in the ordinance.

If the Assembly really thinks that a reapplication is warranted, then the rule for denial should be the same as the rule for approval. If approved a counter permit is good for two years and a CLUP for five years. If denied a counter permit reapplication should not be allowed for two years, and for a CLUP no reapplication for five years. Any reapplication even then should only be allowed if the applicant can prove that new evidence or circumstances exist that were not available or present with the first application.

Amend **21.29.040 Standards for sand , gravel, or material sites.** Two amendments:

1st— In **21.29.040(A)** rewrite (A) to include visual impact and to delete reference to street-level screening.

A. These material site regulations are intended to protect against aquifer disturbance, road damage, physical damage to adjacent properties, dust, noise, visual, and other impacts of earth materials extraction to properties in the vicinity through setbacks and buffer zones. Prior to granting a counter permit or a conditional land use permit under this chapter, the planning director or planning commission, as applicable, must make the following findings:

*** Justification would be that by only requiring street level visual screening this ordinance will eliminate protections for a segment of the borough population—again going back to the one-size-fits-all model that didn't work in the past.

2nd— Include the omitted MatSu standard #2 into **21.29.040.**

2. That the use will preserve the value, spirit, character, and integrity of the surrounding area;

*** Justification is that this standard (currently in the MarSu ordinance) helps to define just where a material site should and/or should not be located. It is critical if the ordinance is really meant to comply with the Comprehensive Plan.

Amend **21.29.050(A)(2) Permit Conditions applicable to all permits** to read:

2. Water source separation. (New paragraph after letter c.)

d. All permits shall be issued with a condition which prohibits any material extraction within 500 linear feet of any existing private well or water source when located within the boundaries of a mapped tsunami hazard zone

***Justification is to include mapped tsunami Hazard Zones as defined by Alaska DNR, in partnership with the Alaska Earthquake Center and the Alaska Division of Homeland Security and Emergency Management. There are seven such zones in the Kenai Borough. Any excavation in a tsunami hazard zone demands scrutiny because of the potential to turn a material site into a saltwater lake thereby contaminating any wells or water sources in that zone.

1st Amend **21.29.020(A)** **Types of permits available** to return Counter permit to current 2.5 acre size, and to retain new language concerning two year time period with one 12 month extension.

***Justification: To allow a material site greater than 2.5 acres that would have multiple negative impacts to properties in the vicinity without any prior public input is a great disservice to the residents of the borough and not in accordance with the Comprehensive Plan.

2nd Amend **21.29.020(B)(1)(2)(3)** to read:
Type 1 CLUP. Type 2 CLUP. Type 3 CLUP.

****Justification: Makes for cleaner reference in remainder of ordinance.

3rd Amend **21.29.020(B)(1)** to read:

1. Type 1 CLUP. Earth Materials Extraction with Restricted Processing CLUP. An Earth Materials Extraction with Restricted Processing CLUP is required for any material extraction which disturbs 2.5 or more cumulative acres. Processing is restricted to one portable two deck screen capable of screening or classifying material, limited to a maximum of 500 cubic yards per day. Extraction within four feet of the seasonal high-water table is prohibited under this permit. The conditions set out in KPB 21.29.050 and .055 are applicable to this type of CLUP.

4th Amend **21.29.020(B)(2)** to add language dealing with water-table separation.

2. ...or crushing activities. Extraction or processing within four feet of the seasonal high-water table is prohibited under this permit. The conditions set forth....

5th Amend the The Type 3 CLUP **21.29.020(B)(3) (Earth Materials Extraction within Water Table)** to include processing in its language. Why wouldn't it??????

From: [Blankenship, John](#)
To: [Warner, Avery](#)
Subject: FW: New Public Comment to Assembly Members
Date: Tuesday, September 6, 2022 6:10:37 PM

From: Kenai Peninsula Borough <webmaster@borough.kenai.ak.us>
Sent: Tuesday, September 6, 2022 5:46 PM
To: BoroughAssembly <Borough-Assembly@kpb.us>; Mayor's Department <MayorDepartmental@kpb.us>
Subject: New Public Comment to Assembly Members

Your Name: Elena Staab

Your Email: Elena-joy@hotmail.com

Subject: Ordinance 2022-36

Message:

To the KPB Assembly:

This is to show my support for Ordinance 2022-36. As a property owner that is adjacent to 2 gravel pits that have grandfather rights (Kobuk & Big Eddy/Spruce St. and Greenridge St & Joplin), I am acutely affected by their unregulated operations. I have experienced flooding multiple times in the last 10 years due to their uncontrolled release of water and the absence of ditches and driveway culverts on my road. I live on Greenridge Street.

After reviewing the ordinance, I noticed the lack of a contingency plan for catastrophic failure of their coffer dams. This is my biggest fear, that a wall of water from those dams will make my home unlivable and render me homeless. I have flood insurance, but that only covers flooding from the river in an "act of god" happenstance.

When these gravel pits were granted grandfather rights this was a rural area, only 3 people homesteading. The current and coming population density calls for re-evaluation and an SWPP at the very least. I have discussed these things with my neighbors and we are all in agreement with your ordinance, plus upgrades to our road for flood management are necessary. I appreciate your time and consideration.

Sincerely,
Elena J. Staab

Kenai Peninsula Borough Assembly
144 N. Binkley Street,
Soldotna, Alaska 99669

Re: Comments Regarding Proposed KPB Ordinance 2022-36

Dear Assembly Members:

We are writing to you regarding the new proposed Ordinance 2022-36, amending KPB Chapter 21.25 and Chapter 21.29. There are certain truths related to gravel pits:

- 1) No one really wants one as a neighbor
- 2) They are for the most part noisy and dusty
- 3) They have a negative visual impact to surrounding homes and neighborhoods
- 4) We all need gravel and sand for our lives we enjoy on the Peninsula
- 5) We all want our families and children to be safe from gravel pit operations
- 6) We all know, to be safe, we need reasonable Borough regulations that protect both the public welfare while helping the gravel industry sustain their businesses.
- 7) We all want gravel and sand at a fair price

The key takeaway from these truths is, "reasonable Borough regulations" for gravel pit operations.

The new proposed Ordinance 2022-36 does move us in the right direction, however, some of the above truths we can agree on have been overlooked or not given the weight they should have.

For example, 21.29.015 (C) now allows a Counter Permit to be 10 acres. A square 10 acre gravel pit would be about 14, 150 foot square residential lots. By any standard, this would be a huge gravel pit. It should be left at 2.5 acres. This new regulation also strips out any public safeguards from all the concerns listed in 1) thru 3) above. Delete this amended version and add back the current language under 21.29.020 (B). But add that Counter Permits must meet public notice requirements of 21.25.060. Also, delete exception given to public notice for Counter Permits under this section.

The public should have the right to examine any proposed gravel pit in their area and be able to discuss it with the Planning Commission.

In the new regs 21.29.040 "Standards for sand, gravel, or material sites", the new amendment is striped of any meaningful language that would allow the Planning Commission to exert their authority in denying a gravel permit. In fact, under this section, and others similar, the Planning Commission will almost have to approve any and all gravel pit applications. The new amendment as written, fails to address most of the above truths we all share about the need for the public's protections from gravel pit operations. The current, existing section of 21.29.040 in its entirety should be left in place as written.

Regarding Item 3) above, about visual impact, the amendment 21.29.040 has set the limit of visual impact to only "street-level visual screening". This restriction of the height of screening to protect properties surrounding a proposed gravel pit does not take into account screening for two story homes, much less, homes on a hill side above a proposed gravel pit. Delete "street-level screening" from this section. And, address visual screening by adding back the current standards in the existing regulations under 21.29.040 (A) (1 thru 6).

Under item. 2) above, regarding dust from gravel pit operations, Eileen Sheridan will be offering an Amendment to 21.29.040 related to dust from quartz and silica that is found in all types of rock and sand mined on the Kenai Peninsula. I took a shovelful of gravel that came from a known gravel pit source in Anchor Point and found it laced with minute particles of silica. The winds pick up the fine silica particles from gravel pit operations and they are blown into surrounding areas. Silica is a known cause of silicosis, respiratory illnesses, cancer and death for humans if breathed in for long periods of time. I urge you all to listen to Eileen's presentation and take time to read the material she's gathered on this important subject. Please pay particular attention to the table on Page 3 of "Crystalline Silica Dust-The Invisible Killer" section. It shows that small silica dust, small enough to enter our immune system can travel 4.5 miles in a 6.2 mph wind. Most gravel people don't seem to understand the long term effects of working around gravel operations and fail to take any precautions themselves. OSHA has issued strong warnings and advisories for people who work around silica dust. Its time we take notice too, and adjust our materials regulations to protect our residents and the public.

There's much more that needs to be addressed in the proposed amendments and we hope to have another chance to do so. This is a big deal for not only the residents and public but very important for our gravel producing neighbors on the Peninsula as well. So, we hope you will take time to weigh all the pros and cons carefully to arrive at fair and workable regulations for us all.

Lastly, we want to encourage you to carefully review and act on Hans Bilben's amendments he has submitted. Hans is a very honest, fair-minded man. He has been working closely with Ed Martin, one of the gravel interest leaders to try to work out language in the proposed new amendments that would work for all of us, both residents and the public, and the folks with gravel interests. We support Mr. Bilben's amendments.

Thank you for considering our views.

Gary and Eileen Sheridan

PO Box 661,
Anchor Point, Alaska 99556

KPB Ord. 2022-36

From: [Blankenship, Johni](#)
To: [Warner, Avery](#)
Subject: FW: <EXTERNAL-SENDER>Cline response - Kenai Peninsula Borough Ordinance 2022-36
Date: Monday, September 12, 2022 5:00:09 PM

Public comment on Material Site Ordinance

From: Ann Cline <anndotcalm@gmail.com>
Sent: Monday, September 12, 2022 4:48 PM
To: Blankenship, Johni <JBlankenship@kpb.us>
Cc: Hans and Jeanne Bilben <Catchalaska@alaska.net>
Subject: <EXTERNAL-SENDER>Cline response - Kenai Peninsula Borough Ordinance 2022-36

CAUTION: This email originated from outside of the KPB system. Please use caution when responding or providing information. Do not click on links or open attachments unless you recognize the sender, know the content is safe and were expecting the communication.

Good afternoon,

At last week's KPB Assembly meeting, the ordinance regarding CLUPs was discussed. After I spoke at the meeting, I gave my name and phone number to you and several of the Assembly to offer my assistance in the ordinance's revision. Johni, please forward this to all Assembly members and Planning Department.

I have several clarifying points which hopefully will result in a clear, easy to follow document to assist landowners and the public regarding land use and material site permits with protections. I am using the amended Ordinance 2022-36 with the new text. Please let me know if I may be of further assistance.

[1]. I was unable to locate where the ordinance stipulates how many acres can be permitted per parcel. What is to prevent a landowner from having 1 acre permitted, another acre permitted a year later, another acre permitted the following year, and so on till he/she has excavated all the acres they would like? Should the ordinance stipulate 1 acre **per parcel**? If the Borough allows short platting, then that's another loophole that needs to be addressed. Otherwise, a landowner could shortplatt his/her parcel into 1 acre parcels and permit them individually.

[2] I don't see the necessity of KPB offering a Counter Permit. It seems to me that a CLUP is sufficient. I didn't see any difference in the 21.29.020 A. Counter Permit description. What am I missing?

[3]. Under 21.29.020 B. Conditional Land Use Permit, 1. states "an Earth Materials Extraction CLUP is required for any material extraction which disturbs 10 or more cumulative acres." My Anchor Point neighbors and I respectfully exhort you to replace the number 10 with 1 to read:

"an Earth Materials Extraction CLUP is required for any material extraction which disturbs more than 1 acre."

[4] I was unable to find the requirements of a public hearing for any CLUP request in excess of 1 acre. A public hearing is very important to ensure that affected Kenai Peninsula Borough residents have an

opportunity to inform planners and stakeholders of concerns regarding health, safety, and welfare of the surrounding residents, tourists, and business owners.

[5] Regarding 21.29.030. Application procedure A:

Delete “a counter permit or” if you determine that only a CLUP is sufficient.

[6] Regarding 21.29.040. A:

Delete “street level” and replace with “visual screening from all affected surrounding areas within 1/2 mile.”

[7] Regarding 21.29.060 - Reclamation plan:

Asking for a bonding requirement of \$750 per acre for reclamation is completely unrealistic. Just to bring in the equipment necessary to do the work far exceeds that price! I suggest you speak with local excavators to obtain an accurate bid on the actual cost to reclaim property and proceed. Remember that unscrupulous landowners will do the least of your demands so you must be diligent and realistic with your legal requirements.

[8] Regarding 21.29.065 A:

A can be deleted if you decide to remove counter permits from the ordinance.

The most important aspect to any ordinance is whether or not it will be enforced. If there are no real consequences for disobedience, then the ordinance is moot. If you are concerned that the KPB planners will have a difficult time bringing landowners into legal compliance with ordinances, then it's imperative that you change your wording from “may” to “must” in your ordinance.

Part of the KPB Planning and Assembly personnel job descriptions should include making a physical visit to the locations of the permits under review. For example, our Anchor Point neighbors have no doubt that if the Assembly and borough Planners had come to our neighborhood to witness for themselves, our lawsuit would have been unnecessary. The Beachcombers LLC gravel pit was/is in full view of, and carcinogenic dust exposure to, our surrounding hillside homes.

As I expressed at the open KPB meeting last week, I believe we all need to be able to sleep each night knowing that we have been honorable and have made righteous decisions not only for our neighbors, businesses, and ourselves but also for **posterity**. We will become dust, but our actions should carry lasting goodness to those we leave behind.

Respectfully,

Ann Cline
34926 Denver
PO Box 121
Anchor Point, AK. 99556
(425) 449-3540

From: [Blankenship, Johni](#)
To: [Warner, Avery](#)
Cc: [Turner, Michele](#)
Subject: FW: <EXTERNAL-SENDER>Gravel pits- to be forwarded, thanks
Date: Monday, October 3, 2022 9:55:21 AM
Attachments: [95bb737e-e498-44ac-9d3a-8d2d88e08331.jpg](#)
[9192d454-4715-40cf-955f-97dbc40e87e0.jpg](#)

From: laura sievert <laurasievert@hotmail.com>
Sent: Monday, September 26, 2022 8:03 PM
To: G_Notify_AssemblyClerk <G_Notify_AssemblyClerk@kpb.us>
Subject: <EXTERNAL-SENDER>Gravel pits- to be forwarded, thanks

CAUTION:This email originated from outside of the KPB system. Please use caution when responding or providing information. Do not click on links or open attachments unless you recognize the sender, know the content is safe and were expecting the communication.

To the Borough Assembly:

I admit that I haven't been keeping up on Assembly progress on regulating gravel pits.

Listening to Nikiski candidates on the KDLL assembly candidate forum tonight, I gather that most residents have concerns about gravel pits because of the normal nuisances and lowering of adjacent property values, which I agree are problems. However, my primary concern (my property value is forever lowered) is the way that gravel pit operators are trusted to run their pits after they have been approved. The two operators that surround my property - Great Northern and QAP- have bulldozed a salmon stream, stacked up old asphalt on shorelines, dumped derelict machinery, run a batch plant without a permit, and otherwise ignored what is allowed by the Borough.

Below, find my previous letter. I still have the same concerns, which are not being addressed when you only look at residents' common concerns like dust, jake brakes, and unsightly views. My concerns are violations that have repercussions that will last decades and beyond. I am not asking you to address my two gravel pit problems- since it's too late- only that you consider the future.

Thank you - Laura Sievert

I live on Beaver Loop, home to several gravel pits. We live between the Quality Asphalt Pit and the Great Northern pit. Both were old gravel pits that came back into production for the Spur Highway project.

As part of your discussion going forward, I beg you to consider two things: first, how to enforce the rules that pit operators are required to follow, new rules as well as those already in effect such as the Anadromous Stream Ordinance. Also, what is to be the relationship between city and Borough regulations regarding gravel pits? Apparently the regulations vary.

Our experience with Quality Asphalt & Paving in 2020 is an example of what can go wrong. Since 2020 we have tried to get the Borough and the City of Kenai to fix QAP's violation of the Anadromous

Stream Ordinance in a stream that originates on our property and then runs through their gravel pit and into the Kenai River.

Just prior to the violation, we had been working with a former Borough biologist who studied our property and made some suggestions as to how we might enhance the coho run up our stream. This was part of a project he was working on to help property owners enhance privately owned habitat.

While extracting gravel for the Spur highway project, QAP bulldozed the stream on their property, cut all trees and vegetation along the bank, built two roads over the stream, and installed two culverts. I found out later that the City of Kenai knew of this plan and approved it. This was apparently due to a difference between City and Borough regulations.

I objected- after the fact- but the repercussions were slight. QAP denied knowing it was an anadromous stream despite having installed an expensive fish culvert on that very stream a couple of hundred yards downstream, under Beaver Loop road.

The biologist who had been helping us negotiated two ways that QAP could begin to make up for damaging the stream: planting trees (which they did- maybe 20 alders, which in our lifetimes will not shade the stream), and removing an old culvert further upstream on their property. Too little, too late. Photo of clear cut stream:



There's more. QAP dumped broken-up used approach asphalt in their pit, near the stream- I believe it is still there. They installed a batch plant in the gravel pit (gone now). There was no permitting or public hearing for that plant. On the other side of our property, Great Northern pushed dirt into the pond (right at our property line) that is the origin of the anadromous stream I refer to. Photo of asphalt dumped in the QAP pit:

9192d454-4715-40cf-955f-97dbc40e87e0.jpg



Rules and regulations are good, but please consider if and how they will be enforced.

No one is watching these pits. We got the Kenai City planner out a couple of times, first on Day One, when QAP clear-cut the 200 foot buffer zones around the pit, a violation of their conditional use permit. No repercussions- the trees are gone, nothing to be done.

I could go on. I can send more photos. How will you make sure pit operators follow the rules? How do they make amends when they violate the rules? Perhaps by posting large bonds? No one can stand out there and monitor them, and the damage can happen really fast. The cutting of the buffer took a few hours. And money doesn't bring back our streams, salmon or buffer zones.

Thanks for your work on this. We need gravel, but I hope you can balance that need with a consideration for the long term health of our water, people, land and wildlife.

Laura Sievert
3329 Beaver Loop, Kenai

Introduced by:	Mayor
Substitute Introduced:	01/16/18
Resolution 2018-004 (Mayor)	See Original for Prior History
Action:	Adopted
Vote:	8 Yes, 0 No, 1 Absent

**KENAI PENINSULA BOROUGH
RESOLUTION 2018-004
(MAYOR) SUBSTITUTE**

A RESOLUTION ESTABLISHING A MATERIAL SITE WORK GROUP

WHEREAS, KPB 21.25.040(A)(2) requires a permit for the commencement of commercial sand, gravel or material sites within the rural district of the Kenai Peninsula Borough; and

WHEREAS, KPB 21.29 provides for a permit process to extract material from the ground; and

WHEREAS, with the exception of one minor change relating to floodplain permits, the material site code was last updated in 2006; and

WHEREAS, the assembly, administration, planning department and the planning commission have recognized that certain provisions of the material site ordinance can be clarified for the operators, public, and staff; and;

WHEREAS, the public has expressed many concerns about dust, noise, water, and negative secondary impacts of material sites; and

WHEREAS, it is the intent of the assembly and administration to involve the public and industry in a collaborative discussion designed to incorporate possible changes to the material site code;

NOW, THEREFORE, BE IT RESOLVED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH:

SECTION 1. That a work group is established for the purpose of examining the current material site permit process and potentially recommending amendments to the material site code provisions.

SECTION 2. That the work group shall consist of at least two assembly members; two planning commissioners; two members of the public; and, two material site industry members. The group shall elect from among its members a chair and a vice-chair who may serve in the absence of the chair. The two members of the assembly shall be appointed by the assembly. The remaining members shall be appointed by the mayor.

SECTION 3. That each meeting time and place shall be advertised, open to the public and subject to the Open Meetings Act.


SECTION 4. The material site work group shall have no authority to act on behalf of the assembly or the administration or communicate on the borough's behalf other than to make recommendations to the planning commission, administration and assembly.

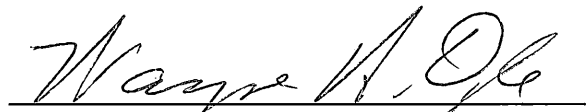
SECTION 5. The work group shall provide a final report to the planning commission, administration and assembly by June 5, 2018, and then discontinue unless extended by the assembly.

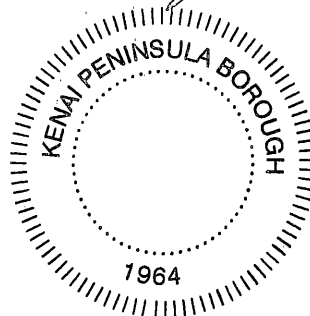
SECTION 6. That this resolution shall take effect immediately upon its adoption.

ADOPTED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH THIS 16TH DAY OF JANUARY, 2018.

ATTEST:


John Blankenship, MMC, Borough Clerk


Wayne H. Ogle, Assembly President



Yes: Bagley, Blakeley, Carpenter, Dunne, Fischer, Hibbert, Smalley, Ogle
No: None
Absent: Cooper

Introduced by:	Mayor
Substitute Introduced:	12/03/19
Ordinance 2019-30 (Mayor):	See Original Ordinance for Prior History
Hearing:	12/03/19
Action:	Failed to Enact
Vote:	3 Yes, 6 No, 0 Absent
Action:	Reconsideration Filed by Bjorkman

**KENAI PENINSULA BOROUGH
ORDINANCE 2019-30
(MAYOR) SUBSTITUTE**

**AN ORDINANCE AMENDING KPB 21.29, KPB 21.25, AND KPB 21.50.055
REGARDING MATERIAL SITE PERMITS, APPLICATIONS, CONDITIONS, AND
PROCEDURES**

- WHEREAS,** Goal 2, Focus Area: Land Use and Changing Climate, Objective A of the 2019 Kenai Peninsula Borough Comprehensive Plan is to establish policies that better guide land use to minimize land use conflicts, maintain property values, protect natural systems and support individual land use freedoms; and
- WHEREAS,** Goal 2, Focus Area: Land Use and Changing Climate, Objective A, Strategy 1 of the 2019 Comprehensive Plan is to adopt limited development standards for specific areas and uses to reduce potential off site impacts of development on adjoining uses and the natural environment; and
- WHEREAS,** Goal 2, Focus Area: Land Use and Changing Climate, Objective A, Strategy 2 of the 2019 Comprehensive Plan is to update the Borough’s existing conditional use regulations for gravel extraction and other uses to better address reoccurring land use conflicts; and
- WHEREAS,** Goal 2, Focus Area: Land Use and Changing Climate, Objective A, Strategy 2a of the 2019 Comprehensive Plan is to clarify the broad purpose of the conditional use process and clear parameters for allowable conditional uses that include reasonable, project-specific conditions that reduce impacts on surrounding uses, and if/when a conditional use permit can be denied and consider establishing conditions that require larger setbacks, safety and visual screening, control on access routes, control on hours of operation, and address environmental concerns; and
- WHEREAS,** Goal 2, Focus Area: Land Use and Changing Climate, Objective A, Strategy 2d of the 2019 Comprehensive Plan is to complete improvements to the rules guiding gravel extraction, with the goal of providing an appropriate balance between providing access to affordable materials for development and protecting quality of life for borough residents; and

- WHEREAS,** Goal 1 of the Mining and Minerals Processing section of the 1990 Kenai Peninsula Borough Coastal Management Program is to provide opportunities to explore, extract and process minerals, sand and gravel resources, while protecting environmental quality and other resource users; and
- WHEREAS,** an assembly subcommittee was formed in 2005 to review the material site code; and
- WHEREAS,** Ordinance 2006-01 (Substitute) codified as KPB 21.29 was adopted in 2006 after consideration of the subcommittee's report; and
- WHEREAS,** the planning department has been administering Ordinance 2006-01 (Substitute), codified as KPB 21.29 for 13 years; and
- WHEREAS,** KPB 21.25.040 requires a permit for the commencement of certain land uses within the rural district of the Kenai Peninsula Borough; and
- WHEREAS,** the planning department has recognized that certain provisions of the material site ordinance could be better clarified for the operators, public, and staff; and
- WHEREAS,** the planning commission and planning department received comments expressing concerns about dust, noise, safety, and aesthetics; and
- WHEREAS,** approximately 253 registered prior existing use material sites and approximately 99 conditional land use permits for material sites have been granted since 1996;
- WHEREAS,** the planning department receives numerous complaints regarding unreclaimed parcels registered as nonconforming prior existing material sites which have not been regulated by KPB; and
- WHEREAS,** the assembly established a material site work group by adoption of resolution 2018-004 (Substitute) to engage in a collaborative discussion involving the public and industry to make recommendations regarding the material site code; and
- WHEREAS,** assembly resolution 2018-025 extended the deadline for the final report to be submitted to the assembly, administration and planning commission to April 30, 2019; and
- WHEREAS,** certain additional conditions placed on material site permits would facilitate a reduction in the negative secondary impacts of material sites, e.g. dust, noise, safety, and unsightliness of material sites; and
- WHEREAS,** at its regularly scheduled meeting of November 12, 2019, the Planning Commission recommended approval by unanimous consent;

NOW, THEREFORE, BE IT ORDAINED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH:

SECTION 1. That KPB 21.25.030 is hereby amended, as follows:

21.25.030. - Definitions.

Unless the context requires otherwise, the following definitions apply to CLUPs:

Abandon means to cease or discontinue a use without intent to resume, but excluding short-term interruptions to use or activity during periods of remodeling, maintaining, or otherwise improving or rearranging a facility or during normal periods of vacation or seasonal closure. An "intent to resume" can be shown through continuous operation of a portion of the facility, maintenance of utilities, or outside proof of continuance, e.g., bills of lading or delivery records. Abandonment also means the cessation of use, regardless of voluntariness, for a specified period of time.

Animal feeding operation means a lot or facility (other than an aquatic animal production facility) where animals (other than aquatic animals) have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period.

- a. The same animals need not remain on the lot for 45 days or more; rather, some animals are fed or maintained on the lot 45 days out of any 12-month period, and
- b. Animals are "maintained" for purposes of this ordinance when they are confined in an area where waste is generated and/or concentrated or are watered, cleaned, groomed, or medicated in a confined area, even if the confinement is temporary.
- c. Two or more animal feeding operations under common ownership are considered, for the purposes of these regulations, to be a single animal feeding operation if they adjoin each other.
- d. Slaughterhouses are animal feeding operations.

Animal unit means a unit of measurement for any animal feeding operation calculated by adding the following numbers: the number of slaughter and feeder cattle multiplied by 1.0, plus the number of mature dairy cattle multiplied by 1.4, plus the number of swine weighing [weighing] over 25 kilograms (approximately 55 pounds) multiplied by 0.4, plus the number of sheep multiplied by 0.1, plus the number of horses multiplied by 2.0.

Animal waste means animal excrement, animal carcasses, feed wasted, process wastewaters or any other waste associated with the confinement of animals from an animal feeding operation.

Animal waste management system means a combination of structures and nonstructural practices serving an animal feeding operation that provides for the collection, treatment, disposal, distribution, storage and land application of animal waste.

Aquifer means a subsurface formation that contains sufficient water-saturated permeable material to yield economical quantities of water to wells and springs.

Aquifer-confining layer means that layer of relatively impermeable soil below an aquifer, typically clay, which confines water.

Assisted living home means a residential facility that serves three or more adults who are not related to the owner by blood or marriage, or that receives state or that receives state or federal payment for service of the number of adults served. The services and activities may include, but are not limited to, housing and food services to its residents, assistance with activities of daily living, and personal assistance, and that complies with Alaska Statutes 47.32.0101 – 47.60.900, as amended.

Child care facility means a place where child care is regularly provided for children under the age of 12 for periods of time that are less than 24 hours in duration and that is licensed pursuant to AS 47.35.005 et seq., excluding child care homes and child care group homes, as currently written or hereafter amended.

Commercial means any provision of services, sale of goods, or use operated for production of income whether or not income is derived, including sales, barter, rental, or trade of goods and services.

Concentrated animal feeding operation (CAFO) means an animal feeding operation confining at least: (1) 1,000 swine weighing at least approximately 55 pounds; (2) 1,000 slaughter and feeder cattle; (3) 700 mature dairy cattle; (4) 500 horses; (5) 10,000 sheep or lambs; (6) 55,000 turkeys; (7) 100,000 laying hens or broilers (if the facility has continuous overflow watering); (8) 30,000 laying hens or broilers (if the facility has a liquid manure system); (9) 5,000 ducks; (10) 1,000 animal units; or (11) a combination of the above resulting in at least 1,000 animal units. Each individual parcel upon which a CAFO is located is a separate CAFO unless they adjoin each other.

Conditioning or processing material means a value-added process including batch plants, asphalt plants, screening, washing, and crushing by use of machinery.

Correctional community residential center (CCRC) means a community residential center, other than a correctional institution, for the short-term or temporary detention of prisoners in transition from a correctional institution, performing restitution, or undergoing rehabilitation or recovery from a legal infirmity. CCRCs may not be used for detention of prisoners who pose a threat or danger to the public for violent or sexual misconduct without imprisonment or physical confinement under guard or twenty-four-hour physical supervision. The determination of whether a prisoner poses a threat or danger to the public for violent or sexual misconduct without imprisonment or physical confinement under guard or twenty-four-hour physical supervision shall be made by the commissioner of corrections for state prisoners and the United States Attorney General, or the U.S. Director of Bureau of Prisons for federal prisoners.

Correctional institution means a facility other than a correctional community residential center providing for the imprisonment or physical confinement or detention of prisoners under guard or twenty-four-hour physical supervision, such as prisons, prison farms, jails, reformatories, penitentiaries, houses of detention, detention centers, honor camps, and similar facilities.

Development plan means a plan created to describe a proposed development on a specific building site excluding material sites under KPB 21.29.020.

Disturbed includes active excavation and all areas necessary to use a parcel as a material site including but not limited to berms, stockpiles, and excavated areas excluding all areas reclaimed for alternate post mining land uses.

[EXHAUSTED MEANS THAT ALL MATERIAL OF A COMMERCIAL QUALITY IN A SAND, GRAVEL, OR MATERIAL SITE HAS BEEN REMOVED.]

Federal prisoners means offenders in the custody or control or under the care or supervision of the United States Attorney General or the Bureau of Prisons.

Groundwater means, in the broadest sense, all subsurface water, more commonly that part of the subsurface water in the saturated zone.

Haul route includes the roads used to haul materials from the permit area to a roadway designated as collector, arterial or interstate by the Alaska Department of Transportation & Public Facilities.

Liquid manure or liquid animal waste system means any animal waste management system which uses water as the primary carrier of such waste into a primary retention structure.

Multi-purpose senior center is a facility where persons 60 years of age or older are provided with services and activities suited to their particular needs. The

services and activities may include, but are not limited to, health examinations, legal assistance, recreation programs, general social activities, telephone reassurance programs, nutrition classes, meals at minimum cost, counseling, protective services, programs for shut-ins and education programs, and that complies with Alaska Statutes 47.60.010—47.60.090, as currently written or hereafter amended.

Permit area includes all excavation, processing, buffer and haul route areas of a CLUP or counter permit.

Person shall include any individual, firm, partnership, association, corporation, cooperative, or state or local government.

Prisoner means:

- a. a person held under authority of state law in official detention as defined in AS 11.81.900;
- b. includes a juvenile committed to the custody of the Alaska Department of Corrections Commissioner when the juvenile has been charged, prosecuted, or convicted as an adult.

Private school is a school comprised of kindergarten through 12th grade, or any combination of those grades, that does not receive direct state or federal funding and that complies with either Alaska Statute 14.45.030 or 14.45.100—14.45.130, as currently written or hereafter amended.

Public school is a school comprised of kindergarten through 12th grade, or any combination of those grades, that is operated by the State of Alaska or any political subdivision of the state.

Sand, gravel or material site means an area used for extracting, quarrying, or conditioning gravel or substances from the ground that are not subject to permits through the state location (mining claim) system (e.g., gold, silver, and other metals), nor energy minerals including but not limited to coal, oil, and gas.

Seasonal high groundwater table means the highest level to which the groundwater rises on an annual basis.

Senior housing project means senior housing as defined for purposes of construction or operation in 15 Alaska Administrative Code 151.950(c), as currently written or hereafter amended.

Stable condition means the rehabilitation, where feasible, of the physical environment of the site to a condition that allows for the reestablishment of

renewable resources on the site within a reasonable period of time by natural processes.

Surface water means water on the earth's surface exposed to the atmosphere such as rivers, lakes, and creeks.

Topsoil means material suitable for vegetative growth.

Vicinity means the same as the area of notification.

Waterbody means any lake, pond, stream, riparian wetland, or groundwater into which storm water runoff is directed.

Water source means a well, spring or other similar source that provides water for human consumptive use.

SECTION 2. That KPB 21.29 is hereby amended, as follows:

CHAPTER 21.29. MATERIAL SITE PERMITS

21.29.010. Material extraction exempt from obtaining a permit.

- A. Material extraction which disturbs an area of less than one acre that is not in a mapped flood plain or subject to 21.29.010(B), does not enter the water table, and does not cross property boundaries, does not require a permit. There will be no excavation within 20 feet of a right-of-way or within ten feet of a lot line.
- B. Material extraction taking place on dewatered bars within the confines of the Snow River and the streams within the Seward-Bear Creek Flood Service Area does not require a permit, however, operators subject to this exemption shall provide the planning department with the information required by KPB 21.29.030(A)(1), (2), (6), (7) and a current flood plain development permit prior to beginning operations.
- C. A prior existing use under KPB 21.29.120 does not require a material extraction permit, but a floodplain development permit is required for all activities within any mapped special flood hazard area.
- D. Material extraction incidental to site development does not require a permit when an approved site development plan is on file with the planning department. Site development plans are approved by the planning director and are valid for one year. The site development plan may be renewed on an annual basis subject to the planning director's approval.

21.29.020. Material extraction and activities requiring a permit.

- A. *Counter permit.* A counter permit is required for material extraction which disturbs no more than 2.5 cumulative acres and does not enter the water table. Counter permits are approved by the planning director, and are not subject to the notice requirements or planning commission approval of KPB 21.25.060. A counter permit is valid for a period of 12 months, with a possible 12-month extension.
- B. *Conditional land use permit.* A conditional land use permit (CLUP) is required for material extraction which disturbs more than 2.5 cumulative acres, or material extraction of any size that enters the water table. A CLUP is required for materials processing. A CLUP is valid for a period of five years. The provisions of KPB Chapter 21.25 are applicable to material site CLUPS and the provisions of KPB 21.25 and 21.29 are read in harmony. If there is a conflict between the provisions of KPB 21.25 and 21.29, the provisions of KPB 21.29 are controlling.

21.29.030. Application procedure.

- A. In order to obtain a counter permit or CLUP, an applicant shall first complete and submit to the borough planning department a permit application, along with the fee listed in the most current Kenai Peninsula Borough Schedule of Rates, Charges and Fees. The planning director may determine that certain contiguous parcels are eligible for a single permit. The application shall include the following items:
 - 1. Legal description of the parcel, KPB tax parcel ID number, and identification of whether the permit is for the entire parcel, or a specific location within a parcel;
 - 2. Expected life span of the material site;
 - 3. A buffer plan consistent with KPB 21.29.050(A)(2);
 - 4. Reclamation plan consistent with KPB 21.29.060;
 - 5. The depth of excavation;
 - 6. Type of material to be extracted and type of equipment to be used;
 - 7. Any voluntary permit conditions the applicant proposes. Failure to include a proposed voluntary permit condition in the application does not preclude the applicant from proposing or agreeing to voluntary permit conditions at a later time;

8. Surface water protection measures, if any, for adjacent properties designed by a civil engineer, including the use of diversion channels, interception ditches, on-site collection ditches, sediment ponds and traps, and silt fence;
9. A site plan and field verification prepared by a professional surveyor licensed and registered in the State of Alaska, including the following information:
 - a. Location of excavation, and, if the site is to be developed in phases, the life span and expected reclamation date for each phase;
 - b. Proposed buffers consistent with KPB 21.29.050(A)(2), or alternate buffer plan;
 - c. Identification of all encumbrances, including, but not limited to easements;
 - d. Points of ingress and egress. Driveway permits must be acquired from either the state or borough as appropriate prior to the issuance of the material site permit;
 - e. Anticipated haul routes;
 - f. Location and [DEPTH] elevation of test holes, and depth of groundwater, if encountered between May and December. At least one test hole per ten acres of excavated area is required to be dug. The test holes shall be at least four feet below the proposed depth of excavation;
 - g. Location of wells of adjacent property owners within 300 feet of the proposed parcel boundary;
 - h. Location of any water body on the parcel, including the location of any riparian wetland as determined by "Wetland Mapping and Classification of the Kenai Lowland, Alaska" maps created by the Kenai Watershed Forum;
 - [I. SURFACE WATER PROTECTION MEASURES FOR ADJACENT PROPERTIES, INCLUDING THE USE OF DIVERSION CHANNELS, INTERCEPTION DITCHES, ON-SITE COLLECTION DITCHES, SEDIMENT PONDS AND TRAPS, AND SILT FENCE; PROVIDE DESIGNS FOR SUBSTANTIAL STRUCTURES; INDICATE WHICH

STRUCTURES WILL REMAIN AS PERMANENT FEATURES AT THE CONCLUSION OF OPERATIONS, IF ANY;]

[J]i. Location of any processing areas on parcel, if applicable;

[K]j. North arrow;

[L]k. The scale to which the site plan is drawn;

[M]l. Preparer's name, date and seal;

[N]m. Field verification shall include staking the boundary of the parcel at sequentially visible intervals. The planning director may grant an exemption in writing to the staking requirements if the parcel boundaries are obvious or staking is unnecessary.

B. In order to aid the planning commission or planning director's decision-making process, the planning director shall provide vicinity, aerial, land use, and ownership maps for each application and may include additional information.

21.29.040. Standards for sand, gravel or material sites.

A. These material site regulations are intended to protect against aquifer disturbance, road damage, physical damage to adjacent properties, dust, noise, and visual impacts. Only the conditions set forth in KPB 21.29.050 may be imposed to meet these standards:

1. Protects against the lowering of water sources serving other properties;
2. Protects against physical damage to [OTHER] adjacent properties;
3. [MINIMIZES] Protects against off-site movement of dust;
4. [MINIMIZES] Protects against noise disturbance to other properties;
5. [MINIMIZES] Protects against visual impacts of the material site; [AND]
6. Provides for alternate post-mining land uses[.];
7. Protects Receiving Waters against adverse effects to fish and wildlife habitat;

8. Protects against traffic impacts; and
9. Provides consistency with the objectives of the Kenai Peninsula Borough Comprehensive Plan and other applicable planning documents.

21.29.050. Permit conditions.

A. The following mandatory conditions apply to counter permits and CLUPs issued for sand, gravel or material sites:

1. [PARCEL]Permit boundaries. [ALL BOUNDARIES OF THE SUBJECT PARCEL] The buffers and any easements or right-of-way abutting the proposed permit area shall be staked at sequentially visible intervals where parcel boundaries are within 300 feet of the excavation perimeter. Field verification and staking will require the services of a professional land surveyor. Stakes shall be in place [AT TIME OF APPLICATION] prior to issuance of the permit.

- [2. *BUFFER ZONE. A BUFFER ZONE SHALL BE MAINTAINED AROUND THE EXCAVATION PERIMETER OR PARCEL BOUNDARIES. WHERE AN EASEMENT EXISTS, A BUFFER SHALL NOT OVERLAP THE EASEMENT, UNLESS OTHERWISE CONDITIONED BY THE PLANNING DIRECTOR OR PLANNING COMMISSION.*

A. THE BUFFER ZONE SHALL PROVIDE AND RETAIN A BASIC BUFFER OF:

- I. 50 FEET OF UNDISTURBED NATURAL VEGETATION, OR
- II. A MINIMUM SIX-FOOT EARTHEN BERM WITH AT LEAST A 2:1 SLOPE, OR
- III. A MINIMUM SIX-FOOT FENCE.

B. A 2:1 SLOPE SHALL BE MAINTAINED BETWEEN THE BUFFER ZONE AND EXCAVATION FLOOR ON ALL INACTIVE SITE WALLS. MATERIAL FROM THE AREA DESIGNATED FOR THE 2:1 SLOPE MAY BE REMOVED IF SUITABLE, STABILIZING MATERIAL IS REPLACED WITHIN 30 DAYS FROM THE TIME OF REMOVAL.

C. THE PLANNING COMMISSION OR PLANNING DIRECTOR SHALL DESIGNATE ONE OR A COMBINATION OF THE ABOVE AS IT DEEMS APPROPRIATE. THE VEGETATION AND FENCE SHALL BE OF SUFFICIENT HEIGHT AND DENSITY TO PROVIDE VISUAL AND NOISE SCREENING OF THE PROPOSED USE AS DEEMED

APPROPRIATE BY THE PLANNING COMMISSION OR PLANNING DIRECTOR.

- D. BUFFERS SHALL NOT CAUSE SURFACE WATER DIVERSION WHICH NEGATIVELY IMPACTS ADJACENT PROPERTIES OR WATER BODIES. SPECIFIC FINDINGS ARE REQUIRED TO ALTER THE BUFFER REQUIREMENTS OF KPB 21.29.050(A)(2)(A) IN ORDER TO MINIMIZE NEGATIVE IMPACTS FROM SURFACE WATER DIVERSION. FOR PURPOSES OF THIS SECTION, SURFACE WATER DIVERSION IS DEFINED AS EROSION, FLOODING, DEHYDRATION OR DRAINING, OR CHANNELING. NOT ALL SURFACE WATER DIVERSION RESULTS IN A NEGATIVE IMPACT.
- E. AT ITS DISCRETION, THE PLANNING COMMISSION MAY WAIVE BUFFER REQUIREMENTS WHERE THE TOPOGRAPHY OF THE PROPERTY OR THE PLACEMENT OF NATURAL BARRIERS MAKES SCREENING NOT FEASIBLE OR NOT NECESSARY. BUFFER REQUIREMENTS SHALL BE MADE IN CONSIDERATION OF AND IN ACCORDANCE WITH EXISTING USES OF ADJACENT PROPERTY AT THE TIME OF APPROVAL OF THE PERMIT. THERE IS NO REQUIREMENT TO BUFFER THE MATERIAL SITE FROM USES WHICH COMMENCE AFTER THE APPROVAL OF THE PERMIT.]

2. *Buffer Area.* Material sites shall maintain buffer areas in accord with this section.

- a. A buffer area of a maximum of 100 feet shall be established between the area of excavation and the parcel boundaries. The buffer area may include one or more of the following: undisturbed natural vegetation, a minimum six-foot fence, a minimum six-foot berm or a combination thereof.
- b. A 2:1 slope shall be maintained between the buffer zone and excavation floor on all inactive site walls. Material from the area designated for the 2:1 slope may be removed if suitable, stabilizing material is replaced within 30 days from the time of removal.
- c. Where an easement exists, a buffer shall not overlap the easement, unless otherwise conditioned by the planning commission or planning director, as applicable.
- d. The buffer area may be reduced where the planning commission or planning director, as applicable, has approved an alternate buffer plan. The alternate buffer plan must consist of natural undisturbed vegetation, a minimum six-foot berm,

or a minimum six-foot fence or a combination thereof; unless the permittee proposes another solution approved by the planning commission or planning director, as applicable, to meet this condition.

- e. The buffer requirements may be waived by the planning commission or planning director, as applicable, where the topography of the property or the placement of natural barriers makes screening not feasible or unnecessary.
- f. There is no requirement to buffer a material site from uses that commence after approval of the permit.
- g. When a buffer area has been denuded prior to review of the application by the planning commission or planning director revegetation may be required.

3. *Processing.* In the case of a CLUP, any equipment which conditions or processes material must be operated at least 300 feet from the parcel boundaries. At its discretion, the planning commission may waive the 300-foot processing distance requirement, or allow a lesser distance in consideration of and in accordance with existing uses of [OF ADJACENT PROPERTY AT THE TIME] the properties in the vicinity at the time of approval of the permit.

4. *Water source separation.*

- a. All permits shall be issued with a condition which prohibits any material extraction within 100 horizontal feet of any water source existing prior to original permit issuance.
- b. All counter permits shall be issued with a condition which requires that a four-foot vertical separation [FROM]between extraction operations and the seasonal high water table be maintained.
- c. All CLUPS shall be issued with a condition which requires that a [TWO] four-foot vertical separation [FROM]between extraction operations and the seasonal high water table be maintained.
- d. There shall be no dewatering either by pumping, ditching or some other form of draining unless an exemption is granted by the planning commission. The exemption for dewatering may be granted if the operator provides a statement under seal and supporting data from a duly licensed and qualified impartial

civil engineer, that the dewatering will not lower any of the surrounding property's water systems and the contractor posts a bond for liability for potential accrued damages.

5. *Excavation in the water table.* Excavation in the water table greater than 300 horizontal feet of a water source may be permitted with the approval of the planning commission based on the following:
 - a. Certification by a qualified independent civil engineer or professional hydrogeologist that the excavation plan will not negatively impact the quantity of an aquifer serving existing water sources.
 - b. The installation of a minimum of three water monitoring tubes or well casings as recommended by a qualified independent civil engineer or professional hydrogeologist adequate to determine flow direction, flow rate, and water elevation.
 - c. Groundwater elevation, flow direction, and flow rate for the subject parcel, measured in three-month intervals by a qualified independent civil engineer or professional hydrogeologist, for at least one year prior to application. Monitoring tubes or wells must be kept in place, and measurements taken, for the duration of any excavation in the water table.
 - d. Operations shall not breach an aquifer-confining layer.
6. *Waterbodies.*
 - a. An undisturbed buffer shall be left and no earth material extraction activities shall take place within [100] 200 linear feet from excavation limits and the ordinary high water level of surface water bodies such as a lake, river, stream, [OR OTHER WATER BODY, INCLUDING] riparian wetlands and mapped floodplains as defined in KPB 21.06. This regulation shall not apply to man-made waterbodies being constructed during the course of the materials extraction activities. In order to prevent discharge, diversion, or capture of surface water, an additional setback from lakes, rivers, anadromous streams, and riparian wetlands may be required.
 - b. Counter permits and CLUPS may contain additional conditions addressing surface water diversion.

7. *Fuel storage.* Fuel storage for containers larger than 50 gallons shall be contained in impermeable berms and basins capable of retaining 110 percent of storage capacity to minimize the potential for uncontained spills or leaks. Fuel storage containers 50 gallons or smaller shall not be placed directly on the ground, but shall be stored on a stable impermeable surface.
8. *Roads.* Operations shall be conducted in a manner so as not to damage borough roads as required by KPB 14.40.175 and will be subject to the remedies set forth in KPB 14.40 for violation of this condition.
9. *Subdivision.* Any further subdivision or return to acreage of a parcel subject to a conditional land use or counter permit requires the permittee to amend their permit. The planning director may issue a written exemption from the amendment requirement if it is determined that the subdivision is consistent with the use of the parcel as a material site and all original permit conditions can be met.
10. *Dust control.* Dust suppression is required on haul roads within the boundaries of the material site by application of water or calcium chloride.
11. *Hours of operation.* [ROCK CRUSHING EQUIPMENT SHALL NOT BE OPERATED BETWEEN 10:00 P.M. AND 6:00 A.M.]
 - a. Processing equipment shall not be operated between 7:00 p.m. and 6:00 a.m.
 - b. The planning commission may grant exceptions to increase the hours of operation and processing based on surrounding land uses, topography, screening the material site from properties in the vicinity and conditions placed on the permit by the planning commission to mitigate the noise, dust and visual impacts caused by the material site.
12. *Reclamation.*
 - a. Reclamation shall be consistent with the reclamation plan approved by the planning commission or planning director as appropriate in accord with KPB 21.29.060.
 - b. [AS A CONDITION OF ISSUING THE PERMIT, THE APPLICANT SHALL SUBMIT A RECLAMATION PLAN AND POST A BOND TO COVER THE ANTICIPATED RECLAMATION COSTS IN AN AMOUNT TO BE DETERMINED BY THE PLANNING DIRECTOR. THIS BONDING REQUIREMENT SHALL NOT APPLY TO SAND, GRAVEL

OR MATERIAL SITES FOR WHICH AN EXEMPTION FROM STATE BOND REQUIREMENTS FOR SMALL OPERATIONS IS APPLICABLE PURSUANT TO AS 27.19.050.] The applicant shall operate the material site consistent with the approved reclamation plan and provide bonding pursuant to 21.29.060(B). This bonding requirement shall not apply to sand, gravel or material sites for which an exemption from state bond requirements for small operations is applicable pursuant to AS 27.19.050.

13. *Other permits.* Permittee is responsible for complying with all other federal, state and local laws applicable to the material site operation, and abiding by related permits. These laws and permits include, but are not limited to, the borough's flood plain, coastal zone, and habitat protection regulations, those state laws applicable to material sites individually, reclamation, storm water pollution and other applicable Environmental Protection Agency (EPA) regulations, clean water act and any other U.S. Army Corp of Engineer permits, any EPA air quality regulations, EPA and ADEC air and water quality regulations, EPA hazardous material regulations, U.S. Dept. of Labor Mine Safety and Health Administration (MSHA) regulations (including but not limited to noise and safety standards), and Federal Bureau of Alcohol, Tobacco and Firearm regulations regarding using and storing explosives. Any violation of these regulations or permits reported to or observed by borough personnel will be forwarded to the appropriate agency for enforcement.
14. [~~VOLUNTARY~~]Volunteered *permit conditions.* Conditions may be included in the permit upon agreement of the permittee and approval of the planning commission for CLUPs or the planning director for counter permits. Such conditions must be consistent with the standards set forth in KPB 21.29.040(A). Planning commission approval of such conditions shall be contingent upon a finding that the conditions will be in the best interest of the borough and the surrounding property owners. [~~VOLUNTARY~~] Volunteered permit conditions apply to the subject parcel and operation, regardless of a change in ownership. A change in [~~VOLUNTARY~~] volunteered permit conditions may be proposed [AT] by permit [RENEWAL OR AMENDMENT] modification.
15. *Signage.* For permitted parcels on which the permittee does not intend to begin operations for at least 12 months after being granted a conditional land use permit, the permittee shall post notice of intent on parcel corners or access, whichever is more visible. Sign dimensions shall be no more than 15" by 15" and must contain the following information: the phrase "Permitted Material Site" along with the permittee's business name and a contact phone number.

16. Appeal. No clearing of vegetation shall occur within the 100-foot maximum buffer area from the permit boundary nor shall the permit be issued or operable until the deadline for the appeal, pursuant to KPB 21.20, has expired.
17. Sound level.
- a. No sound resulting from the materials extraction activities shall create a sound level, when measured at or within the property boundary of the adjacent land, that exceeds 75 dB(A).
 - b. For any sound that is of short duration between the hours of 7 a.m. and 7 p.m. the levels may be increased by:
 - i. Five dB(A) for a total of 15 minutes in any one hour; or
 - ii. Ten dB(A) for a total of five minutes in any hour; or
 - iii. Fifteen db(A) for a total of one and one-half minutes in any one-hour period.
 - c. At its discretion, the planning commission or planning director, as applicable, may reduce or waive the sound level requirements on any or all property boundaries. Sound level requirements shall be made in consideration of and in accordance with existing uses of the properties in the vicinity at the time of approval of the permit.
 - d. Mandatory condition KPB 21.29.050(A)(17) shall expire 365 days from adoption of KPB 21.29.050(A)(17) unless extended or modified by the assembly.
18. Reverse signal alarms. Reverse signal alarms, used at the material site on loaders, excavators, and other earthmoving equipment shall be more technically advanced devices; such as, a multi-frequency “white noise” alarms rather than the common, single (high-pitch) tone alarms. At its discretion, the planning commission or planning director, as applicable, may waive this requirement or a portion of this requirement. The waiver of this requirement shall be made in consideration of and in accordance with existing uses of the properties in the vicinity at the time of approval of the permit.
19. Ingress and egress. The planning commission or planning director may determine the points of ingress and egress for the material site. The permittee is not required to construct haul routes outside the

parcel boundaries of the material site. Driveway authorization must be acquired, from either the state through an “Approval to Construct” or a borough road service area as appropriate, prior to issuance of a material site permit when accessing a public right-of-way.

20. *Dust suppression.* Dust suppression shall be required when natural precipitation is not adequate to suppress the dust generated by the material site traffic on haul routes. Based on surrounding land uses the planning commission or planning director, as applicable, may waive or reduce the requirement for dust suppression on haul routes.
21. *Surface water protection.* Use of surface water protection measures as specified in KPB 21.29.030(A)(8) must be approved by a licensed civil engineer.
22. *Groundwater elevation.* All material sites must maintain one monitoring tube per ten acres of excavated area four feet below the proposed excavation.
23. *Setback.* Material site excavation areas shall be 250-feet from the property boundaries of any local option zoning district, existing public school ground, private school ground, college campus, child care facility, multi-purpose senior center, assisted living home, and licensed health care facility. If overlapping, the buffer areas of the excavation shall be included in the 250-foot setback.

21.29.055. Decision.

The planning commission or planning director, as applicable, shall approve permit applications meeting the mandatory conditions or shall disapprove permit applications that do not meet the mandatory conditions. The decision shall include written findings supporting the decision, and when applicable, there shall be written findings supporting any site-specific alterations to the mandatory condition as specifically allowed by KPB 21.29.050(A)(2)(a), (2)(c), (2)(d), (2)(e), (2)(g), (3), (4)(d), (5), (11)(b), (12), (14), (17)(c), (18), (19), and (20) and as allowed for the KPB 21.29.060 reclamation plan.

21.29.060. Reclamation plan.

- A. All material site permit applications require an overall reclamation plan along with a five-year reclamation plan. A site plan for reclamation shall be required including a scaled drawing with finished contours. A five-year reclamation plan must be submitted with a permit extension request.
- B. The applicant shall revegetate with a non-invasive plant species and reclaim all disturbed land [UPON EXHAUSTING THE MATERIAL ON-SITE, OR WITHIN A

PRE-DETERMINED TIME PERIOD FOR LONG-TERM ACTIVITIES, SO AS TO LEAVE THE LAND IN A STABLE CONDITION. RECLAMATION MUST OCCUR FOR ALL EXHAUSTED AREAS OF THE SITE EXCEEDING FIVE ACRES BEFORE A FIVE-YEAR RENEWAL PERMIT IS ISSUED, UNLESS OTHERWISE REQUIRED BY THE PLANNING COMMISSION. IF THE MATERIAL SITE IS ONE ACRE OR LESS IN SIZE AND HAS BEEN GRANTED A CLUP DUE TO EXCAVATION IN THE WATER TABLE, RECLAMATION MUST BE PERFORMED AS SPECIFIED BY THE PLANNING COMMISSION OR PLANNING DIRECTOR IN THE CONDITIONAL USE OR COUNTER PERMIT] within the time period approved with the reclamation plan so as to leave the land in a stable condition. Bonding shall be required at \$2,000.00 per acre for all acreage included in the current five-year reclamation plan. In the alternative, the planning director may accept a civil engineer's estimate for determining the amount of bonding. If the applicant is bonded with the state, the borough's bonding requirement is waived. Compliance with reclamation plans shall be enforced under KPB 21.50.

C. The following measures must be considered in the [PREPARING] preparation, approval and [IMPLEMENTING] implementation of the reclamation plan, although not all will be applicable to every reclamation plan.

1. Topsoil that is not promptly redistributed to an area being reclaimed will be separated and stockpiled for future use. [THIS MATERIAL WILL BE PROTECTED FROM EROSION AND CONTAMINATION BY ACIDIC OR TOXIC MATERIALS AND PRESERVED IN A CONDITION SUITABLE FOR LATER USE.]
2. The area will be backfilled, graded and recontoured using strippings, overburden, and topsoil [TO A CONDITION THAT ALLOWS FOR THE REESTABLISHMENT OF RENEWABLE RESOURCES ON THE SITE WITHIN A REASONABLE PERIOD OF TIME. IT WILL BE STABILIZED TO A CONDITION THAT WILL ALLOW SUFFICIENT MOISTURE FOR REVEGETATION] so that it will be stabilized to a condition that will allow for the revegetation as required by KPB 21.29.060(B).
3. [SUFFICIENT QUANTITIES OF STOCKPILED OR IMPORTED TOPSOIL WILL BE SPREAD OVER THE RECLAIMED AREA TO A DEPTH OF FOUR INCHES TO PROMOTE NATURAL PLANT GROWTH THAT CAN REASONABLY BE EXPECTED TO REVEGETATE THE AREA WITHIN FIVE YEARS. THE APPLICANT MAY USE THE EXISTING NATURAL ORGANIC BLANKET REPRESENTATIVE OF THE PROJECT AREA IF THE SOIL IS FOUND TO HAVE AN ORGANIC CONTENT OF 5% OR MORE AND MEETS THE SPECIFICATION OF CLASS B TOPSOIL REQUIREMENTS AS SET BY ALASKA TEST METHOD (ATM) T-6.] The [MATERIAL] topsoil used for reclamation shall be reasonably free from roots, clods, sticks, and branches greater than 3 inches in diameter. Areas having slopes

greater than 2:1 require special consideration and design for stabilization by a licensed engineer.

4. Exploration trenches or pits will be backfilled. Brush piles and unwanted vegetation shall be removed from the site, buried or burned. Topsoil and other organics will be spread on the backfilled surface to inhibit erosion and promote natural revegetation.
5. [PEAT AND T]Topsoil mine operations shall ensure a minimum of [TWO] four inches of suitable growing medium is left or replaced on the site upon completion of the reclamation activity (unless otherwise authorized).
6. Ponding may be used as a reclamation method as approved by the planning commission.

- D. The five-year reclamation plan shall describe the total acreage to be reclaimed [EACH YEAR, A LIST OF EQUIPMENT (TYPE AND QUANTITY) TO BE USED IN RECLAMATION, AND A TIME SCHEDULE OF RECLAMATION MEASURES] relative to the total excavation plan.

21.29.070. Permit extension and revocation.

- A. Conditional land use permittees must submit a request in writing for permit extension every five years after the permit is issued. Requests for permit extension must be made at least 30 days prior to permit expiration. Counter permittees must submit any request for a 12-month extension at least 30 days prior to the expiration of the original 12-month permit period.
- B. A permit extension certificate for a CLUP may be granted by the planning director after 5 years, and after one year for a counter permit where no modification to operations or conditions are proposed.
- C. Permit extension may be denied if: (1) reclamation required by this chapter and the original permit has not been performed; (2) the permittee is otherwise in noncompliance with the original permit conditions; or (3) the permittee has had a permit violation in the last two years and has not fulfilled compliance requests.
- D. A modification application shall be processed pursuant to KPB 21.29.030-050 with public notice given as provided by KPB 21.25.060 when operators request modification of their permit conditions based on changes in operations set forth in the modification application.
- E. There shall be no fee for permit extensions approved by the planning director. The fee for a permit modification processed under KPB

21.29.070(D) will be the same as an original permit application in the amount listed in the most current Kenai Peninsula Borough Schedule of Rates, Charges and Fees.

- F. Failure to submit a request for extension will result in the expiration of the permit. The borough may issue a permit termination document upon expiration pursuant to KPB 21.29.080. Once a permit has expired, a new permit application approval process is required in order to operate the material site.
- G. Permits may be revoked pursuant to KPB 21.50. 21.29.080. - Permit termination.

When a permit expires, is revoked, or a permittee requests termination of their permit, a review of permit conditions and site inspections will be conducted by the planning department to ensure code compliance and verify site reclamation prior to termination. When the planning director determines that a site qualifies for termination, a termination document shall be issued to the permittee.

21.29.090. Permit modifications.

If a permittee revises or intends to revise operations (at a time other than permit extension) so that they are no longer consistent with the original application, a permit modification is required. The planning director shall determine whether the revision to operations requires a modification. Permit modification shall be processed in the same manner as original permits.

21.29.100. Recordation.

All permits, permit extensions, modified permits, prior existing uses, and terminations shall be recorded. Failure to record a material site document does not affect the validity of the documents.

21.29.110. Violations.

- A. Violations of this chapter shall be governed by KPB 21.50.
- B. In addition to the remedies provided in KPB 21.50, the planning director may require bonding in a form and amount adequate to protect the borough's interests for an owner or operator who has been cited for three violations of KPB 21.50, 21.25, and 21.29 within a three-year period. The violations need not be committed at the same material site. Failure to provide requested bonding may result in permit revocation proceedings.

21.29.120. Prior existing uses.

- A. Material sites are not held to the standards and conditions of a CLUP if a prior existing use (PEU) determination was granted for the parcel in accordance with KPB 21.29.120(B). To qualify as a PEU, a parcel's use as a material site must have commenced or have been operated after May 21, 1986, and prior to May 21, 1996, provided that the subject use continues in the same location. In no event shall a prior existing use be expanded beyond the smaller of the lot, block, or tract lines as they existed on May 21, 1996. If a parcel is further subdivided after May 21, 1996, the pre-existing use may not be expanded to any lot, tract, or parcel where extraction had not occurred before or on February 16, 1999. If a parcel is subdivided where extraction has already occurred, the prior existing use is considered abandoned, and a CLUP must be obtained for each parcel intended for further material site operations. The parcel owner may overcome this presumption of abandonment by showing that the subdivision is not inconsistent with material site operation. If a parcel subject to a prior existing use is conveyed, the prior existing use survives the conveyance.
- B. Owners of sites must have applied to be registered as a prior existing use prior to January 1, 2001.
- C. [ANY PRIOR EXISTING USE THAT HAS NOT OPERATED AS A MATERIAL SITE BETWEEN MAY 21, 1996, AND MAY 21, 2011, IS CONSIDERED ABANDONED AND MUST THEREAFTER COMPLY WITH THE PERMIT REQUIREMENTS OF THIS CHAPTER. THE PLANNING DIRECTOR SHALL DETERMINE WHETHER A PRIOR EXISTING USE HAS BEEN ABANDONED. AFTER GIVING NOTICE TO THE PARCEL OWNER THAT A PEU IS CONSIDERED ABANDONED, A PARCEL OWNER MAY PROTEST THE TERMINATION OF THE PEU BY FILING WRITTEN NOTICE WITH THE PLANNING DIRECTOR ON A FORM PROVIDED BY THE PLANNING DEPARTMENT. WHEN A PROTEST BY A PARCEL OWNER IS FILED, NOTICE AND AN OPPORTUNITY TO MAKE WRITTEN COMMENTS REGARDING PRIOR EXISTING USE STATUS SHALL BE ISSUED TO OWNERS OF PROPERTY WITHIN A ONE-HALF MILE RADIUS OF THE PARCEL BOUNDARIES OF THE SITE. THE OWNER OF THE PARCEL SUBJECT TO THE PRIOR EXISTING USE MAY SUBMIT WRITTEN INFORMATION, AND THE PLANNING DIRECTOR MAY GATHER AND CONSIDER ANY INFORMATION RELEVANT TO WHETHER A MATERIAL SITE HAS OPERATED. THE PLANNING DIRECTOR MAY CONDUCT A HEARING IF HE OR SHE BELIEVES IT WOULD ASSIST THE DECISION-MAKING PROCESS. THE PLANNING DIRECTOR SHALL ISSUE A WRITTEN DETERMINATION WHICH SHALL BE DISTRIBUTED TO ALL PERSONS MAKING WRITTEN COMMENTS. THE PLANNING DIRECTOR'S DECISION REGARDING TERMINATION OF THE PRIOR EXISTING USE STATUS MAY BE APPEALED TO THE PLANNING COMMISSION WITHIN 15 DAYS OF THE DATE OF THE NOTICE OF DECISION.]

The owner of a material site that has been granted a PEU determination shall provide proof of compliance with AS 27.19.030 – 050 concerning

reclamation to the planning department no later than July 1, 2021. The proof shall consist of an Alaska Department of Natural Resources (DNR) approved reclamation plan and receipt for bonding or a letter of intent filed with DNR.

1. The planning department may request proof of continued compliance with AS 27.19.030 – 050 on an annual basis.
2. Pursuant to KPB 21.29.110 the enforcement process and remedies set forth in KPB 21.50 shall govern if the proof that the statutory requirements contained in AS 27.19.030-050 is not provided to the planning department.

SECTION 3. That KPB 21.50.055 is hereby amended, as follows:

21.50.055. Fines.

- A. Following are the fines for violations of this title. Each day a violation occurs is a separate violation. Violations begin to accrue the date the enforcement notice is issued and continue to the date the enforcement is initially set for hearing. The fine for a violation may not be reduced by the hearing officer to less than the equivalent of one day's fine for each type of violation.

Code Chapter & Section	Violation Description	Daily Fine
KPB 20.10.030(A)	Offering land for sale without final plat approval	\$300.00
KPB 20.10.030(B)	Filing/recording unapproved subdivision/plat	\$300.00
KPB 20.10.030(C)	Violation of subdivision code or condition	\$300.00
KPB 21.05.040(C)	Violation of variance conditions	\$300.00
KPB 21.06.030(D)	Structure or activity prohibited by KPB 21.06	\$300.00
KPB 21.06.040	Failure to obtain a Development Permit/Floodplain Management	\$300.00
KPB 21.06.045	Failure to obtain a SMFDA Development Permit/Violation of SMFDA permit conditions/Floodplain Management	\$300.00
KPB 21.06.050	Violation of permit conditions/Floodplain Management	\$300.00

KPB 21.18.071	Failure to obtain staff permit/Violation of staff permit/Anadromous Streams Habitat Protection	\$300.00
KPB 21.18.072	Failure to obtain limited commercial activity permit/Violation of permit conditions/Anadromous Streams Habitat Protection	\$300.00
KPB 21.18.075	Prohibited use or structure/Anadromous Streams Habitat Protection	\$300.00
KPB 21.18.081	Failure to obtain Conditional Use Permit/Violation of Conditional Use Permit Condition/Anadromous Streams Habitat Protection	\$300.00
KPB 21.18.090	Failure to obtain prior existing use/structure permit/Violation of permit conditions/Anadromous Streams Habitat Protection	\$300.00
KPB 21.18.135(C)	Violation of emergency permit conditions/anadromous stream habitat protection	\$300.00
KPB 21.25.040	Failure to Obtain a Permit/Material Site/Correctional community residential center/Concentrated Animal Feeding Operation	\$300.00
KPB 21.28.030	Violation of permit conditions/Concentrated Animal Feeding Operations	\$300.00
KPB 21.29.020	Failure to Obtain a counter permit/Material Site Permits	\$300.00
KPB 21.29.050	Violation of Conditional Land Use Permit Conditions/Material Site Permits Also applies to KPB 21.26 material site permits	\$300.00
KPB 21.29.060	Violation of Reclamation Plan/Material Site Permits Also applies to KPB 21.26 material site permits	\$300.00
<u>KPB 21.29.120</u>	<u>Failure to Provide Reclamation Plan and Proof of Bonding or Letter of Intent</u>	<u>\$300.00</u>
KPB 21.44.100	Violation of Pre-existing structures/Local Option Zoning	\$300.00
KPB 21.44.110(D)	Prohibited expansion of nonconforming use/Local Option Zoning	\$300.00

KPB 21.44.110(E)	Prohibited Change in Use/Local Option Zoning	\$300.00
KPB 21.44.110(G)	Violation of Conditions on Nonconforming Use/Local Option Zoning	\$300.00
KPB 21.44.130(C)(D)	Violation of Home Occupation Standards and Conditions/Local Option Zoning	\$300.00
KPB 21.44.130(F)	Disallowed Home Occupation/Local Option Zoning	\$300.00
KPB 21.44.135	Failure to file development notice	\$300.00
KPB 21.44.160(A)(B)	Prohibited use	\$300.00
KPB 21.44.160(C)	Violation of Development Standards/Single Family Zoning/Local Option Zoning	\$300.00
KPB 21.44.165(A)(B)	Prohibited use	\$300.00
KPB 21.44.165(C)	Violation of Development Standards/Small Lot Residential Zoning/Local Option Zoning	\$300.00
KPB 21.44.170(A)(B)	Prohibited use	\$300.00
KPB 21.44.170(C)	Violation of Development Standards/Rural Residential District/Local Option Zoning	\$300.00
KPB 21.44.175(B)(C)	Prohibited Use	\$300.00
KPB 21.44.175(D)	Violation of Development Standards/Residential Waterfront	\$300.00
KPB 21.44.180(A)(B)	Prohibited Use	\$300.00
KPB 21.44.180(C)	Violation of Development Standards/Multi-Family Residential District/Local Option Zoning	\$300.00
KPB 21.44.190(A)(B)	Prohibited Use	\$300.00
KPB 21.44.190(C)	Violation of Development Standards/Industrial District/Local Option Zoning	\$300.00

KPB 21.46.030(b)	Failure to maintain bear-resistant garbage cans/Local option zone/Birch and Grove Ridge subdivisions Rural Residential District	\$300.00
KPB 21.50.100(F)	Removal of posted enforcement notice	\$300.00
KPB 21.50.100(G)	Violation of enforcement notice	\$1,000.00
KPB 21.50.130(I)	Violation of an enforcement order	\$1,000.00

SECTION 4. That this ordinance shall become effective upon its enactment.

ENACTED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH THIS * DAY OF * 2019.

Kelly Cooper, Assembly President

ATTEST:

Johni Blankenship, MMC, Borough Clerk

Yes: Dunne, Johnson, Cooper

No: Bjorkman, Blakeley, Carpenter, Cox, Hibbert, Smalley

Absent: None

Introduced by:	Mayor, Johnson
Date:	12/07/21
Hearing:	01/18/22
Action:	Postponed as Amended to 02/01/22
Vote:	5 Yes, 3 No, 1 Absent
Date:	02/01/22
Action:	Tabled
Vote:	9 Yes, 0 No, 0 Absent

**KENAI PENINSULA BOROUGH
ORDINANCE 2021-41**

**AN ORDINANCE AMENDING KPB 21.29, KPB 21.25, AND KPB 21.50.055
REGARDING MATERIAL SITE PERMITS, APPLICATIONS, CONDITIONS, AND
PROCEDURES**

- WHEREAS,** Goal 2, Focus Area: Land Use and Changing Climate, Objective A of the 2019 Kenai Peninsula Borough Comprehensive Plan is to establish policies that better guide land use to minimize land use conflicts, maintain property values, protect natural systems and support individual land use freedoms; and
- WHEREAS,** Goal 2, Focus Area: Land Use and Changing Climate, Objective A, Strategy 1 of the 2019 Comprehensive Plan is to adopt limited development standards for specific areas and uses to reduce potential off site impacts of development on adjoining uses and the natural environment; and
- WHEREAS,** Goal 2, Focus Area: Land Use and Changing Climate, Objective A, Strategy 2 of the 2019 Comprehensive Plan is to update the Borough’s existing conditional use regulations for gravel extraction and other uses to better address reoccurring land use conflicts; and
- WHEREAS,** Goal 2, Focus Area: Land Use and Changing Climate, Objective A, Strategy 2a of the 2019 Comprehensive Plan is to clarify the broad purpose of the conditional use process and clear parameters for allowable conditional uses that include reasonable, project-specific conditions that reduce impacts on surrounding uses, and if/when a conditional use permit can be denied and consider establishing conditions that require larger setbacks, safety and visual screening, control on access routes, control on hours of operation, and address environmental concerns; and
- WHEREAS,** Goal 2, Focus Area: Land Use and Changing Climate, Objective A, Strategy 2d of the 2019 Comprehensive Plan is to complete improvements to the rules guiding gravel extraction, with the goal of providing an appropriate balance between providing access to affordable materials for development and protecting quality of life for borough residents; and

- WHEREAS,** Goal 1 of the Mining and Minerals Processing section of the 1990 Kenai Peninsula Borough Coastal Management Program is to provide opportunities to explore, extract and process minerals, sand and gravel resources, while protecting environmental quality and other resource users; and
- WHEREAS,** an assembly subcommittee was formed in 2005 to review the material site code; and
- WHEREAS,** Ordinance 2006-01 (Substitute) codified as KPB 21.29 was adopted in 2006 after consideration of the subcommittee's report; and
- WHEREAS,** the planning department has been administering Ordinance 2006-01 (Substitute), codified as KPB 21.29 for 13 years; and
- WHEREAS,** KPB 21.25.040 requires a permit for the commencement of certain land uses within the rural district of the Kenai Peninsula Borough; and
- WHEREAS,** the planning department has recognized that certain provisions of the material site ordinance could be better clarified for the operators, public, and staff; and
- WHEREAS,** the planning commission and planning department received comments expressing concerns about dust, noise, safety, and aesthetics; and
- WHEREAS,** approximately 253 registered prior existing use material sites and approximately 99 conditional land use permits for material sites have been granted since 1996;
- WHEREAS,** the planning department receives numerous complaints regarding unreclaimed parcels registered as nonconforming prior existing material sites which have not been regulated by KPB; and
- WHEREAS,** the assembly established a material site work group by adoption of Resolution 2018-004 (Substitute) to engage in a collaborative discussion involving the public and industry to make recommendations regarding the material site code; and
- WHEREAS,** assembly Resolution 2018-025 extended the deadline for the final report to be submitted to the assembly, administration and planning commission to April 30, 2019; and
- WHEREAS,** certain additional conditions placed on material site permits would facilitate a reduction in the negative secondary impacts of material sites, e.g. dust, noise, safety, and unsightliness of material sites; and
- WHEREAS,** at its regularly scheduled meeting of November 12, 2019, the planning commission recommended approval by unanimous consent;

NOW, THEREFORE, BE IT ORDAINED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH:

SECTION 1. That KPB 21.25.030 is hereby amended, as follows:

21.25.030. - Definitions.

Unless the context requires otherwise, the following definitions apply to CLUPs:

Abandon means to cease or discontinue a use without intent to resume, but excluding short-term interruptions to use or activity during periods of remodeling, maintaining, or otherwise improving or rearranging a facility or during normal periods of vacation or seasonal closure. An "intent to resume" can be shown through continuous operation of a portion of the facility, maintenance of utilities, or outside proof of continuance, e.g., bills of lading or delivery records. Abandonment also means the cessation of use, regardless of voluntariness, for a specified period of time.

Animal feeding operation means a lot or facility (other than an aquatic animal production facility) where animals (other than aquatic animals) have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period.

- a. The same animals need not remain on the lot for 45 days or more; rather, some animals are fed or maintained on the lot 45 days out of any 12-month period, and
- b. Animals are "maintained" for purposes of this ordinance when they are confined in an area where waste is generated and/or concentrated or are watered, cleaned, groomed, or medicated in a confined area, even if the confinement is temporary.
- c. Two or more animal feeding operations under common ownership are considered, for the purposes of these regulations, to be a single animal feeding operation if they adjoin each other.
- d. Slaughterhouses are animal feeding operations.

Animal unit means a unit of measurement for any animal feeding operation calculated by adding the following numbers: the number of slaughter and feeder cattle multiplied by 1.0, plus the number of mature dairy cattle multiplied by 1.4, plus the number of swine weighting [weighing] over 25 kilograms (approximately 55 pounds) multiplied by 0.4, plus the number of sheep multiplied by 0.1, plus the number of horses multiplied by 2.0.

Animal waste means animal excrement, animal carcasses, feed wasted, process wastewaters or any other waste associated with the confinement of animals from an animal feeding operation.

Animal waste management system means a combination of structures and nonstructural practices serving an animal feeding operation that provides for the collection, treatment, disposal, distribution, storage and land application of animal waste.

Aquifer means a subsurface formation that contains sufficient water-saturated permeable material to yield economical quantities of water to wells and springs.

Aquifer-confining layer means that layer of relatively impermeable soil below an aquifer, typically clay, which confines water.

Assisted living home means a residential facility that serves three or more adults who are not related to the owner by blood or marriage, or that receives state or federal payment for service of the number of adults served. The services and activities may include, but are not limited to, housing and food services to its residents, assistance with activities of daily living, and personal assistance, and that complies with Alaska Statutes 47.32.0101 – 47.60.900, as amended.

Child care facility means a place where child care is regularly provided for children under the age of 12 for periods of time that are less than 24 hours in duration and that is licensed pursuant to AS 47.35.005 et seq., excluding child care homes and child care group homes, as currently written or hereafter amended.

Commercial means any provision of services, sale of goods, or use operated for production of income whether or not income is derived, including sales, barter, rental, or trade of goods and services.

Concentrated animal feeding operation (CAFO) means an animal feeding operation confining at least: (1) 1,000 swine weighing at least approximately 55 pounds; (2) 1,000 slaughter and feeder cattle; (3) 700 mature dairy cattle; (4) 500 horses; (5) 10,000 sheep or lambs; (6) 55,000 turkeys; (7) 100,000 laying hens or broilers (if the facility has continuous overflow watering); (8) 30,000 laying hens or broilers (if the facility has a liquid manure system); (9) 5,000 ducks; (10) 1,000 animal units; or (11) a combination of the above resulting in at least 1,000 animal units. Each individual parcel upon which a CAFO is located is a separate CAFO unless they adjoin each other.

Conditioning or processing material means a value-added process including batch plants, asphalt plants, screening, washing, and crushing by use of machinery.

Correctional community residential center (CCRC) means a community residential center, other than a correctional institution, for the short-term or temporary detention of prisoners in transition from a correctional institution, performing restitution, or undergoing rehabilitation or recovery from a legal infirmity. CCRCs may not be used for detention of prisoners who pose a threat or danger to the public for violent or sexual misconduct without imprisonment or physical confinement under guard or twenty-four-hour physical supervision. The determination of whether a prisoner poses a threat or danger to the public for violent or sexual misconduct without imprisonment or physical confinement under guard or twenty-four-hour physical supervision shall be made by the commissioner of corrections for state prisoners and the United States Attorney General, or the U.S. Director of Bureau of Prisons for federal prisoners.

Correctional institution means a facility other than a correctional community residential center providing for the imprisonment or physical confinement or detention of prisoners under guard or twenty-four-hour physical supervision, such as prisons, prison farms, jails, reformatories, penitentiaries, houses of detention, detention centers, honor camps, and similar facilities.

Development plan means a plan created to describe a proposed development on a specific building site excluding material sites under KPB 21.29.020.

Disturbed includes active excavation and all areas necessary to use a parcel as a material site including but not limited to berms, stockpiles, and excavated areas excluding all areas reclaimed for alternate post mining land uses.

[EXHAUSTED MEANS THAT ALL MATERIAL OF A COMMERCIAL QUALITY IN A SAND, GRAVEL, OR MATERIAL SITE HAS BEEN REMOVED.]

Federal prisoners means offenders in the custody or control or under the care or supervision of the United States Attorney General or the Bureau of Prisons.

Groundwater means, in the broadest sense, all subsurface water, more commonly that part of the subsurface water in the saturated zone.

Haul route includes the roads used to haul materials from the permit area to a roadway designated as collector, arterial or interstate by the Alaska Department of Transportation & Public Facilities.

Liquid manure or liquid animal waste system means any animal waste management system which uses water as the primary carrier of such waste into a primary retention structure.

Multi-purpose senior center is a facility where persons 60 years of age or older are provided with services and activities suited to their particular needs. The

services and activities may include, but are not limited to, health examinations, legal assistance, recreation programs, general social activities, telephone reassurance programs, nutrition classes, meals at minimum cost, counseling, protective services, programs for shut-ins and education programs, and that complies with Alaska Statutes 47.60.010—47.60.090, as currently written or hereafter amended.

Permit area includes all excavation, processing, buffer and haul route areas of a CLUP or counter permit.

Person shall include any individual, firm, partnership, association, corporation, cooperative, or state or local government.

Prisoner means:

- a. a person held under authority of state law in official detention as defined in AS 11.81.900;
- b. includes a juvenile committed to the custody of the Alaska Department of Corrections Commissioner when the juvenile has been charged, prosecuted, or convicted as an adult.

Private school is a school comprised of kindergarten through 12th grade, or any combination of those grades, that does not receive direct state or federal funding and that complies with either Alaska Statute 14.45.030 or 14.45.100—14.45.130, as currently written or hereafter amended.

Public school is a school comprised of kindergarten through 12th grade, or any combination of those grades, that is operated by the State of Alaska or any political subdivision of the state.

Sand, gravel or material site means an area used for extracting, quarrying, or conditioning gravel or substances from the ground that are not subject to permits through the state location (mining claim) system (e.g., gold, silver, and other metals), nor energy minerals including but not limited to coal, oil, and gas.

Seasonal high groundwater table means the highest level to which the groundwater rises on an annual basis.

Senior housing project means senior housing as defined for purposes of construction or operation in 15 Alaska Administrative Code 151.950(c), as currently written or hereafter amended.

Stable condition means the rehabilitation, where feasible, of the physical environment of the site to a condition that allows for the reestablishment of

renewable resources on the site within a reasonable period of time by natural processes.

Surface water means water on the earth's surface exposed to the atmosphere such as rivers, lakes, and creeks.

Topsoil means material suitable for vegetative growth.

Vicinity means the same as the area of notification.

Waterbody means any lake, pond, stream, riparian wetland, or groundwater into which storm water runoff is directed.

Water source means a well, spring or other similar source that provides water for human consumptive use.

SECTION 2. That KPB 21.29 is hereby amended, as follows:

CHAPTER 21.29. MATERIAL SITE PERMITS

21.29.010. Material extraction exempt from obtaining a permit.

- A. Material extraction which disturbs an area of less than one acre that is not in a mapped flood plain or subject to 21.29.010(B), does not enter the water table, and does not cross property boundaries, does not require a permit. There will be no excavation within 20 feet of a right-of-way or within ten feet of a lot line.
- B. Material extraction taking place on dewatered bars within the confines of the Snow River and the streams within the Seward-Bear Creek Flood Service Area does not require a permit, however, operators subject to this exemption shall provide the planning department with the information required by KPB 21.29.030(A)(1), (2), (6), (7) and a current flood plain development permit prior to beginning operations.
- C. A prior existing use under KPB 21.29.120 does not require a material extraction permit, but a floodplain development permit is required for all activities within any mapped special flood hazard area.
- D. Material extraction incidental to site development does not require a permit when an approved site development plan is on file with the planning department. Site development plans are approved by the planning director and are valid for one year. The site development plan may be renewed on an annual basis subject to the planning director's approval.

21.29.020. Material extraction and activities requiring a permit.

- A. *Counter permit.* A counter permit is required for material extraction which disturbs no more than 2.5 cumulative acres and does not enter the water table. Counter permits are approved by the planning director, and are not subject to the notice requirements or planning commission approval of KPB 21.25.060. A counter permit is valid for a period of 12 months, with a possible 12-month extension.
- B. *Conditional land use permit.* A conditional land use permit (CLUP) is required for material extraction which disturbs more than 2.5 cumulative acres, or material extraction of any size that enters the water table. A CLUP is required for materials processing. A CLUP is valid for a period of five years. The provisions of KPB Chapter 21.25 are applicable to material site CLUPS and the provisions of KPB 21.25 and 21.29 are read in harmony. If there is a conflict between the provisions of KPB 21.25 and 21.29, the provisions of KPB 21.29 are controlling.

21.29.030. Application procedure.

- A. In order to obtain a counter permit or CLUP, an applicant shall first complete and submit to the borough planning department a permit application, along with the fee listed in the most current Kenai Peninsula Borough Schedule of Rates, Charges and Fees. The planning director may determine that certain contiguous parcels are eligible for a single permit. The application shall include the following items:
 - 1. Legal description of the parcel, KPB tax parcel ID number, and identification of whether the permit is for the entire parcel, or a specific location within a parcel;
 - 2. Expected life span of the material site;
 - 3. A buffer plan consistent with KPB 21.29.050(A)(2);
 - 4. Reclamation plan consistent with KPB 21.29.060;
 - 5. The depth of excavation;
 - 6. Type of material to be extracted and type of equipment to be used;
 - 7. Any voluntary permit conditions the applicant proposes. Failure to include a proposed voluntary permit condition in the application does not preclude the applicant from proposing or agreeing to voluntary permit conditions at a later time;

8. Surface water protection measures, if any, for adjacent properties designed by a civil engineer, including the use of diversion channels, interception ditches, on-site collection ditches, sediment ponds and traps, and silt fence;
9. A site plan and field verification prepared by a professional surveyor licensed and registered in the State of Alaska, including the following information:
 - a. Location of excavation, and, if the site is to be developed in phases, the life span and expected reclamation date for each phase;
 - b. Proposed buffers consistent with KPB 21.29.050(A)(2), or alternate buffer plan;
 - c. Identification of all encumbrances, including, but not limited to easements;
 - d. Points of ingress and egress. Driveway permits must be acquired from either the state or borough as appropriate prior to the issuance of the material site permit;
 - e. Anticipated haul routes;
 - f. Location and [DEPTH] elevation of test holes, and depth of groundwater, if encountered between May and December. At least one test hole per ten acres of excavated area is required to be dug. The test holes shall be at least four feet below the proposed depth of excavation;
 - g. Location of wells of adjacent property owners within 300 feet of the proposed parcel boundary;
 - h. Location of any water body on the parcel, including the location of any riparian wetland as determined by ["WETLAND MAPPING AND CLASSIFICATION OF THE KENAI LOWLAND, ALASKA" MAPS CREATED BY THE KENAI WATERSHED FORUM] best available data;
 - [i. SURFACE WATER PROTECTION MEASURES FOR ADJACENT PROPERTIES, INCLUDING THE USE OF DIVERSION CHANNELS, INTERCEPTION DITCHES, ON-SITE COLLECTION DITCHES, SEDIMENT PONDS AND TRAPS, AND SILT FENCE; PROVIDE DESIGNS FOR SUBSTANTIAL STRUCTURES; INDICATE WHICH

STRUCTURES WILL REMAIN AS PERMANENT FEATURES AT THE CONCLUSION OF OPERATIONS, IF ANY;]

[J]i. Location of any processing areas on parcel, if applicable;

[K]j. North arrow;

[L]k. The scale to which the site plan is drawn;

[M]l. Preparer's name, date and seal;

[N]m. Field verification shall include staking the boundary of the parcel at sequentially visible intervals. The planning director may grant an exemption in writing to the staking requirements if the parcel boundaries are obvious or staking is unnecessary.

B. In order to aid the planning commission or planning director's decision-making process, the planning director shall provide vicinity, aerial, land use, and ownership maps for each application and may include additional information.

21.29.040. Standards for sand, gravel or material sites.

A. These material site regulations are intended to protect against aquifer disturbance, road damage, physical damage to adjacent properties, dust, noise, and visual impacts. Only the conditions set forth in KPB 21.29.050 may be imposed to meet these standards:

1. Protects against the lowering of water sources serving other properties;
2. Protects against physical damage to [OTHER] adjacent properties;
3. [MINIMIZES] Protects against off-site movement of dust;
4. [MINIMIZES] Protects against noise disturbance to other properties;
5. [MINIMIZES] Protects against visual impacts of the material site; [AND]
6. Provides for alternate post-mining land uses[.];
7. Protects Receiving Waters against adverse effects to fish and wildlife habitat;
8. Protects against traffic impacts; and

9. Provides consistency with the objectives of the Kenai Peninsula Borough Comprehensive Plan and other applicable planning documents.

21.29.050. Permit conditions.

- A. The following mandatory conditions apply to counter permits and CLUPs issued for sand, gravel or material sites:

1. [*PARCEL*]Permit boundaries. [ALL BOUNDARIES OF THE SUBJECT PARCEL] The buffers and any easements or right-of-way abutting the proposed permit area shall be staked at sequentially visible intervals where parcel boundaries are within 300 feet of the excavation perimeter. Field verification and staking will require the services of a professional land surveyor. Stakes shall be in place [AT TIME OF APPLICATION]prior to issuance of the permit.

- [2. *BUFFER ZONE.* A BUFFER ZONE SHALL BE MAINTAINED AROUND THE EXCAVATION PERIMETER OR PARCEL BOUNDARIES. WHERE AN EASEMENT EXISTS, A BUFFER SHALL NOT OVERLAP THE EASEMENT, UNLESS OTHERWISE CONDITIONED BY THE PLANNING DIRECTOR OR PLANNING COMMISSION.

- A. THE BUFFER ZONE SHALL PROVIDE AND RETAIN A BASIC BUFFER OF:

- I. 50 FEET OF UNDISTURBED NATURAL VEGETATION, OR
- II. A MINIMUM SIX-FOOT EARTHEN BERM WITH AT LEAST A 2:1 SLOPE, OR
- III. A MINIMUM SIX-FOOT FENCE.

- B. A 2:1 SLOPE SHALL BE MAINTAINED BETWEEN THE BUFFER ZONE AND EXCAVATION FLOOR ON ALL INACTIVE SITE WALLS. MATERIAL FROM THE AREA DESIGNATED FOR THE 2:1 SLOPE MAY BE REMOVED IF SUITABLE, STABILIZING MATERIAL IS REPLACED WITHIN 30 DAYS FROM THE TIME OF REMOVAL.

- C. THE PLANNING COMMISSION OR PLANNING DIRECTOR SHALL DESIGNATE ONE OR A COMBINATION OF THE ABOVE AS IT DEEMS APPROPRIATE. THE VEGETATION AND FENCE SHALL BE OF SUFFICIENT HEIGHT AND DENSITY TO PROVIDE VISUAL AND NOISE SCREENING OF THE PROPOSED USE AS DEEMED

APPROPRIATE BY THE PLANNING COMMISSION OR PLANNING DIRECTOR.

- D. BUFFERS SHALL NOT CAUSE SURFACE WATER DIVERSION WHICH NEGATIVELY IMPACTS ADJACENT PROPERTIES OR WATER BODIES. SPECIFIC FINDINGS ARE REQUIRED TO ALTER THE BUFFER REQUIREMENTS OF KPB 21.29.050(A)(2)(A) IN ORDER TO MINIMIZE NEGATIVE IMPACTS FROM SURFACE WATER DIVERSION. FOR PURPOSES OF THIS SECTION, SURFACE WATER DIVERSION IS DEFINED AS EROSION, FLOODING, DEHYDRATION OR DRAINING, OR CHANNELING. NOT ALL SURFACE WATER DIVERSION RESULTS IN A NEGATIVE IMPACT.
- E. AT ITS DISCRETION, THE PLANNING COMMISSION MAY WAIVE BUFFER REQUIREMENTS WHERE THE TOPOGRAPHY OF THE PROPERTY OR THE PLACEMENT OF NATURAL BARRIERS MAKES SCREENING NOT FEASIBLE OR NOT NECESSARY. BUFFER REQUIREMENTS SHALL BE MADE IN CONSIDERATION OF AND IN ACCORDANCE WITH EXISTING USES OF ADJACENT PROPERTY AT THE TIME OF APPROVAL OF THE PERMIT. THERE IS NO REQUIREMENT TO BUFFER THE MATERIAL SITE FROM USES WHICH COMMENCE AFTER THE APPROVAL OF THE PERMIT.]

2. Buffer Area. Material sites shall maintain buffer areas in accord with this section.

- a. A buffer area of a maximum of 100 feet shall be established between the area of excavation and the parcel boundaries. The buffer area may include one or more of the following: undisturbed natural vegetation, a minimum six-foot fence, a minimum six-foot earthen berm with at least a 2/1 slope or a combination thereof.
- b. A 2:1 slope shall be maintained between the buffer zone and excavation floor on all inactive site walls. Material from the area designated for the 2:1 slope may be removed if suitable, stabilizing material is replaced within 30 days from the time of removal.
- c. Where an easement exists, a buffer shall not overlap the easement, unless otherwise conditioned by the planning commission or planning director, as applicable.
- d. The vegetation and fence shall be of sufficient height and density to provide visual and noise screening of the proposed

use as deemed appropriate by the planning commission or the planning director.

- e. The buffer area may be reduced where the planning commission or planning director, as applicable, has approved an alternate buffer plan. The alternate buffer plan must consist of natural undisturbed vegetation, a minimum six-foot berm, or a minimum six-foot fence or a combination thereof; unless the permittee proposes another solution approved by the planning commission or planning director, as applicable, to meet this condition.
- f. The buffer requirements may be waived by the planning commission or planning director, as applicable, where the topography of the property or the placement of natural barriers makes screening not feasible or unnecessary.
- g. There is no requirement to buffer a material site from uses that commence after approval of the permit.
- h. When a buffer area has been denuded prior to review of the application by the planning commission or planning director revegetation may be required.

3. *Processing.* In the case of a CLUP, any equipment which conditions or processes material must be operated at least 300 feet from the parcel boundaries. At its discretion, the planning commission may waive the 300-foot processing distance requirement, or allow a lesser distance in consideration of and in accordance with existing uses of [OF ADJACENT PROPERTY AT THE TIME] the properties in the vicinity at the time of approval of the permit.

4. *Water source separation.*

- a. All permits shall be issued with a condition which prohibits any material extraction within 100 horizontal feet of any water source existing prior to original permit issuance.
- b. All counter permits shall be issued with a condition which requires that a four-foot vertical separation [FROM]between extraction operations and the seasonal high water table be maintained.
- c. All CLUPS shall be issued with a condition which requires that a [TWO] four-foot vertical separation [FROM]between

extraction operations and the seasonal high water table be maintained.

- d. There shall be no dewatering either by pumping, ditching or some other form of draining unless an exemption is granted by the planning commission. The exemption for dewatering may be granted if the operator provides a statement under seal and supporting data from a duly licensed and qualified impartial civil engineer, that the dewatering will not lower any of the surrounding property's water systems and the contractor posts a bond for liability for potential accrued damages.

5. *Excavation in the water table.* Excavation in the water table greater than 300 horizontal feet of a water source may be permitted with the approval of the planning commission based on the following:

- a. Certification by a qualified independent civil engineer or professional hydrogeologist that the excavation plan will not negatively impact the quantity of an aquifer serving existing water sources.
- b. The installation of a minimum of three water monitoring tubes or well casings as recommended by a qualified independent civil engineer or professional hydrogeologist adequate to determine flow direction, flow rate, and water elevation.
- c. Groundwater elevation, flow direction, and flow rate for the subject parcel, measured in three-month intervals by a qualified independent civil engineer or professional hydrogeologist, for at least one year prior to application. Monitoring tubes or wells must be kept in place, and measurements taken, for the duration of any excavation in the water table.
- d. Operations shall not breach an aquifer-confining layer.

6. *Waterbodies.*

- a. An undisturbed buffer shall be left and no earth material extraction activities shall take place within [100] 200 linear feet from excavation limits and the ordinary high water level of surface water bodies such as a lake, river, stream, [OR OTHER WATER BODY, INCLUDING] riparian wetlands and mapped floodplains as defined in KPB 21.06. This regulation shall not apply to man-made waterbodies being constructed during the course of the materials extraction activities. In order to prevent

discharge, diversion, or capture of surface water, an additional setback from lakes, rivers, anadromous streams, and riparian wetlands may be required.

- b. Counter permits and CLUPS may contain additional conditions addressing surface water diversion.
7. *Fuel storage.* Fuel storage for containers larger than 50 gallons shall be contained in impermeable berms and basins capable of retaining 110 percent of storage capacity to minimize the potential for uncontained spills or leaks. Fuel storage containers 50 gallons or smaller shall not be placed directly on the ground, but shall be stored on a stable impermeable surface.
8. *Roads.* Operations shall be conducted in a manner so as not to damage borough roads as required by KPB 14.40.175 and will be subject to the remedies set forth in KPB 14.40 for violation of this condition.
9. *Subdivision.* Any further subdivision or return to acreage of a parcel subject to a conditional land use or counter permit requires the permittee to amend their permit. The planning director may issue a written exemption from the amendment requirement if it is determined that the subdivision is consistent with the use of the parcel as a material site and all original permit conditions can be met.
10. *Dust control.* Dust suppression is required on haul roads within the boundaries of the material site by application of water or calcium chloride.
11. *Hours of operation.* [ROCK CRUSHING EQUIPMENT SHALL NOT BE OPERATED BETWEEN 10:00 P.M. AND 6:00 A.M.]
 - a. Processing equipment shall not be operated between 7:00 p.m. and 6:00 a.m.
 - b. The planning commission may grant exceptions to increase the hours of operation and processing based on surrounding land uses, topography, screening the material site from properties in the vicinity and conditions placed on the permit by the planning commission to mitigate the noise, dust and visual impacts caused by the material site.

12. *Reclamation.*

- a. Reclamation shall be consistent with the reclamation plan approved by the planning commission or planning director as appropriate in accord with KPB 21.29.060.
- b. [AS A CONDITION OF ISSUING THE PERMIT, THE APPLICANT SHALL SUBMIT A RECLAMATION PLAN AND POST A BOND TO COVER THE ANTICIPATED RECLAMATION COSTS IN AN AMOUNT TO BE DETERMINED BY THE PLANNING DIRECTOR. THIS BONDING REQUIREMENT SHALL NOT APPLY TO SAND, GRAVEL OR MATERIAL SITES FOR WHICH AN EXEMPTION FROM STATE BOND REQUIREMENTS FOR SMALL OPERATIONS IS APPLICABLE PURSUANT TO AS 27.19.050.] The applicant shall operate the material site consistent with the approved reclamation plan and provide bonding pursuant to 21.29.060(B). This bonding requirement shall not apply to sand, gravel or material sites for which an exemption from state bond requirements for small operations is applicable pursuant to AS 27.19.050.

13. *Other permits.* Permittee is responsible for complying with all other federal, state and local laws applicable to the material site operation, and abiding by related permits. These laws and permits include, but are not limited to, the borough's flood plain, coastal zone, and habitat protection regulations, those state laws applicable to material sites individually, reclamation, storm water pollution and other applicable Environmental Protection Agency (EPA) regulations, clean water act and any other U.S. Army Corp of Engineer permits, any EPA air quality regulations, EPA and ADEC air and water quality regulations, EPA hazardous material regulations, U.S. Dept. of Labor Mine Safety and Health Administration (MSHA) regulations (including but not limited to noise and safety standards), and Federal Bureau of Alcohol, Tobacco and Firearm regulations regarding using and storing explosives. Any violation of these regulations or permits reported to or observed by borough personnel will be forwarded to the appropriate agency for enforcement.

14. [~~VOLUNTARY~~]Volunteered *permit conditions.* Conditions may be included in the permit upon agreement of the permittee and approval of the planning commission for CLUPs or the planning director for counter permits. Such conditions must be consistent with the standards set forth in KPB 21.29.040(A). Planning commission approval of such conditions shall be contingent upon a finding that the conditions will be in the best interest of the borough and the surrounding property owners. [~~VOLUNTARY~~] Volunteered permit

conditions apply to the subject parcel and operation, regardless of a change in ownership. A change in [VOLUNTARY] volunteered permit conditions may be proposed [AT] by permit [RENEWAL OR AMENDMENT] modification.

15. *Signage.* For permitted parcels on which the permittee does not intend to begin operations for at least 12 months after being granted a conditional land use permit, the permittee shall post notice of intent on parcel corners or access, whichever is more visible. Sign dimensions shall be no more than 15" by 15" and must contain the following information: the phrase "Permitted Material Site" along with the permittee's business name and a contact phone number.
16. *Appeal.* No clearing of vegetation shall occur within the 100-foot maximum buffer area from the permit boundary nor shall the permit be issued or operable until the deadline for the appeal, pursuant to KPB 21.20, has expired.
17. *Sound level.*
 - a. No sound resulting from the materials extraction activities shall create a sound level, when measured at or within the property boundary of the adjacent land, that exceeds 75 dB(A).
 - b. For any sound that is of short duration between the hours of 7 a.m. and 7 p.m. the levels may be increased by:
 - i. Five dB(A) for a total of 15 minutes in any one hour; or
 - ii. Ten dB(A) for a total of five minutes in any hour; or
 - iii. Fifteen db(A) for a total of one and one-half minutes in any one-hour period.
 - c. At its discretion, the planning commission or planning director, as applicable, may reduce or waive the sound level requirements on any or all property boundaries. Sound level requirements shall be made in consideration of and in accordance with existing uses of the properties in the vicinity at the time of approval of the permit.
 - d. Mandatory condition KPB 21.29.050(A)(17) shall expire 365 days from adoption of KPB 21.29.050(A)(17) unless extended or modified by the assembly.

18. Reverse signal alarms. Reverse signal alarms, used at the material site on loaders, excavators, and other earthmoving equipment shall be more technically advanced devices; such as, a multi-frequency “white noise” alarms rather than the common, single (high-pitch) tone alarms. At its discretion, the planning commission or planning director, as applicable, may waive this requirement or a portion of this requirement. The waiver of this requirement shall be made in consideration of and in accordance with existing uses of the properties in the vicinity at the time of approval of the permit.
19. Ingress and egress. The planning commission or planning director may determine the points of ingress and egress for the material site. The permittee is not required to construct haul routes outside the parcel boundaries of the material site. Driveway authorization must be acquired, from either the state through an “Approval to Construct” or a borough road service area as appropriate, prior to issuance of a material site permit when accessing a public right-of-way.
20. Dust suppression. Dust suppression shall be required when natural precipitation is not adequate to suppress the dust generated by the material site traffic on haul routes. Based on surrounding land uses the planning commission or planning director, as applicable, may waive or reduce the requirement for dust suppression on haul routes.
21. Surface water protection. Use of surface water protection measures as specified in KPB 21.29.030(A)(8) must be approved by a licensed civil engineer.
22. Groundwater elevation. All material sites must maintain one monitoring tube per ten acres of excavated area four feet below the proposed excavation.
23. Setback. Material site excavation areas shall be 250-feet from the property boundaries of any local option zoning district, existing public school ground, private school ground, college campus, child care facility, multi-purpose senior center, assisted living home, and licensed health care facility. If overlapping, the buffer areas of the excavation shall be included in the 250-foot setback.

21.29.055. Decision.

The planning commission or planning director, as applicable, shall approve permit applications meeting the mandatory conditions or shall disapprove permit applications that do not meet the mandatory conditions. The decision shall include written findings supporting the decision, and when applicable, there shall be written findings supporting any site-specific alterations to the mandatory condition as

specifically allowed by KPB 21.29.050(A)(2)(a), (2)(c), (2)(d), (2)(e), (2)(g), (3), (4)(d), (5), (11)(b), (12), (14), (17)(c), (18), (19), and (20) and as allowed for the KPB 21.29.060 reclamation plan.

21.29.060. Reclamation plan.

- A. All material site permit applications require an overall reclamation plan along with a five-year reclamation plan. A site plan for reclamation shall be required including a scaled drawing with finished contours. A five-year reclamation plan must be submitted with a permit extension request.
- B. The applicant shall revegetate with a non-invasive plant species and reclaim all disturbed land [UPON EXHAUSTING THE MATERIAL ON-SITE, OR WITHIN A PRE-DETERMINED TIME PERIOD FOR LONG-TERM ACTIVITIES, SO AS TO LEAVE THE LAND IN A STABLE CONDITION. RECLAMATION MUST OCCUR FOR ALL EXHAUSTED AREAS OF THE SITE EXCEEDING FIVE ACRES BEFORE A FIVE-YEAR RENEWAL PERMIT IS ISSUED, UNLESS OTHERWISE REQUIRED BY THE PLANNING COMMISSION. IF THE MATERIAL SITE IS ONE ACRE OR LESS IN SIZE AND HAS BEEN GRANTED A CLUP DUE TO EXCAVATION IN THE WATER TABLE, RECLAMATION MUST BE PERFORMED AS SPECIFIED BY THE PLANNING COMMISSION OR PLANNING DIRECTOR IN THE CONDITIONAL USE OR COUNTER PERMIT] within the time period approved with the reclamation plan so as to leave the land in a stable condition. Bonding shall be required at \$2,000.00 per acre for all acreage included in the current five-year reclamation plan. In the alternative, the planning director may accept a civil engineer's estimate for determining the amount of bonding. If the applicant is bonded with the state, the borough's bonding requirement is waived. Compliance with reclamation plans shall be enforced under KPB 21.50.
- C. The following measures must be considered in the [PREPARING] preparation, approval and [IMPLEMENTING] implementation of the reclamation plan, although not all will be applicable to every reclamation plan.
 - 1. Topsoil that is not promptly redistributed to an area being reclaimed will be separated and stockpiled for future use. [THIS MATERIAL WILL BE PROTECTED FROM EROSION AND CONTAMINATION BY ACIDIC OR TOXIC MATERIALS AND PRESERVED IN A CONDITION SUITABLE FOR LATER USE.]
 - 2. The area will be backfilled, graded and recontoured using strippings, overburden, and topsoil [TO A CONDITION THAT ALLOWS FOR THE REESTABLISHMENT OF RENEWABLE RESOURCES ON THE SITE WITHIN A REASONABLE PERIOD OF TIME. IT WILL BE STABILIZED TO A CONDITION THAT WILL ALLOW SUFFICIENT MOISTURE FOR

REVEGETATION] so that it will be stabilized to a condition that will allow for the revegetation as required by KPB 21.29.060(B).

3. [SUFFICIENT QUANTITIES OF STOCKPILED OR IMPORTED TOPSOIL WILL BE SPREAD OVER THE RECLAIMED AREA TO A DEPTH OF FOUR INCHES TO PROMOTE NATURAL PLANT GROWTH THAT CAN REASONABLY BE EXPECTED TO REVEGETATE THE AREA WITHIN FIVE YEARS. THE APPLICANT MAY USE THE EXISTING NATURAL ORGANIC BLANKET REPRESENTATIVE OF THE PROJECT AREA IF THE SOIL IS FOUND TO HAVE AN ORGANIC CONTENT OF 5% OR MORE AND MEETS THE SPECIFICATION OF CLASS B TOPSOIL REQUIREMENTS AS SET BY ALASKA TEST METHOD (ATM) T-6.] The [MATERIAL] topsoil used for reclamation shall be reasonably free from roots, clods, sticks, and branches greater than 3 inches in diameter. Areas having slopes greater than 2:1 require special consideration and design for stabilization by a licensed engineer.
4. Exploration trenches or pits will be backfilled. Brush piles and unwanted vegetation shall be removed from the site, buried or burned. Topsoil and other organics will be spread on the backfilled surface to inhibit erosion and promote natural revegetation.
5. [PEAT AND T]Topsoil mine operations shall ensure a minimum of [TWO] four inches of suitable growing medium is left or replaced on the site upon completion of the reclamation activity (unless otherwise authorized).
6. Ponding may be used as a reclamation method as approved by the planning commission.

- D. The five-year reclamation plan shall describe the total acreage to be reclaimed [EACH YEAR, A LIST OF EQUIPMENT (TYPE AND QUANTITY) TO BE USED IN RECLAMATION, AND A TIME SCHEDULE OF RECLAMATION MEASURES] relative to the total excavation plan.

21.29.070. Permit extension and revocation.

- A. Conditional land use permittees must submit a request in writing for permit extension every five years after the permit is issued. Requests for permit extension must be made at least 30 days prior to permit expiration. Counter permittees must submit any request for a 12-month extension at least 30 days prior to the expiration of the original 12-month permit period.
- B. A permit extension certificate for a CLUP may be granted by the planning director after 5 years, and after one year for a counter permit where no modification to operations or conditions are proposed.

- C. Permit extension may be denied if: (1) reclamation required by this chapter and the original permit has not been performed; (2) the permittee is otherwise in noncompliance with the original permit conditions; or (3) the permittee has had a permit violation in the last two years and has not fulfilled compliance requests.
- D. A modification application shall be processed pursuant to KPB 21.29.030-050 with public notice given as provided by KPB 21.25.060 when operators request modification of their permit conditions based on changes in operations set forth in the modification application.
- E. There shall be no fee for permit extensions approved by the planning director. The fee for a permit modification processed under KPB 21.29.070(D) will be the same as an original permit application in the amount listed in the most current Kenai Peninsula Borough Schedule of Rates, Charges and Fees.
- F. Failure to submit a request for extension will result in the expiration of the permit. The borough may issue a permit termination document upon expiration pursuant to KPB 21.29.080. Once a permit has expired, a new permit application approval process is required in order to operate the material site.
- G. Permits may be revoked pursuant to KPB 21.50. 21.29.080. - Permit termination.

When a permit expires, is revoked, or a permittee requests termination of their permit, a review of permit conditions and site inspections will be conducted by the planning department to ensure code compliance and verify site reclamation prior to termination. When the planning director determines that a site qualifies for termination, a termination document shall be issued to the permittee.

21.29.090. Permit modifications.

If a permittee revises or intends to revise operations (at a time other than permit extension) so that they are no longer consistent with the original application, a permit modification is required. The planning director shall determine whether the revision to operations requires a modification. Permit modification shall be processed in the same manner as original permits.

21.29.100. Recordation.

All permits, permit extensions, modified permits, prior existing uses, and terminations shall be recorded. Failure to record a material site document does not affect the validity of the documents.

21.29.110. Violations.

- A. Violations of this chapter shall be governed by KPB 21.50.
- B. In addition to the remedies provided in KPB 21.50, the planning director may require bonding in a form and amount adequate to protect the borough's interests for an owner or operator who has been cited for three violations of KPB 21.50, 21.25, and 21.29 within a three-year period. The violations need not be committed at the same material site. Failure to provide requested bonding may result in permit revocation proceedings.

21.29.120. Prior existing uses.

- A. Material sites are not held to the standards and conditions of a CLUP if a prior existing use (PEU) determination was granted for the parcel in accordance with KPB 21.29.120(B). To qualify as a PEU, a parcel's use as a material site must have commenced or have been operated after May 21, 1986, and prior to May 21, 1996, provided that the subject use continues in the same location. In no event shall a prior existing use be expanded beyond the smaller of the lot, block, or tract lines as they existed on May 21, 1996. If a parcel is further subdivided after May 21, 1996, the pre-existing use may not be expanded to any lot, tract, or parcel where extraction had not occurred before or on February 16, 1999. If a parcel is subdivided where extraction has already occurred, the prior existing use is considered abandoned, and a CLUP must be obtained for each parcel intended for further material site operations. The parcel owner may overcome this presumption of abandonment by showing that the subdivision is not inconsistent with material site operation. If a parcel subject to a prior existing use is conveyed, the prior existing use survives the conveyance.
- B. Owners of sites must have applied to be registered as a prior existing use prior to January 1, 2001.
- C. [ANY PRIOR EXISTING USE THAT HAS NOT OPERATED AS A MATERIAL SITE BETWEEN MAY 21, 1996, AND MAY 21, 2011, IS CONSIDERED ABANDONED AND MUST THEREAFTER COMPLY WITH THE PERMIT REQUIREMENTS OF THIS CHAPTER. THE PLANNING DIRECTOR SHALL DETERMINE WHETHER A PRIOR EXISTING USE HAS BEEN ABANDONED. AFTER GIVING NOTICE TO THE PARCEL OWNER THAT A PEU IS CONSIDERED ABANDONED, A PARCEL OWNER MAY

PROTEST THE TERMINATION OF THE PEU BY FILING WRITTEN NOTICE WITH THE PLANNING DIRECTOR ON A FORM PROVIDED BY THE PLANNING DEPARTMENT. WHEN A PROTEST BY A PARCEL OWNER IS FILED, NOTICE AND AN OPPORTUNITY TO MAKE WRITTEN COMMENTS REGARDING PRIOR EXISTING USE STATUS SHALL BE ISSUED TO OWNERS OF PROPERTY WITHIN A ONE-HALF MILE RADIUS OF THE PARCEL BOUNDARIES OF THE SITE. THE OWNER OF THE PARCEL SUBJECT TO THE PRIOR EXISTING USE MAY SUBMIT WRITTEN INFORMATION, AND THE PLANNING DIRECTOR MAY GATHER AND CONSIDER ANY INFORMATION RELEVANT TO WHETHER A MATERIAL SITE HAS OPERATED. THE PLANNING DIRECTOR MAY CONDUCT A HEARING IF HE OR SHE BELIEVES IT WOULD ASSIST THE DECISION-MAKING PROCESS. THE PLANNING DIRECTOR SHALL ISSUE A WRITTEN DETERMINATION WHICH SHALL BE DISTRIBUTED TO ALL PERSONS MAKING WRITTEN COMMENTS. THE PLANNING DIRECTOR'S DECISION REGARDING TERMINATION OF THE PRIOR EXISTING USE STATUS MAY BE APPEALED TO THE PLANNING COMMISSION WITHIN 15 DAYS OF THE DATE OF THE NOTICE OF DECISION.]

The owner of a material site that has been granted a PEU determination shall provide proof of compliance with AS 27.19.030 – 050 concerning reclamation to the planning department no later than July 1, 2022. The proof shall consist of an Alaska Department of Natural Resources (DNR) approved reclamation plan and receipt for bonding or a letter of intent filed with DNR.

1. The planning department may request proof of continued compliance with AS 27.19.030 – 050 on an annual basis.
2. Pursuant to KPB 21.29.110 the enforcement process and remedies set forth in KPB 21.50 shall govern if the proof that the statutory requirements contained in AS 27.19.030-050 is not provided to the planning department.

SECTION 3. That KPB 21.50.055 is hereby amended, as follows:

21.50.055. Fines.

- A. Following are the fines for violations of this title. Each day a violation occurs is a separate violation. Violations begin to accrue the date the enforcement notice is issued and continue to the date the enforcement is initially set for hearing. The fine for a violation may not be reduced by the hearing officer to less than the equivalent of one day's fine for each type of violation.

CODE CHAPTER & SECTION	VIOLATION DESCRIPTION	DAILY FINE
KPB 20.10.030(A)	Offering land for sale without final plat approval	\$300.00
KPB 20.10.030(B)	Filing/recording unapproved subdivision/plat	\$300.00
KPB 20.10.030(C)	Violation of subdivision code or condition	\$300.00
KPB 21.05.040(C)	Violation of variance conditions	\$300.00
KPB 21.06.030(D)	Structure or activity prohibited by KPB 21.06	\$300.00
KPB 21.06.040	Failure to obtain a Development Permit/Floodplain Management	\$300.00
KPB 21.06.045	Failure to obtain a SMFDA Development Permit/Violation of SMFDA permit conditions/Floodplain Management	\$300.00
KPB 21.06.050	Violation of permit conditions/Floodplain Management	\$300.00
KPB 21.18.071	Failure to obtain staff permit/Violation of staff permit/Anadromous Streams Habitat Protection	\$300.00
KPB 21.18.072	Failure to obtain limited commercial activity permit/Violation of permit conditions/Anadromous Streams Habitat Protection	\$300.00
KPB 21.18.075	Prohibited use or structure/Anadromous Streams Habitat Protection	\$300.00
KPB 21.18.081	Failure to obtain Conditional Use Permit/Violation of Conditional Use Permit Condition/Anadromous Streams Habitat Protection	\$300.00
KPB 21.18.090	Failure to obtain prior existing use/structure permit/Violation of permit conditions/Anadromous Streams Habitat Protection	\$300.00
KPB 21.18.135(C)	Violation of emergency permit conditions/anadromous stream habitat protection	\$300.00

CODE CHAPTER & SECTION	VIOLATION DESCRIPTION	DAILY FINE
KPB 21.25.040	Failure to Obtain a Permit/Material Site/Correctional community residential center/Concentrated Animal Feeding Operation	\$300.00
KPB 21.28.030	Violation of permit conditions/Concentrated Animal Feeding Operations	\$300.00
KPB 21.29.020	Failure to Obtain a counter permit/Material Site Permits	\$300.00
KPB 21.29.050	Violation of Conditional Land Use Permit Conditions/Material Site Permits Also applies to KPB 21.26 material site permits	\$300.00
KPB 21.29.060	Violation of Reclamation Plan/Material Site Permits Also applies to KPB 21.26 material site permits	\$300.00
<u>KPB 21.29.120</u>	<u>Failure to Provide Reclamation Plan and Proof of Bonding or Letter of Intent</u>	<u>\$300.00</u>
KPB 21.44.100	Violation of Pre-existing structures/Local Option Zoning	\$300.00
KPB 21.44.110(D)	Prohibited expansion of nonconforming use/Local Option Zoning	\$300.00
KPB 21.44.110(E)	Prohibited Change in Use/Local Option Zoning	\$300.00
KPB 21.44.110(G)	Violation of Conditions on Nonconforming Use/Local Option Zoning	\$300.00
KPB 21.44.130(C)(D)	Violation of Home Occupation Standards and Conditions/Local Option Zoning	\$300.00
KPB 21.44.130(F)	Disallowed Home Occupation/Local Option Zoning	\$300.00
KPB 21.44.135	Failure to file development notice	\$300.00
KPB 21.44.160(A)(B)	Prohibited use	\$300.00

CODE CHAPTER & SECTION	VIOLATION DESCRIPTION	DAILY FINE
KPB 21.44.160(C)	Violation of Development Standards/Single Family Zoning/Local Option Zoning	\$300.00
KPB 21.44.165(A)(B)	Prohibited use	\$300.00
KPB 21.44.165(C)	Violation of Development Standards/Small Lot Residential Zoning/Local Option Zoning	\$300.00
KPB 21.44.170(A)(B)	Prohibited use	\$300.00
KPB 21.44.170(C)	Violation of Development Standards/Rural Residential District/Local Option Zoning	\$300.00
KPB 21.44.175(B)(C)	Prohibited Use	\$300.00
KPB 21.44.175(D)	Violation of Development Standards/Residential Waterfront	\$300.00
KPB 21.44.180(A)(B)	Prohibited Use	\$300.00
KPB 21.44.180(C)	Violation of Development Standards/Multi-Family Residential District/Local Option Zoning	\$300.00
KPB 21.44.190(A)(B)	Prohibited Use	\$300.00
KPB 21.44.190(C)	Violation of Development Standards/Industrial District/Local Option Zoning	\$300.00
KPB 21.46.030(b)	Failure to maintain bear-resistant garbage cans/Local option zone/Birch and Grove Ridge subdivisions Rural Residential District	\$300.00
KPB 21.50.100(F)	Removal of posted enforcement notice	\$300.00
KPB 21.50.100(G)	Violation of enforcement notice	\$1,000.00
KPB 21.50.130(I)	Violation of an enforcement order	\$1,000.00

SECTION 4. That this ordinance shall become effective upon its enactment.

**ENACTED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH THIS * DAY
OF *, 2022.**

Brent Johnson, Assembly President

ATTEST:

Johni Blankenship, MMC, Borough Clerk

01/18/22 Vote on motion to postpone to 02/01/22:

Yes: Bjorkman, Derkevorkian, Elam, Tupper, Johnson

No: Chesley, Cox, Ecklund

Absent: Hibbert

02/01/22 Vote on motion to table:

Yes: Bjorkman, Chesley, Cox, Derkevorkian, Ecklund, Elam, Hibbert, Tupper, Johnson

No: None

Absent: None

Introduced by:	Elam, Derkevorkian
Substitute Introduced:	02/01/22
O2021-41 (Mayor, Johnson)	See Original Ordinance for Prior History
Action:	Tabled
Vote:	9 Yes, 0 No, 0 Absent

**KENAI PENINSULA BOROUGH
ORDINANCE 2021-41
(ELAM, DERKEVORKIAN) SUBSTITUTE**

**AN ORDINANCE AMENDING KPB 21.29, KPB 21.25, AND KPB 21.50.055
REGARDING MATERIAL SITE PERMITS, APPLICATIONS, CONDITIONS, AND
PROCEDURES**

- WHEREAS,** Goal 2, Focus Area: Land Use, Objective A of the 2019 Kenai Peninsula Borough Comprehensive Plan is to establish policies to minimize land use conflicts, protect natural systems, and support individual land use freedoms; and
- WHEREAS,** Goal 2, Focus Area: Land Use, Objective A, Strategy 2 of the 2019 Comprehensive Plan is to update the Borough’s existing conditional use regulations for material extraction to better address reoccurring land use conflicts; and
- WHEREAS,** Goal 2, Focus Area: Land Use, Objective A, Strategy 2a of the 2019 Comprehensive Plan is to clarify the broad purpose of the conditional use process and clear parameters for allowable conditional uses that include reasonable, project-specific conditions that reduce impacts on surrounding use; and
- WHEREAS,** Goal 2, Focus Area: Land Use, Objective A, Strategy 2d of the 2019 Comprehensive Plan is to complete improvements to the rules guiding gravel extraction, with the goal of providing an appropriate balance between providing access to affordable materials for development and quality of life for borough residents; and
- WHEREAS,** Goal 1 of the Mining and Minerals Processing section of the 1990 Kenai Peninsula Borough Coastal Management Program is to provide opportunities to explore, extract and process minerals, sand and gravel resources, while protecting environmental quality and other resource users; and
- WHEREAS,** an assembly subcommittee was formed in 2005 to review the material site code; and
- WHEREAS,** Ordinance 2006-01 (Substitute) codified as KPB 21.29 was adopted in 2006 after consideration of the subcommittee’s report; and
- WHEREAS,** the planning department has been administering Ordinance 2006-01 (Substitute), codified as KPB 21.29 for 13 years; and

WHEREAS, KPB 21.25.040 requires a permit for the commencement of certain land uses within the rural district of the Kenai Peninsula Borough; and

WHEREAS, the planning department has recognized that certain provisions of the material site ordinance could be better clarified for the operators, public, and staff; and

WHEREAS, the planning commission and planning department received comments expressing concerns about dust, noise, safety; and

WHEREAS, approximately 253 registered prior existing use material sites and approximately 99 conditional land use permits for material sites have been granted since 1996;

WHEREAS, the planning department receives numerous complaints regarding unreclaimed parcels registered as nonconforming prior existing material sites which have not been regulated by KPB; and

WHEREAS, the assembly established a material site work group by adoption of resolution 2018-004 (Substitute) to engage in a collaborative discussion involving the public and industry to make recommendations regarding the material site code; and

WHEREAS, at its regularly scheduled meeting of November 12, 2019, the planning commission recommended approval by unanimous consent;

NOW, THEREFORE, BE IT ORDAINED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH:

SECTION 1. That KPB 21.25.030 is hereby amended, as follows:

21.25.030. Definitions.

Unless the context requires otherwise, the following definitions apply to CLUPs:

Abandon means to cease or discontinue a use without intent to resume, but excluding short-term interruptions to use or activity during periods of remodeling, maintaining, or otherwise improving or rearranging a facility or during normal periods of vacation or seasonal closure. An "intent to resume" can be shown through continuous operation of a portion of the facility, maintenance of utilities, or outside proof of continuance, e.g., bills of lading or delivery records. Abandonment also means the cessation of use, regardless of voluntariness, for a specified period of time.

Animal feeding operation means a lot or facility (other than an aquatic animal production facility) where animals (other than aquatic animals) have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period.

- a. The same animals need not remain on the lot for 45 days or more; rather, some animals are fed or maintained on the lot 45 days out of any 12-month period, and
- b. Animals are "maintained" for purposes of this ordinance when they are confined in an area where waste is generated and/or concentrated or are watered, cleaned, groomed, or medicated in a confined area, even if the confinement is temporary.
- c. Two or more animal feeding operations under common ownership are considered, for the purposes of these regulations, to be a single animal feeding operation if they adjoin each other.
- d. Slaughterhouses are animal feeding operations.

Animal unit means a unit of measurement for any animal feeding operation calculated by adding the following numbers: the number of slaughter and feeder cattle multiplied by 1.0, plus the number of mature dairy cattle multiplied by 1.4, plus the number of swine weighting [weighing] over 25 kilograms (approximately 55 pounds) multiplied by 0.4, plus the number of sheep multiplied by 0.1, plus the number of horses multiplied by 2.0.

Animal waste means animal excrement, animal carcasses, feed wasted, process wastewaters or any other waste associated with the confinement of animals from an animal feeding operation.

Animal waste management system means a combination of structures and nonstructural practices serving an animal feeding operation that provides for the collection, treatment, disposal, distribution, storage and land application of animal waste.

Aquifer means a subsurface formation that contains sufficient water-saturated permeable material to yield economical quantities of water to wells and springs.

Aquifer-confining layer means that layer of relatively impermeable soil below an aquifer, typically clay, which confines water.

Assisted living home means a residential facility that serves three or more adults who are not related to the owner by blood or marriage, or that receives state or that receives state or federal payment for service of the number of adults served. The services and activities may include, but are not limited to, housing and food services to its residents, assistance with activities of daily living, and personal assistance, and that complies with Alaska Statutes 47.32.0101 – 47.60.900, as amended.

Child care facility means a place where child care is regularly provided for children under the age of 12 for periods of time that are less than 24 hours in duration and that is licensed pursuant to AS 47.35.005 et seq., excluding child care homes and child care group homes, as currently written or hereafter amended.

Commercial means any provision of services, sale of goods, or use operated for production of income whether or not income is derived, including sales, barter, rental, or trade of goods and services.

Concentrated animal feeding operation (CAFO) means an animal feeding operation confining at least: (1) 1,000 swine weighing at least approximately 55 pounds; (2) 1,000 slaughter and feeder cattle; (3) 700 mature dairy cattle; (4) 500 horses; (5) 10,000 sheep or lambs; (6) 55,000 turkeys; (7) 100,000 laying hens or broilers (if the facility has continuous overflow watering); (8) 30,000 laying hens or broilers (if the facility has a liquid manure system); (9) 5,000 ducks; (10) 1,000 animal units; or (11) a combination of the above resulting in at least 1,000 animal units. Each individual parcel upon which a CAFO is located is a separate CAFO unless they adjoin each other.

Conditioning or processing material means a value-added process including batch plants, asphalt plants, screening, washing, and crushing by use of machinery.

Correctional community residential center (CCRC) means a community residential center, other than a correctional institution, for the short-term or temporary detention of prisoners in transition from a correctional institution, performing restitution, or undergoing rehabilitation or recovery from a legal infirmity. CCRCs may not be used for detention of prisoners who pose a threat or danger to the public for violent or sexual misconduct without imprisonment or physical confinement under guard or twenty-four-hour physical supervision. The determination of whether a prisoner poses a threat or danger to the public for violent or sexual misconduct without imprisonment or physical confinement under guard or twenty-four-hour physical supervision shall be made by the commissioner of corrections for state prisoners and the United States Attorney General, or the U.S. Director of Bureau of Prisons for federal prisoners.

Correctional institution means a facility other than a correctional community residential center providing for the imprisonment or physical confinement or detention of prisoners under guard or twenty-four-hour physical supervision, such as prisons, prison farms, jails, reformatories, penitentiaries, houses of detention, detention centers, honor camps, and similar facilities.

Development plan means a plan created to describe a proposed development on a specific building site excluding material sites under KPB 21.29.020.

Disturbed includes active excavation and all areas necessary to use a parcel as a material site including but not limited to berms, stockpiles, and excavated areas excluding all areas reclaimed for alternate post mining land uses.

[*EXHAUSTED* MEANS THAT ALL MATERIAL OF A COMMERCIAL QUALITY IN A SAND, GRAVEL, OR MATERIAL SITE HAS BEEN REMOVED.]

Federal prisoners means offenders in the custody or control or under the care or supervision of the United States Attorney General or the Bureau of Prisons.

Groundwater means, in the broadest sense, all subsurface water, more commonly that part of the subsurface water in the saturated zone.

Liquid manure or liquid animal waste system means any animal waste management system which uses water as the primary carrier of such waste into a primary retention structure.

Multi-purpose senior center is a facility where persons 60 years of age or older are provided with services and activities suited to their particular needs. The services and activities may include, but are not limited to, health examinations, legal assistance, recreation programs, general social activities, telephone reassurance programs, nutrition classes, meals at minimum cost, counseling, protective services, programs for shut-ins and education programs, and that complies with Alaska Statutes 47.60.010—47.60.090, as currently written or hereafter amended.

Permit area includes all excavation, processing, buffer and haul route areas of a CLUP or counter permit.

Person shall include any individual, firm, partnership, association, corporation, cooperative, or state or local government.

Prisoner means:

- a. a person held under authority of state law in official detention as defined in AS 11.81.900;
- b. includes a juvenile committed to the custody of the Alaska Department of Corrections Commissioner when the juvenile has been charged, prosecuted, or convicted as an adult.

Private school is a school comprised of kindergarten through 12th grade, or any combination of those grades, that does not receive direct state or federal funding and that complies with either Alaska Statute 14.45.030 or 14.45.100—14.45.130, as currently written or hereafter amended.

Public school is a school comprised of kindergarten through 12th grade, or any combination of those grades, that is operated by the State of Alaska or any political subdivision of the state.

Sand, gravel or material site means an area used for extracting, quarrying, or conditioning gravel or substances from the ground that are not subject to permits through the state location (mining claim) system (e.g., gold, silver, and other metals), nor energy minerals including but not limited to coal, oil, and gas.

Seasonal high groundwater table means the highest level to which the groundwater rises on an annual basis.

Senior housing project means senior housing as defined for purposes of construction or operation in 15 Alaska Administrative Code 151.950(c), as currently written or hereafter amended.

Stable condition means the rehabilitation, where feasible, of the physical environment of the site to a condition that allows for the reestablishment of renewable resources on the site within a reasonable period of time by natural processes.

Surface water means water on the earth's surface exposed to the atmosphere such as rivers, lakes, and creeks.

Topsoil means material suitable for vegetative growth.

Waterbody means any lake, pond, stream, riparian wetland, or groundwater into which storm water runoff is directed.

Water source means a well, spring or other similar source that provides water for human consumptive use.

SECTION 2. That KPB 21.29 is hereby amended, as follows:

CHAPTER 21.29. MATERIAL SITE PERMITS

21.29.010. Material extraction exempt from obtaining a permit.

- A. Material extraction which disturbs an area of less than one acre that is not in a mapped flood plain or subject to 21.29.010(B), does not enter the water table, and does not cross property boundaries, does not require a permit. There will be no excavation within 20 feet of a right-of-way or within ten feet of a lot line.
- B. Material extraction taking place on dewatered bars within the confines of the Snow River and the streams within the Seward-Bear Creek Flood

Service Area does not require a permit, however, operators subject to this exemption shall provide the planning department with the information required by KPB 21.29.030(A)(1), (2), (6), (7) and a current flood plain development permit prior to beginning operations.

- C. A prior existing use under KPB 21.29.120 does not require a material extraction permit, but a floodplain development permit is required for all activities within any mapped special flood hazard area.
- D. Material extraction incidental to site development does not require a permit when an approved site development plan is on file with the planning department. Site development plans are approved by the planning director and are valid for one year. The site development plan may be renewed on an annual basis subject to the planning director's approval.

21.29.020. Material extraction and activities requiring a permit.

- A. *Counter permit.* A counter permit is required for material extraction which disturbs no more than 2.5 cumulative acres and does not enter the water table. Counter permits are approved by the planning director, and are not subject to the notice requirements or planning commission approval of KPB 21.25.060. A counter permit is valid for a period of 12 months, with a possible 12-month extension.
- B. *Conditional land use permit.* A conditional land use permit (CLUP) is required for material extraction which disturbs more than 2.5 cumulative acres, or material extraction of any size that enters the water table. [A CLUP IS REQUIRED FOR MATERIALS PROCESSING.] A CLUP is valid for a period of five years. The provisions of KPB Chapter 21.25 are applicable to material site CLUPS and the provisions of KPB 21.25 and 21.29 are read in harmony. If there is a conflict between the provisions of KPB 21.25 and 21.29, the provisions of KPB 21.29 are controlling

21.29.030. Application procedure.

- A. In order to obtain a counter permit or CLUP, an applicant shall first complete and submit to the borough planning department a permit application, along with the fee listed in the most current Kenai Peninsula Borough Schedule of Rates, Charges and Fees. The planning director may determine that certain contiguous parcels are eligible for a single permit. The application shall include the following items:
 - 1. Legal description of the parcel, KPB tax parcel ID number, and identification of whether the permit is for the entire parcel, or a specific location within a parcel;

2. Expected life span of the material site;
3. A buffer plan consistent with KPB 21.29.050(A)(2);
4. Reclamation plan consistent with KPB 21.29.060;
5. The depth of excavation;
6. Type of material to be extracted and type of equipment to be used;
7. Any voluntary permit conditions the applicant proposes. Failure to include a proposed voluntary permit condition in the application does not preclude the applicant from proposing or agreeing to voluntary permit conditions at a later time;
8. Surface water protection measures, if any, for adjacent properties designed by a SWPPP certified individual, including the use of diversion channels, interception ditches, on-site collection ditches, sediment ponds and traps, and silt fence;
9. A site plan prepared by the site operator and field verification prepared by a professional surveyor licensed and registered in the State of Alaska, including the following information:
 - a. Location of excavation, and, if the site is to be developed in phases, the life span and expected reclamation date for each phase;
 - b. Proposed buffers consistent with KPB 21.29.050(A)(2), or alternate buffer plan;
 - c. Identification of all encumbrances, including, but not limited to easements;
 - d. Points of ingress and egress. Driveway permits must be acquired from either the state or borough as appropriate prior to the issuance of the material site permit;
 - e. Anticipated haul routes;
 - f. Location and [DEPTH] elevation of test holes, and depth of groundwater, if encountered between May and December. At least one test hole per ten acres of excavated area is required to be dug.

- g. Location of wells of adjacent property owners within [300]
200 feet of the proposed parcel boundary;
- h. Location of any water body on the parcel,
- [I. SURFACE WATER PROTECTION MEASURES FOR ADJACENT PROPERTIES, INCLUDING THE USE OF DIVERSION CHANNELS, INTERCEPTION DITCHES, ON-SITE COLLECTION DITCHES, SEDIMENT PONDS AND TRAPS, AND SILT FENCE; PROVIDE DESIGNS FOR SUBSTANTIAL STRUCTURES; INDICATE WHICH STRUCTURES WILL REMAIN AS PERMANENT FEATURES AT THE CONCLUSION OF OPERATIONS, IF ANY;]
- [J]i. Location of any processing areas on parcel, if applicable;
- [K]j. North arrow;
- [L]k. The scale to which the site plan is drawn;
- [M]l. Preparer's name, date
- [N]m. Field verification shall include staking the boundary of the parcel at sequentially visible intervals. The planning director may grant an exemption in writing to the staking requirements if the parcel boundaries are obvious or staking is unnecessary.

- B. In order to aid the planning commission or planning director's decision-making process, the planning director shall provide vicinity, aerial, land use, and ownership maps for each application and may include additional information.

21.29.040. Standards for sand, gravel or material sites.

- A. These material site regulations are intended to Minimize aquifer disturbance, road damage, physical damage to adjacent properties, dust, and noise. Only the conditions set forth in KPB 21.29.050 may be imposed to meet these standards:
 - 1. [PROTECTS AGAINST] Minimizes the lowering of water sources serving other properties;
 - 2. [PROTECTS AGAINST] Minimizes physical damage to [OTHER] adjacent properties;

3. Minimizes off-site movement of dust;
4. Minimizes noise disturbance to other properties;
5. [MINIMIZES VISUAL IMPACTS] Provides for alternate post-mining land uses.

21.29.050. Permit conditions.

A. The following mandatory conditions apply to counter permits and CLUPs issued for sand, gravel or material sites:

1. [*PARCEL*]Permit boundaries. [ALL BOUNDARIES OF THE SUBJECT PARCEL] The buffers and any easements or right-of-way abutting the proposed permit area shall be staked at sequentially visible intervals where parcel boundaries are within 300 feet of the excavation perimeter. Field verification and staking will require the services of a professional land surveyor. Stakes shall be in place [AT TIME OF APPLICATION] prior to issuance of the permit.

[2. BUFFER ZONE. A BUFFER ZONE SHALL BE MAINTAINED AROUND THE EXCAVATION PERIMETER OR PARCEL BOUNDARIES. WHERE AN EASEMENT EXISTS, A BUFFER SHALL NOT OVERLAP THE EASEMENT, UNLESS OTHERWISE CONDITIONED BY THE PLANNING DIRECTOR OR PLANNING COMMISSION.

A. THE BUFFER ZONE SHALL PROVIDE AND RETAIN A BASIC BUFFER OF:

I. 50 FEET OF UNDISTURBED NATURAL VEGETATION, OR

II. A MINIMUM TEN FOOT EARTHEN BERM WITH AT LEAST A 2:1 SLOPE, OR

III. A MINIMUM SIX-FOOT FENCE.

B. A 2:1 SLOPE SHALL BE MAINTAINED BETWEEN THE BUFFER ZONE AND EXCAVATION FLOOR ON ALL INACTIVE SITE WALLS. MATERIAL FROM THE AREA DESIGNATED FOR THE 2:1 SLOPE MAY BE REMOVED IF SUITABLE, STABILIZING MATERIAL IS REPLACED WITHIN 90 DAYS FROM THE TIME OF REMOVAL.

C. THE PLANNING COMMISSION OR PLANNING DIRECTOR SHALL DESIGNATE ONE OR A COMBINATION OF THE ABOVE AS IT DEEMS APPROPRIATE. THE VEGETATION AND FENCE SHALL BE OF SUFFICIENT HEIGHT AND DENSITY TO PROVIDE VISUAL AND NOISE SCREENING OF THE PROPOSED USE AS DEEMED

APPROPRIATE BY THE PLANNING COMMISSION OR PLANNING DIRECTOR.

- D. BUFFERS SHALL NOT CAUSE SURFACE WATER DIVERSION WHICH NEGATIVELY IMPACTS ADJACENT PROPERTIES OR WATER BODIES. SPECIFIC FINDINGS ARE REQUIRED TO ALTER THE BUFFER REQUIREMENTS OF KPB 21.29.050(A)(2)(A) IN ORDER TO MINIMIZE NEGATIVE IMPACTS FROM SURFACE WATER DIVERSION. FOR PURPOSES OF THIS SECTION, SURFACE WATER DIVERSION IS DEFINED AS EROSION, FLOODING, DEHYDRATION OR DRAINING, OR CHANNELING. NOT ALL SURFACE WATER DIVERSION RESULTS IN A NEGATIVE IMPACT.
- E. AT ITS DISCRETION, THE PLANNING COMMISSION MAY WAIVE BUFFER REQUIREMENTS WHERE THE TOPOGRAPHY OF THE PROPERTY OR THE PLACEMENT OF NATURAL BARRIERS MAKES SCREENING NOT FEASIBLE OR NOT NECESSARY. BUFFER REQUIREMENTS SHALL BE MADE IN CONSIDERATION OF AND IN ACCORDANCE WITH EXISTING USES OF ADJACENT PROPERTY AT THE TIME OF APPROVAL OF THE PERMIT. THERE IS NO REQUIREMENT TO BUFFER THE MATERIAL SITE FROM USES WHICH COMMENCE AFTER THE APPROVAL OF THE PERMIT.]

2. *Buffer Area.*

- a. A 2:1 slope shall be maintained between the buffer zone and excavation floor on all inactive site walls. Material from the area designated for the 2:1 slope may be removed if suitable, stabilizing material is replaced within 90 days from the time of removal.
- b. The buffer area may be reduced where the planning commission or planning director, as applicable, has approved an alternate buffer plan introduced by the applicant. The alternate buffer plan must consist of natural undisturbed vegetation, or a minimum ten foot berm, or a minimum six-foot fence or a combination thereof, consisting of only one option in a single geographical location; unless the permittee proposes another solution approved by the planning commission or planning director, as applicable, to meet this condition.
- c. The buffer requirements may be waived by the planning commission or planning director, as applicable, where the topography of the property or the placement of natural barriers makes screening not feasible or unnecessary.

- d. There is no requirement to buffer a material site from uses that commence after approval of the permit.
- 3. *Processing.* In the case of a CLUP, any equipment which conditions or processes material must be operated at least 300 feet from the parcel boundaries. At its discretion, the planning commission may waive the 300-foot processing distance requirement, or allow a lesser distance in consideration of and in accordance with existing uses of adjacent properties at the time.
- 4. *Water source separation.*
 - a. All permits shall be issued with a condition which prohibits any material extraction within 100 horizontal feet of any water source existing prior to original permit issuance.
 - b. All counter permits shall be issued with a condition which requires that a four-foot vertical separation [FROM THE SEASONAL HIGH WATER TABLE BE MAINTAINED] an excavation distance a maximum of 15 feet below the seasonal high-water table must be maintained under these conditions:
 - 1. No dewatering is allowed.
 - 2. The edge of any water body must be 200 feet from any DEC septic or well.
 - 3. A spill response kit must be maintained onsite.
 - 4. Operations shall stay 2 foot above an aquifer-confining layer.
 - 5. A 200-foot separation from any water body and any stored hazardous material.
 - [C. ALL CLUPS SHALL BE ISSUED WITH A CONDITION WHICH REQUIRES THAT A TWO-FOOT VERTICAL SEPARATION FROM THE SEASONAL HIGH WATER TABLE BE MAINTAINED.]
 - c. There shall be no dewatering either by pumping, ditching or some other form of draining unless an exemption is granted by the planning commission. The exemption for dewatering may be granted if the operator provides a statement under seal and supporting data from a duly licensed and qualified impartial civil engineer, that the dewatering will not lower any of the surrounding property's water systems and the contractor posts a bond for liability for potential accrued damages.

5. *Excavation in the water table.* Excavation in the water table greater than ~~[300]~~200 horizontal feet of a water source and 15 feet below water table may be permitted with the approval of the planning commission based on the following:
 - a. Certification by a qualified independent civil engineer or professional hydrogeologist that the excavation plan will not negatively impact the quantity of an aquifer serving existing water sources.
 - b. The installation of a minimum of three water monitoring tubes or well casings as recommended by a qualified independent civil engineer or professional hydrogeologist adequate to determine flow direction, flow rate, and water elevation.
 - c. Groundwater elevation, flow direction, and flow rate for the subject parcel, measured in three-month intervals by a qualified independent civil engineer or professional hydrogeologist, for at least one year prior to application. Monitoring tubes or wells must be kept in place, and measurements taken, for the duration of any excavation in the water table.
 - d. Operations shall not breach an aquifer-confining layer.
6. *Waterbodies.*
 - a. An undisturbed buffer shall be left and no earth material extraction activities shall take place within 100 linear feet [FROM] of excavation limits and the ordinary high water level of surface water bodies such as a lake, river, stream, ~~[OR OTHER WATER BODY, INCLUDING]~~ riparian wetlands ~~[AND MAPPED FLOODPLAINS AS DEFINED IN KPB 21.06]~~. This regulation shall not apply to ponds less than one acre on private land, man-made waterbodies being constructed during the course of the materials extraction activities. In order to prevent discharge, diversion, or capture of surface water, an additional setback from lakes, rivers, anadromous streams, and riparian wetlands may be required.
 - b. Counter permits and CLUPS may contain additional conditions addressing surface water diversion.
7. *Fuel storage.* Fuel storage for containers larger than 50 gallons shall be contained in impermeable berms and basins capable of retaining 110 percent of storage capacity to minimize the potential for

uncontained spills or leaks. Fuel storage containers 50 gallons or smaller shall not be placed directly on the ground, but shall be stored on a stable impermeable surface. Double wall tanks are also acceptable.

8. *Roads.* Operations shall be conducted in a manner so as not to damage borough roads as required by KPB 14.40.175 and will be subject to the remedies set forth in KPB 14.40 for violation of this condition.
9. *Subdivision.* Any further subdivision or return to acreage of a parcel subject to a conditional land use or counter permit requires the permittee to amend their permit. The planning director may issue a written exemption from the amendment requirement if it is determined that the subdivision is consistent with the use of the parcel as a material site and all original permit conditions can be met.
10. *Dust control.* Dust suppression is required on haul roads within the boundaries of the material site by application of water or calcium chloride.
11. *Hours of operation.* [ROCK CRUSHING EQUIPMENT SHALL NOT BE OPERATED BETWEEN 10:00 P.M. AND 6:00 A.M.]
 - a. Processing equipment shall not be operated between 10:00 p.m. and 6:00 a.m.
 - b. The planning commission may grant exceptions to increase the hours of operation and processing based on surrounding land uses, topography, screening the material site from properties in the vicinity and conditions placed on the permit by the planning commission to mitigate the noise, dust and ~~visual impacts~~ caused by the material site.
12. *Reclamation.*
 - a. Reclamation shall be consistent with the reclamation plan approved by the planning commission or planning director as appropriate in accord with KPB 21.29.060.
 - b. [AS A CONDITION OF ISSUING THE PERMIT, THE APPLICANT SHALL SUBMIT A RECLAMATION PLAN AND POST A BOND TO COVER THE ANTICIPATED RECLAMATION COSTS IN AN AMOUNT TO BE DETERMINED BY THE PLANNING DIRECTOR. THIS BONDING REQUIREMENT SHALL NOT APPLY TO SAND, GRAVEL OR MATERIAL SITES FOR WHICH AN EXEMPTION FROM STATE BOND REQUIREMENTS FOR SMALL OPERATIONS IS APPLICABLE

PURSUANT TO AS 27.19.050.] The applicant shall operate the material site consistent with the approved reclamation plan and provide bonding pursuant to 21.29.060(B). This bonding requirement shall not apply to sand, gravel or material sites for which an exemption from state bond requirements for small operations is applicable pursuant to AS 27.19.050.

13. *Other permits.* Permittee is responsible for complying with all other federal, state and local laws applicable to the material site operation, and abiding by related permits. These laws and permits include, but are not limited to, the borough's flood plain, coastal zone, and habitat protection regulations, those state laws applicable to material sites individually, reclamation, storm water pollution and other applicable Environmental Protection Agency (EPA) regulations, clean water act and any other U.S. Army Corp of Engineer permits, any EPA air quality regulations, EPA and ADEC air and water quality regulations, EPA hazardous material regulations, U.S. Dept. of Labor Mine Safety and Health Administration (MSHA) regulations (including but not limited to noise and safety standards), and Federal Bureau of Alcohol, Tobacco and Firearm regulations regarding using and storing explosives. Any violation of these regulations or permits reported to or observed by borough personnel will be forwarded to the appropriate agency for enforcement.
14. [~~VOLUNTARY~~]Volunteered *permit conditions.* Conditions may be included in the permit upon agreement of the permittee and approval of the planning commission for CLUPs or the planning director for counter permits. Such conditions must be consistent with the standards set forth in KPB 21.29.040(A). Planning commission approval of such conditions shall be contingent upon a finding that the conditions will be in the best interest of the borough and the surrounding property owners. [~~VOLUNTARY~~] Volunteered permit conditions apply to the subject parcel and operation, regardless of a change in ownership. A change in [~~VOLUNTARY~~] volunteered permit conditions may be proposed [AT] by permit [RENEWAL OR AMENDMENT] modification.
15. *Signage.* For permitted parcels on which the permittee does not intend to begin operations for at least 12 months after being granted a conditional land use permit, the permittee shall post notice of intent on parcel corners or access, whichever is more visible. Sign dimensions shall be no more than 15" by 15" and must contain the following information: the phrase "Permitted Material Site" along with the permittee's business name and a contact phone number.

16. Appeal. No clearing of vegetation shall occur within the ~~50~~ 100-foot maximum buffer area from the permit boundary nor shall the permit be issued or operable until the deadline for the appeal, pursuant to KPB 21.20, has expired.
17. Reverse signal alarms. Reverse signal alarms, used at the material site on loaders, excavators, and other earthmoving equipment may be more technically advanced devices; such as, a multi-frequency “white noise” alarms rather than the common, single (high-pitch) tone alarms. At its discretion, the planning commission or planning director, as applicable, may waive this requirement or a portion of this requirement. The waiver of this requirement shall be made in consideration of and in accordance with existing uses of the properties in the vicinity at the time of approval of the permit.
19. Dust suppression. Dust suppression ~~may~~ shall be required when natural precipitation is not adequate to suppress the dust generated by the material site traffic on haul routes within property boundaries. Based on surrounding land uses the planning commission or planning director, as applicable, may waive or reduce the requirement for dust suppression on haul routes within property boundaries.
21. Surface water protection. Use of surface water protection measures as specified in KPB 21.29.030(A)(8) must be approved by a licensed civil engineer or SWPPP certified individual.
22. Setback. Material site excavation areas shall be 250-feet from the property boundaries of any local option zoning district, existing public school ground, private school ground, college campus, child care facility, multi-purpose senior center, assisted living home, and licensed health care facility. If overlapping, the buffer areas of the excavation shall be included in the 250-foot setback. At the time of application.

21.29.060. Reclamation plan.

- A. All material site permit applications require an overall reclamation plan.
- B. The applicant may revegetate with a non-invasive plant species and reclaim all disturbed land [UPON EXHAUSTING THE MATERIAL ON-SITE, OR WITHIN A PRE-DETERMINED TIME PERIOD FOR LONG-TERM ACTIVITIES, SO AS TO LEAVE THE LAND IN A STABLE CONDITION. RECLAMATION MUST OCCUR FOR ALL EXHAUSTED AREAS OF THE SITE EXCEEDING FIVE ACRES BEFORE A FIVE-YEAR RENEWAL PERMIT IS ISSUED, UNLESS OTHERWISE REQUIRED BY THE PLANNING COMMISSION. IF THE MATERIAL SITE IS ONE ACRE OR LESS IN SIZE AND HAS BEEN GRANTED A CLUP DUE TO EXCAVATION IN THE WATER TABLE,

RECLAMATION MUST BE PERFORMED AS SPECIFIED BY THE PLANNING COMMISSION OR PLANNING DIRECTOR IN THE CONDITIONAL USE OR COUNTER PERMIT] within the time period approved with the reclamation plan so as to leave the land in a stable condition. Bonding shall be required at \$750.00 per acre for all acreage included in the current five-year reclamation plan. In the alternative, the planning director shall accept a civil engineer's estimate for determining the amount of bonding. If the applicant is bonded with the state, the borough's bonding requirement is waived. Compliance with reclamation plans shall be enforced under KPB 21.50.

C. The following measures must be considered in the [PREPARING] preparation, approval and [IMPLEMENTING] implementation of the reclamation plan, although not all will be applicable to every reclamation plan.

1. The area will be backfilled, graded and recontoured using strippings, overburden, and topsoil [TO A CONDITION THAT ALLOWS FOR THE REESTABLISHMENT OF RENEWABLE RESOURCES ON THE SITE WITHIN A REASONABLE PERIOD OF TIME. IT WILL BE STABILIZED TO A CONDITION THAT WILL ALLOW SUFFICIENT MOISTURE FOR REVEGETATION] so that it will be stabilized to a condition that will allow for the revegetation as required by KPB 21.29.060(B).
2. [SUFFICIENT QUANTITIES OF STOCKPILED OR IMPORTED TOPSOIL WILL BE SPREAD OVER THE RECLAIMED AREA TO A DEPTH OF FOUR INCHES TO PROMOTE NATURAL PLANT GROWTH THAT CAN REASONABLY BE EXPECTED TO REVEGETATE THE AREA WITHIN FIVE YEARS. THE APPLICANT MAY USE THE EXISTING NATURAL ORGANIC BLANKET REPRESENTATIVE OF THE PROJECT AREA IF THE SOIL IS FOUND TO HAVE AN ORGANIC CONTENT OF 5% OR MORE AND MEETS THE SPECIFICATION OF CLASS B TOPSOIL REQUIREMENTS AS SET BY ALASKA TEST METHOD (ATM) T-6.] The [MATERIAL] topsoil used for reclamation shall be reasonably free from roots, clods, sticks, and branches greater than 3 inches in diameter. Areas having slopes greater than 2:1 require special consideration and design for stabilization by a licensed engineer.
4. Exploration trenches or pits will be backfilled. Brush piles and unwanted vegetation shall be removed from the site, buried or burned. Topsoil and other organics will be spread on the backfilled surface to inhibit erosion and promote natural revegetation.
5. [PEAT AND T] Topsoil mine operations shall ensure a minimum of [TWO] four inches of suitable growing medium is left or replaced on the site upon completion of the reclamation activity (unless otherwise authorized).

6. Ponding may be used as a reclamation method as approved by the planning commission.

[D. THE PLAN SHALL DESCRIBE THE TOTAL ACREAGE TO BE RECLAIMED EACH YEAR, A LIST OF EQUIPMENT (TYPE AND QUANTITY) TO BE USED IN RECLAMATION, AND A TIME SCHEDULE OF RECLAMATION MEASURES.]

21.29.070. Permit extension and revocation.

- A. Conditional land use permittees must submit a request in writing for permit extension every five years after the permit is issued. Requests for permit extension must be made at least 30 days prior to permit expiration. Counter permittees must submit any request for a 12-month extension at least 30 days prior to the expiration of the original 12-month permit period.
- B. A permit extension certificate for a CLUP may be granted by the planning director after 5 years, and after one year for a counter permit where no modification to operations or conditions are proposed.
- C. Permit extension may be denied if: (1) reclamation required by this chapter and the original permit has not been performed; (2) the permittee is otherwise in noncompliance with the original permit conditions; or (3) the permittee has had a permit violation in the last two years and has not fulfilled compliance requests.
- D. A modification application shall be processed pursuant to KP.B 21.29.030-050 with public notice given as provided by KP.B 21.25.060 when operators request modification of their permit conditions based on changes in operations set forth in the modification application.
- E. There shall be no fee for permit extensions approved by the planning director. The fee for a permit modification processed under KP.B 21.29.070(D) will be the same as an original permit application in the amount listed in the most current Kenai Peninsula Borough Schedule of Rates, Charges and Fees.
- F. Failure to submit a request for extension will result in the expiration of the permit. The borough may issue a permit termination document upon expiration pursuant to KP.B 21.29.080. Once a permit has expired, a new permit application approval process is required in order to operate the material site.
- G. Permits may be revoked pursuant to KP.B 21.50.

21.29.080. Permit termination.

When a permit expires, is revoked, or a permittee requests termination of their permit, a review of permit conditions and site inspections will be conducted by the planning department to ensure code compliance and verify site reclamation prior to termination. When the planning director determines that a site qualifies for termination, a termination document shall be issued to the permittee.

21.29.090. Permit modifications.

If a permittee revises or intends to revise operations (at a time other than permit extension) so that they are no longer consistent with the original application, a permit modification is required. The planning director shall determine whether the revision to operations requires a modification. Permit modification shall be processed in the same manner as original permits.

21.29.100. Recordation.

All permits, permit extensions, modified permits, prior existing uses, and terminations shall be recorded. Failure to record a material site document does not affect the validity of the documents.

21.29.110. Violations.

- A. Violations of this chapter shall be governed by KPB 21.50.
- B. In addition to the remedies provided in KPB 21.50, the planning director may require bonding in a form and amount adequate to protect the borough's interests for an owner or operator who has been cited for three violations of KPB 21.50, 21.25, and 21.29 within a three-year period. The violations need not be committed at the same material site. Failure to provide requested bonding may result in permit revocation proceedings.

21.29.120. Prior existing uses.

- A. Material sites are not held to the standards and conditions of a CLUP if a prior existing use (PEU) determination was granted for the parcel in accordance with KPB 21.29.120(B). To qualify as a PEU, a parcel's use as a material site must have commenced or have been operated after May 21, 1986, and prior to May 21, 1996, provided that the subject use continues in the same location. In no event shall a prior existing use be expanded beyond the smaller of the lot, block, or tract lines as they existed on May 21, 1996. If a parcel is further subdivided after May 21, 1996, the pre-existing use may not be expanded to any lot, tract, or parcel where extraction had not occurred before or on February 16, 1999. If a parcel is subdivided where extraction has already occurred, the prior existing use is considered

abandoned, and a CLUP must be obtained for each parcel intended for further material site operations. The parcel owner may overcome this presumption of abandonment by showing that the subdivision is not inconsistent with material site operation. If a parcel subject to a prior existing use is conveyed, the prior existing use survives the conveyance.

- B. Owners of sites must have applied to be registered as a prior existing use prior to January 1, 2001.
- C. [ANY PRIOR EXISTING USE THAT HAS NOT OPERATED AS A MATERIAL SITE BETWEEN MAY 21, 1996, AND MAY 21, 2011, IS CONSIDERED ABANDONED AND MUST THEREAFTER COMPLY WITH THE PERMIT REQUIREMENTS OF THIS CHAPTER. THE PLANNING DIRECTOR SHALL DETERMINE WHETHER A PRIOR EXISTING USE HAS BEEN ABANDONED. AFTER GIVING NOTICE TO THE PARCEL OWNER THAT A PEU IS CONSIDERED ABANDONED, A PARCEL OWNER MAY PROTEST THE TERMINATION OF THE PEU BY FILING WRITTEN NOTICE WITH THE PLANNING DIRECTOR ON A FORM PROVIDED BY THE PLANNING DEPARTMENT. WHEN A PROTEST BY A PARCEL OWNER IS FILED, NOTICE AND AN OPPORTUNITY TO MAKE WRITTEN COMMENTS REGARDING PRIOR EXISTING USE STATUS SHALL BE ISSUED TO OWNERS OF PROPERTY WITHIN A ONE-HALF MILE RADIUS OF THE PARCEL BOUNDARIES OF THE SITE. THE OWNER OF THE PARCEL SUBJECT TO THE PRIOR EXISTING USE MAY SUBMIT WRITTEN INFORMATION, AND THE PLANNING DIRECTOR MAY GATHER AND CONSIDER ANY INFORMATION RELEVANT TO WHETHER A MATERIAL SITE HAS OPERATED. THE PLANNING DIRECTOR MAY CONDUCT A HEARING IF HE OR SHE BELIEVES IT WOULD ASSIST THE DECISION-MAKING PROCESS. THE PLANNING DIRECTOR SHALL ISSUE A WRITTEN DETERMINATION WHICH SHALL BE DISTRIBUTED TO ALL PERSONS MAKING WRITTEN COMMENTS. THE PLANNING DIRECTOR'S DECISION REGARDING TERMINATION OF THE PRIOR EXISTING USE STATUS MAY BE APPEALED TO THE PLANNING COMMISSION WITHIN 15 DAYS OF THE DATE OF THE NOTICE OF DECISION.]

The owner of a material site that has been granted a PEU determination shall provide proof of compliance with AS 27.19.030 – 050 concerning reclamation to the planning department no later than July 1, 2021. The proof shall consist of an Alaska Department of Natural Resources (DNR) approved reclamation plan and receipt for bonding or a letter of intent filed with DNR.

- 1. The planning department may request proof of continued compliance with AS 27.19.030 – 050 on an annual basis.
- 2. Pursuant to KPB 21.29.110 the enforcement process and remedies set forth in KPB 21.50 shall govern if the proof that the statutory requirements contained in AS 27.19.030-050 is not provided to the planning department.

SECTION 3. That KPB 21.50.055 is hereby amended, as follows:

21.50.055. Fines.

- A. Following are the fines for violations of this title. Each day a violation occurs is a separate violation. Violations begin to accrue the date the enforcement notice is issued and continue to the date the enforcement is initially set for hearing. The fine for a violation may not be reduced by the hearing officer to less than the equivalent of one day's fine for each type of violation.

CODE CHAPTER & SECTION	VIOLATION DESCRIPTION	DAILY FINE
KPB 20.10.030(A)	Offering land for sale without final plat approval	\$300.00
KPB 20.10.030(B)	Filing/recording unapproved subdivision/plat	\$300.00
KPB 20.10.030(C)	Violation of subdivision code or condition	\$300.00
KPB 21.05.040(C)	Violation of variance conditions	\$300.00
KPB 21.06.030(D)	Structure or activity prohibited by KPB 21.06	\$300.00
KPB 21.06.040	Failure to obtain a Development Permit/Floodplain Management	\$300.00
KPB 21.06.045	Failure to obtain a SMFDA Development Permit/Violation of SMFDA permit conditions/Floodplain Management	\$300.00
KPB 21.06.050	Violation of permit conditions/Floodplain Management	\$300.00
KPB 21.18.071	Failure to obtain staff permit/Violation of staff permit/Anadromous Streams Habitat Protection	\$300.00
KPB 21.18.072	Failure to obtain limited commercial activity permit/Violation of permit conditions/Anadromous Streams Habitat Protection	\$300.00
KPB 21.18.075	Prohibited use or structure/Anadromous Streams Habitat Protection	\$300.00

CODE CHAPTER & SECTION	VIOLATION DESCRIPTION	DAILY FINE
KPB 21.18.081	Failure to obtain Conditional Use Permit/Violation of Conditional Use Permit Condition/Anadromous Streams Habitat Protection	\$300.00
KPB 21.18.090	Failure to obtain prior existing use/structure permit/Violation of permit conditions/Anadromous Streams Habitat Protection	\$300.00
KPB 21.18.135(C)	Violation of emergency permit conditions/anadromous stream habitat protection	\$300.00
KPB 21.25.040	Failure to Obtain a Permit/Material Site/Correctional community residential center/Concentrated Animal Feeding Operation	\$300.00
KPB 21.28.030	Violation of permit conditions/Concentrated Animal Feeding Operations	\$300.00
KPB 21.29.020	Failure to Obtain a counter permit/Material Site Permits	\$300.00
KPB 21.29.050	Violation of Conditional Land Use Permit Conditions/Material Site Permits Also applies to KPB 21.26 material site permits	\$300.00
KPB 21.29.060	Violation of Reclamation Plan/Material Site Permits Also applies to KPB 21.26 material site permits	\$300.00
<u>KPB 21.29.120</u>	<u>Failure to Provide Reclamation Plan and Proof of Bonding or Letter of Intent</u>	<u>\$300.00</u>
KPB 21.44.100	Violation of Pre-existing structures/Local Option Zoning	\$300.00
KPB 21.44.110(D)	Prohibited expansion of nonconforming use/Local Option Zoning	\$300.00
KPB 21.44.110(E)	Prohibited Change in Use/Local Option Zoning	\$300.00
KPB 21.44.110(G)	Violation of Conditions on Nonconforming Use/Local Option Zoning	\$300.00

CODE CHAPTER & SECTION	VIOLATION DESCRIPTION	DAILY FINE
KPB 21.44.130(C)(D)	Violation of Home Occupation Standards and Conditions/Local Option Zoning	\$300.00
KPB 21.44.130(F)	Disallowed Home Occupation/Local Option Zoning	\$300.00
KPB 21.44.135	Failure to file development notice	\$300.00
KPB 21.44.160(A)(B)	Prohibited use	\$300.00
KPB 21.44.160(C)	Violation of Development Standards/Single Family Zoning/Local Option Zoning	\$300.00
KPB 21.44.165(A)(B)	Prohibited use	\$300.00
KPB 21.44.165(C)	Violation of Development Standards/Small Lot Residential Zoning/Local Option Zoning	\$300.00
KPB 21.44.170(A)(B)	Prohibited use	\$300.00
KPB 21.44.170(C)	Violation of Development Standards/Rural Residential District/Local Option Zoning	\$300.00
KPB 21.44.175(B)(C)	Prohibited Use	\$300.00
KPB 21.44.175(D)	Violation of Development Standards/Residential Waterfront	\$300.00
KPB 21.44.180(A)(B)	Prohibited Use	\$300.00
KPB 21.44.180(C)	Violation of Development Standards/Multi-Family Residential District/Local Option Zoning	\$300.00
KPB 21.44.190(A)(B)	Prohibited Use	\$300.00
KPB 21.44.190(C)	Violation of Development Standards/Industrial District/Local Option Zoning	\$300.00

CODE CHAPTER & SECTION	VIOLATION DESCRIPTION	DAILY FINE
KPB 21.46.030(b)	Failure to maintain bear-resistant garbage cans/Local option zone/Birch and Grove Ridge subdivisions Rural Residential District	\$300.00
KPB 21.50.100(F)	Removal of posted enforcement notice	\$300.00
KPB 21.50.100(G)	Violation of enforcement notice	\$1,000.00
KPB 21.50.130(I)	Violation of an enforcement order	\$1,000.00

SECTION 4. That this ordinance shall become effective upon its enactment.

ENACTED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH THIS * DAY OF * 2022.

Brent Johnson, Assembly President

ATTEST:

Johni Blankenship, MMC, Borough Clerk

02/01/22 Vote on motion to table:

Yes: Bjorkman, Chesley, Cox, Derkevorkian, Ecklund, Elam, Hibbert, Tupper, Johnson

No: None

Absent: None

Introduced by:	Mayor, Johnson
Date:	12/07/21
Hearing:	01/18/22
Action:	Postponed as Amended to 02/01/22
Vote:	5 Yes, 3 No, 1 Absent
Date:	02/01/22
Action:	
Vote:	

**KENAI PENINSULA BOROUGH
ORDINANCE 2021-41**

**AN ORDINANCE AMENDING KPB 21.29, KPB 21.25, AND KPB 21.50.055
REGARDING MATERIAL SITE PERMITS, APPLICATIONS, CONDITIONS, AND
PROCEDURES**

- WHEREAS,** Goal 2, Focus Area: Land Use and Changing Climate, Objective A of the 2019 Kenai Peninsula Borough Comprehensive Plan is to establish policies that better guide land use to minimize land use conflicts, maintain property values, protect natural systems and support individual land use freedoms; and
- WHEREAS,** Goal 2, Focus Area: Land Use and Changing Climate, Objective A, Strategy 1 of the 2019 Comprehensive Plan is to adopt limited development standards for specific areas and uses to reduce potential off site impacts of development on adjoining uses and the natural environment; and
- WHEREAS,** Goal 2, Focus Area: Land Use and Changing Climate, Objective A, Strategy 2 of the 2019 Comprehensive Plan is to update the Borough’s existing conditional use regulations for gravel extraction and other uses to better address reoccurring land use conflicts; and
- WHEREAS,** Goal 2, Focus Area: Land Use and Changing Climate, Objective A, Strategy 2a of the 2019 Comprehensive Plan is to clarify the broad purpose of the conditional use process and clear parameters for allowable conditional uses that include reasonable, project-specific conditions that reduce impacts on surrounding uses, and if/when a conditional use permit can be denied and consider establishing conditions that require larger setbacks, safety and visual screening, control on access routes, control on hours of operation, and address environmental concerns; and
- WHEREAS,** Goal 2, Focus Area: Land Use and Changing Climate, Objective A, Strategy 2d of the 2019 Comprehensive Plan is to complete improvements to the rules guiding gravel extraction, with the goal of providing an appropriate balance between providing access to affordable materials for development and protecting quality of life for borough residents; and

- WHEREAS,** Goal 1 of the Mining and Minerals Processing section of the 1990 Kenai Peninsula Borough Coastal Management Program is to provide opportunities to explore, extract and process minerals, sand and gravel resources, while protecting environmental quality and other resource users; and
- WHEREAS,** an assembly subcommittee was formed in 2005 to review the material site code; and
- WHEREAS,** Ordinance 2006-01 (Substitute) codified as KPB 21.29 was adopted in 2006 after consideration of the subcommittee's report; and
- WHEREAS,** the planning department has been administering Ordinance 2006-01 (Substitute), codified as KPB 21.29 for 13 years; and
- WHEREAS,** KPB 21.25.040 requires a permit for the commencement of certain land uses within the rural district of the Kenai Peninsula Borough; and
- WHEREAS,** the planning department has recognized that certain provisions of the material site ordinance could be better clarified for the operators, public, and staff; and
- WHEREAS,** the planning commission and planning department received comments expressing concerns about dust, noise, safety, and aesthetics; and
- WHEREAS,** approximately 253 registered prior existing use material sites and approximately 99 conditional land use permits for material sites have been granted since 1996;
- WHEREAS,** the planning department receives numerous complaints regarding unreclaimed parcels registered as nonconforming prior existing material sites which have not been regulated by KPB; and
- WHEREAS,** the assembly established a material site work group by adoption of Resolution 2018-004 (Substitute) to engage in a collaborative discussion involving the public and industry to make recommendations regarding the material site code; and
- WHEREAS,** assembly Resolution 2018-025 extended the deadline for the final report to be submitted to the assembly, administration and planning commission to April 30, 2019; and
- WHEREAS,** certain additional conditions placed on material site permits would facilitate a reduction in the negative secondary impacts of material sites, e.g. dust, noise, safety, and unsightliness of material sites; and
- WHEREAS,** at its regularly scheduled meeting of November 12, 2019, the planning commission recommended approval by unanimous consent;

NOW, THEREFORE, BE IT ORDAINED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH:

SECTION 1. That KPB 21.25.030 is hereby amended, as follows:

21.25.030. - Definitions.

Unless the context requires otherwise, the following definitions apply to CLUPs:

Abandon means to cease or discontinue a use without intent to resume, but excluding short-term interruptions to use or activity during periods of remodeling, maintaining, or otherwise improving or rearranging a facility or during normal periods of vacation or seasonal closure. An "intent to resume" can be shown through continuous operation of a portion of the facility, maintenance of utilities, or outside proof of continuance, e.g., bills of lading or delivery records. Abandonment also means the cessation of use, regardless of voluntariness, for a specified period of time.

Animal feeding operation means a lot or facility (other than an aquatic animal production facility) where animals (other than aquatic animals) have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period.

- a. The same animals need not remain on the lot for 45 days or more; rather, some animals are fed or maintained on the lot 45 days out of any 12-month period, and
- b. Animals are "maintained" for purposes of this ordinance when they are confined in an area where waste is generated and/or concentrated or are watered, cleaned, groomed, or medicated in a confined area, even if the confinement is temporary.
- c. Two or more animal feeding operations under common ownership are considered, for the purposes of these regulations, to be a single animal feeding operation if they adjoin each other.
- d. Slaughterhouses are animal feeding operations.

Animal unit means a unit of measurement for any animal feeding operation calculated by adding the following numbers: the number of slaughter and feeder cattle multiplied by 1.0, plus the number of mature dairy cattle multiplied by 1.4, plus the number of swine weighting [weighing] over 25 kilograms (approximately 55 pounds) multiplied by 0.4, plus the number of sheep multiplied by 0.1, plus the number of horses multiplied by 2.0.

Animal waste means animal excrement, animal carcasses, feed wasted, process wastewaters or any other waste associated with the confinement of animals from an animal feeding operation.

Animal waste management system means a combination of structures and nonstructural practices serving an animal feeding operation that provides for the collection, treatment, disposal, distribution, storage and land application of animal waste.

Aquifer means a subsurface formation that contains sufficient water-saturated permeable material to yield economical quantities of water to wells and springs.

Aquifer-confining layer means that layer of relatively impermeable soil below an aquifer, typically clay, which confines water.

Assisted living home means a residential facility that serves three or more adults who are not related to the owner by blood or marriage, or that receives state or federal payment for service of the number of adults served. The services and activities may include, but are not limited to, housing and food services to its residents, assistance with activities of daily living, and personal assistance, and that complies with Alaska Statutes 47.32.0101 – 47.60.900, as amended.

Child care facility means a place where child care is regularly provided for children under the age of 12 for periods of time that are less than 24 hours in duration and that is licensed pursuant to AS 47.35.005 et seq., excluding child care homes and child care group homes, as currently written or hereafter amended.

Commercial means any provision of services, sale of goods, or use operated for production of income whether or not income is derived, including sales, barter, rental, or trade of goods and services.

Concentrated animal feeding operation (CAFO) means an animal feeding operation confining at least: (1) 1,000 swine weighing at least approximately 55 pounds; (2) 1,000 slaughter and feeder cattle; (3) 700 mature dairy cattle; (4) 500 horses; (5) 10,000 sheep or lambs; (6) 55,000 turkeys; (7) 100,000 laying hens or broilers (if the facility has continuous overflow watering); (8) 30,000 laying hens or broilers (if the facility has a liquid manure system); (9) 5,000 ducks; (10) 1,000 animal units; or (11) a combination of the above resulting in at least 1,000 animal units. Each individual parcel upon which a CAFO is located is a separate CAFO unless they adjoin each other.

Conditioning or processing material means a value-added process including batch plants, asphalt plants, screening, washing, and crushing by use of machinery.

Correctional community residential center (CCRC) means a community residential center, other than a correctional institution, for the short-term or temporary detention of prisoners in transition from a correctional institution, performing restitution, or undergoing rehabilitation or recovery from a legal infirmity. CCRCs may not be used for detention of prisoners who pose a threat or danger to the public for violent or sexual misconduct without imprisonment or physical confinement under guard or twenty-four-hour physical supervision. The determination of whether a prisoner poses a threat or danger to the public for violent or sexual misconduct without imprisonment or physical confinement under guard or twenty-four-hour physical supervision shall be made by the commissioner of corrections for state prisoners and the United States Attorney General, or the U.S. Director of Bureau of Prisons for federal prisoners.

Correctional institution means a facility other than a correctional community residential center providing for the imprisonment or physical confinement or detention of prisoners under guard or twenty-four-hour physical supervision, such as prisons, prison farms, jails, reformatories, penitentiaries, houses of detention, detention centers, honor camps, and similar facilities.

Development plan means a plan created to describe a proposed development on a specific building site excluding material sites under KPB 21.29.020.

Disturbed includes active excavation and all areas necessary to use a parcel as a material site including but not limited to berms, stockpiles, and excavated areas excluding all areas reclaimed for alternate post mining land uses.

[EXHAUSTED MEANS THAT ALL MATERIAL OF A COMMERCIAL QUALITY IN A SAND, GRAVEL, OR MATERIAL SITE HAS BEEN REMOVED.]

Federal prisoners means offenders in the custody or control or under the care or supervision of the United States Attorney General or the Bureau of Prisons.

Groundwater means, in the broadest sense, all subsurface water, more commonly that part of the subsurface water in the saturated zone.

Haul route includes the roads used to haul materials from the permit area to a roadway designated as collector, arterial or interstate by the Alaska Department of Transportation & Public Facilities.

Liquid manure or liquid animal waste system means any animal waste management system which uses water as the primary carrier of such waste into a primary retention structure.

Multi-purpose senior center is a facility where persons 60 years of age or older are provided with services and activities suited to their particular needs. The

services and activities may include, but are not limited to, health examinations, legal assistance, recreation programs, general social activities, telephone reassurance programs, nutrition classes, meals at minimum cost, counseling, protective services, programs for shut-ins and education programs, and that complies with Alaska Statutes 47.60.010—47.60.090, as currently written or hereafter amended.

Permit area includes all excavation, processing, buffer and haul route areas of a CLUP or counter permit.

Person shall include any individual, firm, partnership, association, corporation, cooperative, or state or local government.

Prisoner means:

- a. a person held under authority of state law in official detention as defined in AS 11.81.900;
- b. includes a juvenile committed to the custody of the Alaska Department of Corrections Commissioner when the juvenile has been charged, prosecuted, or convicted as an adult.

Private school is a school comprised of kindergarten through 12th grade, or any combination of those grades, that does not receive direct state or federal funding and that complies with either Alaska Statute 14.45.030 or 14.45.100—14.45.130, as currently written or hereafter amended.

Public school is a school comprised of kindergarten through 12th grade, or any combination of those grades, that is operated by the State of Alaska or any political subdivision of the state.

Sand, gravel or material site means an area used for extracting, quarrying, or conditioning gravel or substances from the ground that are not subject to permits through the state location (mining claim) system (e.g., gold, silver, and other metals), nor energy minerals including but not limited to coal, oil, and gas.

Seasonal high groundwater table means the highest level to which the groundwater rises on an annual basis.

Senior housing project means senior housing as defined for purposes of construction or operation in 15 Alaska Administrative Code 151.950(c), as currently written or hereafter amended.

Stable condition means the rehabilitation, where feasible, of the physical environment of the site to a condition that allows for the reestablishment of

renewable resources on the site within a reasonable period of time by natural processes.

Surface water means water on the earth's surface exposed to the atmosphere such as rivers, lakes, and creeks.

Topsoil means material suitable for vegetative growth.

Vicinity means the same as the area of notification.

Waterbody means any lake, pond, stream, riparian wetland, or groundwater into which storm water runoff is directed.

Water source means a well, spring or other similar source that provides water for human consumptive use.

SECTION 2. That KPB 21.29 is hereby amended, as follows:

CHAPTER 21.29. MATERIAL SITE PERMITS

21.29.010. Material extraction exempt from obtaining a permit.

- A. Material extraction which disturbs an area of less than one acre that is not in a mapped flood plain or subject to 21.29.010(B), does not enter the water table, and does not cross property boundaries, does not require a permit. There will be no excavation within 20 feet of a right-of-way or within ten feet of a lot line.
- B. Material extraction taking place on dewatered bars within the confines of the Snow River and the streams within the Seward-Bear Creek Flood Service Area does not require a permit, however, operators subject to this exemption shall provide the planning department with the information required by KPB 21.29.030(A)(1), (2), (6), (7) and a current flood plain development permit prior to beginning operations.
- C. A prior existing use under KPB 21.29.120 does not require a material extraction permit, but a floodplain development permit is required for all activities within any mapped special flood hazard area.
- D. Material extraction incidental to site development does not require a permit when an approved site development plan is on file with the planning department. Site development plans are approved by the planning director and are valid for one year. The site development plan may be renewed on an annual basis subject to the planning director's approval.

21.29.020. Material extraction and activities requiring a permit.

- A. *Counter permit.* A counter permit is required for material extraction which disturbs no more than 2.5 cumulative acres and does not enter the water table. Counter permits are approved by the planning director, and are not subject to the notice requirements or planning commission approval of KPB 21.25.060. A counter permit is valid for a period of 12 months, with a possible 12-month extension.
- B. *Conditional land use permit.* A conditional land use permit (CLUP) is required for material extraction which disturbs more than 2.5 cumulative acres, or material extraction of any size that enters the water table. A CLUP is required for materials processing. A CLUP is valid for a period of five years. The provisions of KPB Chapter 21.25 are applicable to material site CLUPS and the provisions of KPB 21.25 and 21.29 are read in harmony. If there is a conflict between the provisions of KPB 21.25 and 21.29, the provisions of KPB 21.29 are controlling.

21.29.030. Application procedure.

- A. In order to obtain a counter permit or CLUP, an applicant shall first complete and submit to the borough planning department a permit application, along with the fee listed in the most current Kenai Peninsula Borough Schedule of Rates, Charges and Fees. The planning director may determine that certain contiguous parcels are eligible for a single permit. The application shall include the following items:
 - 1. Legal description of the parcel, KPB tax parcel ID number, and identification of whether the permit is for the entire parcel, or a specific location within a parcel;
 - 2. Expected life span of the material site;
 - 3. A buffer plan consistent with KPB 21.29.050(A)(2);
 - 4. Reclamation plan consistent with KPB 21.29.060;
 - 5. The depth of excavation;
 - 6. Type of material to be extracted and type of equipment to be used;
 - 7. Any voluntary permit conditions the applicant proposes. Failure to include a proposed voluntary permit condition in the application does not preclude the applicant from proposing or agreeing to voluntary permit conditions at a later time;

8. Surface water protection measures, if any, for adjacent properties designed by a civil engineer, including the use of diversion channels, interception ditches, on-site collection ditches, sediment ponds and traps, and silt fence;
9. A site plan and field verification prepared by a professional surveyor licensed and registered in the State of Alaska, including the following information:
 - a. Location of excavation, and, if the site is to be developed in phases, the life span and expected reclamation date for each phase;
 - b. Proposed buffers consistent with KPB 21.29.050(A)(2), or alternate buffer plan;
 - c. Identification of all encumbrances, including, but not limited to easements;
 - d. Points of ingress and egress. Driveway permits must be acquired from either the state or borough as appropriate prior to the issuance of the material site permit;
 - e. Anticipated haul routes;
 - f. Location and [DEPTH] elevation of test holes, and depth of groundwater, if encountered between May and December. At least one test hole per ten acres of excavated area is required to be dug. The test holes shall be at least four feet below the proposed depth of excavation;
 - g. Location of wells of adjacent property owners within 300 feet of the proposed parcel boundary;
 - h. Location of any water body on the parcel, including the location of any riparian wetland as determined by ["WETLAND MAPPING AND CLASSIFICATION OF THE KENAI LOWLAND, ALASKA" MAPS CREATED BY THE KENAI WATERSHED FORUM] best available data;
 - [I. SURFACE WATER PROTECTION MEASURES FOR ADJACENT PROPERTIES, INCLUDING THE USE OF DIVERSION CHANNELS, INTERCEPTION DITCHES, ON-SITE COLLECTION DITCHES, SEDIMENT PONDS AND TRAPS, AND SILT FENCE; PROVIDE DESIGNS FOR SUBSTANTIAL STRUCTURES; INDICATE WHICH

STRUCTURES WILL REMAIN AS PERMANENT FEATURES AT THE CONCLUSION OF OPERATIONS, IF ANY;]

[J]i. Location of any processing areas on parcel, if applicable;

[K]j. North arrow;

[L]k. The scale to which the site plan is drawn;

[M]l. Preparer's name, date and seal;

[N]m. Field verification shall include staking the boundary of the parcel at sequentially visible intervals. The planning director may grant an exemption in writing to the staking requirements if the parcel boundaries are obvious or staking is unnecessary.

B. In order to aid the planning commission or planning director's decision-making process, the planning director shall provide vicinity, aerial, land use, and ownership maps for each application and may include additional information.

21.29.040. Standards for sand, gravel or material sites.

A. These material site regulations are intended to protect against aquifer disturbance, road damage, physical damage to adjacent properties, dust, noise, and visual impacts. Only the conditions set forth in KPB 21.29.050 may be imposed to meet these standards:

1. Protects against the lowering of water sources serving other properties;
2. Protects against physical damage to [OTHER] adjacent properties;
3. [MINIMIZES] Protects against off-site movement of dust;
4. [MINIMIZES] Protects against noise disturbance to other properties;
5. [MINIMIZES] Protects against visual impacts of the material site; [AND]
6. Provides for alternate post-mining land uses[.];
7. Protects Receiving Waters against adverse effects to fish and wildlife habitat;
8. Protects against traffic impacts; and

9. Provides consistency with the objectives of the Kenai Peninsula Borough Comprehensive Plan and other applicable planning documents.

21.29.050. Permit conditions.

- A. The following mandatory conditions apply to counter permits and CLUPs issued for sand, gravel or material sites:

1. [PARCEL]Permit boundaries. [ALL BOUNDARIES OF THE SUBJECT PARCEL] The buffers and any easements or right-of-way abutting the proposed permit area shall be staked at sequentially visible intervals where parcel boundaries are within 300 feet of the excavation perimeter. Field verification and staking will require the services of a professional land surveyor. Stakes shall be in place [AT TIME OF APPLICATION] prior to issuance of the permit.

- [2. *BUFFER ZONE.* A BUFFER ZONE SHALL BE MAINTAINED AROUND THE EXCAVATION PERIMETER OR PARCEL BOUNDARIES. WHERE AN EASEMENT EXISTS, A BUFFER SHALL NOT OVERLAP THE EASEMENT, UNLESS OTHERWISE CONDITIONED BY THE PLANNING DIRECTOR OR PLANNING COMMISSION.

- A. THE BUFFER ZONE SHALL PROVIDE AND RETAIN A BASIC BUFFER OF:

- I. 50 FEET OF UNDISTURBED NATURAL VEGETATION, OR

- II. A MINIMUM SIX-FOOT EARTHEN BERM WITH AT LEAST A 2:1 SLOPE, OR

- III. A MINIMUM SIX-FOOT FENCE.

- B. A 2:1 SLOPE SHALL BE MAINTAINED BETWEEN THE BUFFER ZONE AND EXCAVATION FLOOR ON ALL INACTIVE SITE WALLS. MATERIAL FROM THE AREA DESIGNATED FOR THE 2:1 SLOPE MAY BE REMOVED IF SUITABLE, STABILIZING MATERIAL IS REPLACED WITHIN 30 DAYS FROM THE TIME OF REMOVAL.

- C. THE PLANNING COMMISSION OR PLANNING DIRECTOR SHALL DESIGNATE ONE OR A COMBINATION OF THE ABOVE AS IT DEEMS APPROPRIATE. THE VEGETATION AND FENCE SHALL BE OF SUFFICIENT HEIGHT AND DENSITY TO PROVIDE VISUAL AND NOISE SCREENING OF THE PROPOSED USE AS DEEMED

APPROPRIATE BY THE PLANNING COMMISSION OR PLANNING DIRECTOR.

- D. BUFFERS SHALL NOT CAUSE SURFACE WATER DIVERSION WHICH NEGATIVELY IMPACTS ADJACENT PROPERTIES OR WATER BODIES. SPECIFIC FINDINGS ARE REQUIRED TO ALTER THE BUFFER REQUIREMENTS OF KPB 21.29.050(A)(2)(A) IN ORDER TO MINIMIZE NEGATIVE IMPACTS FROM SURFACE WATER DIVERSION. FOR PURPOSES OF THIS SECTION, SURFACE WATER DIVERSION IS DEFINED AS EROSION, FLOODING, DEHYDRATION OR DRAINING, OR CHANNELING. NOT ALL SURFACE WATER DIVERSION RESULTS IN A NEGATIVE IMPACT.
- E. AT ITS DISCRETION, THE PLANNING COMMISSION MAY WAIVE BUFFER REQUIREMENTS WHERE THE TOPOGRAPHY OF THE PROPERTY OR THE PLACEMENT OF NATURAL BARRIERS MAKES SCREENING NOT FEASIBLE OR NOT NECESSARY. BUFFER REQUIREMENTS SHALL BE MADE IN CONSIDERATION OF AND IN ACCORDANCE WITH EXISTING USES OF ADJACENT PROPERTY AT THE TIME OF APPROVAL OF THE PERMIT. THERE IS NO REQUIREMENT TO BUFFER THE MATERIAL SITE FROM USES WHICH COMMENCE AFTER THE APPROVAL OF THE PERMIT.]

2. *Buffer Area.* Material sites shall maintain buffer areas in accord with this section.

- a. A buffer area of a maximum of 100 feet shall be established between the area of excavation and the parcel boundaries. The buffer area may include one or more of the following: undisturbed natural vegetation, a minimum six-foot fence, a minimum six-foot earthen berm with at least a 2/1 slope or a combination thereof.
- b. A 2:1 slope shall be maintained between the buffer zone and excavation floor on all inactive site walls. Material from the area designated for the 2:1 slope may be removed if suitable, stabilizing material is replaced within 30 days from the time of removal.
- c. Where an easement exists, a buffer shall not overlap the easement, unless otherwise conditioned by the planning commission or planning director, as applicable.
- d. The vegetation and fence shall be of sufficient height and density to provide visual and noise screening of the proposed

use as deemed appropriate by the planning commission or the planning director.

- e. The buffer area may be reduced where the planning commission or planning director, as applicable, has approved an alternate buffer plan. The alternate buffer plan must consist of natural undisturbed vegetation, a minimum six-foot berm, or a minimum six-foot fence or a combination thereof; unless the permittee proposes another solution approved by the planning commission or planning director, as applicable, to meet this condition.
- f. The buffer requirements may be waived by the planning commission or planning director, as applicable, where the topography of the property or the placement of natural barriers makes screening not feasible or unnecessary.
- g. There is no requirement to buffer a material site from uses that commence after approval of the permit.
- h. When a buffer area has been denuded prior to review of the application by the planning commission or planning director revegetation may be required.

- 3. *Processing.* In the case of a CLUP, any equipment which conditions or processes material must be operated at least 300 feet from the parcel boundaries. At its discretion, the planning commission may waive the 300-foot processing distance requirement, or allow a lesser distance in consideration of and in accordance with existing uses of [OF ADJACENT PROPERTY AT THE TIME] the properties in the vicinity at the time of approval of the permit.

4. *Water source separation.*

- a. All permits shall be issued with a condition which prohibits any material extraction within 100 horizontal feet of any water source existing prior to original permit issuance.
- b. All counter permits shall be issued with a condition which requires that a four-foot vertical separation [FROM]between extraction operations and the seasonal high water table be maintained.
- c. All CLUPS shall be issued with a condition which requires that a [TWO] four-foot vertical separation [FROM]between

extraction operations and the seasonal high water table be maintained.

- d. There shall be no dewatering either by pumping, ditching or some other form of draining unless an exemption is granted by the planning commission. The exemption for dewatering may be granted if the operator provides a statement under seal and supporting data from a duly licensed and qualified impartial civil engineer, that the dewatering will not lower any of the surrounding property's water systems and the contractor posts a bond for liability for potential accrued damages.
5. *Excavation in the water table.* Excavation in the water table greater than 300 horizontal feet of a water source may be permitted with the approval of the planning commission based on the following:
- a. Certification by a qualified independent civil engineer or professional hydrogeologist that the excavation plan will not negatively impact the quantity of an aquifer serving existing water sources.
 - b. The installation of a minimum of three water monitoring tubes or well casings as recommended by a qualified independent civil engineer or professional hydrogeologist adequate to determine flow direction, flow rate, and water elevation.
 - c. Groundwater elevation, flow direction, and flow rate for the subject parcel, measured in three-month intervals by a qualified independent civil engineer or professional hydrogeologist, for at least one year prior to application. Monitoring tubes or wells must be kept in place, and measurements taken, for the duration of any excavation in the water table.
 - d. Operations shall not breach an aquifer-confining layer.
6. *Waterbodies.*
- a. An undisturbed buffer shall be left and no earth material extraction activities shall take place within [100] 200 linear feet from excavation limits and the ordinary high water level of surface water bodies such as a lake, river, stream, [OR OTHER WATER BODY, INCLUDING] riparian wetlands and mapped floodplains as defined in KPB 21.06. This regulation shall not apply to man-made waterbodies being constructed during the course of the materials extraction activities. In order to prevent

discharge, diversion, or capture of surface water, an additional setback from lakes, rivers, anadromous streams, and riparian wetlands may be required.

- b. Counter permits and CLUPS may contain additional conditions addressing surface water diversion.
7. *Fuel storage.* Fuel storage for containers larger than 50 gallons shall be contained in impermeable berms and basins capable of retaining 110 percent of storage capacity to minimize the potential for uncontained spills or leaks. Fuel storage containers 50 gallons or smaller shall not be placed directly on the ground, but shall be stored on a stable impermeable surface.
8. *Roads.* Operations shall be conducted in a manner so as not to damage borough roads as required by KPB 14.40.175 and will be subject to the remedies set forth in KPB 14.40 for violation of this condition.
9. *Subdivision.* Any further subdivision or return to acreage of a parcel subject to a conditional land use or counter permit requires the permittee to amend their permit. The planning director may issue a written exemption from the amendment requirement if it is determined that the subdivision is consistent with the use of the parcel as a material site and all original permit conditions can be met.
10. *Dust control.* Dust suppression is required on haul roads within the boundaries of the material site by application of water or calcium chloride.
11. *Hours of operation.* [ROCK CRUSHING EQUIPMENT SHALL NOT BE OPERATED BETWEEN 10:00 P.M. AND 6:00 A.M.]
 - a. Processing equipment shall not be operated between 7:00 p.m. and 6:00 a.m.
 - b. The planning commission may grant exceptions to increase the hours of operation and processing based on surrounding land uses, topography, screening the material site from properties in the vicinity and conditions placed on the permit by the planning commission to mitigate the noise, dust and visual impacts caused by the material site.

12. *Reclamation.*

- a. Reclamation shall be consistent with the reclamation plan approved by the planning commission or planning director as appropriate in accord with KPB 21.29.060.
- b. [AS A CONDITION OF ISSUING THE PERMIT, THE APPLICANT SHALL SUBMIT A RECLAMATION PLAN AND POST A BOND TO COVER THE ANTICIPATED RECLAMATION COSTS IN AN AMOUNT TO BE DETERMINED BY THE PLANNING DIRECTOR. THIS BONDING REQUIREMENT SHALL NOT APPLY TO SAND, GRAVEL OR MATERIAL SITES FOR WHICH AN EXEMPTION FROM STATE BOND REQUIREMENTS FOR SMALL OPERATIONS IS APPLICABLE PURSUANT TO AS 27.19.050.] The applicant shall operate the material site consistent with the approved reclamation plan and provide bonding pursuant to 21.29.060(B). This bonding requirement shall not apply to sand, gravel or material sites for which an exemption from state bond requirements for small operations is applicable pursuant to AS 27.19.050.

13. *Other permits.* Permittee is responsible for complying with all other federal, state and local laws applicable to the material site operation, and abiding by related permits. These laws and permits include, but are not limited to, the borough's flood plain, coastal zone, and habitat protection regulations, those state laws applicable to material sites individually, reclamation, storm water pollution and other applicable Environmental Protection Agency (EPA) regulations, clean water act and any other U.S. Army Corp of Engineer permits, any EPA air quality regulations, EPA and ADEC air and water quality regulations, EPA hazardous material regulations, U.S. Dept. of Labor Mine Safety and Health Administration (MSHA) regulations (including but not limited to noise and safety standards), and Federal Bureau of Alcohol, Tobacco and Firearm regulations regarding using and storing explosives. Any violation of these regulations or permits reported to or observed by borough personnel will be forwarded to the appropriate agency for enforcement.

14. [~~VOLUNTARY~~]Volunteered *permit conditions.* Conditions may be included in the permit upon agreement of the permittee and approval of the planning commission for CLUPs or the planning director for counter permits. Such conditions must be consistent with the standards set forth in KPB 21.29.040(A). Planning commission approval of such conditions shall be contingent upon a finding that the conditions will be in the best interest of the borough and the surrounding property owners. [~~VOLUNTARY~~] Volunteered permit

conditions apply to the subject parcel and operation, regardless of a change in ownership. A change in [VOLUNTARY] volunteered permit conditions may be proposed [AT] by permit [RENEWAL OR AMENDMENT] modification.

15. *Signage.* For permitted parcels on which the permittee does not intend to begin operations for at least 12 months after being granted a conditional land use permit, the permittee shall post notice of intent on parcel corners or access, whichever is more visible. Sign dimensions shall be no more than 15" by 15" and must contain the following information: the phrase "Permitted Material Site" along with the permittee's business name and a contact phone number.
16. *Appeal.* No clearing of vegetation shall occur within the 100-foot maximum buffer area from the permit boundary nor shall the permit be issued or operable until the deadline for the appeal, pursuant to KPB 21.20, has expired.
17. *Sound level.*
 - a. No sound resulting from the materials extraction activities shall create a sound level, when measured at or within the property boundary of the adjacent land, that exceeds 75 dB(A).
 - b. For any sound that is of short duration between the hours of 7 a.m. and 7 p.m. the levels may be increased by:
 - i. Five dB(A) for a total of 15 minutes in any one hour; or
 - ii. Ten dB(A) for a total of five minutes in any hour; or
 - iii. Fifteen db(A) for a total of one and one-half minutes in any one-hour period.
 - c. At its discretion, the planning commission or planning director, as applicable, may reduce or waive the sound level requirements on any or all property boundaries. Sound level requirements shall be made in consideration of and in accordance with existing uses of the properties in the vicinity at the time of approval of the permit.
 - d. Mandatory condition KPB 21.29.050(A)(17) shall expire 365 days from adoption of KPB 21.29.050(A)(17) unless extended or modified by the assembly.

18. Reverse signal alarms. Reverse signal alarms, used at the material site on loaders, excavators, and other earthmoving equipment shall be more technically advanced devices; such as, a multi-frequency “white noise” alarms rather than the common, single (high-pitch) tone alarms. At its discretion, the planning commission or planning director, as applicable, may waive this requirement or a portion of this requirement. The waiver of this requirement shall be made in consideration of and in accordance with existing uses of the properties in the vicinity at the time of approval of the permit.
19. Ingress and egress. The planning commission or planning director may determine the points of ingress and egress for the material site. The permittee is not required to construct haul routes outside the parcel boundaries of the material site. Driveway authorization must be acquired, from either the state through an “Approval to Construct” or a borough road service area as appropriate, prior to issuance of a material site permit when accessing a public right-of-way.
20. Dust suppression. Dust suppression shall be required when natural precipitation is not adequate to suppress the dust generated by the material site traffic on haul routes. Based on surrounding land uses the planning commission or planning director, as applicable, may waive or reduce the requirement for dust suppression on haul routes.
21. Surface water protection. Use of surface water protection measures as specified in KPB 21.29.030(A)(8) must be approved by a licensed civil engineer.
22. Groundwater elevation. All material sites must maintain one monitoring tube per ten acres of excavated area four feet below the proposed excavation.
23. Setback. Material site excavation areas shall be 250-feet from the property boundaries of any local option zoning district, existing public school ground, private school ground, college campus, child care facility, multi-purpose senior center, assisted living home, and licensed health care facility. If overlapping, the buffer areas of the excavation shall be included in the 250-foot setback.

21.29.055. Decision.

The planning commission or planning director, as applicable, shall approve permit applications meeting the mandatory conditions or shall disapprove permit applications that do not meet the mandatory conditions. The decision shall include written findings supporting the decision, and when applicable, there shall be written findings supporting any site-specific alterations to the mandatory condition as

specifically allowed by KPB 21.29.050(A)(2)(a), (2)(c), (2)(d), (2)(e), (2)(g), (3), (4)(d), (5), (11)(b), (12), (14), (17)(c), (18), (19), and (20) and as allowed for the KPB 21.29.060 reclamation plan.

21.29.060. Reclamation plan.

- A. All material site permit applications require an overall reclamation plan along with a five-year reclamation plan. A site plan for reclamation shall be required including a scaled drawing with finished contours. A five-year reclamation plan must be submitted with a permit extension request.
- B. The applicant shall revegetate with a non-invasive plant species and reclaim all disturbed land [UPON EXHAUSTING THE MATERIAL ON-SITE, OR WITHIN A PRE-DETERMINED TIME PERIOD FOR LONG-TERM ACTIVITIES, SO AS TO LEAVE THE LAND IN A STABLE CONDITION. RECLAMATION MUST OCCUR FOR ALL EXHAUSTED AREAS OF THE SITE EXCEEDING FIVE ACRES BEFORE A FIVE-YEAR RENEWAL PERMIT IS ISSUED, UNLESS OTHERWISE REQUIRED BY THE PLANNING COMMISSION. IF THE MATERIAL SITE IS ONE ACRE OR LESS IN SIZE AND HAS BEEN GRANTED A CLUP DUE TO EXCAVATION IN THE WATER TABLE, RECLAMATION MUST BE PERFORMED AS SPECIFIED BY THE PLANNING COMMISSION OR PLANNING DIRECTOR IN THE CONDITIONAL USE OR COUNTER PERMIT] within the time period approved with the reclamation plan so as to leave the land in a stable condition. Bonding shall be required at \$2,000.00 per acre for all acreage included in the current five-year reclamation plan. In the alternative, the planning director may accept a civil engineer's estimate for determining the amount of bonding. If the applicant is bonded with the state, the borough's bonding requirement is waived. Compliance with reclamation plans shall be enforced under KPB 21.50.
- C. The following measures must be considered in the [PREPARING] preparation, approval and [IMPLEMENTING] implementation of the reclamation plan, although not all will be applicable to every reclamation plan.
 - 1. Topsoil that is not promptly redistributed to an area being reclaimed will be separated and stockpiled for future use. [THIS MATERIAL WILL BE PROTECTED FROM EROSION AND CONTAMINATION BY ACIDIC OR TOXIC MATERIALS AND PRESERVED IN A CONDITION SUITABLE FOR LATER USE.]
 - 2. The area will be backfilled, graded and recontoured using strippings, overburden, and topsoil [TO A CONDITION THAT ALLOWS FOR THE REESTABLISHMENT OF RENEWABLE RESOURCES ON THE SITE WITHIN A REASONABLE PERIOD OF TIME. IT WILL BE STABILIZED TO A CONDITION THAT WILL ALLOW SUFFICIENT MOISTURE FOR

REVEGETATION] so that it will be stabilized to a condition that will allow for the revegetation as required by KPB 21.29.060(B).

3. [SUFFICIENT QUANTITIES OF STOCKPILED OR IMPORTED TOPSOIL WILL BE SPREAD OVER THE RECLAIMED AREA TO A DEPTH OF FOUR INCHES TO PROMOTE NATURAL PLANT GROWTH THAT CAN REASONABLY BE EXPECTED TO REVEGETATE THE AREA WITHIN FIVE YEARS. THE APPLICANT MAY USE THE EXISTING NATURAL ORGANIC BLANKET REPRESENTATIVE OF THE PROJECT AREA IF THE SOIL IS FOUND TO HAVE AN ORGANIC CONTENT OF 5% OR MORE AND MEETS THE SPECIFICATION OF CLASS B TOPSOIL REQUIREMENTS AS SET BY ALASKA TEST METHOD (ATM) T-6.] The [MATERIAL] topsoil used for reclamation shall be reasonably free from roots, clods, sticks, and branches greater than 3 inches in diameter. Areas having slopes greater than 2:1 require special consideration and design for stabilization by a licensed engineer.
4. Exploration trenches or pits will be backfilled. Brush piles and unwanted vegetation shall be removed from the site, buried or burned. Topsoil and other organics will be spread on the backfilled surface to inhibit erosion and promote natural revegetation.
5. [PEAT AND T]Topsoil mine operations shall ensure a minimum of [TWO] four inches of suitable growing medium is left or replaced on the site upon completion of the reclamation activity (unless otherwise authorized).
6. Ponding may be used as a reclamation method as approved by the planning commission.

- D. The five-year reclamation plan shall describe the total acreage to be reclaimed [EACH YEAR, A LIST OF EQUIPMENT (TYPE AND QUANTITY) TO BE USED IN RECLAMATION, AND A TIME SCHEDULE OF RECLAMATION MEASURES] relative to the total excavation plan.

21.29.070. Permit extension and revocation.

- A. Conditional land use permittees must submit a request in writing for permit extension every five years after the permit is issued. Requests for permit extension must be made at least 30 days prior to permit expiration. Counter permittees must submit any request for a 12-month extension at least 30 days prior to the expiration of the original 12-month permit period.
- B. A permit extension certificate for a CLUP may be granted by the planning director after 5 years, and after one year for a counter permit where no modification to operations or conditions are proposed.

- C. Permit extension may be denied if: (1) reclamation required by this chapter and the original permit has not been performed; (2) the permittee is otherwise in noncompliance with the original permit conditions; or (3) the permittee has had a permit violation in the last two years and has not fulfilled compliance requests.
- D. A modification application shall be processed pursuant to KPB 21.29.030-050 with public notice given as provided by KPB 21.25.060 when operators request modification of their permit conditions based on changes in operations set forth in the modification application.
- E. There shall be no fee for permit extensions approved by the planning director. The fee for a permit modification processed under KPB 21.29.070(D) will be the same as an original permit application in the amount listed in the most current Kenai Peninsula Borough Schedule of Rates, Charges and Fees.
- F. Failure to submit a request for extension will result in the expiration of the permit. The borough may issue a permit termination document upon expiration pursuant to KPB 21.29.080. Once a permit has expired, a new permit application approval process is required in order to operate the material site.
- G. Permits may be revoked pursuant to KPB 21.50. 21.29.080. - Permit termination.

When a permit expires, is revoked, or a permittee requests termination of their permit, a review of permit conditions and site inspections will be conducted by the planning department to ensure code compliance and verify site reclamation prior to termination. When the planning director determines that a site qualifies for termination, a termination document shall be issued to the permittee.

21.29.090. Permit modifications.

If a permittee revises or intends to revise operations (at a time other than permit extension) so that they are no longer consistent with the original application, a permit modification is required. The planning director shall determine whether the revision to operations requires a modification. Permit modification shall be processed in the same manner as original permits.

21.29.100. Recordation.

All permits, permit extensions, modified permits, prior existing uses, and terminations shall be recorded. Failure to record a material site document does not affect the validity of the documents.

21.29.110. Violations.

- A. Violations of this chapter shall be governed by KPB 21.50.
- B. In addition to the remedies provided in KPB 21.50, the planning director may require bonding in a form and amount adequate to protect the borough's interests for an owner or operator who has been cited for three violations of KPB 21.50, 21.25, and 21.29 within a three-year period. The violations need not be committed at the same material site. Failure to provide requested bonding may result in permit revocation proceedings.

21.29.120. Prior existing uses.

- A. Material sites are not held to the standards and conditions of a CLUP if a prior existing use (PEU) determination was granted for the parcel in accordance with KPB 21.29.120(B). To qualify as a PEU, a parcel's use as a material site must have commenced or have been operated after May 21, 1986, and prior to May 21, 1996, provided that the subject use continues in the same location. In no event shall a prior existing use be expanded beyond the smaller of the lot, block, or tract lines as they existed on May 21, 1996. If a parcel is further subdivided after May 21, 1996, the pre-existing use may not be expanded to any lot, tract, or parcel where extraction had not occurred before or on February 16, 1999. If a parcel is subdivided where extraction has already occurred, the prior existing use is considered abandoned, and a CLUP must be obtained for each parcel intended for further material site operations. The parcel owner may overcome this presumption of abandonment by showing that the subdivision is not inconsistent with material site operation. If a parcel subject to a prior existing use is conveyed, the prior existing use survives the conveyance.
- B. Owners of sites must have applied to be registered as a prior existing use prior to January 1, 2001.
- C. [ANY PRIOR EXISTING USE THAT HAS NOT OPERATED AS A MATERIAL SITE BETWEEN MAY 21, 1996, AND MAY 21, 2011, IS CONSIDERED ABANDONED AND MUST THEREAFTER COMPLY WITH THE PERMIT REQUIREMENTS OF THIS CHAPTER. THE PLANNING DIRECTOR SHALL DETERMINE WHETHER A PRIOR EXISTING USE HAS BEEN ABANDONED. AFTER GIVING NOTICE TO THE PARCEL OWNER THAT A PEU IS CONSIDERED ABANDONED, A PARCEL OWNER MAY

PROTEST THE TERMINATION OF THE PEU BY FILING WRITTEN NOTICE WITH THE PLANNING DIRECTOR ON A FORM PROVIDED BY THE PLANNING DEPARTMENT. WHEN A PROTEST BY A PARCEL OWNER IS FILED, NOTICE AND AN OPPORTUNITY TO MAKE WRITTEN COMMENTS REGARDING PRIOR EXISTING USE STATUS SHALL BE ISSUED TO OWNERS OF PROPERTY WITHIN A ONE-HALF MILE RADIUS OF THE PARCEL BOUNDARIES OF THE SITE. THE OWNER OF THE PARCEL SUBJECT TO THE PRIOR EXISTING USE MAY SUBMIT WRITTEN INFORMATION, AND THE PLANNING DIRECTOR MAY GATHER AND CONSIDER ANY INFORMATION RELEVANT TO WHETHER A MATERIAL SITE HAS OPERATED. THE PLANNING DIRECTOR MAY CONDUCT A HEARING IF HE OR SHE BELIEVES IT WOULD ASSIST THE DECISION-MAKING PROCESS. THE PLANNING DIRECTOR SHALL ISSUE A WRITTEN DETERMINATION WHICH SHALL BE DISTRIBUTED TO ALL PERSONS MAKING WRITTEN COMMENTS. THE PLANNING DIRECTOR'S DECISION REGARDING TERMINATION OF THE PRIOR EXISTING USE STATUS MAY BE APPEALED TO THE PLANNING COMMISSION WITHIN 15 DAYS OF THE DATE OF THE NOTICE OF DECISION.]

The owner of a material site that has been granted a PEU determination shall provide proof of compliance with AS 27.19.030 – 050 concerning reclamation to the planning department no later than July 1, 2022. The proof shall consist of an Alaska Department of Natural Resources (DNR) approved reclamation plan and receipt for bonding or a letter of intent filed with DNR.

1. The planning department may request proof of continued compliance with AS 27.19.030 – 050 on an annual basis.
2. Pursuant to KPB 21.29.110 the enforcement process and remedies set forth in KPB 21.50 shall govern if the proof that the statutory requirements contained in AS 27.19.030-050 is not provided to the planning department.

SECTION 3. That KPB 21.50.055 is hereby amended, as follows:

21.50.055. Fines.

- A. Following are the fines for violations of this title. Each day a violation occurs is a separate violation. Violations begin to accrue the date the enforcement notice is issued and continue to the date the enforcement is initially set for hearing. The fine for a violation may not be reduced by the hearing officer to less than the equivalent of one day's fine for each type of violation.

CODE CHAPTER & SECTION	VIOLATION DESCRIPTION	DAILY FINE
KPB 20.10.030(A)	Offering land for sale without final plat approval	\$300.00
KPB 20.10.030(B)	Filing/recording unapproved subdivision/plat	\$300.00
KPB 20.10.030(C)	Violation of subdivision code or condition	\$300.00
KPB 21.05.040(C)	Violation of variance conditions	\$300.00
KPB 21.06.030(D)	Structure or activity prohibited by KPB 21.06	\$300.00
KPB 21.06.040	Failure to obtain a Development Permit/Floodplain Management	\$300.00
KPB 21.06.045	Failure to obtain a SMFDA Development Permit/Violation of SMFDA permit conditions/Floodplain Management	\$300.00
KPB 21.06.050	Violation of permit conditions/Floodplain Management	\$300.00
KPB 21.18.071	Failure to obtain staff permit/Violation of staff permit/Anadromous Streams Habitat Protection	\$300.00
KPB 21.18.072	Failure to obtain limited commercial activity permit/Violation of permit conditions/Anadromous Streams Habitat Protection	\$300.00
KPB 21.18.075	Prohibited use or structure/Anadromous Streams Habitat Protection	\$300.00
KPB 21.18.081	Failure to obtain Conditional Use Permit/Violation of Conditional Use Permit Condition/Anadromous Streams Habitat Protection	\$300.00
KPB 21.18.090	Failure to obtain prior existing use/structure permit/Violation of permit conditions/Anadromous Streams Habitat Protection	\$300.00
KPB 21.18.135(C)	Violation of emergency permit conditions/anadromous stream habitat protection	\$300.00

CODE CHAPTER & SECTION	VIOLATION DESCRIPTION	DAILY FINE
KPB 21.25.040	Failure to Obtain a Permit/Material Site/Correctional community residential center/Concentrated Animal Feeding Operation	\$300.00
KPB 21.28.030	Violation of permit conditions/Concentrated Animal Feeding Operations	\$300.00
KPB 21.29.020	Failure to Obtain a counter permit/Material Site Permits	\$300.00
KPB 21.29.050	Violation of Conditional Land Use Permit Conditions/Material Site Permits Also applies to KPB 21.26 material site permits	\$300.00
KPB 21.29.060	Violation of Reclamation Plan/Material Site Permits Also applies to KPB 21.26 material site permits	\$300.00
<u>KPB 21.29.120</u>	<u>Failure to Provide Reclamation Plan and Proof of Bonding or Letter of Intent</u>	<u>\$300.00</u>
KPB 21.44.100	Violation of Pre-existing structures/Local Option Zoning	\$300.00
KPB 21.44.110(D)	Prohibited expansion of nonconforming use/Local Option Zoning	\$300.00
KPB 21.44.110(E)	Prohibited Change in Use/Local Option Zoning	\$300.00
KPB 21.44.110(G)	Violation of Conditions on Nonconforming Use/Local Option Zoning	\$300.00
KPB 21.44.130(C)(D)	Violation of Home Occupation Standards and Conditions/Local Option Zoning	\$300.00
KPB 21.44.130(F)	Disallowed Home Occupation/Local Option Zoning	\$300.00
KPB 21.44.135	Failure to file development notice	\$300.00
KPB 21.44.160(A)(B)	Prohibited use	\$300.00

CODE CHAPTER & SECTION	VIOLATION DESCRIPTION	DAILY FINE
KPB 21.44.160(C)	Violation of Development Standards/Single Family Zoning/Local Option Zoning	\$300.00
KPB 21.44.165(A)(B)	Prohibited use	\$300.00
KPB 21.44.165(C)	Violation of Development Standards/Small Lot Residential Zoning/Local Option Zoning	\$300.00
KPB 21.44.170(A)(B)	Prohibited use	\$300.00
KPB 21.44.170(C)	Violation of Development Standards/Rural Residential District/Local Option Zoning	\$300.00
KPB 21.44.175(B)(C)	Prohibited Use	\$300.00
KPB 21.44.175(D)	Violation of Development Standards/Residential Waterfront	\$300.00
KPB 21.44.180(A)(B)	Prohibited Use	\$300.00
KPB 21.44.180(C)	Violation of Development Standards/Multi-Family Residential District/Local Option Zoning	\$300.00
KPB 21.44.190(A)(B)	Prohibited Use	\$300.00
KPB 21.44.190(C)	Violation of Development Standards/Industrial District/Local Option Zoning	\$300.00
KPB 21.46.030(b)	Failure to maintain bear-resistant garbage cans/Local option zone/Birch and Grove Ridge subdivisions Rural Residential District	\$300.00
KPB 21.50.100(F)	Removal of posted enforcement notice	\$300.00
KPB 21.50.100(G)	Violation of enforcement notice	\$1,000.00
KPB 21.50.130(I)	Violation of an enforcement order	\$1,000.00

SECTION 4. That this ordinance shall become effective upon its enactment.

**ENACTED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH THIS * DAY
OF *, 2022.**

Brent Johnson, Assembly President

ATTEST:

Johani Blankenship, MMC, Borough Clerk

Yes: Bjorkman, Derkevorkian, Elam, Tupper, Johnson

No: Chesley, Cox, Ecklund

Absent: Hibbert

[Clerk's Note: At the 01/18/22 meeting this amendment failed 4 Yes, 4 No, 1 Absent. Notice of reconsideration was given by Mr. Elam.]

Kenai Peninsula Borough Assembly

MEMORANDUM

TO: Brent Johnson, Assembly President
Members, Kenai Peninsula Borough Assembly

FROM: Bill Elam, Assembly Member *BE*

DATE: January 18, 2022

SUBJECT: Elam Amendment #2 to Ordinance 2021-41, Amending KPB 21.29, KPB 21.25, and KPB 21.50.055 Regarding Material Site Permits, Applications, Conditions, and Procedures (Johnson, Mayor)

[Please note the bold underlined language is new and the strikeout bold language in brackets is to be deleted.]

- Amend Section 2, KPB 21.29.040(A), as follows:

21.29.040. Standards for sand, gravel or material sites.

- A. These material site regulations are intended to protect against aquifer disturbance, road damage, physical damage to adjacent properties, dust, noise, and visual impacts. ~~**[Only the conditions set forth in KPB 21.29.050 may be imposed to meet these standards:]**~~ **The mandatory conditions of 21.29.050 are express conditions precedent to the granting of any conditional land use permit and after a public hearing, the planning commission must find, in writing, that through imposition of all the mandatory conditions under KPB 21.29.050 that the following standards are met:**
1. ~~**[Protects against the lowering of water sources serving other properties;]**~~ **The use is not inconsistent with the applicable comprehensive plan;**
 2. ~~**[Protects against physical damage to [other] adjacent properties;]**~~ **The use will preserve the value, spirit, character, and integrity of the surrounding area;**

Page 2 of 2

Date: January 18, 2022

RE: Elam Amendment #2 to O2021-41

3. ~~[[Minimizes] Protects against off-site movement of dust;]~~
The applicant has met all other requirements of this chapter pertaining to the use in question;
4. ~~[[Minimizes] Protects against noise disturbance to other properties;]]~~
That granting the permit will not be harmful to the public health, safety and general welfare; and
5. ~~[[Minimizes] Protects against visual impacts of the material site; [and]]~~
The sufficient setbacks, lot area, buffers or other safeguards are being provided to meet the conditions listed in KPB 21.29.050.
- ~~[6. Provides for alternate post-mining land uses[.];]~~
- ~~[7. Protects Receiving Waters against adverse effects to fish and wildlife habitat;]~~
- ~~[8. Protects against traffic impacts; and]~~
- ~~[9. Provides consistency with the objectives of the Kenai Peninsula Borough Comprehensive Plan and other applicable planning documents.]~~

Your consideration of this amendment is appreciated.

Kenai Peninsula Borough Assembly

MEMORANDUM

TO: Brent Johnson, Assembly President
Members, Kenai Peninsula Borough Assembly

FROM: Cindy Ecklund, Assembly Member ^{1st}
Mike Tupper, Assembly Member ^{MT}

DATE: January 18, 2022

SUBJECT: Amendment to Ordinance 2021-41, Amending KPB 21.29, KPB 21.25,
and KPB 21.50.055 Regarding Material Site Permits, Applications,
Conditions, and Procedures (Johnson, Mayor)

[Please note the bold underlined language is new and the strikeout bold language in brackets is to be deleted.]

- Amend Section 2, KPB 21.29.050(A)(2)(a), as follows:

21.29.050. Permit conditions.

- A. The following mandatory conditions apply to counter permits and CLUPs issued for sand, gravel, or material sites:

...

2. Buffer Area. Material sites shall maintain buffer areas in accord with this section.

- a. A buffer area of a maximum of 100 feet shall be established between the area of excavation and the parcel boundaries. The buffer area may include one or more of the following: undisturbed natural vegetation, a minimum six-foot fence, ~~a minimum six-foot berm~~ **a minimum six-foot earthen berm with at least a 2/1 slope** or a combination thereof.

Clerk's Note: This amendment was approved at the 01/18/22 meeting. 8 Yes, 0 No, 1 Absent

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January 18, 2021

Re: Ecklund and Tupper Amendments to O2021-41

- Amend Section 2, KPB Section 21.29.050(A)(2)(c), as follows:

21.29.050. Permit conditions.

- A. The following mandatory conditions apply to counter permits and CLUPs issued for sand, gravel, or material sites:

...

2. Buffer Area. Material sites shall maintain buffer areas in accord with this section.

Clerk's Note: This amendment was approved at the 01/18/22 meeting. 5 Yes, 3 No, 1 Absent

- c. Where an easement exists, a buffer shall not overlap the easement, unless otherwise conditioned by the planning commission or planning director, as applicable. **d. The vegetation and fence shall be of sufficient height and density to provide visual and noise screening of the proposed use as deemed appropriate by the planning commission or the planning director.**

- Amend Section 2, KPB Section 21.29.050(A)(2)(d), as follows:

- A. The following mandatory conditions apply to counter permits and CLUPs issued for sand, gravel, or material sites:

...

2. Buffer Area. Material sites shall maintain buffer areas in accord with this section.

...

- d. The buffer area may be reduced where the planning commission or planning director, as applicable, has approved an alternate buffer plan. The alternate buffer plan must consist of natural undisturbed vegetation, ~~a minimum six-foot berm~~, **a minimum six-foot earthen berm with at least a 2/1 slope** or a minimum six-foot fence or a combination thereof; unless the permittee proposes another solution approved by the planning

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January 18, 2021

Re: Ecklund and Tupper Amendments to O2021-41

commission or planning director, as applicable, to meet this condition.

➤ Amend Section 2, KPB 21.29.055, as follows:

21.29.055. Decision.

~~[The planning commission or planning director, as applicable, shall approve permit applications meeting the mandatory conditions or shall disapprove permit applications that do not meet the mandatory conditions. The decision shall include written findings supporting the decision, and when applicable, there shall be written findings supporting any site-specific alterations to the mandatory condition as specifically allowed by KPB 21.29.050(A)(2)(a), (2)(c), (2)(d), (2)(e), (2)(g), (3), (4)(d), (5), (11)(b), (12), (14), (17)(c), (18), (19), and (20) and as allowed for the KPB 21.29.060 reclamation plan.]~~

The planning commission or planning director, as applicable, shall approve permit applications whereby mandatory standards under KPB 21.29.040 have been met through implementation of imposed and volunteered conditions set forth in KPB 21.29.050, or shall disapprove permit applications when the imposed and volunteered conditions do not meet the mandatory standards in KPB 21.29.040.

The decision shall include written findings detailing how the imposed and volunteered condition under KPB 21.29.050 meet, or do not meet the mandatory standards set forth in KPB 21.29.040, and evidence to support those findings. When applicable, there shall be written findings supporting any site-specific alterations to the mandatory condition as specifically allowed by KPB 21.29.050(A)(2)(a), (2)(c), (2)(d), (2)(e), (2)(g), (3), (4)(d), (5), (11)(b), (12), (14), (17)(c), (18), (19), and (20) and as allowed for the KPB 21.29.060 reclamation plan.

Your consideration of these amendments is appreciated.

Introduced by: Elam, Derkevorkian
Substitute Introduced: 02/01/22
O2021-41 (Mayor, Johnson) See Original Ordinance for Prior History
Action:
Vote:

**KENAI PENINSULA BOROUGH
ORDINANCE 2021-41
(ELAM, DERKEVORKIAN) SUBSTITUTE**

**AN ORDINANCE AMENDING KPB 21.29, KPB 21.25, AND KPB 21.50.055
REGARDING MATERIAL SITE PERMITS, APPLICATIONS, CONDITIONS, AND
PROCEDURES**

- WHEREAS,** Goal 2, Focus Area: Land Use, Objective A of the 2019 Kenai Peninsula Borough Comprehensive Plan is to establish policies to minimize land use conflicts, protect natural systems, and support individual land use freedoms; and
- WHEREAS,** Goal 2, Focus Area: Land Use, Objective A, Strategy 2 of the 2019 Comprehensive Plan is to update the Borough's existing conditional use regulations for material extraction to better address reoccurring land use conflicts; and
- WHEREAS,** Goal 2, Focus Area: Land Use, Objective A, Strategy 2a of the 2019 Comprehensive Plan is to clarify the broad purpose of the conditional use process and clear parameters for allowable conditional uses that include reasonable, project-specific conditions that reduce impacts on surrounding use; and
- WHEREAS,** Goal 2, Focus Area: Land Use, Objective A, Strategy 2d of the 2019 Comprehensive Plan is to complete improvements to the rules guiding gravel extraction, with the goal of providing an appropriate balance between providing access to affordable materials for development and quality of life for borough residents; and
- WHEREAS,** Goal 1 of the Mining and Minerals Processing section of the 1990 Kenai Peninsula Borough Coastal Management Program is to provide opportunities to explore, extract and process minerals, sand and gravel resources, while protecting environmental quality and other resource users; and
- WHEREAS,** an assembly subcommittee was formed in 2005 to review the material site code; and
- WHEREAS,** Ordinance 2006-01 (Substitute) codified as KPB 21.29 was adopted in 2006 after consideration of the subcommittee's report; and
- WHEREAS,** the planning department has been administering Ordinance 2006-01 (Substitute), codified as KPB 21.29 for 13 years; and

WHEREAS, KPB 21.25.040 requires a permit for the commencement of certain land uses within the rural district of the Kenai Peninsula Borough; and

WHEREAS, the planning department has recognized that certain provisions of the material site ordinance could be better clarified for the operators, public, and staff; and

WHEREAS, the planning commission and planning department received comments expressing concerns about dust, noise, safety; and

WHEREAS, approximately 253 registered prior existing use material sites and approximately 99 conditional land use permits for material sites have been granted since 1996;

WHEREAS, the planning department receives numerous complaints regarding unreclaimed parcels registered as nonconforming prior existing material sites which have not been regulated by KPB; and

WHEREAS, the assembly established a material site work group by adoption of resolution 2018-004 (Substitute) to engage in a collaborative discussion involving the public and industry to make recommendations regarding the material site code; and

WHEREAS, at its regularly scheduled meeting of November 12, 2019, the planning commission recommended approval by unanimous consent;

NOW, THEREFORE, BE IT ORDAINED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH:

SECTION 1. That KPB 21.25.030 is hereby amended, as follows:

21.25.030. Definitions.

Unless the context requires otherwise, the following definitions apply to CLUPs:

Abandon means to cease or discontinue a use without intent to resume, but excluding short-term interruptions to use or activity during periods of remodeling, maintaining, or otherwise improving or rearranging a facility or during normal periods of vacation or seasonal closure. An "intent to resume" can be shown through continuous operation of a portion of the facility, maintenance of utilities, or outside proof of continuance, e.g., bills of lading or delivery records. Abandonment also means the cessation of use, regardless of voluntariness, for a specified period of time.

Animal feeding operation means a lot or facility (other than an aquatic animal production facility) where animals (other than aquatic animals) have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period.

- a. The same animals need not remain on the lot for 45 days or more; rather, some animals are fed or maintained on the lot 45 days out of any 12-month period, and
- b. Animals are "maintained" for purposes of this ordinance when they are confined in an area where waste is generated and/or concentrated or are watered, cleaned, groomed, or medicated in a confined area, even if the confinement is temporary.
- c. Two or more animal feeding operations under common ownership are considered, for the purposes of these regulations, to be a single animal feeding operation if they adjoin each other.
- d. Slaughterhouses are animal feeding operations.

Animal unit means a unit of measurement for any animal feeding operation calculated by adding the following numbers: the number of slaughter and feeder cattle multiplied by 1.0, plus the number of mature dairy cattle multiplied by 1.4, plus the number of swine weighting [weighing] over 25 kilograms (approximately 55 pounds) multiplied by 0.4, plus the number of sheep multiplied by 0.1, plus the number of horses multiplied by 2.0.

Animal waste means animal excrement, animal carcasses, feed wasted, process wastewaters or any other waste associated with the confinement of animals from an animal feeding operation.

Animal waste management system means a combination of structures and nonstructural practices serving an animal feeding operation that provides for the collection, treatment, disposal, distribution, storage and land application of animal waste.

Aquifer means a subsurface formation that contains sufficient water-saturated permeable material to yield economical quantities of water to wells and springs.

Aquifer-confining layer means that layer of relatively impermeable soil below an aquifer, typically clay, which confines water.

Assisted living home means a residential facility that serves three or more adults who are not related to the owner by blood or marriage, or that receives state or that receives state or federal payment for service of the number of adults served. The services and activities may include, but are not limited to, housing and food services to its residents, assistance with activities of daily living, and personal assistance, and that complies with Alaska Statutes 47.32.0101 – 47.60.900, as amended.

Child care facility means a place where child care is regularly provided for children under the age of 12 for periods of time that are less than 24 hours in duration and that is licensed pursuant to AS 47.35.005 et seq., excluding child care homes and child care group homes, as currently written or hereafter amended.

Commercial means any provision of services, sale of goods, or use operated for production of income whether or not income is derived, including sales, barter, rental, or trade of goods and services.

Concentrated animal feeding operation (CAFO) means an animal feeding operation confining at least: (1) 1,000 swine weighing at least approximately 55 pounds; (2) 1,000 slaughter and feeder cattle; (3) 700 mature dairy cattle; (4) 500 horses; (5) 10,000 sheep or lambs; (6) 55,000 turkeys; (7) 100,000 laying hens or broilers (if the facility has continuous overflow watering); (8) 30,000 laying hens or broilers (if the facility has a liquid manure system); (9) 5,000 ducks; (10) 1,000 animal units; or (11) a combination of the above resulting in at least 1,000 animal units. Each individual parcel upon which a CAFO is located is a separate CAFO unless they adjoin each other.

Conditioning or processing material means a value-added process including batch plants, asphalt plants, screening, washing, and crushing by use of machinery.

Correctional community residential center (CCRC) means a community residential center, other than a correctional institution, for the short-term or temporary detention of prisoners in transition from a correctional institution, performing restitution, or undergoing rehabilitation or recovery from a legal infirmity. CCRCs may not be used for detention of prisoners who pose a threat or danger to the public for violent or sexual misconduct without imprisonment or physical confinement under guard or twenty-four-hour physical supervision. The determination of whether a prisoner poses a threat or danger to the public for violent or sexual misconduct without imprisonment or physical confinement under guard or twenty-four-hour physical supervision shall be made by the commissioner of corrections for state prisoners and the United States Attorney General, or the U.S. Director of Bureau of Prisons for federal prisoners.

Correctional institution means a facility other than a correctional community residential center providing for the imprisonment or physical confinement or detention of prisoners under guard or twenty-four-hour physical supervision, such as prisons, prison farms, jails, reformatories, penitentiaries, houses of detention, detention centers, honor camps, and similar facilities.

Development plan means a plan created to describe a proposed development on a specific building site excluding material sites under KPB 21.29.020.

Disturbed includes active excavation and all areas necessary to use a parcel as a material site including but not limited to berms, stockpiles, and excavated areas excluding all areas reclaimed for alternate post mining land uses.

[*EXHAUSTED* MEANS THAT ALL MATERIAL OF A COMMERCIAL QUALITY IN A SAND, GRAVEL, OR MATERIAL SITE HAS BEEN REMOVED.]

Federal prisoners means offenders in the custody or control or under the care or supervision of the United States Attorney General or the Bureau of Prisons.

Groundwater means, in the broadest sense, all subsurface water, more commonly that part of the subsurface water in the saturated zone.

Liquid manure or liquid animal waste system means any animal waste management system which uses water as the primary carrier of such waste into a primary retention structure.

Multi-purpose senior center is a facility where persons 60 years of age or older are provided with services and activities suited to their particular needs. The services and activities may include, but are not limited to, health examinations, legal assistance, recreation programs, general social activities, telephone reassurance programs, nutrition classes, meals at minimum cost, counseling, protective services, programs for shut-ins and education programs, and that complies with Alaska Statutes 47.60.010—47.60.090, as currently written or hereafter amended.

Permit area includes all excavation, processing, buffer and haul route areas of a CLUP or counter permit.

Person shall include any individual, firm, partnership, association, corporation, cooperative, or state or local government.

Prisoner means:

- a. a person held under authority of state law in official detention as defined in AS 11.81.900;
- b. includes a juvenile committed to the custody of the Alaska Department of Corrections Commissioner when the juvenile has been charged, prosecuted, or convicted as an adult.

Private school is a school comprised of kindergarten through 12th grade, or any combination of those grades, that does not receive direct state or federal funding and that complies with either Alaska Statute 14.45.030 or 14.45.100—14.45.130, as currently written or hereafter amended.

Public school is a school comprised of kindergarten through 12th grade, or any combination of those grades, that is operated by the State of Alaska or any political subdivision of the state.

Sand, gravel or material site means an area used for extracting, quarrying, or conditioning gravel or substances from the ground that are not subject to permits through the state location (mining claim) system (e.g., gold, silver, and other metals), nor energy minerals including but not limited to coal, oil, and gas.

Seasonal high groundwater table means the highest level to which the groundwater rises on an annual basis.

Senior housing project means senior housing as defined for purposes of construction or operation in 15 Alaska Administrative Code 151.950(c), as currently written or hereafter amended.

Stable condition means the rehabilitation, where feasible, of the physical environment of the site to a condition that allows for the reestablishment of renewable resources on the site within a reasonable period of time by natural processes.

Surface water means water on the earth's surface exposed to the atmosphere such as rivers, lakes, and creeks.

Topsoil means material suitable for vegetative growth.

Waterbody means any lake, pond, stream, riparian wetland, or groundwater into which storm water runoff is directed.

Water source means a well, spring or other similar source that provides water for human consumptive use.

SECTION 2. That KPB 21.29 is hereby amended, as follows:

CHAPTER 21.29. MATERIAL SITE PERMITS

21.29.010. Material extraction exempt from obtaining a permit.

- A. Material extraction which disturbs an area of less than one acre that is not in a mapped flood plain or subject to 21.29.010(B), does not enter the water table, and does not cross property boundaries, does not require a permit. There will be no excavation within 20 feet of a right-of-way or within ten feet of a lot line.
- B. Material extraction taking place on dewatered bars within the confines of the Snow River and the streams within the Seward-Bear Creek Flood

Service Area does not require a permit, however, operators subject to this exemption shall provide the planning department with the information required by KPB 21.29.030(A)(1), (2), (6), (7) and a current flood plain development permit prior to beginning operations.

- C. A prior existing use under KPB 21.29.120 does not require a material extraction permit, but a floodplain development permit is required for all activities within any mapped special flood hazard area.
- D. Material extraction incidental to site development does not require a permit when an approved site development plan is on file with the planning department. Site development plans are approved by the planning director and are valid for one year. The site development plan may be renewed on an annual basis subject to the planning director's approval.

21.29.020. Material extraction and activities requiring a permit.

- A. *Counter permit.* A counter permit is required for material extraction which disturbs no more than 2.5 cumulative acres and does not enter the water table. Counter permits are approved by the planning director, and are not subject to the notice requirements or planning commission approval of KPB 21.25.060. A counter permit is valid for a period of 12 months, with a possible 12-month extension.
- B. *Conditional land use permit.* A conditional land use permit (CLUP) is required for material extraction which disturbs more than 2.5 cumulative acres, or material extraction of any size that enters the water table. [A CLUP IS REQUIRED FOR MATERIALS PROCESSING.] A CLUP is valid for a period of five years. The provisions of KPB Chapter 21.25 are applicable to material site CLUPS and the provisions of KPB 21.25 and 21.29 are read in harmony. If there is a conflict between the provisions of KPB 21.25 and 21.29, the provisions of KPB 21.29 are controlling

21.29.030. Application procedure.

- A. In order to obtain a counter permit or CLUP, an applicant shall first complete and submit to the borough planning department a permit application, along with the fee listed in the most current Kenai Peninsula Borough Schedule of Rates, Charges and Fees. The planning director may determine that certain contiguous parcels are eligible for a single permit. The application shall include the following items:
 - 1. Legal description of the parcel, KPB tax parcel ID number, and identification of whether the permit is for the entire parcel, or a specific location within a parcel;

2. Expected life span of the material site;
3. A buffer plan consistent with KPB 21.29.050(A)(2);
4. Reclamation plan consistent with KPB 21.29.060;
5. The depth of excavation;
6. Type of material to be extracted and type of equipment to be used;
7. Any voluntary permit conditions the applicant proposes. Failure to include a proposed voluntary permit condition in the application does not preclude the applicant from proposing or agreeing to voluntary permit conditions at a later time;
8. Surface water protection measures, if any, for adjacent properties designed by a SWPPP certified individual, including the use of diversion channels, interception ditches, on-site collection ditches, sediment ponds and traps, and silt fence;
9. A site plan prepared by the site operator and field verification prepared by a professional surveyor licensed and registered in the State of Alaska, including the following information:
 - a. Location of excavation, and, if the site is to be developed in phases, the life span and expected reclamation date for each phase;
 - b. Proposed buffers consistent with KPB 21.29.050(A)(2), or alternate buffer plan;
 - c. Identification of all encumbrances, including, but not limited to easements;
 - d. Points of ingress and egress. Driveway permits must be acquired from either the state or borough as appropriate prior to the issuance of the material site permit;
 - e. Anticipated haul routes;
 - f. Location and [DEPTH] elevation of test holes, and depth of groundwater, if encountered between May and December. At least one test hole per ten acres of excavated area is required to be dug.

- g. Location of wells of adjacent property owners within [300]
200 feet of the proposed parcel boundary;
- h. Location of any water body on the parcel,
- [I. SURFACE WATER PROTECTION MEASURES FOR ADJACENT PROPERTIES, INCLUDING THE USE OF DIVERSION CHANNELS, INTERCEPTION DITCHES, ON-SITE COLLECTION DITCHES, SEDIMENT PONDS AND TRAPS, AND SILT FENCE; PROVIDE DESIGNS FOR SUBSTANTIAL STRUCTURES; INDICATE WHICH STRUCTURES WILL REMAIN AS PERMANENT FEATURES AT THE CONCLUSION OF OPERATIONS, IF ANY;]
- [J]i. Location of any processing areas on parcel, if applicable;
- [K]j. North arrow;
- [L]k. The scale to which the site plan is drawn;
- [M]l. Preparer's name, date
- [N]m. Field verification shall include staking the boundary of the parcel at sequentially visible intervals. The planning director may grant an exemption in writing to the staking requirements if the parcel boundaries are obvious or staking is unnecessary.

- B. In order to aid the planning commission or planning director's decision-making process, the planning director shall provide vicinity, aerial, land use, and ownership maps for each application and may include additional information.

21.29.040. Standards for sand, gravel or material sites.

- A. These material site regulations are intended to Minimize aquifer disturbance, road damage, physical damage to adjacent properties, dust, and noise. Only the conditions set forth in KPB 21.29.050 may be imposed to meet these standards:
 - 1. [PROTECTS AGAINST] Minimizes the lowering of water sources serving other properties;
 - 2. [PROTECTS AGAINST] Minimizes physical damage to [OTHER] adjacent properties;

3. Minimizes off-site movement of dust;
4. Minimizes noise disturbance to other properties;
5. [MINIMIZES VISUAL IMPACTS] Provides for alternate post-mining land uses.

21.29.050. Permit conditions.

A. The following mandatory conditions apply to counter permits and CLUPs issued for sand, gravel or material sites:

1. [~~PARCEL~~]Permit boundaries. [ALL BOUNDARIES OF THE SUBJECT PARCEL] The buffers and any easements or right-of-way abutting the proposed permit area shall be staked at sequentially visible intervals where parcel boundaries are within 300 feet of the excavation perimeter. Field verification and staking will require the services of a professional land surveyor. Stakes shall be in place [AT TIME OF APPLICATION] prior to issuance of the permit.

[2. BUFFER ZONE. A BUFFER ZONE SHALL BE MAINTAINED AROUND THE EXCAVATION PERIMETER OR PARCEL BOUNDARIES. WHERE AN EASEMENT EXISTS, A BUFFER SHALL NOT OVERLAP THE EASEMENT, UNLESS OTHERWISE CONDITIONED BY THE PLANNING DIRECTOR OR PLANNING COMMISSION.

A. THE BUFFER ZONE SHALL PROVIDE AND RETAIN A BASIC BUFFER OF:

I. 50 FEET OF UNDISTURBED NATURAL VEGETATION, OR

II. A MINIMUM TEN FOOT EARTHEN BERM WITH AT LEAST A 2:1 SLOPE, OR

III. A MINIMUM SIX-FOOT FENCE.

B. A 2:1 SLOPE SHALL BE MAINTAINED BETWEEN THE BUFFER ZONE AND EXCAVATION FLOOR ON ALL INACTIVE SITE WALLS. MATERIAL FROM THE AREA DESIGNATED FOR THE 2:1 SLOPE MAY BE REMOVED IF SUITABLE, STABILIZING MATERIAL IS REPLACED WITHIN 90 DAYS FROM THE TIME OF REMOVAL.

C. THE PLANNING COMMISSION OR PLANNING DIRECTOR SHALL DESIGNATE ONE OR A COMBINATION OF THE ABOVE AS IT DEEMS APPROPRIATE. THE VEGETATION AND FENCE SHALL BE OF SUFFICIENT HEIGHT AND DENSITY TO PROVIDE VISUAL AND NOISE SCREENING OF THE PROPOSED USE AS DEEMED

APPROPRIATE BY THE PLANNING COMMISSION OR PLANNING DIRECTOR.

- D. BUFFERS SHALL NOT CAUSE SURFACE WATER DIVERSION WHICH NEGATIVELY IMPACTS ADJACENT PROPERTIES OR WATER BODIES. SPECIFIC FINDINGS ARE REQUIRED TO ALTER THE BUFFER REQUIREMENTS OF KPB 21.29.050(A)(2)(A) IN ORDER TO MINIMIZE NEGATIVE IMPACTS FROM SURFACE WATER DIVERSION. FOR PURPOSES OF THIS SECTION, SURFACE WATER DIVERSION IS DEFINED AS EROSION, FLOODING, DEHYDRATION OR DRAINING, OR CHANNELING. NOT ALL SURFACE WATER DIVERSION RESULTS IN A NEGATIVE IMPACT.
- E. AT ITS DISCRETION, THE PLANNING COMMISSION MAY WAIVE BUFFER REQUIREMENTS WHERE THE TOPOGRAPHY OF THE PROPERTY OR THE PLACEMENT OF NATURAL BARRIERS MAKES SCREENING NOT FEASIBLE OR NOT NECESSARY. BUFFER REQUIREMENTS SHALL BE MADE IN CONSIDERATION OF AND IN ACCORDANCE WITH EXISTING USES OF ADJACENT PROPERTY AT THE TIME OF APPROVAL OF THE PERMIT. THERE IS NO REQUIREMENT TO BUFFER THE MATERIAL SITE FROM USES WHICH COMMENCE AFTER THE APPROVAL OF THE PERMIT.]

2. *Buffer Area.*

- a. A 2:1 slope shall be maintained between the buffer zone and excavation floor on all inactive site walls. Material from the area designated for the 2:1 slope may be removed if suitable, stabilizing material is replaced within 90 days from the time of removal.
- b. The buffer area may be reduced where the planning commission or planning director, as applicable, has approved an alternate buffer plan introduced by the applicant. The alternate buffer plan must consist of natural undisturbed vegetation, or a minimum ten foot berm, or a minimum six-foot fence or a combination thereof, consisting of only one option in a single geographical location; unless the permittee proposes another solution approved by the planning commission or planning director, as applicable, to meet this condition.
- c. The buffer requirements may be waived by the planning commission or planning director, as applicable, where the topography of the property or the placement of natural barriers makes screening not feasible or unnecessary.

- d. There is no requirement to buffer a material site from uses that commence after approval of the permit.
- 3. *Processing.* In the case of a CLUP, any equipment which conditions or processes material must be operated at least 300 feet from the parcel boundaries. At its discretion, the planning commission may waive the 300-foot processing distance requirement, or allow a lesser distance in consideration of and in accordance with existing uses of adjacent properties at the time.
- 4. *Water source separation.*
 - a. All permits shall be issued with a condition which prohibits any material extraction within 100 horizontal feet of any water source existing prior to original permit issuance.
 - b. All counter permits shall be issued with a condition which requires that a four-foot vertical separation [FROM THE SEASONAL HIGH WATER TABLE BE MAINTAINED] an excavation distance a maximum of 15 feet below the seasonal high-water table must be maintained under these conditions:
 - 1. No dewatering is allowed.
 - 2. The edge of any water body must be 200 feet from any DEC septic or well.
 - 3. A spill response kit must be maintained onsite.
 - 4. Operations shall stay 2 foot above an aquifer-confining layer.
 - 5. A 200-foot separation from any water body and any stored hazardous material.
 - [C. ALL CLUPS SHALL BE ISSUED WITH A CONDITION WHICH REQUIRES THAT A TWO-FOOT VERTICAL SEPARATION FROM THE SEASONAL HIGH WATER TABLE BE MAINTAINED.]
 - c. There shall be no dewatering either by pumping, ditching or some other form of draining unless an exemption is granted by the planning commission. The exemption for dewatering may be granted if the operator provides a statement under seal and supporting data from a duly licensed and qualified impartial civil engineer, that the dewatering will not lower any of the surrounding property's water systems and the contractor posts a bond for liability for potential accrued damages.

5. *Excavation in the water table.* Excavation in the water table greater than ~~[300]~~200 horizontal feet of a water source and 15 feet below water table may be permitted with the approval of the planning commission based on the following:
 - a. Certification by a qualified independent civil engineer or professional hydrogeologist that the excavation plan will not negatively impact the quantity of an aquifer serving existing water sources.
 - b. The installation of a minimum of three water monitoring tubes or well casings as recommended by a qualified independent civil engineer or professional hydrogeologist adequate to determine flow direction, flow rate, and water elevation.
 - c. Groundwater elevation, flow direction, and flow rate for the subject parcel, measured in three-month intervals by a qualified independent civil engineer or professional hydrogeologist, for at least one year prior to application. Monitoring tubes or wells must be kept in place, and measurements taken, for the duration of any excavation in the water table.
 - d. Operations shall not breach an aquifer-confining layer.
6. *Waterbodies.*
 - a. An undisturbed buffer shall be left and no earth material extraction activities shall take place within 100 linear feet [FROM] of excavation limits and the ordinary high water level of surface water bodies such as a lake, river, stream, [OR OTHER WATER BODY, INCLUDING] riparian wetlands [AND MAPPED FLOODPLAINS AS DEFINED IN KPB 21.06]. This regulation shall not apply to ponds less than one acre on private land, man-made waterbodies being constructed during the course of the materials extraction activities. In order to prevent discharge, diversion, or capture of surface water, an additional setback from lakes, rivers, anadromous streams, and riparian wetlands may be required.
 - b. Counter permits and CLUPS may contain additional conditions addressing surface water diversion.
7. *Fuel storage.* Fuel storage for containers larger than 50 gallons shall be contained in impermeable berms and basins capable of retaining 110 percent of storage capacity to minimize the potential for

uncontained spills or leaks. Fuel storage containers 50 gallons or smaller shall not be placed directly on the ground, but shall be stored on a stable impermeable surface. Double wall tanks are also acceptable.

8. *Roads.* Operations shall be conducted in a manner so as not to damage borough roads as required by KPB 14.40.175 and will be subject to the remedies set forth in KPB 14.40 for violation of this condition.
9. *Subdivision.* Any further subdivision or return to acreage of a parcel subject to a conditional land use or counter permit requires the permittee to amend their permit. The planning director may issue a written exemption from the amendment requirement if it is determined that the subdivision is consistent with the use of the parcel as a material site and all original permit conditions can be met.
10. *Dust control.* Dust suppression is required on haul roads within the boundaries of the material site by application of water or calcium chloride.
11. *Hours of operation.* [ROCK CRUSHING EQUIPMENT SHALL NOT BE OPERATED BETWEEN 10:00 P.M. AND 6:00 A.M.]
 - a. Processing equipment shall not be operated between 10:00 p.m. and 6:00 a.m.
 - b. The planning commission may grant exceptions to increase the hours of operation and processing based on surrounding land uses, topography, screening the material site from properties in the vicinity and conditions placed on the permit by the planning commission to mitigate the noise, dust and ~~visual impacts~~ caused by the material site.
12. *Reclamation.*
 - a. Reclamation shall be consistent with the reclamation plan approved by the planning commission or planning director as appropriate in accord with KPB 21.29.060.
 - b. [AS A CONDITION OF ISSUING THE PERMIT, THE APPLICANT SHALL SUBMIT A RECLAMATION PLAN AND POST A BOND TO COVER THE ANTICIPATED RECLAMATION COSTS IN AN AMOUNT TO BE DETERMINED BY THE PLANNING DIRECTOR. THIS BONDING REQUIREMENT SHALL NOT APPLY TO SAND, GRAVEL OR MATERIAL SITES FOR WHICH AN EXEMPTION FROM STATE BOND REQUIREMENTS FOR SMALL OPERATIONS IS APPLICABLE

PURSUANT TO AS 27.19.050.] The applicant shall operate the material site consistent with the approved reclamation plan and provide bonding pursuant to 21.29.060(B). This bonding requirement shall not apply to sand, gravel or material sites for which an exemption from state bond requirements for small operations is applicable pursuant to AS 27.19.050.

13. *Other permits.* Permittee is responsible for complying with all other federal, state and local laws applicable to the material site operation, and abiding by related permits. These laws and permits include, but are not limited to, the borough's flood plain, coastal zone, and habitat protection regulations, those state laws applicable to material sites individually, reclamation, storm water pollution and other applicable Environmental Protection Agency (EPA) regulations, clean water act and any other U.S. Army Corp of Engineer permits, any EPA air quality regulations, EPA and ADEC air and water quality regulations, EPA hazardous material regulations, U.S. Dept. of Labor Mine Safety and Health Administration (MSHA) regulations (including but not limited to noise and safety standards), and Federal Bureau of Alcohol, Tobacco and Firearm regulations regarding using and storing explosives. Any violation of these regulations or permits reported to or observed by borough personnel will be forwarded to the appropriate agency for enforcement.
14. [VOLUNTARY]Volunteered permit conditions. Conditions may be included in the permit upon agreement of the permittee and approval of the planning commission for CLUPs or the planning director for counter permits. Such conditions must be consistent with the standards set forth in KPB 21.29.040(A). Planning commission approval of such conditions shall be contingent upon a finding that the conditions will be in the best interest of the borough and the surrounding property owners. [VOLUNTARY] Volunteered permit conditions apply to the subject parcel and operation, regardless of a change in ownership. A change in [VOLUNTARY] volunteered permit conditions may be proposed [AT] by permit [RENEWAL OR AMENDMENT] modification.
15. *Signage.* For permitted parcels on which the permittee does not intend to begin operations for at least 12 months after being granted a conditional land use permit, the permittee shall post notice of intent on parcel corners or access, whichever is more visible. Sign dimensions shall be no more than 15" by 15" and must contain the following information: the phrase "Permitted Material Site" along with the permittee's business name and a contact phone number.

16. Appeal. No clearing of vegetation shall occur within the 50 ~~100~~-foot maximum buffer area from the permit boundary nor shall the permit be issued or operable until the deadline for the appeal, pursuant to KPB 21.20, has expired.
17. Reverse signal alarms. Reverse signal alarms, used at the material site on loaders, excavators, and other earthmoving equipment may be more technically advanced devices; such as, a multi-frequency “white noise” alarms rather than the common, single (high-pitch) tone alarms. At its discretion, the planning commission or planning director, as applicable, may waive this requirement or a portion of this requirement. The waiver of this requirement shall be made in consideration of and in accordance with existing uses of the properties in the vicinity at the time of approval of the permit.
19. Dust suppression. Dust suppression may ~~shall~~ be required when natural precipitation is not adequate to suppress the dust generated by the material site traffic on haul routes within property boundaries. Based on surrounding land uses the planning commission or planning director, as applicable, may waive or reduce the requirement for dust suppression on haul routes within property boundaries.
21. Surface water protection. Use of surface water protection measures as specified in KPB 21.29.030(A)(8) must be approved by a licensed civil engineer or SWPPP certified individual.
22. Setback. Material site excavation areas shall be 250-feet from the property boundaries of any local option zoning district, existing public school ground, private school ground, college campus, child care facility, multi-purpose senior center, assisted living home, and licensed health care facility. If overlapping, the buffer areas of the excavation shall be included in the 250-foot setback. At the time of application.

21.29.060. Reclamation plan.

- A. All material site permit applications require an overall reclamation plan.
- B. The applicant may revegetate with a non-invasive plant species and reclaim all disturbed land [UPON EXHAUSTING THE MATERIAL ON-SITE, OR WITHIN A PRE-DETERMINED TIME PERIOD FOR LONG-TERM ACTIVITIES, SO AS TO LEAVE THE LAND IN A STABLE CONDITION. RECLAMATION MUST OCCUR FOR ALL EXHAUSTED AREAS OF THE SITE EXCEEDING FIVE ACRES BEFORE A FIVE-YEAR RENEWAL PERMIT IS ISSUED, UNLESS OTHERWISE REQUIRED BY THE PLANNING COMMISSION. IF THE MATERIAL SITE IS ONE ACRE OR LESS IN SIZE AND HAS BEEN GRANTED A CLUP DUE TO EXCAVATION IN THE WATER TABLE,

RECLAMATION MUST BE PERFORMED AS SPECIFIED BY THE PLANNING COMMISSION OR PLANNING DIRECTOR IN THE CONDITIONAL USE OR COUNTER PERMIT] within the time period approved with the reclamation plan so as to leave the land in a stable condition. Bonding shall be required at \$750.00 per acre for all acreage included in the current five-year reclamation plan. In the alternative, the planning director shall accept a civil engineer's estimate for determining the amount of bonding. If the applicant is bonded with the state, the borough's bonding requirement is waived. Compliance with reclamation plans shall be enforced under KPB 21.50.

- C. The following measures must be considered in the [PREPARING] preparation, approval and [IMPLEMENTING] implementation of the reclamation plan, although not all will be applicable to every reclamation plan.
1. The area will be backfilled, graded and recontoured using strippings, overburden, and topsoil [TO A CONDITION THAT ALLOWS FOR THE REESTABLISHMENT OF RENEWABLE RESOURCES ON THE SITE WITHIN A REASONABLE PERIOD OF TIME. IT WILL BE STABILIZED TO A CONDITION THAT WILL ALLOW SUFFICIENT MOISTURE FOR REVEGETATION] so that it will be stabilized to a condition that will allow for the revegetation as required by KPB 21.29.060(B).
 2. [SUFFICIENT QUANTITIES OF STOCKPILED OR IMPORTED TOPSOIL WILL BE SPREAD OVER THE RECLAIMED AREA TO A DEPTH OF FOUR INCHES TO PROMOTE NATURAL PLANT GROWTH THAT CAN REASONABLY BE EXPECTED TO REVEGETATE THE AREA WITHIN FIVE YEARS. THE APPLICANT MAY USE THE EXISTING NATURAL ORGANIC BLANKET REPRESENTATIVE OF THE PROJECT AREA IF THE SOIL IS FOUND TO HAVE AN ORGANIC CONTENT OF 5% OR MORE AND MEETS THE SPECIFICATION OF CLASS B TOPSOIL REQUIREMENTS AS SET BY ALASKA TEST METHOD (ATM) T-6.] The [MATERIAL] topsoil used for reclamation shall be reasonably free from roots, clods, sticks, and branches greater than 3 inches in diameter. Areas having slopes greater than 2:1 require special consideration and design for stabilization by a licensed engineer.
 4. Exploration trenches or pits will be backfilled. Brush piles and unwanted vegetation shall be removed from the site, buried or burned. Topsoil and other organics will be spread on the backfilled surface to inhibit erosion and promote natural revegetation.
 5. [PEAT AND T] Topsoil mine operations shall ensure a minimum of [TWO] four inches of suitable growing medium is left or replaced on the site upon completion of the reclamation activity (unless otherwise authorized).

6. Ponding may be used as a reclamation method as approved by the planning commission.

[D. THE PLAN SHALL DESCRIBE THE TOTAL ACREAGE TO BE RECLAIMED EACH YEAR, A LIST OF EQUIPMENT (TYPE AND QUANTITY) TO BE USED IN RECLAMATION, AND A TIME SCHEDULE OF RECLAMATION MEASURES.]

21.29.070. Permit extension and revocation.

- A. Conditional land use permittees must submit a request in writing for permit extension every five years after the permit is issued. Requests for permit extension must be made at least 30 days prior to permit expiration. Counter permittees must submit any request for a 12-month extension at least 30 days prior to the expiration of the original 12-month permit period.
- B. A permit extension certificate for a CLUP may be granted by the planning director after 5 years, and after one year for a counter permit where no modification to operations or conditions are proposed.
- C. Permit extension may be denied if: (1) reclamation required by this chapter and the original permit has not been performed; (2) the permittee is otherwise in noncompliance with the original permit conditions; or (3) the permittee has had a permit violation in the last two years and has not fulfilled compliance requests.
- D. A modification application shall be processed pursuant to KP.B 21.29.030-050 with public notice given as provided by KP.B 21.25.060 when operators request modification of their permit conditions based on changes in operations set forth in the modification application.
- E. There shall be no fee for permit extensions approved by the planning director. The fee for a permit modification processed under KP.B 21.29.070(D) will be the same as an original permit application in the amount listed in the most current Kenai Peninsula Borough Schedule of Rates, Charges and Fees.
- F. Failure to submit a request for extension will result in the expiration of the permit. The borough may issue a permit termination document upon expiration pursuant to KP.B 21.29.080. Once a permit has expired, a new permit application approval process is required in order to operate the material site.
- G. Permits may be revoked pursuant to KP.B 21.50.

21.29.080. Permit termination.

When a permit expires, is revoked, or a permittee requests termination of their permit, a review of permit conditions and site inspections will be conducted by the planning department to ensure code compliance and verify site reclamation prior to termination. When the planning director determines that a site qualifies for termination, a termination document shall be issued to the permittee.

21.29.090. Permit modifications.

If a permittee revises or intends to revise operations (at a time other than permit extension) so that they are no longer consistent with the original application, a permit modification is required. The planning director shall determine whether the revision to operations requires a modification. Permit modification shall be processed in the same manner as original permits.

21.29.100. Recordation.

All permits, permit extensions, modified permits, prior existing uses, and terminations shall be recorded. Failure to record a material site document does not affect the validity of the documents.

21.29.110. Violations.

- A. Violations of this chapter shall be governed by KPB 21.50.
- B. In addition to the remedies provided in KPB 21.50, the planning director may require bonding in a form and amount adequate to protect the borough's interests for an owner or operator who has been cited for three violations of KPB 21.50, 21.25, and 21.29 within a three-year period. The violations need not be committed at the same material site. Failure to provide requested bonding may result in permit revocation proceedings.

21.29.120. Prior existing uses.

- A. Material sites are not held to the standards and conditions of a CLUP if a prior existing use (PEU) determination was granted for the parcel in accordance with KPB 21.29.120(B). To qualify as a PEU, a parcel's use as a material site must have commenced or have been operated after May 21, 1986, and prior to May 21, 1996, provided that the subject use continues in the same location. In no event shall a prior existing use be expanded beyond the smaller of the lot, block, or tract lines as they existed on May 21, 1996. If a parcel is further subdivided after May 21, 1996, the pre-existing use may not be expanded to any lot, tract, or parcel where extraction had not occurred before or on February 16, 1999. If a parcel is subdivided where extraction has already occurred, the prior existing use is considered

abandoned, and a CLUP must be obtained for each parcel intended for further material site operations. The parcel owner may overcome this presumption of abandonment by showing that the subdivision is not inconsistent with material site operation. If a parcel subject to a prior existing use is conveyed, the prior existing use survives the conveyance.

- B. Owners of sites must have applied to be registered as a prior existing use prior to January 1, 2001.
- C. [ANY PRIOR EXISTING USE THAT HAS NOT OPERATED AS A MATERIAL SITE BETWEEN MAY 21, 1996, AND MAY 21, 2011, IS CONSIDERED ABANDONED AND MUST THEREAFTER COMPLY WITH THE PERMIT REQUIREMENTS OF THIS CHAPTER. THE PLANNING DIRECTOR SHALL DETERMINE WHETHER A PRIOR EXISTING USE HAS BEEN ABANDONED. AFTER GIVING NOTICE TO THE PARCEL OWNER THAT A PEU IS CONSIDERED ABANDONED, A PARCEL OWNER MAY PROTEST THE TERMINATION OF THE PEU BY FILING WRITTEN NOTICE WITH THE PLANNING DIRECTOR ON A FORM PROVIDED BY THE PLANNING DEPARTMENT. WHEN A PROTEST BY A PARCEL OWNER IS FILED, NOTICE AND AN OPPORTUNITY TO MAKE WRITTEN COMMENTS REGARDING PRIOR EXISTING USE STATUS SHALL BE ISSUED TO OWNERS OF PROPERTY WITHIN A ONE-HALF MILE RADIUS OF THE PARCEL BOUNDARIES OF THE SITE. THE OWNER OF THE PARCEL SUBJECT TO THE PRIOR EXISTING USE MAY SUBMIT WRITTEN INFORMATION, AND THE PLANNING DIRECTOR MAY GATHER AND CONSIDER ANY INFORMATION RELEVANT TO WHETHER A MATERIAL SITE HAS OPERATED. THE PLANNING DIRECTOR MAY CONDUCT A HEARING IF HE OR SHE BELIEVES IT WOULD ASSIST THE DECISION-MAKING PROCESS. THE PLANNING DIRECTOR SHALL ISSUE A WRITTEN DETERMINATION WHICH SHALL BE DISTRIBUTED TO ALL PERSONS MAKING WRITTEN COMMENTS. THE PLANNING DIRECTOR'S DECISION REGARDING TERMINATION OF THE PRIOR EXISTING USE STATUS MAY BE APPEALED TO THE PLANNING COMMISSION WITHIN 15 DAYS OF THE DATE OF THE NOTICE OF DECISION.]

The owner of a material site that has been granted a PEU determination shall provide proof of compliance with AS 27.19.030 – 050 concerning reclamation to the planning department no later than July 1, 2021. The proof shall consist of an Alaska Department of Natural Resources (DNR) approved reclamation plan and receipt for bonding or a letter of intent filed with DNR.

- 1. The planning department may request proof of continued compliance with AS 27.19.030 – 050 on an annual basis.
- 2. Pursuant to KPB 21.29.110 the enforcement process and remedies set forth in KPB 21.50 shall govern if the proof that the statutory requirements contained in AS 27.19.030-050 is not provided to the planning department.

SECTION 3. That KPB 21.50.055 is hereby amended, as follows:

21.50.055. Fines.

- A. Following are the fines for violations of this title. Each day a violation occurs is a separate violation. Violations begin to accrue the date the enforcement notice is issued and continue to the date the enforcement is initially set for hearing. The fine for a violation may not be reduced by the hearing officer to less than the equivalent of one day's fine for each type of violation.

CODE CHAPTER & SECTION	VIOLATION DESCRIPTION	DAILY FINE
KPB 20.10.030(A)	Offering land for sale without final plat approval	\$300.00
KPB 20.10.030(B)	Filing/recording unapproved subdivision/plat	\$300.00
KPB 20.10.030(C)	Violation of subdivision code or condition	\$300.00
KPB 21.05.040(C)	Violation of variance conditions	\$300.00
KPB 21.06.030(D)	Structure or activity prohibited by KPB 21.06	\$300.00
KPB 21.06.040	Failure to obtain a Development Permit/Floodplain Management	\$300.00
KPB 21.06.045	Failure to obtain a SMFDA Development Permit/Violation of SMFDA permit conditions/Floodplain Management	\$300.00
KPB 21.06.050	Violation of permit conditions/Floodplain Management	\$300.00
KPB 21.18.071	Failure to obtain staff permit/Violation of staff permit/Anadromous Streams Habitat Protection	\$300.00
KPB 21.18.072	Failure to obtain limited commercial activity permit/Violation of permit conditions/Anadromous Streams Habitat Protection	\$300.00
KPB 21.18.075	Prohibited use or structure/Anadromous Streams Habitat Protection	\$300.00

CODE CHAPTER & SECTION	VIOLATION DESCRIPTION	DAILY FINE
KPB 21.18.081	Failure to obtain Conditional Use Permit/Violation of Conditional Use Permit Condition/Anadromous Streams Habitat Protection	\$300.00
KPB 21.18.090	Failure to obtain prior existing use/structure permit/Violation of permit conditions/Anadromous Streams Habitat Protection	\$300.00
KPB 21.18.135(C)	Violation of emergency permit conditions/anadromous stream habitat protection	\$300.00
KPB 21.25.040	Failure to Obtain a Permit/Material Site/Correctional community residential center/Concentrated Animal Feeding Operation	\$300.00
KPB 21.28.030	Violation of permit conditions/Concentrated Animal Feeding Operations	\$300.00
KPB 21.29.020	Failure to Obtain a counter permit/Material Site Permits	\$300.00
KPB 21.29.050	Violation of Conditional Land Use Permit Conditions/Material Site Permits Also applies to KPB 21.26 material site permits	\$300.00
KPB 21.29.060	Violation of Reclamation Plan/Material Site Permits Also applies to KPB 21.26 material site permits	\$300.00
<u>KPB 21.29.120</u>	<u>Failure to Provide Reclamation Plan and Proof of Bonding or Letter of Intent</u>	<u>\$300.00</u>
KPB 21.44.100	Violation of Pre-existing structures/Local Option Zoning	\$300.00
KPB 21.44.110(D)	Prohibited expansion of nonconforming use/Local Option Zoning	\$300.00
KPB 21.44.110(E)	Prohibited Change in Use/Local Option Zoning	\$300.00
KPB 21.44.110(G)	Violation of Conditions on Nonconforming Use/Local Option Zoning	\$300.00

CODE CHAPTER & SECTION	VIOLATION DESCRIPTION	DAILY FINE
KPB 21.44.130(C)(D)	Violation of Home Occupation Standards and Conditions/Local Option Zoning	\$300.00
KPB 21.44.130(F)	Disallowed Home Occupation/Local Option Zoning	\$300.00
KPB 21.44.135	Failure to file development notice	\$300.00
KPB 21.44.160(A)(B)	Prohibited use	\$300.00
KPB 21.44.160(C)	Violation of Development Standards/Single Family Zoning/Local Option Zoning	\$300.00
KPB 21.44.165(A)(B)	Prohibited use	\$300.00
KPB 21.44.165(C)	Violation of Development Standards/Small Lot Residential Zoning/Local Option Zoning	\$300.00
KPB 21.44.170(A)(B)	Prohibited use	\$300.00
KPB 21.44.170(C)	Violation of Development Standards/Rural Residential District/Local Option Zoning	\$300.00
KPB 21.44.175(B)(C)	Prohibited Use	\$300.00
KPB 21.44.175(D)	Violation of Development Standards/Residential Waterfront	\$300.00
KPB 21.44.180(A)(B)	Prohibited Use	\$300.00
KPB 21.44.180(C)	Violation of Development Standards/Multi-Family Residential District/Local Option Zoning	\$300.00
KPB 21.44.190(A)(B)	Prohibited Use	\$300.00
KPB 21.44.190(C)	Violation of Development Standards/Industrial District/Local Option Zoning	\$300.00

CODE CHAPTER & SECTION	VIOLATION DESCRIPTION	DAILY FINE
KPB 21.46.030(b)	Failure to maintain bear-resistant garbage cans/Local option zone/Birch and Grove Ridge subdivisions Rural Residential District	\$300.00
KPB 21.50.100(F)	Removal of posted enforcement notice	\$300.00
KPB 21.50.100(G)	Violation of enforcement notice	\$1,000.00
KPB 21.50.130(I)	Violation of an enforcement order	\$1,000.00

SECTION 4. That this ordinance shall become effective upon its enactment.

ENACTED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH THIS * DAY OF * 2022.

Brent Johnson, Assembly President

ATTEST:

Johni Blankenship, MMC, Borough Clerk

Yes:

No:

Absent:

Kenai Peninsula Borough

Planning Department

MEMORANDUM

TO: Brent Johnson, Assembly President
Members, Kenai Peninsula Borough Assembly

THRU: Charlie Pierce, Mayor CP

FROM: Melanie Aeschliman, Planning Director MA

DATE: November 23, 2021

SUBJECT: Ordinance 2021-41 Amending KPB 21.29, KPB 21.25, and KPB 21.50.055 Regarding Material Site Permits, Applications, Conditions, and Procedures (Mayor)

On December 13, 2019, the assembly failed to enact Ordinance 2019-30(SUB). As requested, this proposed ordinance reintroduces, word for word, O2019-30(SUB). Any amendments to this proposed ordinance will be proposed as separate amendment memorandums.

A timeline regarding the material site work group recommendations, planning commission recommendations, and the history of O2019-30(SUB) is attached.

Your consideration of these amendments is appreciated.

MEMORANDUM

TO: Blair Martin, Planning Commission Chair
Members, Kenai Peninsula Borough Planning Commission

THRU: Melanie Aeschliman, Planning Director *MA*
Samantha Lopez, River Center Manager *SL*

FROM: Bryan Taylor, Planner *BT*

DATE: November 17, 2021

RE: Reintroduction of Ordinance 2019-30 SUB; An Ordinance Amending KPB 21.29, KPB 21.25, and KPB 21.50.055 Regarding Material Site Permits, Applications, Conditions, and Procedures

The mayor would like to reintroduce the above ordinance at the December 7, 2021, Assembly meeting. The Planning Commission reviewed the original ordinance at its regularly scheduled November 12, 2019 meeting. Prior to that, the Planning Commission reviewed an ordinance proposed by the Material Site Work Group and recommended amendments. Ordinance 2019-30 Substitute incorporates all changes recommended by the Planning Commission. Below is a timeline of the ordinance's development and legislative history.

- **January 16, 2018:** KPB Assembly established a Material Site Work Group (MSWG) through Resolution 2018-004 Substitute.
- **January 31, 2018 through April 30, 2019:** The MSWG held work session meetings and took public comment. (Meetings were not held between May 23 and October 10, 2018, to avoid overlapping with the construction season when operators would not be available to participate.) At its second meeting on February 14, 2018, the MSWG adopted the following mission statement: *"To evaluate our existing KPB codes with respect to material sites (gravel extraction) to ensure that we collectively believe the appropriate balance exists to meet the need for affordable development while also protecting quality of life for our residents."*
- **May 15, 2018:** Through Resolution 2018-25, the Assembly extended the deadline for the MSWG to produce a report until April 30, 2019.
- **April 30, 2019:** At its final meeting, the MSWG forwarded a proposed ordinance to the Planning Commission for review.
- **May 13, 2019:** The Planning Commission held a regular meeting and the MSWG's proposed ordinance was placed on the Planning Commission's agenda under "Pending Items for Future Action". There was some commission discussion of the item. The minutes noted that the commission would consider it at its June 24, 2019, meeting when

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Date: November 17, 2021

To: Blair Martin, Planning Commission Chair
Members, Kenai Peninsula Borough Planning Commission

RE: Reintroduction of Ordinance 2019-30 SUB; An Ordinance Amending KPB 21.29, KPB 21.25, and KPB 21.50.055 Regarding Material Site Permits, Applications, Conditions, and Procedures

key staff and commissioners could be present.

- **June 18, 2019:** The chair of the MSWG, Robert Ruffner, gave a presentation to the Assembly during its regularly scheduled meeting.
- **June 24, 2019:** The Planning Commission held a public hearing on the unnumbered ordinance proposed by the MSWG entitled "An Ordinance Amending KPB Chapter 21.25, Conditional Land Use Permits and Amending KPB Chapter 21.29, Material Site Permits".
- **July 15, 2019:** The Planning Commission held a work session on the ordinance proposed by the MSWG.
- **August 26, 2019:** The Planning Commission held a public hearing on the ordinance proposed by the MSWG. The commission voted to postpone further consideration until its September 9, 2019, regular meeting.
- **September 9, 2019:** The Planning Commission continued deliberation on the ordinance proposed by the MSWG. After voting on a number of proposed amendments to the ordinance, the commission requested staff arrange a work session with the Assembly and postponed further deliberation.
- **October 24, 2019:** A memo providing a sectional analysis of proposed amendments was sent from Sean Kelly, Deputy Borough Attorney, and Max Best, Planning Director, to KPB Assembly. The memo outlined amendments to the MSWG ordinance proposed by the Planning Commission. All amendments outlined within the memo were later included within Ordinance 2019-30 Substitute.
- **November 5, 2019:** A joint work session between the Assembly and the Planning Commission was held regarding Ordinance 2019-30. At its regularly scheduled meeting, Ordinance 2019-30 was introduced and the Assembly set a public hearing for December 3, 2019.
- **November 12, 2019:** At its regular meeting, the Planning Commission recommended approval of Ordinance 2019-30 and several amendments.
- **November 20, 2019:** In a memo to the KPB Assembly, Max Best, Planning Director, notified the Assembly of the Planning Commission's recommendation of approval and outlined recommended amendments proposed by the Planning Commission at its November 12, 2019, meeting. All amendments outlined within the memo were included within Ordinance 2019-30 Substitute.
- **December 3, 2019:** The Assembly held a public hearing on Ordinance 2019-30. A motion to amend by substitute was carried but the motion to enact the substitute ordinance failed. Assembly member Bjorkman gave notice of reconsideration of Ordinance 2019-30 Substitute.
- **January 7, 2020:** At the Assembly's regularly scheduled meeting, a motion to reconsider Ordinance 2019-30 Substitute failed.

Kenai Peninsula Borough

Legal Department

MEMORANDUM

TO: Brent Johnson, Assembly president
Members, Kenai Peninsula Borough Assembly

FROM: A. Walker Steinhage, Deputy Borough Attorney *AW*
Sean Kelley, Borough Attorney *SK*

CC: Charlie Pierce, Mayor
Melanie Aeschliman, Planning Director

DATE: January 14, 2022

RE: Questions for the Assembly to consider regarding Ordinance 2021-41

Appeals from Planning Commission decisions approving or denying material site conditional land use permit (CLUP) applications, and remands to the Commission which sometimes follow such appeals, cost the Borough time, resources, and money.

In response to inquiries from KPB Assembly members, the purpose of this memo is to present some questions for the Assembly to consider as it reviews Ordinance 2021-41. If the Assembly is able to resolve some or all of these questions, the costs associated with appeals from the Commission's CLUP decisions may be alleviated. The questions are as follows:

1) Should the Planning Commission continue to have the discretion to deny a CLUP application?

Current Code: The Planning Commission is vested with discretion to deny a permit application. Under KPB 21.25.050(B) the Planning Commission shall either "approve, modify or disapprove the permit application."

O2021-41 as proposed: The new section KPB 21.29.055 provides that the Planning Commission shall approve permit applications that meet all the mandatory conditions under KPB 21.29.050 and shall disapprove a permit application that does not meet all the conditions under KPB 21.29.050.

2) If the Planning Commission has the discretion to deny a CLUP application, what is the scope of that discretion?

- a. Should the Planning Commission have the discretion to deny a CLUP application which otherwise meets or exceeds all the conditions under KPB 21.29.050 if the Commission finds that the application does not meet the standards established under KPB 21.29.040?
- b. Should the Planning Commission have the discretion to deny a CLUP application which otherwise meets or exceeds all the conditions under KPB 21.29.050 **and** even if the Commission finds that the application meets the standards established under KPB 21.29.040?

3) If the Assembly decides the Planning Commission should have the discretion to deny a CLUP application, how can the applicable KPB Code (specifically KPB 21.29.040 and 21.29.050) be improved to best equip the Commission to make findings of fact, based on substantial evidence in the record, to withstand scrutiny on appeal and thereby reduce remands after appellate review?

Several tables are appended to this memo comparing current KPB Code language and the language proposed in Ordinance 02021-41¹ with the language drawn from the analogous codes from other second-class boroughs; namely, the Matanuska-Susitna Borough (Appendix A), the Ketchikan Gateway Borough (Appendix B), the Kodiak Island Borough (Appendix C), and the Fairbanks North Star Borough (Appendix D).

4) If the Assembly decides to eliminate the Planning Commission's discretion to deny CLUP applications, then what is the purpose of the Planning Commission's review of CLUP applications?

- a. If the Planning Commission's discretion is eliminated, then should review of CLUP applications simply become an administrative process?
- b. What effect will eliminating the Planning Commission's discretion to deny CLUP applications have on the public's ability to be heard?

Enclosures:

- (1) Appendix A
- (2) Appendix B
- (3) Appendix C
- (4) Appendix D
- (5) Sectional Analysis provided when O2019-30 was originally considered

¹ New Text Underlined; [DELETED TEXT BRACKETED]

APPENDIX A

KPB/MATANUSKA-SUSITNA BOROUGH

KPB 21.29.040. Standards for sand, gravel or material sites. (As proposed in O2021-41)	MSB 17.30.060 General Standards for Approval
A. These material site regulations are intended to protect against aquifer disturbance, road damage, physical damage to adjacent properties, dust, noise, and visual impacts. Only the conditions set forth in KPB 21.29.050 may be imposed to meet these standards:	(A) In granting an administrative permit or a conditional use permit, the director or commission must make the following findings:
1. Protects against the lowering of water sources serving other properties;	(1) that the use is not inconsistent with the applicable comprehensive plan;
2. Protects against physical damage to [OTHER] <u>adjacent</u> properties;	(2) that the use will preserve the value, spirit, character, and integrity of the surrounding area;
3. [MINIMIZES] <u>Protects against</u> off-site movement of dust;	(3) that the applicant has met all other requirements of this chapter pertaining to the use in question;
4. [MINIMIZES] <u>Protects against</u> noise disturbance to other properties;	(4) that granting the permit will not be harmful to the public health, safety and general welfare; and
5. [MINIMIZES] <u>Protects against</u> visual impacts of the material site; [AND]	(5) that the sufficient setbacks, lot area, buffers or other safeguards are being provided to meet the conditions listed in MSB 17.30.050 (B).
6. Provides for alternate post-mining land uses[.];	
<u>7. Protects Receiving Waters against adverse effects to fish and wildlife habitat;</u>	
<u>8. Protects against traffic impacts; and</u>	
<u>9. Provides consistency with the objectives of the Kenai Peninsula Borough Comprehensive Plan and other applicable planning documents.</u>	

APPENDIX B
KPB/KETCHIKAN GATEWAY BOROUGH

KPB 21.29.040. Standards for sand, gravel or material sites. (As proposed in O2021-41)	KGB Code 18.55.050
A. These material site regulations are intended to protect against aquifer disturbance, road damage, physical damage to adjacent properties, dust, noise, and visual impacts. Only the conditions set forth in KPB 21.29.050 may be imposed to meet these standards:	(a) Purpose. A conditional use permit, issued hereunder, is a device which gives flexibility to the zoning ordinance in a uniform and controlled manner. It permits inclusion, in zones where it is permitted by the zoning ordinance (of which this chapter is part), of uses which are basically desirable to the community, but where the nature of the use will not permit its location at every location in the said zones without restrictions and conditions designed to fit the special problems which the use presents. A conditional use permit allows a landowner to put his property to a use which the zoning ordinance expressly permits: It does not allow a landowner to use his property in a manner forbidden by the zoning ordinance.
1. Protects against the lowering of water sources serving other properties;	(b) Standards. As express conditions precedent to the granting of any conditional use permit, a majority of the planning commission members (not merely a majority of the members present), after a public hearing, must find in writing that:
2. Protects against physical damage to [OTHER] <u>adjacent</u> properties;	(1) The requested conditional use is reasonably necessary for the public health, safety, and general welfare; and
3. [MINIMIZES] <u>Protects against</u> off-site movement of dust;	(2) The requested conditional use will not permanently or substantially injure the lawful use of neighboring uses; and
4. [MINIMIZES] <u>Protects against</u> noise disturbance to other properties;	(3) The requested conditional use will generally be in harmony with the comprehensive plan; and
5. [MINIMIZES] <u>Protects against</u> visual impacts of the material site; [AND]	(4) The requested conditional use is a conditional use expressly permitted by the zoning ordinance in the zone in which the conditional use permit is requested.
6. Provides for alternate post-mining land uses[.];	
<u>7. Protects Receiving Waters against adverse effects to fish and wildlife habitat;</u>	
<u>8. Protects against traffic impacts; and</u>	
<u>9. Provides consistency with the objectives of the Kenai Peninsula Borough Comprehensive Plan and other applicable planning documents.</u>	

APPENDIX C

KPB/KODIAK ISLAND BOROUGH

KPB 21.29.040. Standards for sand, gravel or material sites. (As proposed in O2021-41)	KIB 17.200.050 General Standards for Approval²
A. These material site regulations are intended to protect against aquifer disturbance, road damage, physical damage to adjacent properties, dust, noise, and visual impacts. Only the conditions set forth in KPB 21.29.050 may be imposed to meet these standards:	A. <i>Approval.</i> If it is the finding of the commission, after consideration of staff's report and receipt of testimony at the public hearing, that the use proposed in the application, or under appropriate conditions or restrictions, meets all of the following, the conditional use permit shall be granted:
1. Protects against the lowering of water sources serving other properties;	1. That the conditional use will preserve the value, spirit, character and integrity of the surrounding area;
2. Protects against physical damage to [OTHER] <u>adjacent</u> properties;	2. That the conditional use fulfills all other requirements of this chapter pertaining to the conditional use in question;
3. [MINIMIZES] <u>Protects against</u> off-site movement of dust;	3. That granting the conditional use permit will not be harmful to the public health, safety, convenience and comfort;
4. [MINIMIZES] <u>Protects against</u> noise disturbance to other properties;	4. That the sufficient setbacks, lot area, buffers or other safeguards are being provided to meet the conditions listed in subsections <u>(A)(1)</u> through <u>(3)</u> of this section;
5. [MINIMIZES] <u>Protects against</u> visual impacts of the material site; [AND]	5. If the permit is for a public use or structure, the commission must find that the proposed use or structure is located in a manner which will maximize public benefits.
6. Provides for alternate post-mining land uses[.];	
<u>7. Protects Receiving Waters against adverse effects to fish and wildlife habitat;</u>	
<u>8. Protects against traffic impacts; and</u>	
<u>9. Provides consistency with the objectives of the Kenai Peninsula Borough Comprehensive Plan and other applicable planning documents.</u>	

² Interestingly, KIB Code 17.200.050 contains the following subsection: "B. Denial. If the commission finds, after consideration of staff's report and receipt of testimony at the public hearing, that it cannot make all of the required findings in subsection A of this section it shall deny the conditional use permit."

APPENDIX D
KPB/FAIRBANKS NORTH STAR BOROUGH

KPB 21.29.040. Standards for sand, gravel or material sites. (As proposed in O2021-41)	FNSB 18.104.050 Procedures for conditional uses.
A. These material site regulations are intended to protect against aquifer disturbance, road damage, physical damage to adjacent properties, dust, noise, and visual impacts. Only the conditions set forth in KPB 21.29.050 may be imposed to meet these standards:	C. Hearing and Decision by the Planning Commission. The Planning Commission shall review, hear and decide whether or not to approve a request for a conditional use. The Planning Commission shall also consider and adopt findings in each of the following:
1. Protects against the lowering of water sources serving other properties;	1. Whether or not the proposed conditional use conforms to the intent and purpose of this title and of other ordinances and state statutes;
2. Protects against physical damage to [OTHER] <u>adjacent</u> properties;	2. Whether or not there are adequate existing sewage capacities, transportation facilities, energy and water supplies, and other public services to serve the proposed conditional use;
3. [MINIMIZES] <u>Protects against</u> off-site movement of dust;	3. Whether or not the proposed conditional use will protect the public health, safety and welfare.
4. [MINIMIZES] <u>Protects against</u> noise disturbance to other properties;	
5. [MINIMIZES] <u>Protects against</u> visual impacts of the material site; [AND]	
6. Provides for alternate post-mining land uses[.];	
7. <u>Protects Receiving Waters against adverse effects to fish and wildlife habitat;</u>	
8. <u>Protects against traffic impacts; and</u>	
9. <u>Provides consistency with the objectives of the Kenai Peninsula Borough Comprehensive Plan and other applicable planning documents.</u>	

Kenai Peninsula Borough

Legal Department

MEMORANDUM

TO: Kelly Cooper, Assembly President
Kenai Peninsula Borough Assembly Members

THRU: Charlie Pierce, Mayor

FROM: Sean Kelley, Deputy Borough Attorney
Max Best, Planning Director

DATE: October 24, 2019

RE: Material Site Sectional Analysis

Please find following a sectional analysis of the amendments to the material site ordinance proposed by the Kenai Peninsula Borough Planning Commission.

1. In KPB 21.25.030. - Definitions.

A definition of "assisted living home" is added because a setback is proposed to be required from those facilities. A definition for "development plan" is added to support a new exemption from the material site ordinance that allows extraction for on-site development. A definition of "disturbed" is added and the definition of "exhausted" is eliminated. This change is made to avoid the situation where reclamation is delayed or avoided by asserting a material site is not yet exhausted, instead reclamation is in reference to disturbed areas. The term "disturbed" is also consistent with the state of Alaska reclamation language. A definition of "haul route" is added to support the proposed requirement for off-site dust suppression. A definition of "permit area" is added—this clarifies that a portion of a parcel, as opposed to an entire parcel, may be subject to a material site permit and defines what attributes will be considered part of the permitted area. A definition of "vicinity" is added to include all existing uses within the ½-mile notification area. This defines the area that should be considered when waiving or lessening the conditions on the permit.

Material Site Sectional Analysis
October 24, 2019
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2. KPB 21.29.010. -Material extraction exempt from obtaining a permit.

Subsection (D) adds a new exemption for parcels with a development plan on file with the planning department. This provision exempts from the ordinance short-term extraction that is incidental to site development for a building project.

3. KPB 21.29.030. -Application procedure.

Surface water protection measures are moved from the site plan section of the application to Paragraph (A)(8) because a surveyor is required to prepare the site plan, but an engineer is necessary to design the surface water protection measures.

Paragraph (A)(9)(f) is clarified to require more than 1 test hole placed anywhere on the parcel as that requirement allowed for taking the test hole at the highest elevation on a parcel which may not be the most accurate measurement of depth to groundwater. The proposed ordinance requires a test hole for every ten acres of excavated area and the test holes must be four feet below the proposed depth of excavation. This is consistent with the proposed increased requirement that excavation remain four feet above ground water which is consistent with Alaska DEC User's Manual Best Management Practices for Gravel/Rock Aggregate Extraction Projects – Protecting Surface Water & Groundwater Quality in Alaska (Sept. 2012) (hereinafter "Best Management Practices") and is also consistent with the current requirement for counter permits.

4. KPB 21.29.040. -Standards for sand, gravel or material sites.

Three new standards are added that either existing or proposed conditions will meet. Receiving waters are protected for fish and wildlife. This standard is consistent with mandatory condition #6 which requires a setback from waterbodies for material site extraction. Standard #8 is added to protect against traffic impacts which is consistent with the conditions regarding damage to borough roads, proposed ingress and egress, noise, and dust. Standard #9 is added because planning decisions should be consistent with the comprehensive plan.

Material Site Sectional Analysis

October 24, 2019

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5. KPB 21.20.050(A)(1) is changed to require staking the permit boundaries, rather than the parcel boundaries prior to issuance of the permit. (Staking the boundaries of the parcel is currently required at time of application.)
 6. KPB 21.20.050(A)(2) is changed to require a maximum buffer of 100 feet unless the operator can demonstrate to the planning commission that there are good reasons for a reduced buffer. A fence, vegetation, or berm or a combination thereof may be used as a buffer. Unlike the current code, the maximum vegetative buffer is not 50 feet but could be up to the entire 100 foot of buffer required. Another new requirement is that when a buffer area has been denuded prior to review of the application by the planning commission or planning director revegetation may be required. This is to avoid the practice of making application and then destroying the vegetation that could have served as a buffer. Finally, there is a new condition allowing the buffer to be reduced with an approved alternate buffer plan which may consist of a berm, vegetation, fence or other type of buffer solution. For example, a moveable wall that would screen noise and the visual impact of the material site could be allowed.
 7. Language is revised in KPB 21.29.050(A)(3) for consistency by using the term "vicinity" rather than the term "adjacent".
 8. In KPB 21.20.050(A)(6) the buffer from waterbodies is increased to 200 feet. This condition is consistent with the Alaska DEC User Manual Best Management Practices and the newly proposed standard regarding the protection of "receiving waters".
 9. Paragraph KPB 21.29.050(A)(11) is revised to prohibit processing from 7 p.m. to 6 a.m. The current prohibition is 10 p.m. to 6 a.m. for rock crushing. Paragraph (b) is added to allow the planning commission to grant exceptions to the restrictions on processing hours based on a variety of factors including surrounding land uses, topography, screening the material site from adjacent properties and conditions placed on the permit by the planning commission to mitigate the noise, dust, and visual impacts caused by the material site.
 10. Paragraph KPB 21.29.050(A)(12)(b) clarifies the requirement for a reclamation plan and bonding for material sites that are not exempt from the state bonding requirements. This condition is further detailed in KPB 21.29.060(B) addressing reclamation.

Material Site Sectional Analysis

October 24, 2019

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11. Air quality is added to the list of other regulations in condition KPB 21.29.050(A)(13) that a material site is responsible for following.
 12. Language is revised in KPB 21.29.050(A)(14) for consistency by using the term "volunteered" rather than the term "voluntary".
 13. In KPB 21.29.050(A)(16), a new condition clarifies that a material site permit shall not be issued until the 15-day appeal period has passed to avoid someone operating prior to an appeal being filed only to be required to cease because of the stay required by KPB 21.20.260.
 14. A new condition is added in KPB 21.29.050(A)(17), Sound Level. The condition requires that sounds levels from material site activities not exceed 75 dB(A), measured at or within the property boundary of the material site. Some exceptions are made to increase that limit for sound of a short duration between 7 a.m. and 7 p.m. The planning commission may reduce the sound level requirements in consideration of the existing land uses in the vicinity. This sound level requirement has a sunset clause of 365 days after adoption unless extended by the assembly in order to gather information on noise levels and ensure that this new requirement is workable for site operations. This condition meets the standard regarding reduction of noise impacts generated by a material site.
 15. KPB 21.29.050(A)(18) is a new requirement that white noise devices be used instead of high-pitched tone alarms. This requirement may be waived based on existing land uses in the vicinity of the material site. This condition meets the standard regarding reduction of noise impacts generated by a material site.
 16. KPB 21.29.050(A)(19) is a new condition allowing the planning commission or planning director as appropriate to determine the points of ingress and egress of a material site as concerns regarding the direction of haul route traffic are frequently raised. Driveway authorizations for access to public roads must be received prior to permit issuance. This condition meets the standards regarding traffic, noise, and dust.
 17. KPB 21.29.050(A)(20) is a new condition requiring dust suppression on haul routes. The condition can be relaxed based on surrounding land uses. This condition meets the standard regarding reduction of dust generated by material sites.

Material Site Sectional Analysis

October 24, 2019

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18. KPB 21.29.050(A)(21) provides that if surface water protection measures are to be provided as defined in KPB 21.29.030(A)(8), they must be approved by a licensed civil engineer.
 19. KPB 21.29.050(A)(22) is a new condition requiring material sites to maintain one monitoring tube per ten acres of excavated area four feet below the proposed excavation. This condition is consistent with the new requirement that excavation remain four feet above groundwater. This condition addresses the standard of protection of surrounding water sources.
 20. KPB 21.29.050(A)(23) is a new requirement for a setback from local option zoning districts, schools, child care facilities, senior centers, assisted living homes and licensed health care facilities.
 21. KPB 21.20.055, Decision, is added which clarifies the planning commission's authority to approve or disapprove a permit application and authority to modify permit conditions.
 22. KPB 21.29.060 is amended to clarify that reclamation plans last for five years consistent with the five-year renewal requirement for material site permits. Bonding is required at \$2000.00 per acre for all acreage included in the five-year reclamation plan, or the planning director may accept a civil engineer's estimate for determining the amount of the bond. If the applicant is bonded with the state, the applicant need not be bonded with the borough.
 23. KPB 21.29.120, Prior Existing Uses, is amended to delete the provision regarding terminating abandoned material site permits since it was only applicable to permits that did not operate between May 21, 1996 and May 21, 2011. New language is added requiring PEUs to provide proof of compliance with the state reclamation, bonding, and letter of intent requirements. Failure to file this documentation may result in an enforcement action.
 24. KPB 21.50.055, Fines, is amended to include a \$300.00 fine for failure to provide a reclamation plan and proof of bonding or letter of intent pursuant to KPB 21.29.120.

Broyles, Randi

From: Hans Bilben <catchalaska@alaska.net>
Sent: Tuesday, February 8, 2022 6:12 PM
To: Blankenship, Johni
Subject: <EXTERNAL-SENDER>Info for 2/15/22 Committee of the Whole (Material Site Ordinance)

CAUTION: This email originated from outside of the KPB system. Please use caution when responding or providing information. Do not click on links or open attachments unless you recognize the sender, know the content is safe and were expecting the communication.

Date:
2/8/2022

To:
KPB Assembly Members

Subject:
KPB 21.29.050 (A)(2) Buffer Area/Zone

Assembly Members,

During the January 18th Assembly meeting Gina DeBardelaben of McLane Consulting spoke concerning the proposed material site ordinance revision. She followed up with a letter to the Assembly dated January 19th. While most of Gina's proposals have merit and should be considered, her proposal to allow an applicant to extract material from under and within the Buffer Zone is seriously flawed.

The Buffer Zone is just what the name implies, a buffer to protect neighboring property owners from noise, visual, and to some degree dust impacts. The buffer zone is designed in accordance with existing uses of neighboring properties, and may consist of fifty feet of undisturbed natural vegetation, a six foot earthen berm with a 2/1 slope, a six foot fence, or a combination of the three. In cases where there are no neighboring properties that will have negative impacts, the buffer zone can be minimal or nonexistent. When existing uses dictate the need for protections the Buffer Zone is designed accordingly. The reason for the entire CLUP ordinance is stated in **KPB 21.25.020 Purpose**. It says "...impose minimum standards for certain land uses which may be damaging to the public health, safety, and welfare..." Those minimum standards are spelled out in **KPB 21.29.040** and need to be adhered to during all aspects of the proposed use.

Gina's final statement that allowing excavation in the Buffer Zone will reduce need for additional material sites has no merit, as the need for additional sites will be totally demand driven. Another oversight in her proposal is just where is all of the material going to come from to replace and rebuild the Buffer Zone after excavating twenty feet or more in depth.

Allowing excavation in the Buffer Zone deprives borough residents of the protections spelled out in the ordinance, contradicts the stated Purpose of the entire ordinance, and should not be allowed under any circumstances.

Thank you for your service to the people of the Kenai Peninsula,

Broyles, Randi

From: Hans Bilben <catchalaska@alaska.net>
Sent: Wednesday, February 9, 2022 10:52 AM
To: Blankenship, Johni
Subject: <EXTERNAL-SENDER> Supporting Documents for proposed material site amendments.

CAUTION: This email originated from outside of the KPB system. Please use caution when responding or providing information. Do not click on links or open attachments unless you recognize the sender, know the content is safe and were expecting the communication.

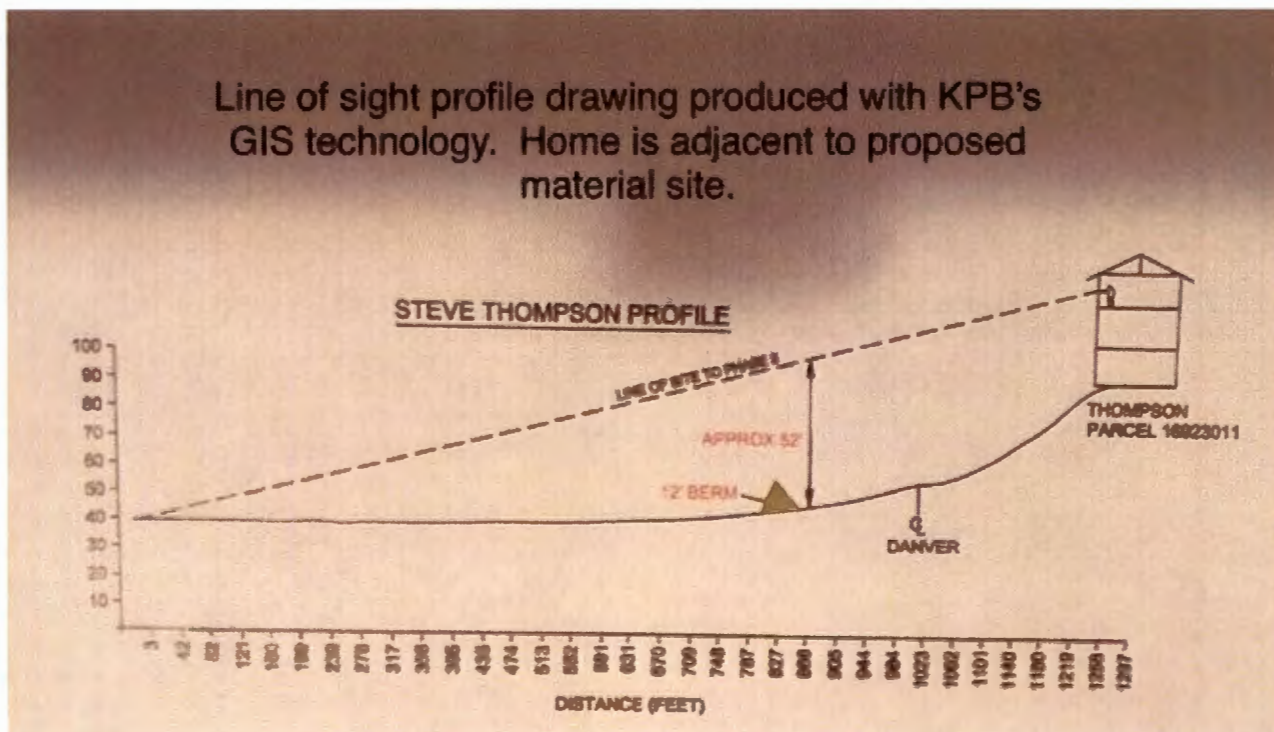
Hi Johni,

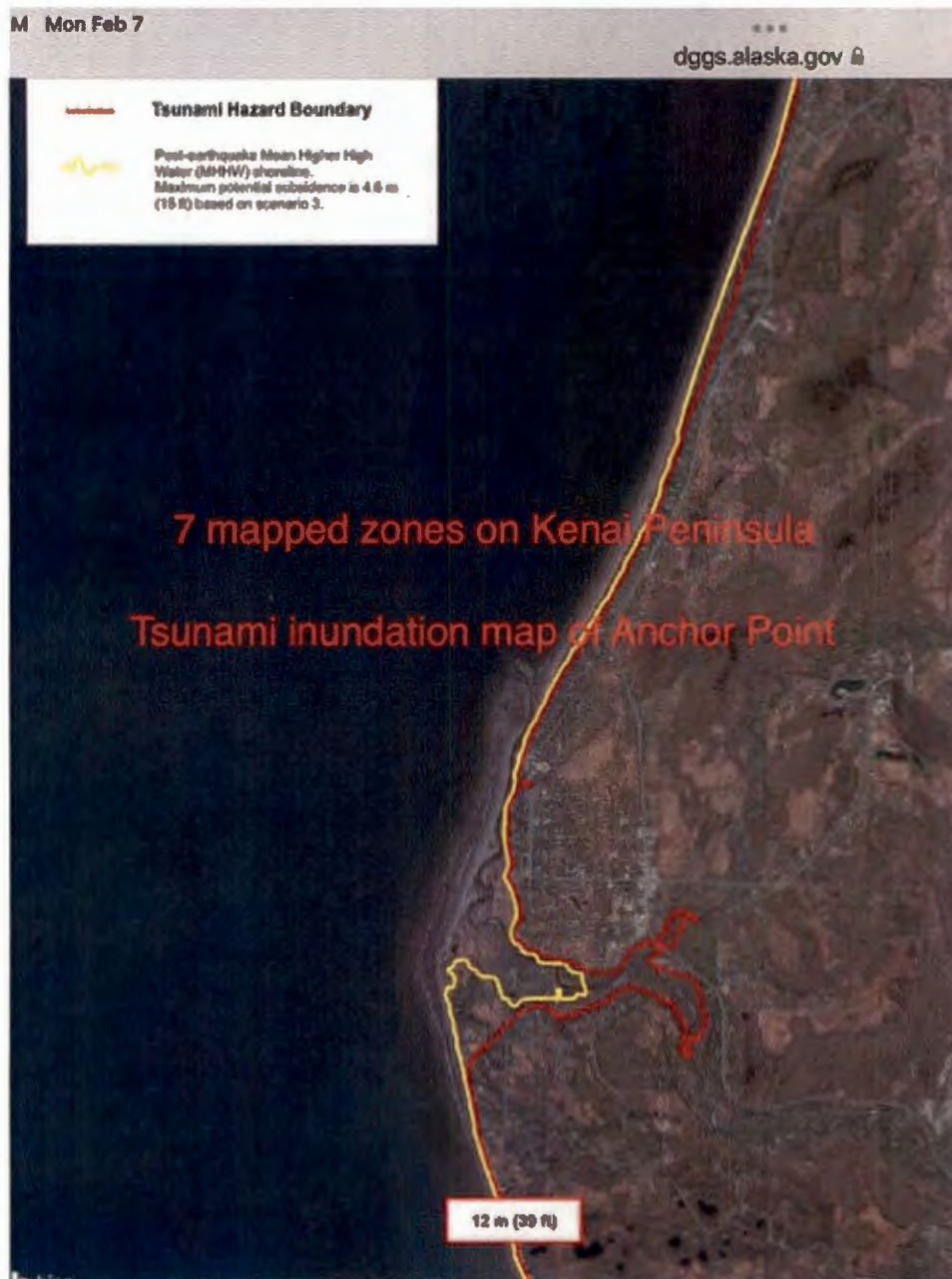
I should have sent these with the proposed amendments yesterday, but OOPS! If you could include these supporting documents with my proposed amendments to the material site ordinance for the Committee of the Whole session on 2/15/2022 that would be great!!

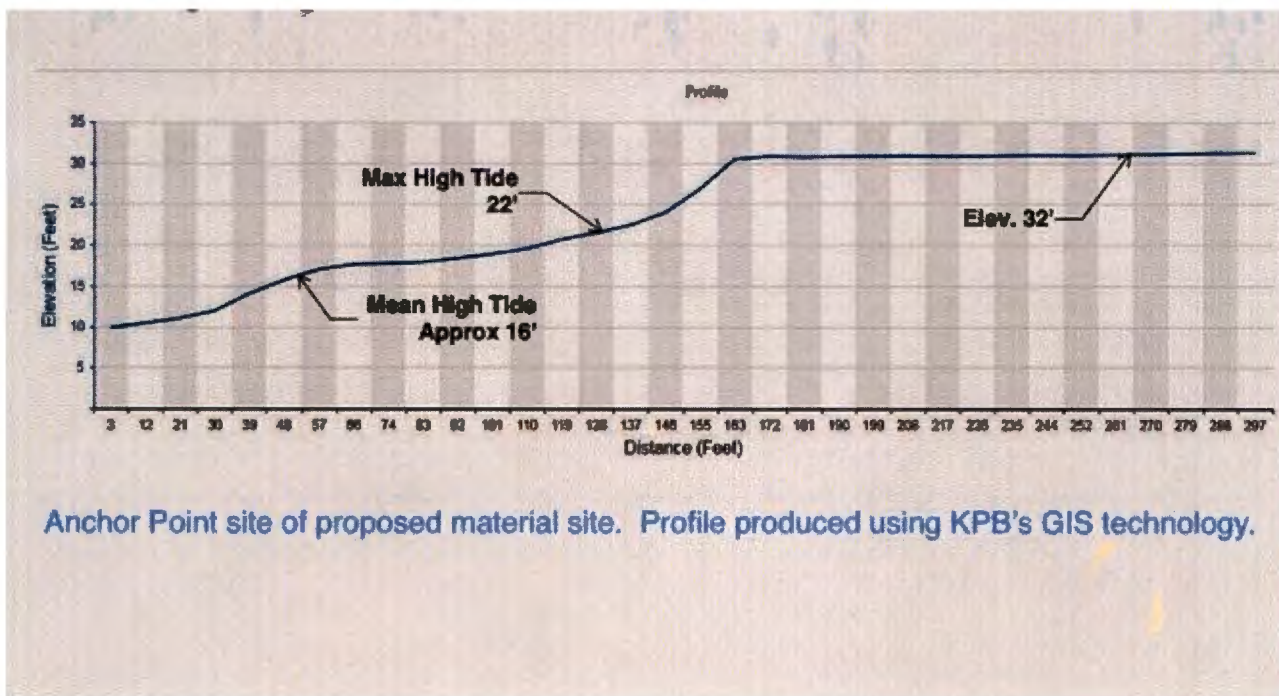
Thanks,

Hans Bilben

Document in support of proposed amendment 21.29.050 (A)(2)(b) Buffer Area.







8:37 AM Wed Feb 9

sms-tsunami-warning.com

100%

rebuilding and road reconstruction) are critical.



Image: Tsunami environmental impact

Combined with the issue of waste is that of hazardous materials and toxic substances that can be inadvertently mixed up with ordinary debris. These include asbestos, oil fuel, and other industrial raw materials and chemicals. Rapid clean-up of affected areas can result in inappropriate disposal methods, including air burning and open dumping, leading to secondary impacts on the environment.

Contamination of soil and water is the second key environmental impact of a tsunami. Salination of water bodies such as rivers, wells, inland lakes, and groundwater aquifers can occur in most cases. This also affects the soil fertility of agricultural lands due to salination and debris contamination, which will affect yields in the medium and long term. Sewage, septic tanks and toilets are damaged contaminating the water supply.

Last but not least, there may be radiation resulting from damage to nuclear plants, as it happened in Japan in March 2011. Since radiation exists for a long time, it has the capacity to inflict damage upon anything exposed to it. Radiation is most dangerous to animals and humans causing destruction as molecules lose their electrons. The damage caused by radiation to the DNA structure determines birth defects, cancers even death.

Cost

Massive costs hit communities and nations when a tsunami happens. Victims and survivors of the tsunami need immediate help from rescue teams.

Broyles, Randi

From: Hans Bilben <catchalaska@alaska.net>
Sent: Tuesday, February 8, 2022 6:00 PM
To: Blankenship, Johni
Cc: Aeschliman, Melanie; Kelley, Sean; Chesley, Lane
Subject: <EXTERNAL-SENDER>Material Site Ordinance Amendments
Attachments: Standard #1 Amendment.pages; CLUP Category Amendment.pages; Buffer Area amendments.pages; Waterbody Amendments.pages

CAUTION:This email originated from outside of the KPB system. Please use caution when responding or providing information. Do not click on links or open attachments unless you recognize the sender, know the content is safe and were expecting the communication.

Hi Johni,

Please provide these proposed amendments to the Committee of the Whole dealing with the Material Site Ordinance on 2/15/2022. If there is any trouble opening these because of format, let me know and I'll adjust accordingly!

Thanks,

Hans Bilben

1. 21.29.050 (A)(2) Buffer Area (3 amendments)

Replace (a) with:

- a. A buffer area shall be established between the area of excavation and the parcel boundaries. The buffer area for a Class 1 (processing) CLUP shall consist of the following: A minimum fifty feet of undisturbed natural vegetation and a minimum twelve-foot earthen berm with a minimum 2/1 slope. The buffer area for a Class 2 (non-processing) CLUP shall consist of one or any combination of the following: Fifty feet of undisturbed natural vegetation, a minimum six-foot fence, a minimum six-foot earthen berm with a minimum 2/1 slope.
-

- 2. Add a new paragraph to 21.29.050 (A)(2) Buffer Area—maybe call it (b) and move remainder of letters down one?**

- b. KPB's Geographic Information System (GIS) technology will be utilized in the design of the buffer area when differing elevations exist between the proposed site and neighboring property owners. Using this technology, line of sight profile drawings from the uppermost inhabitable level of existing properties located within one thousand feet of the proposed parcel boundary shall be utilized in the determination of sufficiency of the buffer area.
-

3. In the revised proposal under Buffer Area (c) the word “**not**” is omitted from what the wording was in the current (**see 21.29.050 (A)(2) in original**) ordinance. This is a huge takeaway from borough residents and I believe that when it was discussed at the material site group they decided to keep the word “**not**”. As worded, the proposed revision would include any easements between a property owner and a gravel pit as part of the Buffer Area.

21.29.050 (A)(2)(c) Should be amended to read:

c. Where an easement exists, a buffer shall **not** overlap the easement, unless otherwise conditioned by the planning commission or planning director.

1. Three Amendments to create two Categories of CLUPs.

21.29.020 (B) Conditional Land Use Permit.

B. A conditional land use permit (CLUP) is required for material extraction which disturbs more than 2.5 cumulative acres, or material extraction of any size that enters the water table. [~~A CLUP IS REQUIRED FOR MATERIALS PROCESSING.~~] **CLUPs will be categorized at the time of application as: Class 1 (Processing), or Class 2 (Non-Processing).** A CLUP is valid for a period of five years. The provisions of KPB Chapter 21.25 are applicable to material site CLUPs and the provisions of 21.25 and 21.29 are read in harmony. If there is a conflict between the provisions of KPB 21.25 and 21.29, the provisions of 21.29 are controlling.

2. 21.29.050 (A) Permit Conditions.

A. The following mandatory conditions apply to counter permits, [~~CLUPs~~] **Class 1 CLUPs, and Class 2 CLUPs** issued for sand, gravel, or material sites:

3. 21.29.050 (A)(3) Permit Conditions

3. Processing. In the case of a [~~CLUP~~] **Class 1 (processing) CLUP**, any equipment which conditions or processes material must be operated at least [~~300~~] **500** feet from the parcel boundaries. At its discretion, the planning commission may waive the [~~300~~] **500** foot processing distance requirement, or allow a lesser distance in consideration of and in accordance with existing uses of adjacent property at the time.

Amendment to Standards

21.29.040 (A)(1) Standards for sand, gravel, or material sites.

1. Protects against the lowering and/or contamination of water sources serving other properties;

Add new paragraphs (c) and (d) to this section:

21.29.050 (A)(6) Waterbodies.

c. No material site extraction shall be allowed within the boundaries of a tsunami inundation area. These areas are mapped by the Alaska DNR, in partnership with the Alaska Earthquake Center and the Alaska Division of Homeland Security and Emergency Management.

d. When material sites are proposed near waterways and estuaries which support salmon rearing habitat existing ground water flow information shall be utilized to determine if standards will be met.

Mr. Brent Johnson, President,
Kenai Peninsula Borough Assembly
and Assembly members

Dear Mr. Johnson and Assembly Members,

Reading about the wish of the Assembly to review the Gravel Pit Ordinance, reminded me of my years if involvement with this.

Drew Scalzi wrote the first one, which the Gravel folks hatted, they did not feel it was necessary to control their businesses, and deeply resented the efforts. I got involved thanks to Ann Byes of Anchor Point, who lives near a prime example of gravel pit abuse, where a house stands totally isolated by the deep extractions all around it. She and I were concerned that future extraction would not affect residents nearby, and had asked for at least a 300 ft. distance from a well and the proposed gravel pit.. Before it was voted on, that was changed to 100 ft. At that time Committee meetings were behind closed doors and discussion at the meetings very limited. (During my tenure we changed that.)

So, during my tenure we took another look at it and rewrote it, again to the utter chagrin of the businesses. At that time, as you are now, we came up against a subdivision that faces a busy gravel pit just outside the quiet subdivision, and those folks are not happy about it. They can get local option zoning within the subdivision, but no protection outside the subdivision.

It is time for the Assembly to consider zoning certain areas as residential, that would not allow gravel pits, or commercial businesses. It is the only way to ensure established subdivisions will be protected from commercial disturbances.

In the past there has been a huge outcry against zoning, but I think the time has come. I see the planning committee listening to impassioned cries against proposed gravel pits, and I can empathize. It is impossible to create an ordinance that will protect them.

And somehow we have to recognize there is a need for gravel in order to build anything, roads, homes, etc. That is a vital business on the Peninsula.

I do not envy you what lies ahead. I wish you the best in your endeavors.

Sincerely,

Milli Martin
P.O. Box 2652
Homer, Alaska 99603

Broyles, Randi

From: Blankenship, Johni
Sent: Wednesday, January 26, 2022 11:54 AM
To: Broyles, Randi
Subject: FW: <EXTERNAL-SENDER>Fwd: KPB Ordinance 2021 - 41

From: Larry Smith <dlconst.smith@gmail.com>
Sent: Wednesday, January 26, 2022 11:52 AM
To: Blankenship, Johni <JBlankenship@kpb.us>
Subject: <EXTERNAL-SENDER>Fwd: KPB Ordinance 2021 - 41

CAUTION: This email originated from outside of the KPB system. Please use caution when responding or providing information. Do not click on links or open attachments unless you recognize the sender, know the content is safe and were expecting the communication.

Please include this in the Assembly packet for the next meeting wherein KPB Ordinance 2021-41 is considered. Thank you.

----- Forwarded message -----

From: **Larry Smith** <dlconst.smith@gmail.com>
Date: Wed, Jan 26, 2022 at 11:47 AM
Subject: KPB Ordinance 2021 - 41
To: <bjohnson@kpb.us>, <bhibbert@kpb.us>, <rderkevorkian@kpb.us>, <bjorkman@kpb.us>, <tysoncox@kpb.us>, <belam@kpb.us>, <cecklund@kpb.us>, <lchesley@kpb.us>, <mtupper@kpb.us>, Pierce, Charlie <cpierce@kpb.us>, Kpac Association <kpacassociation@yahoo.com>

Ladies and Gentlemen,

I attended the KPB Assembly meeting on January 18, 2022 and testified against this Ordinance. I do not know how many emails you received in support of this Ordinance but seem to recall that everyone (at least a majority) who testified in person that evening testified against the Ordinance. And yet at the conclusion of the public testimony the Assembly introduced the Ordinance and offered a number of amendments; some of which were adopted and others rejected.

Therefore I wonder who it is that you are representing? Certainly not the public or your constituents since in my view they requested that you vote down the Ordinance. Are you representing the KPB Planning Commission or the KPB Administration? Why are you moving forward with this Ordinance?

--

Larry Smith

President
D & L Construction Co., Inc.
(907) 262-6160
(907) 262-6163 Fax
(907) 398-4284 Cell

--

Larry Smith

President

D & L Construction Co., Inc.

(907) 262-6160

(907) 262-6163 Fax

(907) 398-4284 Cell

Dibble Creek Rock Ltd.

January 20, 2022

Kenai Peninsula Borough
Borough Assembly
144 N. Binkley Street
Soldotna, AK 99669

RE: Review of Ordinance 2021-41

Dibble Creek Rock Ltd. (DCR) does not support the current proposed changes regarding KPB Ordinance 2021-41. We simply feel that the Borough needs to put more research into logical, effective changes to the ordinance that make sense. Not only economic sense, but changes that are geared towards efficiency, usefulness, and overall production for the operators and to stop acting upon the skewed emotions of landowners.

The proposed changes to the ordinance currently read very distorted. It is very misguided and will ultimately result in more complaints to the Borough, which is why the code was written in the first place, to reduce complaints. Wording within the code should be heavily modified, eliminating wording or phrases that have nothing to do with working within a material site or phrases that relay unattainable results. Wording such as "other uses, protects against, minimizes, vicinity" are just a few examples that are vague and subject to interpretation. Possibly more appropriate wording could be considered. It also appears there is potential for unnecessary overlap in regulation between the Borough and other State and Federal agencies.

As one of the larger gravel processors on the Kenai Peninsula, we are highly disappointed that no one from the KPB Material Site Work Group reached out to Dibble Creek Rock Ltd. in the past two years for our input or suggestions for modifications to the ordinance. What operators did they reach out to for input?

The growing need for **quality** processed gravel throughout the Kenai Peninsula will become increasingly difficult to attain. Product specifications need to be met to ensure that aggregates of superior quality are produced for not only maintaining roads, but for home and building foundations on less than favorable land conditions. Quality aggregates are a big part of the ready-mix concrete and asphalt manufacturing process. Products that prove to be crucial components in the road building and general construction industry. Challenging demands put forth in the new ordinance would drive the cost of doing business through the roof. In turn, dramatically increasing the price of materials to the end user (State, Feds, Borough, Homeowners).

We do hope that our thoughts, along with others on the Kenai Peninsula are genuinely taken into consideration.

Respectfully,

Cap Shafer
President

Quality Washed Rock Products • Ready Mix Concrete

34481 North Fork Road • Anchor Point, AK 99556 • 907.235.7126 - Phone • 907.235.0682 - Fax



To the Kenai Peninsula Borough Assembly,

The Kenai Peninsula Aggregate and Contractors Association has received over a hundred phone calls from our members and the public in regard to the actions of the assembly at the meeting conducted on the 18th of January, 2022. All these calls asked us two things. What is going on?!? Why did the assembly go against the will of the people? Specifically, callers are concerned about the Assembly's decision to do so.

Several of our members have asked the Association to write a letter as a plea of communication and education, asking members of the assembly to contact them before any further amendments are considered. Most of our members and the public are concerned about what damage to the industry, economy, property rights, and equal protection any further amendments will do without industry input.

Many calls received have a consensus that further amendments without education of the industry will result in negative impacts. These impacts have varied from the closure of existing material sites, closure to the public, doubling or tripling of material costs, or significant increase in the cost of material. This will unnecessarily impact the economy of the Kenai peninsula and quite possibly affect the safety of the residents in many ways. Many worried that if the cost of sand increases dramatically, roads will receive less maintenance, causing potentially fatal accidents. That is just the most obvious concern, as we are in the season of slick roads and the residents have already experienced cutbacks in road maintenance during the Walker administration at the state level. We can see how voters responded when Government made decisions that affected basic needs and took advice from special interests. One might note the current situation and reaction of the trucking industry in Canada, due to adverse regulation.

As a plea for communication and education, these members of our association below have asked their names and phone numbers be included. Thank you for your full consideration in this matter.

Ed Martin III, President, KPACA 252-2554.

Cap Shafer, Dibble Creek Rock, 399-4550

Larry Smith, D&L Construction, 398-4284

Robert Peterkin, Northwind Properties LLC, 252-7482

Dave Yragui, 252-1891

Dan Michel, Valley View Gravel, 252-1833

Jake Denbrock, SND Enterprises, 252-0156

Glen Martin, Great Northern Construction and Management, 252-5326



Lou Oliva, L&J Enterprises, 252-1300

Marty Oberg, Peninsula Construction, 398-6331

Matt Letzring, Letzring Inc., 398-5263

Mark Rozak, Steam on Wheels, 252-2335

Troy Jones, East Road Services Inc., 235-6574, 399-1297

Terry Best, 398-1268

Chad Hammond, Hammond Trucking, 398-6715

Scott Foster, Foster Construction, 394-1977

Dennis Merkes, Merkes Builders, 398-3369

Richard Encelewski, Ninilchik Native Assoc., 348-0884, 567-3866

Cole Peterson, Metco Alaska llc, 362-7142

Randy Chumley, A&L Construction, 398-3048

Sean McKeown, Knik Construction, 907-545-3637

From: K, E, & E Martin <keeconstructionllc@yahoo.com>
Sent: Sunday, January 30, 2022 12:14 PM
To: Pierce, Charlie <CPierce@kpb.us>; Planning Dept, <planning@kpb.us>; Kelley, Sean <skelley@kpb.us>; Blankenship, Johni <JBlankenship@kpb.us>
Subject: Fw: <EXTERNAL-SENDER>The Doctrine of Estoppel

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KPB Assembly & Borough Mayor,
 Please consider a no vote on 2021-41 or any substitution.

Go back to square one, with a work group made up of 4 individuals from the Industry & 4 Concerned Property Owners only. Allow them to find consensus on the issues that the Government has powers to enforce **& only those powers (ie: ZONING or not under a second class Borough ?)** . Anything beyond lawful KPB Code & Enforcement powers needs to be resolved in Civil Court. The KPB Administration shouldn't become referee for conflicts ahead or after citizen civil controversies regarding Private Property Rights. .

The government should provide assistance (information) of Law, Jurisdiction & by what means to the KPB can Enforce Code! We feel this is the only equitable solution to this controversy now appearing currently before the Administration, Assembly & it's citizens.

As far as the requested "REMAND " on the civil cases , stay out of it entirely regardless of any demand of the Superior Court order(s). The only response should be "we did our job now do yours & we advise consideration of applying the Doctrine of ESTOPPEL.

It appears to us the time to defend the permits the KPB has issued has maybe long past! You failed to honestly do any defense for the Permit Holders. Why is that ? Being the party who issued the permit(s), you should defend it/them!

No Government should be the catalyst for controversy! Please consider our views.
 Ed & Kathleen Martin.

KEE Construction, LLC

January 6, 2022

Mr. Ed Martin III
President
Kenai Peninsula Aggregate and Contractors Association
via email: Kpac Association [kpacassociation@yahoo.com]

Re: Comments on KPB proposed material site ordinance amendments

Dear Mr. Martin:

You have requested that I review the recently proposed Kenai Peninsula Borough material site ordinance amendments introduced December 7, 2021, by the Mayor along with your suggested revisions to the amendments and provide comments. You and I have also discussed the process leading up to these proposed amendments. My comments are provided pro bono as a courtesy to your organization, as well as to the Kenai Peninsula Borough and all residents and businesses interested in this topic.

I do not have any current clients or projects in the Borough that I would consider a conflict of interest, however I do have more than 39 years of experience performing hydrogeologic work in Alaska with some of it on the Kenai Peninsula, as well as relevant experience being involved in the regulation and management of complex resource development issues from both government and private sector perspectives.

My comments are grouped into two areas: 1) the process of developing these amendments; and 2) technical considerations regarding gravel pits and groundwater resources.

Process

The draft ordinance amendments state that:

the assembly established a material site work group by adoption of resolution 2018-004 (Substitute) to engage in a collaborative discussion involving the public and industry to make recommendations regarding the material site code;

From our discussion, it is obvious that the material site work group did not operate on a level playing field, but rather produced its findings through majority vote. In my opinion, this is a fatal flaw of the process that resulted in the current proposals.

As background, I have been involved in two work groups regarding very complex and controversial topics that were highly successful as a result of operating on a level playing field. By this I mean that all decisions, large and small, were made by consensus, not majority rule.

In the 1980s, there was considerable concern over potential and actual groundwater and water well contamination issues on the Kenai Peninsula related to the oil and gas industry. The result was that I, as an employee of the Alaska Division of Geological and Geophysical Surveys, co-

5701 PENNY CIRCLE, ANCHORAGE, AK, 99516

jamunter@arctic.net

PHONE (907) 345-0165; FAX (907) 348-8592

chaired the Kenai Peninsula Groundwater Task Force. This task force obtained considerable funding from the oil and gas industry that was operating on the peninsula at the time to conduct groundwater studies to better understand groundwater resources and disposal sites such as the Sterling Special Waste Management Site. The condition placed on the task force by industry representatives in order to participate and provide funding was that of a "level playing field". While sometimes it took quite a bit of time to achieve consensus, the results were durable and not very controversial.

More recently, the Alaska Department of Environmental Conservation initiated a statewide effort to regulate the drilling of single-family domestic wells. A Stakeholders Working Group (SWG) was convened to explore the issues, and again, all work was conducted by consensus. The group was hugely successful in developing a set of Best Management Practices for drilling private single-family wells, in developing another document for properly decommissioning wells and in creating a new website with numerous resources for well owners:
<https://dec.alaska.gov/eh/dw/dwp/private-wells/>.

I bring these examples to your attention because, in reviewing the proposed amendments and your comments, it is apparent that these proposed amendments are complex and controversial, often interrelate to one another, and would benefit greatly from more work by a working group operating collaboratively by consensus prior to being considered for adoption.

It is worth noting that in our society ever-tightening environmental regulations are typically a one-way street. The long-term harm from over-regulating resource extraction is increasing costs and increasing scarcity of the resource on the open market. Sand and gravel resources are fundamentally important to the orderly economic development of the Kenai Peninsula Borough, are not highly transportable from other locations, and are dependent on time-limited extraction activities at most sites as a result of resource depletion. In south-central Alaska, there are many examples of reclaimed former gravel pits (some with ponds) that are important assets for long-term community development and wildlife.

A working group operating by consensus should be afforded whatever time it takes to achieve results. They should self-organize, with Chairs or Co-Chairs selected on the basis of impartial administration of the group. A potentially long timeframe should be considered for this important work because the KPB currently has a functional ordinance governing gravel resource extraction to serve in the interim. While many would likely consider the existing ordinances imperfect, it seems that it is far more important to get revisions right, rather than to get them fast.

In a nutshell, the existing proposed amendments should be scrapped and the whole process should start over with a level playing field amongst all stakeholders who agree to work in a collaborative and productive atmosphere towards improvements to the existing ordinances.

Technical considerations

There are many legitimate issues associated with gravel pits such as noise, dust, traffic, visual impacts, etc. which I will not address. One of the key concerns that commonly arises with gravel pits is impacts to groundwater or surface water resources. This is important, because while land

and gravel resources are typically privately owned, water resources in Alaska are reserved to the people for common use and responsibility for their management is delegated to agencies. Also, water has the uncanny habit of moving from place to place. So what happens to water at a gravel pit does not stay at the gravel pit.

The existing ordinance allows excavation into the water table under certain conditions. Proposed revisions by Kpac suggest loosening those restrictions and allowing more general mining of sand and gravel to a depth of up to 15 feet below the water table.

There is not a clear-cut answer to how mining of aggregate resources below the water table should be regulated. As described above, this should be subjected to deliberation by a stakeholder working group operating under consensus rules. Below, however are some considerations.

First, mining resources below the water table is not inherently "bad" or "not permissible" by agencies. The recently completed and approved Environmental Impact Statement for the proposed Donlin gold mine in southwest Alaska, for example, proposes digging an open pit about two miles long, one mile wide and more than 1/4 mile deep that would fill almost to the brim after mining to form a pit lake. With mining below the water table, however, precautions are warranted to protect nearby users of groundwater and potentially-affected surface water resources, wetlands and wildlife.

Throughout south-central Alaska, and notably in the Anchor Point area, numerous old gravel pits are now flooded to form small lakes or ponds. Some of these features provide wildlife habitat and potential visual and recreational enhancement for neighboring homes and businesses.

During gravel pit operations, one of the largest concerns about groundwater contamination comes from accidental fuel spills. All gravel pits should have rigorous and robust measures in place to prevent such spills and some degree of capacity to clean up spills if they occur.

The current ordinance calls for a two-foot vertical separation between the bottom of a pit and the seasonal high water table under most conditions. The rationale for this separation is not clear. In the event of a sizeable fuel spill, such a buffer would not be very useful in preventing fuel from reaching the water table. In a gravel pit, fuel would tend to infiltrate vertically downward from the spill point and "pancake" out on the surface of the water table two feet or more below the ground. The pore-space storage that would capture spilled fuel before reaching the water table could be as low as about 10 gallons. Once a spill encountered the water table, dissolved fuel components would begin to migrate in a downgradient direction along with the groundwater. To be most effective, cleanup should be rapid and may entail excavating a large quantity of contaminated sand and gravel. In contrast, if a fuel spill reached a gravel pit pond, the resulting sheen and/or floating product would likely be immediately obvious. Sorbents and/or booms stored on-site could be rapidly deployed to contain and mop up the bulk of the contamination.

Some perspective on regulatory requirements for two- or four-foot separation to the water table may be useful. It is a common regulatory requirement that the distance between the bottom of a septic system leachfield and the top of the seasonal high water table must be at least four feet.

The reason for this requirement is that wastewater percolating downward from leachfields needs to receive aerobic (i.e. oxygenated) subsurface treatment in the unsaturated zone between the bottom of the leachfield and the low-oxygen saturated sediments below the water table in order to treat and removed certain compounds and microorganisms from the wastewater. Such logic does not apply to gravel pits where no wastewater treatment occurs.

Part of Kpac's proposed revision to ordinances is that, in order to make wider and taller surrounding berms (10 ft high rather than 6 feet high) and simultaneously preserve the economic viability of extracting aggregate resources, excavation below the water table should be considered along with appropriate protective measures.

A consequence of extracting sand and gravel below the water table is that the total footprint of gravel pits in any given area may be reduced. This could occur because if there is a fixed market demand for aggregate the aggregate has to come from somewhere. If pits were able to extract an additional 17 vertical feet (two feet above and 15 feet below the water table) of aggregate resources from part of their operation, then it follows that fewer net acres of land surface would need to be disturbed to meet the market demand.

One useful protective measure for water table excavation would be the prohibited distance to surrounding water wells or even potential water well locations on nearby undeveloped property. A gravel pit should not "shadow" a potential well location on a nearby property such that the property is undevelopable using a well and a septic system. A large public water-supply well, for example, must be sited more than 200 feet from certain potential sources of contamination, and that distance should be considered as suitably applicable for private well distances from gravel pit ponds, as well.

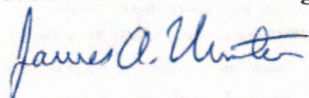
Another potential contaminant source from excavating below the water table is fine silt or clay that could become entrained in groundwater and travel some distance towards a well. Again, a protective distance to surrounding wells, especially if groundwater flow directions can be determined, would likely be the most practical way of reducing risk from entrained silt or clay in groundwater.

The concept of requiring the bottom of an excavation to be 15 feet above nearby private well intake openings is only marginally protective. This is because, if a contaminant plume should develop in groundwater, lateral and vertical dispersion (i.e. spreading) of the plume could readily exceed this amount. Also, the construction details of nearby wells are not always known.

Should you have any questions, please call me at 907-345-0165 or 907-727-6310 (cell).

Sincerely,

J. A. Munter Consulting, Inc.



James A. Munter, CPG

Certified Ground Water Professional No. 119481

Alaska Licensed Professional Geologist No. 568

Comments on KPB materials site revisions

Page 4 of 4

January 6, 2022

Turner, Michele

Subject: FW: <EXTERNAL-SENDER>Fw: DEC Drinking Water regulations related to gravel extraction
Attachments: image001.png

From: Kpac Association <kpacassociation@yahoo.com>
Sent: Thursday, January 20, 2022 2:08 PM
To: G_Notify_AssemblyClerk <G_Notify_AssemblyClerk@kpb.us>
Subject: <EXTERNAL-SENDER>Fw: DEC Drinking Water regulations related to gravel extraction

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Hi Johni,
Please forward to the assembly.
Ed Martin III
President
KPACA
252-2554

----- Forwarded Message -----

From: Palmer, Charley (DEC) <charley.palmer@alaska.gov>
To: kpacassociation@yahoo.com <kpacassociation@yahoo.com>
Cc: Rypkema, James (DEC) <james.rypkema@alaska.gov>; Miller, Christopher C (DEC) <chris.miller@alaska.gov>
Sent: Monday, January 10, 2022, 10:06:57 AM GMT-9
Subject: DEC Drinking Water regulations related to gravel extraction

Hi Ed Martin,

As mentioned before, we have little authority with respect to land use activities near a public water system in our current regulations, 18 AAC 80. For that reason, we did work with the Division of Water to update a Best Management Practices document found at <https://dec.alaska.gov/water/wastewater/stormwater/gravel/>, to include consideration of nearby public water systems. I've cc'd Jim Rypkema in case he has anything to add regarding the BMP document. I've also cc'd my supervisor, Chris Miller, just so he's aware of our communication.

As requested, below are relevant regulations that could apply:

18 AAC 80.015. Well protection, source water protection, and well decommissioning.

(a) A person may not

(1) cause pollution or contamination to enter a public water system; or

(2) create or maintain a condition that has a significant potential to cause or allow the pollution or contamination of a public water system.

(d) A person who owns or is responsible for a well, hole, or excavation into a water supply source or potential water supply source for a public water system shall use appropriate methods as follows to protect the water supply source as required under (a) of this section:

(1) if the well, hole, or excavation is either active or temporarily inactive, the person shall maintain the well, hole, or excavation using appropriate methods, including methods set out in (b) of this section;

(2) if the well, hole, or excavation is permanently inactive or abandoned, the person shall protect, seal, or fill the well, hole, or excavation using appropriate methods approved by the department as set out in (e) of this section;

(3) in this subsection “wells, holes, or excavations” include

(A) a well that may or may not be used for potable water;

(B) a hole drilled, augured, or jetted for the purpose of subsurface exploration or sampling;

(C) a cathodic protection well; or

(D) another form of excavation that might contaminate a public water supply source.

18 AAC 80.020. Minimum separation distances.

(a) A person may not construct, install, maintain, or operate a public water system unless the minimum separation distances in Table A, in this subsection, are maintained between a potential source of contamination and a drinking water source for the public water system.

TABLE A.
Minimum Separation Distances^a Between Drinking
Water Sources and Potential Sources of Contamination
(Measured horizontally in feet)

Type of Drinking Water System	
Potential Sources of Contamination	Community Water Systems, Non-transient Non-Community Water Systems, and Transient Non-Community Water Systems
Wastewater treatment works, ^b wastewater disposal system, ^b pit privy, ^b sewer manhole, lift station, cleanout	200
Community sewer line, holding tank, ^b other potential sources of contamination ^c	200
Private sewer line, petroleum lines and storage tanks, ^d drinking water treatment waste ^e	100

Notes to Table A:

^a These minimum distances will be expanded, or additional monitoring will be required under 18 AAC 80.020(b) and (e)(2).

^b Distance to a drinking water source is measured from the nearest edge of the drinking water source to the nearest edge of the potential source of contamination.

^c Other potential sources of contamination include [but are not limited to] sanitary landfills, domestic animal and agricultural waste, and industrial discharge lines.

^d The minimum separation distances for petroleum storage tanks do not apply to tanks that contain propane, or to above-ground storage tanks or drums that, in the aggregate, have a storage capacity of less than 500 gallons of petroleum products, and that store only petroleum products necessary for the operation and maintenance of pumps, power generation systems, or heating systems associated with a potable water source.

^e Drinking water treatment wastes include the backwash water from filters and water softeners, and the reject water from reverse osmosis units.

(b) The department will require a greater separation distance than that required by Table A in (a) of this section if the department determines that additional distance is necessary to protect surface water, groundwater, or a drinking water source. The department will make this decision after considering soil classifications, groundwater conditions, surface topography, geology, past experience, or other factors relevant to protection of surface water, groundwater, or drinking water.

Regards,



Charley Palmer

Hydrologist 3

FAA Certified sUAS (drone) Pilot

DEC-EH | Drinking Water Program

Drinking Water Source Protection

PHONE 907-269-0292

charley.palmer@alaska.gov

555 CORDOVA STREET

ANCHORAGE, AK 99501

Turner, Michele

Subject: FW: <EXTERNAL-SENDER>Fw: Gravel pits with waterbodies

From: Kpac Association <kpacassociation@yahoo.com>
Sent: Thursday, January 20, 2022 2:11 PM
To: G_Notify_AssemblyClerk <G_Notify_AssemblyClerk@kpb.us>
Subject: <EXTERNAL-SENDER>Fw: Gravel pits with waterbodies

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Hi Johni,
Please forward to the assembly as comment on 2021-41
Ed Martin III
President
KPACA
252-2554

----- Forwarded Message -----

From: Peterson, Ryan E (DEC) <ryan.peterson@alaska.gov>
To: Kpac Association <kpacassociation@yahoo.com>
Cc: Wilfong, David L (DEC) <david.wilfong@alaska.gov>; Bear, Tonya (DEC) <tonya.bear@alaska.gov>
Sent: Friday, January 7, 2022, 01:34:23 PM GMT-9
Subject: RE: Gravel pits with waterbodies

Good Afternoon Ed,

Thank you so much for the inquiry. In regards to your question of what applicable regulations of the wastewater disposal regulations 18 AAC 72 could apply during the development of a materials site resulting in the creation of surface water and/or steep slopes, the sections that come to mind are:

18 AAC 72.020(b) which goes over separation distances from a wastewater disposal system to surface water sources; and

18 AAC 72.035(9) which goes over separation distances from a conventional onsite system to a ground surface slope greater than 25 percent with a drop in the surface height greater than 10 feet.

These will cover most private residential systems. If the nearby property or development is a commercial facility, additional restrictions based on site specific considerations may apply.

Please let me know or the Soldotna wastewater review engineer Dave Wilfong, 262-3405, david.wilfong@alaska.gov, know if you have any additional questions. Thank you!

Ryan Peterson
Dept of Environmental Conservation / Division of Water
Engineering Support and Plan Review Section
43335 Kalifornsky Beach Road, STE 11 Soldotna AK 99669
ryan.peterson@alaska.gov
Phone: 907-262-3402 Fax: 907-262-2294
septic.alaska.gov

-----Original Message-----

From: Kpac Association <kpacassociation@yahoo.com>

Sent: Friday, January 7, 2022 7:24 AM
To: Peterson, Ryan E (DEC) <ryan.peterson@alaska.gov>
Subject: Gravel pits with waterbodies

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Hi Ryan. Per our conversation yesterday, could you write me back something referring to the DEC waste water divisions regulations regarding waterbodies and slopes that could occur in the development of a material site? Thanks, Ed.

Sent from my iPhone

02021-41

Turner, Michele

Subject: FW: <EXTERNAL-SENDER>Fw: [External Email]Info on gravel pit habitat
Attachments: Gravel Pit Ponds as Habitat Enhancement for Juvenile Coho Salmon pnw_gtr212.pdf;
Guidelines for Gravel-Pit Wetland Creation 0653-Prange.pdf; Nancy St Article.pdf; Nancy
St As-Built-lowres (002).pdf

From: Kpac Association <kpacassociation@yahoo.com>
Sent: Thursday, January 20, 2022 2:03 PM
To: G_Notify_AssemblyClerk <G_Notify_AssemblyClerk@kpb.us>
Subject: <EXTERNAL-SENDER>Fw: [External Email]Info on gravel pit habitat

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Hi Johni,

Could you send this to the assembly for comment on 2021-41? It is from the forest service about some amazing uses they have done with old gravel pits that have been excavated into the water table. Reclamation benefits and options.

Ed Martin III
President
KPACA
252-2554

----- Forwarded Message -----

From: Cross, Adam -FS <adam.cross@usda.gov>
To: Kpac Association <kpacassociation@yahoo.com>
Sent: Thursday, January 13, 2022, 02:40:43 PM GMT-9
Subject: RE: [External Email]Info on gravel pit habitat

Good Afternoon Ed,

I wanted to share some of the literature my co-workers located. Some of it is a bit older but still relevant. Unfortunately, the FS has not published much if anything about the work of transitioning gravel ponds into salmon habitat or even recreational areas in Portage Valley. The area is a great "show me" example for folks who may be interested.

I hope the attached will be helpful.

Best Regards,
Adam

Adam Cross
KPZ Aquatics Program Manager
Forest Service
Chugach National Forest, Kenai Peninsula Zone
p: 907-288-7715
f: 907-288-5111
adam.cross@usda.gov
33599 Ranger Station Spur
Seward, AK 99664
www.fs.fed.us

Caring for the land and serving people

-----Original Message-----

From: Kpac Association <kpacassociation@yahoo.com>
Sent: Thursday, January 6, 2022 10:52 AM
To: Cross, Adam -FS <adam.cross@usda.gov>
Subject: [External Email]Info on gravel pit habitat

[External Email]

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Please send any concerns or suspicious messages to: Spam.Abuse@usda.gov

Great conversation with you today! Any info you have on any pits converted to habitat would be appreciated. A simple letter explaining your success in that area would be excellent to start a discussion in the presentation I'm producing for the KPB. Thank you so much! Ed Martin. 252-2554.

Sent from my iPhone

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United States
Department of
Agriculture

Forest Service

Pacific Northwest
Research Station

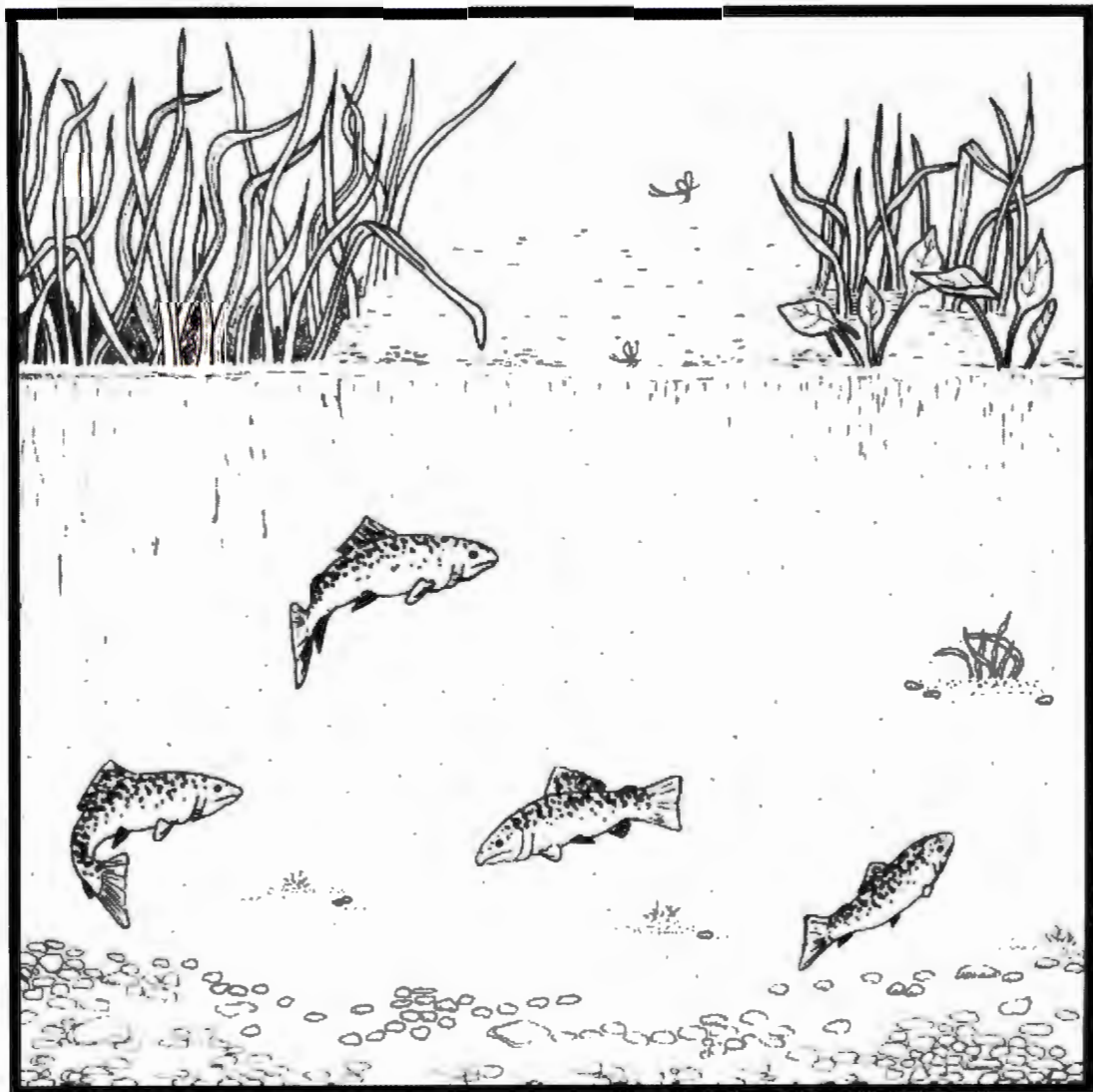
General Technical
Report

PNW-GTR-212



Gravel Pit Ponds as Habitat Enhancement for Juvenile Coho Salmon

Mason D. Bryant



Author

MASON D. BRYANT is a research fishery biologist, Forestry Science Laboratory, P.O. Box 20909, Juneau, Alaska 99802.

Abstract

Bryant, Mason D. 1988. Gravel pit ponds as habitat enhancement for juvenile coho salmon. General Technical Report PNW-GTR-212. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 10 p.

Gravel pits built during road construction in the early 1970's near Yakutat, Alaska, filled with water and were connected to nearby rivers to allow juvenile salmonids to enter. Seasonal changes in population size, length and weight, and length frequencies of the coho salmon population were evaluated over a 2-year period. Numbers of coho salmon fluctuated, but two of the ponds supported high populations, more than 2,000 fish, throughout the study. These ponds appeared to support coho salmon throughout the winter. The range of physical measurements of the ponds did not seem to account for differences in numbers of salmon, but low concentrations of dissolved oxygen were detected in all ponds near the bottom. Aquatic vegetation, water exchange rate, and access may have affected the number of coho salmon in the less-productive ponds.

Keywords: Fish habitat, salmonids, stream habitat management, southeast Alaska, Alaska (southeast).

Contents

1	Introduction
1	Methods
2	Results
8	Discussion
10	Literature Cited

Introduction

Road construction and forest development are commonly associated with detrimental effects on salmonid habitat; with proper planning, however, such effects can be avoided. In this paper, I discuss a method to improve salmonid production in conjunction with road construction.

Juvenile coho salmon (*Oncorhynchus kisutch*) are aggressive, invasive, and mobile (Allee 1974, Chapman 1962, Skeesick 1970). Sheridan¹ suggested that the gravel pits, created during road construction on the glacial outwash of the Yakutat forelands (Alaska Department of Fish and Game 1984), would be exploited by juvenile coho salmon if the ponds were connected to river systems containing coho salmon. Several gravel pits that had filled with water were connected by artificial channels to nearby rivers during the 1970's. Coho salmon fry were observed in the ponds, but no systematic effort was undertaken to estimate the number of fish in the ponds or to evaluate their effectiveness as rearing habitat.

The purpose of this study was to determine if these ponds were suitable rearing habitat for juvenile coho salmon. Numbers of juvenile coho in four ponds were estimated over several seasons. Size and ages were determined. Selected chemical and physical measurements were taken on the ponds to identify factors that could account for differences in salmon populations.

Although ponds are not generally associated with coho salmon habitat, beaver ponds and riverine ponds have been identified as productive coho habitat in Alaska and in Washington in recent years² (Bryant 1984, Peterson 1982). Russell and Schramek (1984) found about 2,500 coho salmon fry and 500 fingerlings in a gravel pit associated with a beaver pond during the summer of 1977. They did not follow the populations through the winter, however. Both Peterson (1982) and Russell and Schramek (1984) reported seasonal migrations to and from the ponds. Although most of these studies were on natural ponds, their results indicate that ponds created by gravel borrow pits can support juvenile coho salmon; such ponds may be an inexpensive method to increase coho salmon production.

Methods

Four ponds-Nine-Mile, Green, Twenty-Two-Mile, and Beanbelly-were sampled monthly from July through October 1983 and during spring or early summer and autumn in 1984 and 1985. Minnow traps (mesh size = 6.3 mm) were baited with salmon eggs and distributed along the edge of the ponds, usually within a few meters of the bank, 1 to 2 m deep. A few were placed in the middle of the ponds. Between 26 and 30 traps were sufficient to sample each of the ponds. In 1984, Twenty-Two-Mile Pond was not sampled because of low coho salmon populations. Green Pond was not sampled in 1985 for the same reason. Traps were allowed to fish for 1 hour, long enough to capture a sufficient sample. Longer periods occasionally resulted in high mortalities. Mortalities incurred during handling were identified and removed from the experiment.

All fish were identified and measured (total length). Scales and weights were taken from a subsample of the salmonid population. Salmonids were marked by punching a hole in the caudal fin. In the fall of 1984, salmonids were marked by freeze branding (Bryant and Walkotten 1980).

¹ Sheridan, W.L. 1970. Coho salmon habitat improvement-on glacial outwash plains. U.S. Department of Agriculture, Forest Service, Region 10. Unpublished.

² Sanders, G.H. Movement and territoriality in juvenile coho salmon (*Oncorhynchus kisutch*) in a southeast Alaska pond. Alaska Department of Fish and Game, Juneau, AK. Unpublished report.

Population size was estimated either with the Schnabel multiple mark and recapture method or the Bailey modification of the Peterson estimate (Ricker 1975). The Schnabel method was used in all the 1983 samples. The method varied in later samples because of limited sampling time. The multiple mark and recapture experiments were conducted over a period of 5 days or less. Emigration and immigration were negligible during the summer. During of the summer sampling periods, water levels were low and streams into and out of the ponds were either not running or had small flows. Increased rainfall in the autumn resulted in higher flows, but mark and recapture samples were done over a period of 2 or 3 days to minimize the effect of fish moving into or out of the ponds.

All four ponds were surveyed to determine surface area. Depth profiles were not made, but maximum depths were determined during secchi disk and oxygen measurements. Temperature and oxygen were measured with a YSI³ oxygen meter in 1983 and 1984. Oxygen measurements in June 1985 were made with the Alsterburg modification of the Winkler method (U.S. Environmental Protection Agency 1974).

Results

The number of coho salmon in Nine-Mile and Beanbelly Ponds increased from July to October in 1983. Each pond supported more than 3,500 coho salmon in the fall of 1983 (fig. 1). Green and Twenty-Two-Mile Ponds were not sampled after October 1983 because few fish were captured. The number of coho salmon in Green Pond declined from an estimated 2,700 in August to a point where no estimate was possible in October (fig. 1). The number of coho salmon in Twenty-Two-Mile Pond was consistently low.

³ Use of trade names is for the information and convenience of the reader. Such use does not imply endorsement by the U.S. Department of Agriculture of any product or service to the exclusion of others that may be suitable.

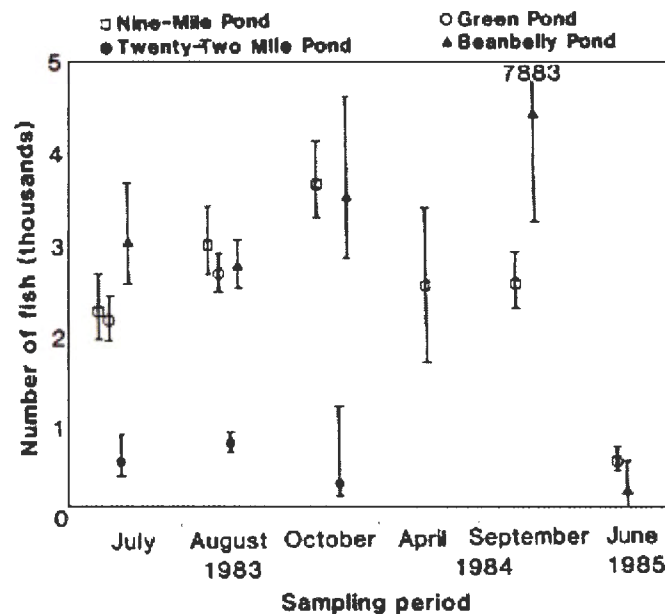


Figure 1—Population estimates of coho salmon captured in Nine-Mile, Green, Twenty-Two-Mile, and Beanbelly Ponds from 1983 to 1985.

Population estimates in Nine-Mile and Beanbelly Ponds were made October 1983, April 1984, September 1984, and June 1985 to assess overwinter use of the ponds. Beanbelly Pond was not sampled in April, 1984 because snow on the road made it inaccessible. In Nine-Mile Pond, the number of juvenile coho salmon decreased from 3,666 to 2,547 between October 1983 and April 1984. Fin punches applied in October were observed in the April sample; therefore, coho salmon overwintered in the pond, but emigration and immigration likely occurred between the sample periods. Because of heavy snow, the ponds were not sampled until the 1st week in June 1985. The low populations in both ponds in June may be attributed to smolt migration. Comparison of length frequencies in September 1984 and June 1985 in Beanbelly Pond corroborate this migration (fig. 2). In September 1984, the median length of coho salmon in Beanbelly Pond was 88 mm (total length), and more than 10 percent of the total catch was longer than 100 mm; in June 1985, the median length was 82 mm, and less than 2 percent of the total catch was longer than 100 mm.

A few coho salmon marked with freeze brands in September 1984 were recovered from both ponds in June 1985, but they numbered less than 1 percent of the total catch; therefore, overwinter survival cannot be estimated. Recovery of marked fish in June 1985 and the persistence in the ponds of coho salmon that were at least 1 year old in the spring and early summer of 1984 and 1985 indicate that the ponds are used over the winter.

Recruitment to the ponds appears to be the result of upstream migration of juvenile coho, except in Beanbelly Pond which is fed by a stream with spawnable habitat. Recruitment of fry into the ponds appears to begin in June. During May 1984, fewer than 5 percent of the coho salmon caught in Nine-Mile Pond were smaller than 62 mm (total length); by September, more than 16 percent were smaller than 62 mm (fig. 3). Between July and September, the percentage of smaller coho salmon increased slightly in Nine-Mile Pond, indicating that fry moved into the pond. In Beanbelly Pond, the percentage of smaller coho salmon decreased slightly from July to September in 1983, suggesting that smaller fish did not move into the pond and that the difference in size was the result of growth.

Significant differences occurred among the length-weight regressions computed for the coho salmon captured in the four ponds in July and August 1983 (table 1). Throughout the analysis, Nine-Mile Pond shows a consistently higher slope than the other ponds, indicating more robust fish and better growth. In September 1983, large differences appear in the slope of the regression for Twenty-Two-Mile Pond (2.2) compared to those of Nine-Mile and Beanbelly Ponds (2.8 and 2.7). The lack of significance in September 1983 may result from the smaller sample size in Twenty-Two-Mile Pond compared to that in the other two ponds.

Although depths of each pond varied, each had a relatively uniform profile tapering from a deep end to a shallow end with steep sides. The least productive pond, Twenty-Two-Mile, was also the shallowest. Green Pond and Nine-Mile Pond were similar in depth and shape (table 2); both are connected to the Situk River. Beanbelly, the largest and deepest of the four ponds, has an irregular shape and is more like a natural pond. It is fed by a perennial stream.

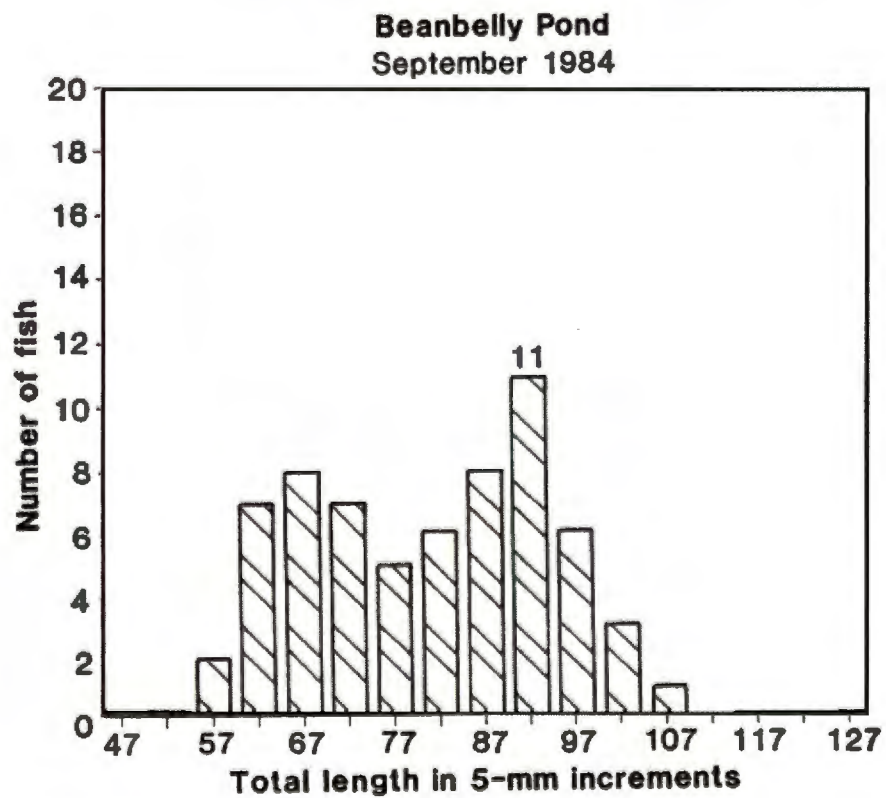
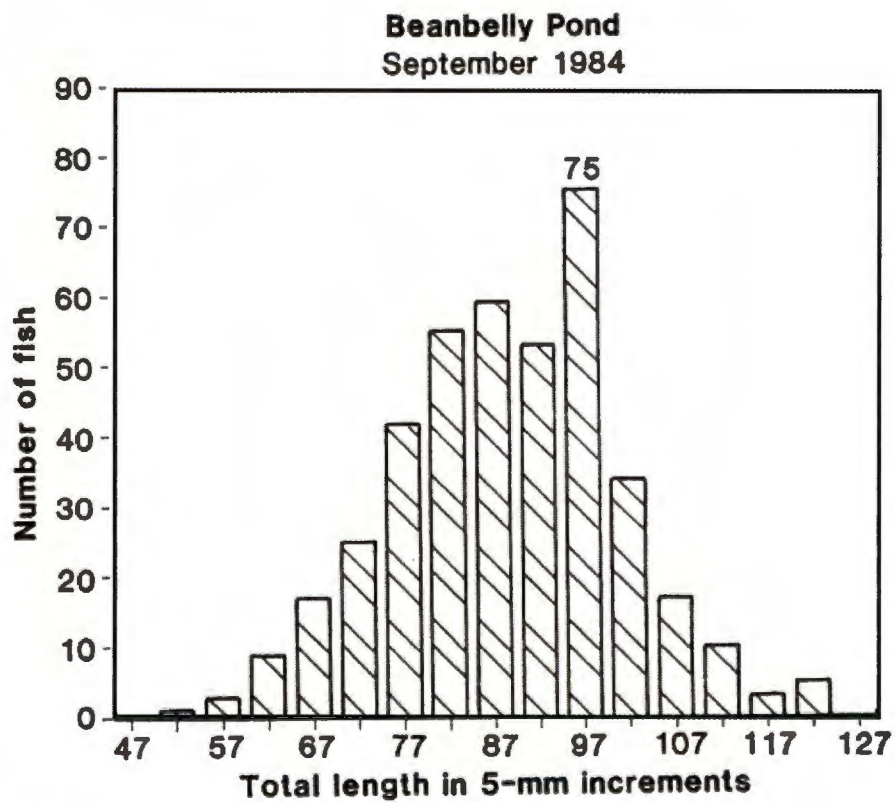


Figure 2—Length frequency distribution of coho salmon captured in Beanbelly Pond in September 1984 and June 1985.

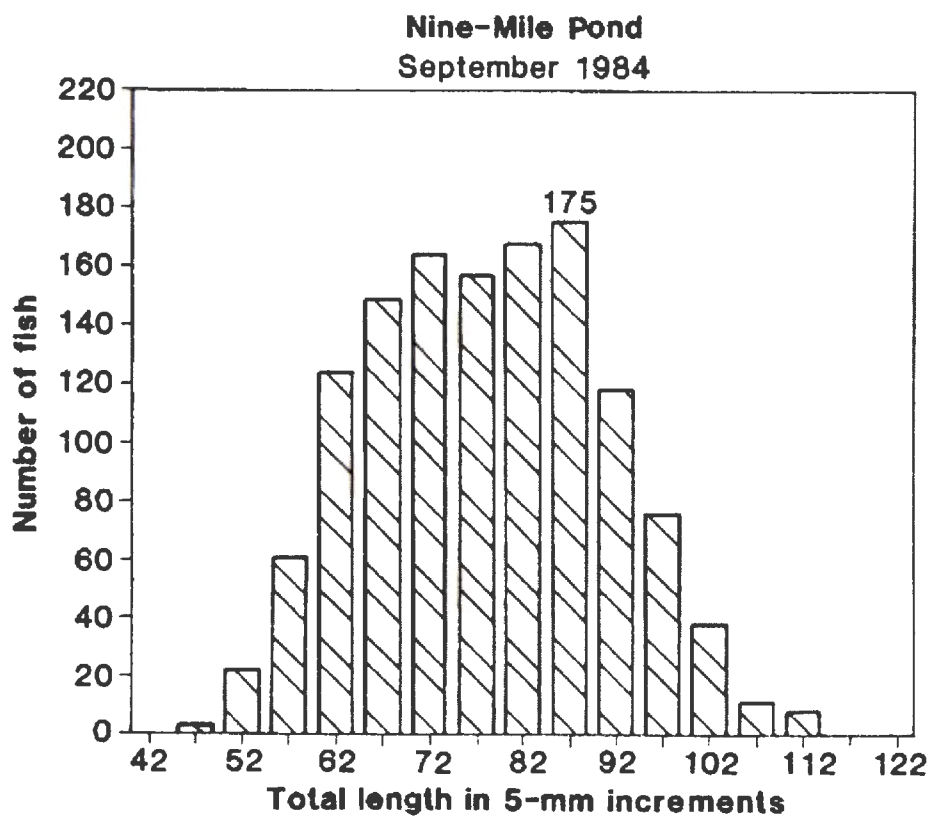
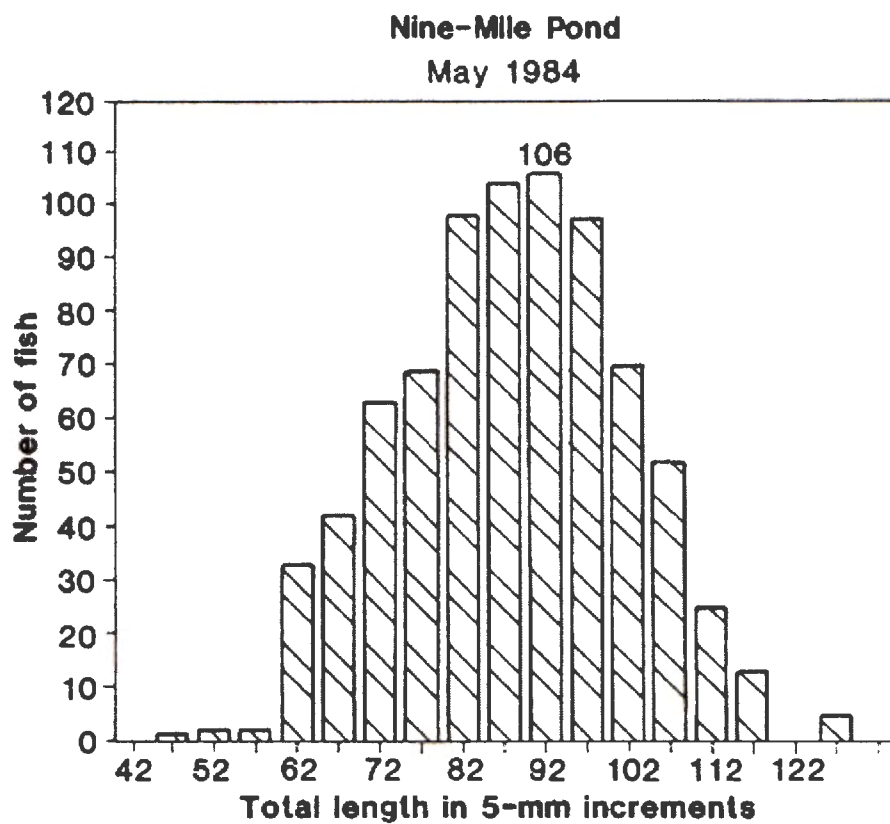


Figure 3—Length frequency distribution of coho salmon captured in Nine-Mile Pond in May and September 1984.

Table 1-Differences among ponds in length-weight regressions

Date and pond	Intercept	Slope	Significance	
	a	b	Level	Slope
July 1983:				
Nine-Mile	-5.3683	3.157		
Green	-4.0452	2.482	≤ .05	≥ .05
Twenty-Two-Mile	-4.1865	2.5663		
Beanbelly	-3.9622	2.4281		
August 1983:				
Nine-Mile	-5.1244	3.0233		
Green	-4.153	2.5325	≤ .05	≥ .05
Twenty-Two-mile	-4.844	2.867		
Beanbelly	-5.1789	3.0326		
Sept. 1983				
Nine-Mile	-4.783	2.8378		
Green	—	—		
Twenty-Two-Mile	-3.6585	2.2101	≤ .05	≥ .20 (NS)
Beanbelly	-4.5538	2.7266		
April 1984				
Nine-Mile	-5.1337	2.9813		
Green	-4.6439	2.7453	≤ .05	≥ .05
Twenty-Two-Mile	—	—		
Beanbelly	—	—		

— = no data: NS = not significant

Table 2—Yakutat gravel pit ponds morphology

	Area	Volume ^a	Maximum depth	Average depth ^b
	<u>Square meters</u>	<u>Cubic meters</u>	<u>-----Meters-----</u>	
Green	7,644	9,500	2.5	1.25
Nine-Mile	10,010	12,513	2.5	1.25
Twenty-Two-Mile	27,972	27,513	2.0	1.0
Beanbelly	34,954	61,170	3.5	1.75

^a Volume = area times average depth.

^b Average depth = maximum depth divided by 2

Temperature and oxygen were slightly stratified in all ponds during the summer and winter. The ponds were isothermal in the spring and fall (fig. 4). Oxygen supply depends partly on the water-exchange rate in each of the ponds during periodic thaws throughout the winter. Oxygen levels near the bottom of the ponds were lowest during December but were above 5 p/m at the surface in all four ponds. The dissolved oxygen supply may have become critically low later in the winter after a thick layer of ice formed.

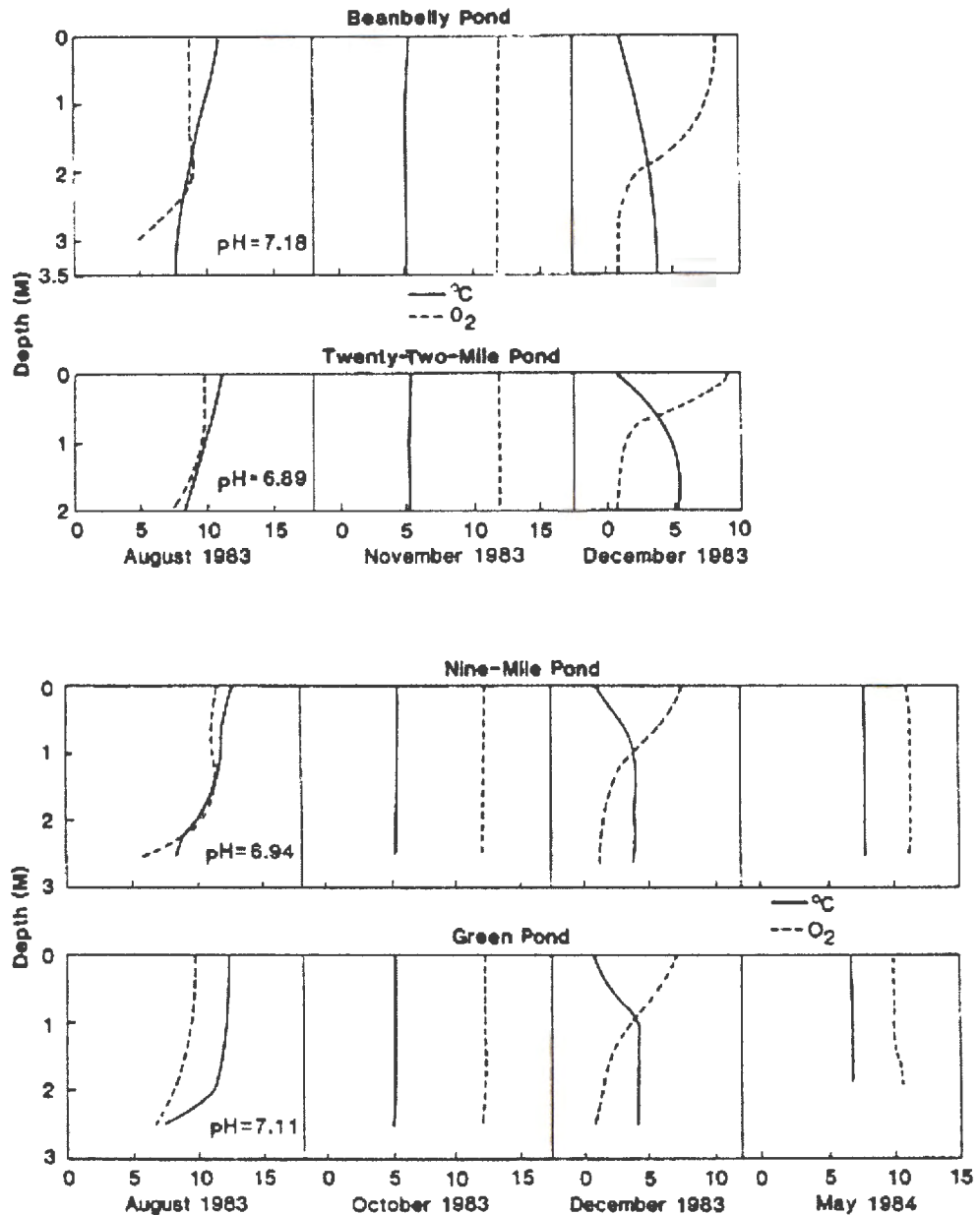


Figure 4—Seasonal temperature and oxygen profiles for Green, Nine-Mile, Twenty- Two-Mile, and Beanbelly Ponds.

Discussion

All four ponds were used to a greater or lesser extent by juvenile coho salmon during the study. Even over the short period of this study, populations fluctuated from year to year. In Green Pond, the salmonid population virtually disappeared after the fall of 1983. The population at Twenty-Two-Mile Pond was consistently low. Beanbelly and Nine-Mile Ponds consistently supported the highest populations of coho salmon.

None of the morphological or chemical features measured during the study appear to account for the differences and changes in the coho salmon population in the ponds. A more likely explanation may be the connection between the ponds and the river. Both Nine-Mile Pond and Beanbelly Pond had well-defined channels between the ponds and the river. The outlet to Twenty-Two-Mile Pond was poorly defined. Neither Twenty-Two-Mile Pond nor Green Pond had a defined inlet channel. Although ground water is an important source of water for the ponds, flow of surface water into and out of the ponds may be an important factor determining the water quality of the ponds as habitat for juvenile coho salmon.

Because all juvenile coho salmon immigrated into the ponds, the channel between the river and the ponds is critical to their use by coho salmon. All ponds were apparently accessible at high-flow periods (spring and fall) to juvenile coho salmon in the adjacent rivers, but the less well-defined channels connecting Twenty-Two-Mile Pond and Green Pond may have contributed to the low populations in these ponds. A poorly defined channel has lower velocity and is less likely to be found by the fish. Once found, it may not offer a clear path to the pond.

The coho salmon in the less productive ponds appeared to be less robust than those in the other two ponds. Where significant differences among length-weight regressions occurred, the lower values were associated with the ponds that had fewer coho salmon; therefore, factors other than access may be affecting productivity in the ponds. Among possible factors that were observed but not evaluated in this study are food and competition. Food may be a limiting factor and the differences in length-weight ratios may reflect fewer aquatic organisms available for food in these ponds. Large populations of threespine sticklebacks (*Gasterosteus aculeatus*) were observed in all the ponds. Beanbelly, Nine-Mile, and Twenty-Two-Mile Ponds had a dense cover of aquatic plants, and the bottom of Green Pond was covered with a dense mat of algae. The dense cover of aquatic vegetation would contribute to a large stickleback population by providing excellent habitat for reproduction and cover for newly hatched sticklebacks. The effect of competition for space and food between sticklebacks and coho salmon was not studied. Aquatic plants and algal growth would also contribute to low concentrations of benthic dissolved oxygen during fall and winter as the vegetation died and began to decompose. In addition, sticklebacks may be able to tolerate lower dissolved oxygen concentration than coho salmon.

Timber along the bank was apparently not a factor in any of the ponds. Twenty-Two-Mile Pond was the only one with large trees along the bank. These trees did not appear to influence the pond. Willow (*Salix* sp.) and alder (*Alnus* sp.) were the dominant vegetation along the banks of the other ponds. Based on observations of numbers of coho salmon captured near vegetation in the water, coho salmon do not appear to prefer brush habitat associated with these ponds. Nevertheless, shrubs along the bank may provide cover and a source of terrestrial insects to coho salmon.

Although the results of this study show differences among the ponds, specific factors controlling numbers of coho salmon in the ponds were not identified. The range of morphological and chemical differences measured in the ponds did not appear to affect numbers of coho salmon. The ponds apparently provide habitat for juvenile coho salmon although low dissolved oxygen sometimes may increase mortality. Coho salmon apparently remain in the ponds through winter.

The design of artificial ponds for juvenile coho salmon habitat should include several important morphological features. Adequate water quality is necessary throughout the year, particularly during the winter. A perennial flow of surface water into the pond may satisfy this requirement. The second requirement is access. An effective method for providing both these features is to construct an upstream inlet from the stream to the pond and a downstream outlet from the pond to the stream. Other favorable features include an average depth greater than 2 meters and bank vegetation for shade and cover.

Additional study on the effects of competitive interaction between salmonids and other species such as sticklebacks, the role of aquatic vegetation as cover and its effect on water quality, and the effects of pond morphology and water exchange rates could improve the design of artificial ponds. As projects are effectively evaluated, design criteria will be improved to increase the effectiveness of similar ponds. Ponds have not been extensively used as an enhancement tool for increasing coho salmon production, but they offer a promising and often low-cost enhancement method.

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Bryant, Mason D. 1988. Gravel pit ponds as habitat enhancement for juvenile coho salmon. General Technical Report PNW-GTR-212. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 10 p.

Gravel pits built during road construction in the early 1970's near Yakutat, Alaska, filled with water and were connected to nearby rivers to allow juvenile salmonids to enter. Seasonal changes in population size, length and weight, and length frequencies of the coho salmon population were evaluated over a 2-year period. Numbers of coho salmon fluctuated, but two of the ponds supported high populations, more than 2,000 fish, throughout the study. These ponds appeared to support coho salmon throughout the winter. The range of physical measurements of the ponds did not seem to account for differences in numbers of salmon, but low concentrations of dissolved oxygen were detected in all ponds near the bottom. Aquatic vegetation, water exchange rate, and access may have affected the number of coho salmon in the less-productive ponds.

Keywords: Fish habitat, salmonids, stream habitat management, southeast Alaska, Alaska (southeast).

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Recycled Soils Enhance Wetland Habitat in Juneau, Alaska

by Michele Elfers

IN disturbed ecosystems needing reclamation, excess materials from development projects offer new opportunities for wildlife habitat enhancement. The Nancy Street Wetland Enhancement Project pioneered a creative strategy to partner the development needs of a fill disposal site with desirable conservation goals. The project utilized clean native soils generated by a high school construction project in the Mendenhall Valley of Juneau, Alaska, to reclaim a 1950s era gravel pit into a functional wetland. Clean fill material was deposited and shaped to create mixed wetland topography, including a stream channel, deep and shallow water areas, and small islands. Plantings of emergent wetland, riparian, and upland vegetation improved habitat for fish and wildlife and water quality in what is part of a state designated impaired waterbody.

Located along Duck Creek in the Mendenhall Valley, the enhancement of the Nancy Street gravel pit was identified as a priority project in the Duck Creek Watershed Management Plan (National Marine Fisheries Service, 1999). Intense residential development over the past forty years in the Mendenhall Valley has impacted Duck Creek significantly. The increase of nonpoint source pollution, channelization, and above-grade stream crossings has degraded water quality and habitat. In 2002, the Alaska Biological Monitoring and Water Quality Assessment Program Report rated Duck Creek the lowest for habitat variables of all

streams studied in Southeast Alaska (Alaska Department of Environmental Conservation, 2003). Poor habitat quality has reduced anadromous fish populations such as coho and chum salmon, and has impacted habitat for the large number of mallards and other waterfowl that use these wetlands as refuge from nearby popular hunting zones.

In the 1950s and 1960s, gravel extraction created three adjacent, open water pits on the East Fork of Duck Creek. The most downstream pit is located at Nancy Street. Groundwater flowing into the pit carries dissolved iron from soil strata, which reacts with atmospheric oxygen upon reaching the surface. The resulting formation of iron oxide precipitate (iron "floc") decreases the concentration of dissolved oxygen in the water column, impacting aquatic inverte-

brates and fish. While not inherently toxic, iron floc also settles into the substrate, clogging gravel beds that might

The gravel pit at Nancy Street is located less than one mile from the high school construction site, and the enhancement project opportunity required a substantial amount of fill that had previously not been available.

otherwise provide good spawning habitat for fish.

The Engineering Department at the



Emergent wetlands are created along the perimeter of a deep water pool for juvenile coho salmon habitat.

City and Borough of Juneau (CBJ) initiated the wetland enhancement project in 2005 when designs for a new high school indicated a large amount of excess soil would be generated during construction. Transport of the fill for disposal would have required a three mile drive to a privately owned waste site. The gravel pit at Nancy Street is located less than one mile

Using the Nancy Street pit as a fill disposal site, the CBJ Engineering Department charged the high school construction contractor a lower rate for fill disposal and used the revenue to recover a portion of the land purchase cost.

from the high school construction site, and the enhancement project opportunity required a substantial amount of fill that had previously not been available. CBJ



The construction of a new high school contributed 64,000 cubic yards of clean fill to the wetland enhancement of the former gravel pit.

began coordinating with the U.S. Fish and Wildlife Service (USFWS) and the Natural Resources Conservation Service (NRCS) to use the clean native soil for wetland enhancement at the Nancy Street pit.

Consolidation of land ownership was the first step toward reclaiming the pit. CBJ owned most of the seven acre site, but a large parcel encompassing both open water wetland and upland areas was privately owned. The parcel was purchased for \$137,000. Using the Nancy Street pit as a fill disposal site, the CBJ Engineering Department charged the high

school construction contractor a lower rate for fill disposal and used the revenue to recover a portion of the land purchase cost. The cost to the CBJ of filling the Nancy Street site, including the land purchase, was \$319,000. The cost of the typical market alternative was \$572,000. By undertaking the wetland enhancement project partially funded by USFWS and NRCS cost share programs, the CBJ saved \$253,000 on the cost of the high school construction.

Site Planning:

To design and execute the fill disposal

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and wetland enhancement project, the CBJ contracted the engineering firms Toner-Nordling Associates for the initial fill design and R&M Engineering, Inc. for the design development of the filling process. Glacier State Contractors, Inc. executed the design. To maintain flow through Duck Creek, a stream channel at a minimum of four feet deep was designed to meander through the wetland. From the perimeter of the wetland, shallow platforms, or marsh "fingers", were filled to allow for the planting of emergent marsh vegetation for fish and wildlife foraging and protective habitat. During construction, the fingers provided functional benefit by allowing access for dump trucks to the center of the wetland for filling. At each end of the wetland, two deep water areas were left in place to provide overwintering habitat for juvenile coho. After nine months of filling in 2005, 64,000 cubic yards were placed to create the wetland, resulting in increased savings for the CBJ.

An earthen dam was constructed to control water levels at the project site and in the two upstream pits. This occurred



AmeriCorps workers, with a local youth agency, SAGA, transplanted over 5,000 native plants from nearby wetlands into the former gravel pit.

after the filling and revegetation phase to create more stable and drier conditions during construction and planting. A meandering outlet stream was excavated

to allow fish passage through the earthen dam. Both the dam and the outlet stream were constructed using an impermeable liner to prevent water loss. Layers of

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became an important component in gaining public approval and support of the project. Adjacent landowners initially viewed the enhancement project as disruptive, but through the process of filling, planting and trail construction, many neighbors and community members have expressed that the enhancement is an improvement to the neighborhood. It offers recreational opportunities for a neighborhood composed of streets and private property, and provides access to a successional landscape with a fantastic view of the Mendenhall Glacier.

To encourage neighborhood use of the site, CBJ and Trail Mix Inc, constructed a six foot wide gravel trail, and a deck was sited at the south end to capture a remarkable view across the wetland of the Mendenhall Glacier. The decking on the observation deck and boardwalk, railings, and benches were built with recycled plastic lumber. An island at the north end is accessed by a bridge and boardwalk and offers a bench and viewing point south. The 70' bridge is a steel gangway recycled from a CBJ Docks and Harbors improvement project.

Throughout the construction process, volunteers donated time, materials and money to the project. Neighbors began appearing during the summer construction to comment on how excited they were about the project. The CBJ Ports and Harbors Department donated the bridge and benches and the U.S. Coast Guard Engineering Division volunteered to construct the observation deck.

As a result of the success of this project, a similar process is planned for the Allison Pond upstream of the Nancy Street Wetland. The process will be improved based on the lessons learned and applied to the Allison Pond site needs. The strategy and process developed by the Engineering Department at the CBJ has saved the taxpayer's money by pioneering this alternative option to fill disposal. The support of resource agencies, local organizations, and citizen volunteers has enhanced habitat for fish and wildlife and reclaimed a valuable community resource. **LBW**

For more information contact Michele Elfers, City & Borough of Juneau, Alaska, (907)586-0931, e-mail: michele_elfers@ci.juneau.ak.us.

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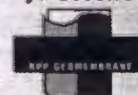
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cobbles and gravel for spawning were placed on top of the stream channel liner to create riffles and shallow pools.

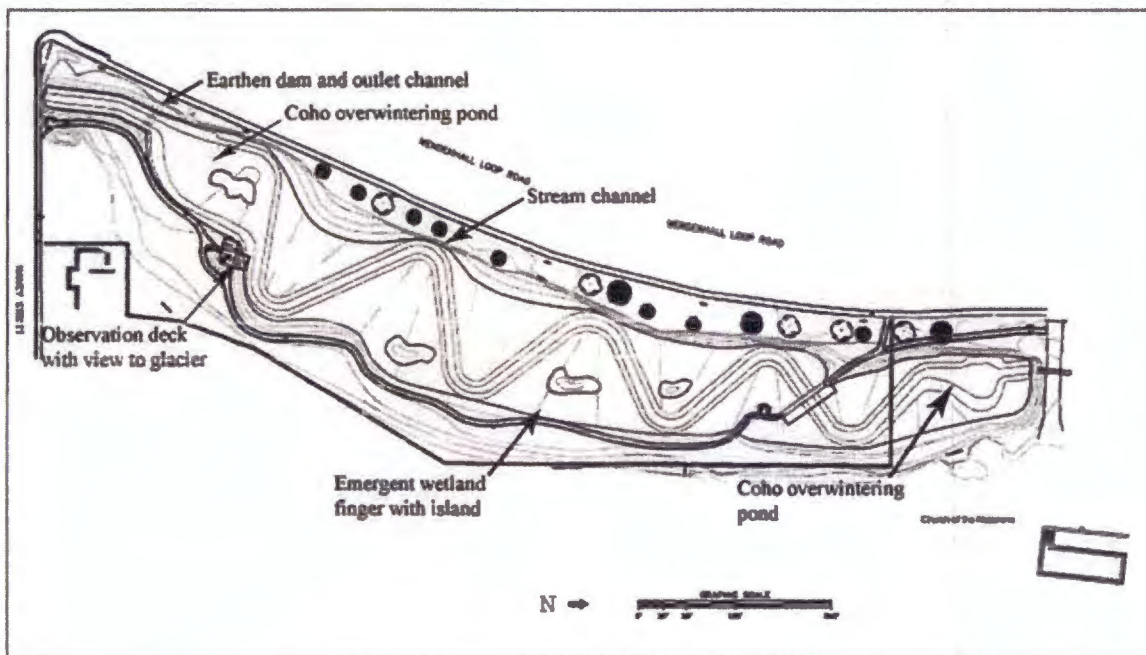
The site design and implementation plans of the filling process determined both habitat improvement and operational efficiency. By filling and completing

tric zones based on the depth of water in which they grow. Although the Nancy Street Wetland is primarily ground water fed, precipitation and surface runoff influence the water level and will therefore affect the survival and composition of the site's wetland plant community.

Alaska and British Columbia. All planting work was done by hand using shovel bulb planters, and pulaskis.

Lessons Learned:

To improve the revegetation process for future projects, better planning for irrigation should be in place prior to transplanting. As mentioned earlier, the dam was constructed after the completion of the planting of the emergent vegetation. Revegetation occurred between the months of April and August when Juneau receives thirty inches of rain. However, a two-week period of unusually warm, sunny weather desiccated the high marsh area. Watering was necessary, but difficult to accomplish on such a large site. Crews used buckets and a garden quality



each "finger" and section of the wetland individually, greater variety and attention to each landform was introduced. Initially the option of filling the entire site and then returning to dredge the stream channel had been considered, but would have resulted in less diversity of habitat and less attention to the design details. The chosen approach facilitated meeting the design elevations to within 3 inches to provide necessary habitat for emergent wetland plants—a difficult task on a large project where over 60,000 cubic yards of fill are being placed.

Revegetation planning began in early 2006 by researching and evaluating three locally constructed wetlands and interviewing local naturalists experienced in reclamation and revegetation projects. There was no previously documented information on constructed wetlands in Southeast Alaska, so this project is being carefully monitored to provide baseline information that can be used for development of future wetland enhancement projects. For the purpose of planting design, plants were divided into concen-

During the planting season of 2006, volunteers from the community and Americorps workers funded by USFWS planted over 5,000 emergent plugs and cuttings, and 150 lbs of grass and forb seeds. As there are no native plant nurseries in Juneau or Southeast Alaska, the workers transplanted plugs and cuttings from local wetlands to maintain native gene stock and minimize the possibility of importing invasive plants. Seeds were purchased or donated from sources in

gasoline-powered water pump to irrigate the wetland. Some plant mortality occurred, and it is likely that a prolonged period of hot, dry weather would have significantly impacted plant survival. To prevent this from happening on future projects, fill and topsoil with a higher organic content than what was used in this project would help retain moisture. Other strategies include controlling water levels to keep soil saturated while planting, or the delaying of planting until July when precipitation is more reliable and frequent in Juneau.

There is some concern that the water level is higher than the designed level. However, the rainfall was higher than average in 2006, so it is difficult to tell the water levels in the wetland will drop. For this reason, designing a dam with adjustability to account for the discrepancy in water level would improve the function and success of the project.

Recreational Use of the Site:

The design and development of a community trail through the wetland

There was no previously documented information on constructed wetlands in Southeast Alaska, so this project is being carefully monitored to provide baseline information that can be used for development of future wetland enhancement projects.

Guidelines for Gravel-Pit Wetland Creation

by

Bonnie Baldwin Prange

Abstract. The frequent colonization of the margins of abandoned and unreclaimed wet sand and gravel pits by typical marsh vegetation indicates the feasibility of a created wetlands component in gravel/sand reclamation planning. Using the natural pit wetlands as models and examining the pertinent literature, guidelines were developed for: (1) selecting promising sites, (2) planning with a regional perspective, and (3) construction and monitoring. Key concepts are: hydrological stability and adjacent land uses that will not have an adverse impact; consideration given to how a pit wetland will interact with adjacent ecosystems on a regional level; grading of pit perimeters to produce irregular contours and no more than a 0.6 m change of elevation within the proposed wetland; a combination of limited deliberate planting along with natural colonization whenever the reclamation permit can be adjusted to allow the 3 to 4 years commonly necessary for such colonization; the establishment of self-perpetuating marsh vegetation confirmed over a 3-year period of observation as a minimum requirement for determining permit compliance. Longer term monitoring of pits reclaimed under these guidelines could provide information that would increase and refine post-mining land-use options for wet sites. Research projects could focus on learning more about development of wetland functions within created systems, eventually providing standards for evaluation on a functional level.

Introduction

Wetland creation is still in its infancy as an applied science and is not yet capable of producing predictable results. It is, consequently, a subject of considerable controversy. To some it appears to be a relatively simple, repeatable process; to others a minefield of assumptions regarding ecosystem structure and function. The experimental nature of wetland-creation has made it less attractive for mine reclamation proposals, resulting in very little effort made to purposefully create gravel-pit wetlands, even where conditions are very favorable. The vast majority of wetlands and waterbodies on mined lands nationwide exist not because they were planned for, but by accident as a result of the mining of gravel for highway and other construction projects (Brooks, 1990). As examples

of natural regeneration, these sites can provide valuable information regarding the species composition, life-support functions, and long-term persistence that might be expected in future "successful" wetland creations.

Without substantial scientific evidence, which we do not have, there is no reason to assume that these volunteer wetlands function on the same level or provide the benefits of the long-established ecosystems which have been filled-in and lost to agriculture and development. It seems likely, however, that even disturbed and degraded wetland sites may have unknown value. Increasingly, studies indicate that these sites may be very significant for rare species, migratory birds, and regional hydrological functions (Josselyn and others, 1990). "Sites presumed to have little value may provide vital

refuge for species during storm events or support rare and endangered species due to lower interspecific competition within these marginal habitats" (Josselyn and others, 1990).

Scientists have now begun to study wetland creation and restoration in an effort to manage and accelerate processes which may take generations to occur naturally. From these experimental studies will come information which may ultimately allow true replacement of lost or damaged ecosystems. More research is needed, and sand/gravel pits are in many instances ideal as test sites. Excavations that expose the water table commonly create the hydrological features necessary for a wetland, and they eliminate the need for diking and high-maintenance pumping and drainage systems.

The gradual colonization of numerous abandoned wet pits by wetland species indicates both their suitability for subsequent use as a planned wetland and the potential to add to the wetland resource base. Innovative reclamation could supply valuable habitat, contribute to regional hydrological resources, and provide research opportunities to improve our understanding of artificial wetlands. Sand/gravel-pit wetlands offer benefits to society with which mining companies could be pleased to be associated and identified.

Minimum Site Requirements

Hydrology

Hydrology is the key to long-term functioning of wetland ecosystems (Kusler and Kentula, 1990). Since establishment of hydrophytic vegetation will depend on both the predictability and controlled fluctuation of water levels, wetland creation should be restricted to those sites for which seasonal water-level elevations have been determined and where some manipulation is possible. Freshwater gravel-pit wetlands not in river or stream beds will be dependent on ground water and variable surface water flows.

Ground water and surface runoff do not always provide dependable water sources, but in most situations they will satisfy the requirements of a wetland project (Van Egmond and Green, 1992).

Assessing the reclamation potential of sand or gravel excavations as wetlands should involve monitoring test pits for annual water-level fluctuations. The amount of fluctuation depends on the nature of the aquifer and on how much water mining operations and nearby users consume. Ranges of 2 meters per year are not uncommon in porous sand and gravel aquifers with local recharge zones (Michalski and others, 1987). Some gravel-pit sites may not be suitable for wetland development due to extreme variations of the water table. Suitability can not be determined until the expected range of the water-table elevation has been established with statistically sound data. Since a successful wetland design incorporates many site-specific variables, it is not possible to generalize acceptable range maximums or periodicity. A decision must be based on project goals and the requirements and tolerances of the wetland-plant communities that project designers want to establish (T. S. Miller, King County Services, oral commun., 1992). The widely varying flooding tolerances among wetland species can be used to advantage in increasing wetland creation options for a particular site. A flexible plan that can accommodate unexpected changes in plant community composition will have a greater chance of success, especially where ground water flows are seasonally unstable.

Potential Land-Use Conflicts

Social considerations may be just as important determinants of site suitability as physical ones. "Adjacent land use . . . could detrimentally impact functioning of wetlands or the wetlands may have detrimental impacts on current or planned uses of neighboring lands" (Hammer, 1992). Intensive agriculture or heavy industry adjacent to the site might produce sediment or chemical-loaded runoff that would prevent wetland establishment.

Wetlands themselves can be unwelcome neighbors. Although some new housing developments and office complexes are planned around preserved sections of wetlands, residents of established communities may well object when wetland alternatives are proposed. Neighborhood opposition often focuses on the prospect of public use, with fears of noise, traffic, and vandalism paramount. Several mining companies have shelved plans to donate lands to the public when faced with organized community opposition (Morris, 1982).

Planning Pit-to-Wetland Conversions

Pre-planning for Realistic Goals

Wetland conversion plans should be "integrated with mining operations and reclamation at the beginning of any project" (Brooks, 1990). This ideal should not preclude adding wetlands to an existing reclamation plan. Wetland creation could be added to a previously permitted proposal for a post-mining open-water pond, for instance, assuming the hydrologic conditions to support the pond had already been established. Reclamation designed around an aquatic ecosystem goal provides direction in the early planning stages, but the decision to attempt creation of specific wetland functions might best be left until mining is nearly complete. At that point the altered hydrology of the site could be re-evaluated, and objectives could be based on several seasons of hydrological data-gathering plus assessment of regional land-use trends over the same time-span. When objectives have been established, they should be clearly described and recorded, along with any subsequent amendments, because on-site modifications during construction and planting are commonly necessary (Hammer, 1992).

Michalski and others (1987) recommend detailed studies to determine surficial characteristics of the site before, during, and after extraction. If pumping of ground water is part of the extraction process, the output could be monitored to estimate in-flow rates and the potential

area of ground-water influence after mining (Michalski and others, 1987). Pre-mining planning could include provisions for hydrological monitoring and record-keeping at various stages over the life of the mine. This provides the database from which to determine the most feasible final configuration. The information would be useful for establishing other reclamation endpoints if it did not ultimately support the proposed wetland goal.

Regional Reference Wetlands as Guidelines

The most fundamental goal, regardless of the specific chosen objectives, is to develop self-maintaining systems that mimic natural ones in as many ways as possible. The study of local natural wetlands is important because artificial wetlands must closely imitate natural systems adapted to the region if a creation project is to succeed without continual operating and maintenance costs (Hammer, 1992). This means that design parameters must be appropriate to local hydrology, climate, and soil conditions. Measurements of elements of wetland structure at a natural site within the region or watershed that shares these conditions will provide insights into what is obtainable and how to evaluate progress at the constructed site (Hammer, 1992). In the context of comparisons of natural to artificial, the objectives for a created wetland must encompass "only a very early successional stage if the evaluation period is short (less than 10 years for a marsh)" (Hammer, 1992).

Landscape Considerations

Even if the physical parameters of a site are favorable for reclamation as wetland, the result will be counterproductive if it conflicts with regional land-use priorities or overall ecological balance. "Land managers need to establish their mitigation policies in the context of what changes are occurring in wetland types throughout a given physiographic region, not just on a particular mine site" (Brooks, 1990). Assessing these trends to determine regional need for specific wetland types requires coordination among

federal and state agencies. Cooperating agencies must then see that this information is transferred to those who will be planning wetland construction, including the mining industry (Brooks and others, 1988).

Constructing a Gravel-pit Wetland

Site-specific Considerations and Grading Plans

Since each site presents a particular combination of hydrology, topography, and substrate, only generalized instructions can be provided. There are no exact guidelines yet accepted in the very young science of wetland creation. Given favorable site hydrology, however, it is possible to proceed with assurance that the creation of gentle slopes at pit perimeters plus restoration of topsoil, or even moderately amended subsoil, will result in establishment of wetland vegetation. Many abandoned wet pits have, over time, acquired typical wetland vegetational characteristics with far less encouragement.

Although many mine reclamation plans are submitted in the initial permitting process, it may not be practical to plan the specifics of a post-mining pit wetland until the extraction is nearly complete. At that point it should be possible to draw up a detailed site grading plan which will take the site variables into account. The final hydrological parameters, in particular, may not be fully anticipated or understood until the alterations that mining imposes have actually been realized. The site grading plan is an essential element in engineering the site for wetlands because it will determine basin morphometry, which in turn determines vegetational composition (Garbisch, 1986). Because many wetland plants are sensitive to water depths within a low range of tolerance, the most useful plan would have contours of 1 foot or less at a scale of 1 inch equals 20 to 50 feet (Miller, 1987).

The precision grading required to bring the site to the final grade within the established tolerances may not be possible if water cannot

be excluded from the pit (Garbisch, 1986). In these instances, "the site grading plan should reflect this . . . and specify the scattered mounding of fill materials in order to diversify the wetland habitat" (Garbisch, 1986).

Shorelines and Slopes

A common recommendation for sand-or-gravel-mine wetland construction is to increase the area of the pit basin by creating an irregular shoreline. Bays, inlets, coves, peninsulas, and islands increase topographic heterogeneity and habitat diversity and provide more "edge" by increasing percentage of shoreline per unit area (Crawford and Rossiter, 1982). Pit floors should also have an irregular topography with mounds and depressions (Norman and Lingley, 1992; Van Egmond and Green, 1992; Michalski and others, 1987). Dumping overburden in irregularly spaced piles will create rough bottom contours and perimeter landforms (Van Egmond and Green, 1992).

Construction of some of these landforms can take place during mining to simplify post-mining reclamation. Overburden and waste materials (including boulders and tree debris) can be graded into landforms above and below the water line (Michalski and others, 1987). Islands for protection of waterfowl and general ecosystem diversity can be developed in undrained pits during operations (Michalski and others, 1987). They should be separated from the shore by a permanent water depth of 1-to-2 m and a width of 4-or-5 m, with tops at least 1 m above the estimated highwater mark (Van Egmond and Green, 1992).

Slopes for a true marsh community need to be almost flat — no more than a 0.6-m change of elevation between the deep and shallow marsh (Miller, 1987). Shallow slopes maximize flooding and minimize erosion (Kruczynski, 1990). Brooks (1990) and Crawford and Rossiter (1982) recommend gentle slopes at 10H:1V or 20H:1V; Kruczynski (1990) suggests that a range of 5H:1V to 15H:1V is acceptable. Since it is unlikely that efficient mining will be possible at

these angles, the cut-and-fill method can be used to create recommended slopes (Norman and Lingley, 1992).

Unless slopes have been left ungraded and unstabilized, gravel-pit waterbodies typically have two distinct habitats: the shoreline wetland and open water. Grading plans will determine how much area will be allotted for each. Fifty percent open water to 50% marsh or swamp is often cited as optimal for fish and wildlife habitat (Van Egmond and Green, 1992; Crawford and Rossiter, 1982). Norman and Lingley (1992) suggest 25% of the waterbody in shallow water less than 0.6 m deep, 25% in shallow water 0.6-2 m deep, and 50% in water greater than 3 m as a general guideline for use by fish and waterfowl. If wetland communities are the objective, however, "the higher percentage of shallow areas the better" (Norman and Lingley, 1992).

Water Level Adjustment

Gravel and sand pit-wetland creations are primarily ground water-fed and therefore may not require elaborate water-control mechanisms. According to Van Egmond and Green (1992), "natural cycles of drought and wet spells will sometimes provide adequate changes in water levels." An outlet with a controllable weir will increase management options, however, and will enable periodic partial drainage which helps re-establish wetland vegetation. Van Egmond and Green (1992) recommend that a water-level drawdown should occur every 3 to 10 years. Boule (1988) emphasizes the importance of simple systems which are more likely to be self-regulating and self-maintaining. He advocates relatively inexpensive weirs or other similar devices which are unlikely to fail and disrupt the entire system. Outlets should be identified on-site and recorded in plans so that they can be periodically inspected and protected from erosion (Norman and Lingley 1992).

Branch (1985) reported successful vegetation establishment on a 5-ha portion of an abandoned sand and gravel mine in Maryland using a

device with a removable weir plate which controlled the top 0.3 m of water in the basin. Removal of the weir plate exposed perimeter areas for planting; once this was complete, the plate was reinstalled to restore the project design water levels. Garbisch (1986) suggests that incorporation of an adjustable weir in the project design may compensate for less-than-precise grading.

Although periodic "drawdowns" are important for waterbodies that function as waterfowl habitat, many pit ponds lack surface drainage and "cannot be drawn down using standard dikes and weirs" (Michalski and others, 1987). For landlocked ponds receiving supplemental water from surface runoff, a partial drawdown can be engineered by periodically diverting this surface flow (Michalski and others, 1987). Unless there are concerns about contaminants in the surface water, it can be directed toward the pit-pond impoundments (Van Egmond and Green, 1992). The drainage channels "should have a natural sinuosity and gradient", should be stabilized with riprap or vegetation, and should be directed through upland "vegetated areas to slow runoffs and aid in water filtration" (Norman and Lingley, 1992).

Sealing and Lining

Since "most natural wetlands are perched above an impervious layer that reduces or prevents water loss", Hammer (1992) believes that there are few situations in which a basin can sustain a wetlands ecosystem without an impermeable lining. Brooks (1990), on the other hand, states that "basins constructed below the water table rarely need to be sealed." Wet pits have an advantage as wetland creation sites not only because they are filled primarily by ground water flow, but also because natural sealing is common. The material left behind after gravel mining usually has a fairly high percentage of clay or silt, especially if aggregate was washed on site (Bradshaw and Chadwick, 1980). These "fines" will contribute to the blocking of water movement, and over time additional fine sediments will be eroded or carried into the pit lake

with surface runoff (Evoy and Holland, 1989). The extent of this natural sealing will vary from site to site depending on the shape of the pit, bank materials, perimeter vegetation and water turbidity (Durbec and others, 1987). It seems likely, however, that even a partial lining of sediments within the pit would be beneficial from a wetland creation perspective.

Soils

An appropriate substrate for plant establishment can be created by placing topsoil on banks, islands, and submerged areas that have the recommended shallow grade. Norman and Lingley (1992) recommend a 15-to-20 cm layer of topsoil over a thicker layer of subsoil; Hammer (1992) suggests a 40-to-60 cm total soil layer (topsoil and subsoil) will be needed to provide adequate substrate for root growth. This soil layer should be placed on islands and down to 1.5 m below the expected highwater mark for the wetland perimeter (Van Egmond and Green, 1992). If grading-plan configurations are to remain accurate, the pre-final grades will have to be made lower than the final design elevations to allow room for the topsoil (Miller, 1987).

Stripping and stockpiling of topsoil before mining will reduce reclamation costs later on. To maximize efficient use of on-site materials, clean process-waste fines can be used to augment salvaged topsoil (Hart and Keammerer, 1992). Structural damage can be minimized if soil stripping and replacement is limited to dry periods and if proper machinery (e.g., wide-track crawler bulldozers) is used in re-application (Norman and Lingley, 1992). Any sort of unnecessary equipment movement over the soil should be avoided.

There are varied estimations of appropriate topsoil storage periods. Brooks (1990) specifies a maximum of 3 months. Garbisch (1986) says stockpile duration must be less than 4 weeks. Segmental reclamation is the only procedure that will be compatible with these storage times,

because it allows transfer of topsoil directly from an active mining segment to another segment which is in the process of being reclaimed. This reclamation approach is ideal for larger sites and long-term operations, but it is not always an option where deposit heterogeneity and market fluctuations prevent continual movement of the operation from one segment to the next (Norman and Lingley, 1992). Where longer storage periods are necessary, Michalski and others (1987) suggest seeding of the piles as a way to reduce loss of quality.

For mined sites that have no salvaged topsoil available, the partially weathered subsoil may be an acceptable substitute (Michalski and others, 1987). Garbisch (1986) goes so far as to say that most clean (uncontaminated) inorganic borrow and dredged fill materials will be satisfactory substrates for wetland establishment. Hammer (1992) agrees that "most common substrates are suitable for wetland establishment" and that "wetland plants thrive in a broad range of soil types", but adds that topsoil replacement may eliminate the need for soil amendments.

If subsoil or overburden material is the only planting medium available, then a controlled time-release fertilizer that performs in saturated soils should be put into the substrate together with the transplant (Garbisch, 1986). If the planting is occurring underwater, Garbisch (1986) suggests placing the fertilizer in burlap sacks underneath the transplant. Fertilizers should never be broadcast or spread on the soil surface of wetlands (Shapiro and Associates, 1991). The cost and additional labor necessary to apply these fertilizers would seem to argue for on-site salvaging or site-to-site transfer of topsoil whenever possible.

Straw or hay mulch is another option to consider for any reclaimed site where the substrate lacks organic matter (Brooks, 1990) and could be an inexpensive adjunct or alternative to commercial fertilizer for wetland applications. Street (1982) recommends 1 kg straw mulch per square meter.

Wetland Vegetation

For wetland creations, there are only two basic reasons for choosing managed revegetation over natural colonization: timing and species composition (Josselyn and others, 1990). Composition, especially, is a factor in many mitigation proposals. Revegetation by artificial means may be required, for example, if a specific wetland plant community is necessary to replace habitat for wildlife species that are losing habitat elsewhere. In these situations it may be advisable to salvage plants from wetland sites that are being destroyed and transfer them to a new site where their genetic diversity is likely to be preserved.

Managed revegetation programs are also generally more successful in controlling exotic species which commonly invade disturbed areas and become established first (Josselyn and others, 1990). These exotics usually have a competitive edge over native marsh species and may form extensive monotypic or low diversity stands that decrease the wildlife habitat or nutrient processing functions of the wetlands they take over. Reed canarygrass (*Phalaris arundinacea*) and purple loosestrife (*Lythrum salicaria*) are notorious local examples in freshwater wetlands.

There are also a few ubiquitous native wetland plants which may be considered undesirable due to their aggressive, weedy characteristics. Many wetland ecologists would advise control of dominants such as common cattail (*Typha latifolia*), willow (*Salix* spp.), and cottonwood (*Populus* spp.) because of their tendency to reduce system diversity and crowd out plants more valuable to wildlife (Hammer, 1992; Odum, 1988; Erwin and Best, 1985). These pioneer colonizers are adapted to invade disturbed sites, and "creation projects often behave like disturbed wetlands" (Odum, 1988). Nonetheless, dominant natives such as cattail, willows and cottonwoods remain popular components of revegetation projects and are found on many lists of suggested species for wetland plantings. As naturally occurring features on most disturbed

freshwater wetland sites, they would seem to be far preferable to weedy exotics and perhaps not worth great effort and expense to control unless their establishment would conflict with project goals.

If a natural seed source is nearby, or if the substrate contains a seedbank from another location, periodic manipulation of water levels in the constructed wetland basin can be sufficient to start germination and retard growth of terrestrial species. Miller (1987) suggests that a seed source can be obtained from mud removed from shorelines of existing ponds and marshes and spread in the shallows (water depth less than 10 cm) of the created site. Brooks (1990) mentions the possible transfer of seed-bearing hydric soils from wetlands scheduled to be altered or filled-in for development. The removal of plants or soil can be justified only when the destruction of the natural wetland is a legally sanctioned certainty and all relevant government regulations have been followed. If these conditions are met, salvaging of plants and hydric soils from nearby development sites or during segmental reclamation should be encouraged as a means of preserving what would otherwise be lost.

A post-reclamation study comparing treatments in a central Florida marshland reclaimed from a phosphate mine provides support for the use of relocated hydric soils. The study determined that topsoiling with a 2-to-10cm-thick layer of "mulch" containing seed and root material obtained from a wetland borrow site showed "distinct advantages over natural revegetation of overburden" (Erwin and Best, 1985). After two full growing seasons, the mulched areas had higher species diversity and more complete vegetative cover than the untreated overburden areas. More importantly, this topsoiling method "appears to encourage the accelerated establishment of late successional plants in sufficient quantities to compete with aggressive weedy species" (Erwin and Best, 1985).

Natural hydric soil seedbanks thus obtained should not be stockpiled for longer than 1 month to avoid desiccation and possible re-oxidation of

metals (Brooks, 1990). Hammer (1992) advises that any wetlands soil reserved for later use should be stored underwater to prevent release of bound metals.

If a legally and ecologically acceptable donor site is available, Hammer (1992) recommends an alternative to digging out and spreading a layer of wetland soils. This method involves collecting cores of wetland soil (10-12 cm diameter and 15-25 cm long) and inserting them in the substrate at the reclamation site. The cores contain seeds as well as roots, tubers and rhizomes and can rapidly develop into a complex wetland community. They are also a reservoir of propagules that may produce additional plant growth for several years after they are installed at the new site. Disadvantages center around labor costs involved in collecting, transporting, and installing the cumbersome and somewhat fragile cores.

If species composition for a particular mitigation purpose is not a concern, and if establishment within a limited time frame and budget is the priority, then a combination of natural colonization and deliberate planting may be the most effective way to establish vegetation on gravel-pit wetlands. Natural regeneration, while not "manageable" enough for situations where precise control over outcome is important (Garbisch, 1986), may provide the best long-term results because the plants will grow where they are best adapted (Clewell and Lea, 1990). The availability of natural seed sources adjacent to the project site or the possibility of seed transport into the site via flood waters needs to be evaluated if natural revegetation is part of the reclamation plan (Clewell and Lea, 1990). The amount of hand planting undertaken should depend on the proximity or reliability of a seed source, labor and materials costs, and time allotted to complete the project.

For those pit wetlands that can or must be hand planted, the best guide for species selection will be found in the vegetative composition of similar nearby wetlands (Hammer, 1992). Local native-plant nurseries, a few of which specialize in wetland vegetation, are sources of advice on

what species combinations will produce the most natural plant communities. The objectives of the reclamation plan, which might include wildlife habitat, aesthetic enhancement, and/or storm-water detention and purification, will also help determine appropriate plant species (McMullen, 1988). The limiting factors, however, will be the physical conditions at the site and the environmental tolerances of available nursery stock.

The type of plant stock chosen will influence timing of planting and vice versa. Spring is usually the best time to plant, with fall the next best choice (McMullen, 1988). Propagules planted in late spring may be less susceptible to wildlife damage due to the shorter time to be expected between planting and germination. These timing recommendations generally apply to the seeds, rhizomes, corms, and tubers of herbaceous species, as well as to the whole plants. Woody vegetation such as trees and shrubs should be planted in the dormant state which generally extends from November through March in the Pacific Northwest (Norman and Lingley, 1992).

A biologist familiar with local wetlands should review the proposed planting design. "The number of each plant species to be used will be based on the type of community, the plant's position in the community, and the required spacing between plants" (Miller, 1987). Miller (1987) generally recommends that trees planted on 4.6-to-7.6-m centers, shrubs on 0.9-to-2.4-m centers and groundcovers on 1.0-m centers would be appropriate for the emergent shorelines of created freshwater wetlands. Marshes created in standing water deeper than 10 cm are most easily established using sprigs (culms), tubers, or rhizomes (Miller, 1987). These propagules are pushed into the mud/mulch substrate on 0.3-to-1.5-meter centers (Brooks, 1990). Plantings should be irregularly spaced in clumps to mimic natural spacing as closely as possible.

The cost of managed revegetation with nursery stock and labor intensive hand planting can be substantial (Brooks and others, 1988). Miller (1987) estimates that approximately 27,000

transplants per hectare will be necessary to establish a created marsh wetland. Costs can be greatly reduced if time expectations and reclamation objectives allow at least partial natural colonization. If the hydrological aspects of a site are favorable to begin with, precise grading and substrate preparation should be enough to assure emergence of at least a few native and/or naturalized wetland species. On sites being created as a diversity-enhancing feature of a mine reclamation plan and not as mitigations for specific wetland losses, this may be all that is needed.

Buffer areas consisting of native upland vegetation and at least 30 meters wide will increase habitat diversity and protect the shoreline and should be planted/seeded on the higher ground surrounding the pit impoundment and created perimeter wetland (Norman and Lingley, 1992). According to Munro (1991), vegetated areas should be provided as buffers between wetlands and adjacent developed land or as transition zones between wetlands and adjacent natural areas even if not required by regulations.

Post-construction Monitoring

Evaluating Success

The construction process, if carefully planned and well executed, should produce a site on which the altered hydrologic conditions favor wetland development. The introduction of wetland plant species, whether by natural colonization or managed revegetation, is only the first step in that development. Wetland functions for which the project was designed might not develop for decades, if at all. According to Hammer (1992), it is "grossly unrealistic to expect to create even the simplest type of natural wetlands systems" within 2 or 3 years after construction. This makes it very difficult for regulators to determine whether a wetland reclamation has been "successful", particularly if the site is part of a mitigation effort to replace the functions of natural wetlands sacrificed to development.

The time limits for completion of revegetation that are specified by many surface-mine regulatory programs are inadequate for the evaluation of created wetlands. Washington State allows 2 years or "such later date as may be authorized by the department" (Chapter 332-18-050 WAC). The literature on wetland creation and restoration indicates that 2 years is not sufficient time for stabilization of new emergent marsh ecosystems. Boule (1988) suggests that establishment and natural perpetuation of plants in marsh and shrub-swamp systems would require 3 to 5 years. Brooks (1990) states that "there is some scientific evidence for the stabilization of emergent marsh systems after three years." Josselyn and others (1990) report their observations that many San Francisco Bay area wetland restoration projects which had been considered revegetation failures became fully vegetated when allowed a 3-to-4-year period of natural regeneration.

Past experience with restored or created wetlands also indicates that revegetation over 1 or 2 years is "no guarantee that the area will continue to function over time" (Kusler and Kentula, 1990). Active monitoring, with periodic review by qualified personnel, would provide some perspective on the direction that site development is following and would allow for timely mid-course corrections if necessary. Reports, submitted within 90 days following sampling, should document any vegetation changes including percent survival and cover of planted and/or volunteer species (Erwin, 1990). Monitoring reports should also document issues related to water levels, water quality, and sedimentation and discuss recommendations for improving the degree of success observed (Erwin, 1990).

Short-term vs. Long-term Monitoring

The evidence regarding the establishment of marsh vegetation seems to indicate a minimum 3-year monitoring program for wetland creation projects. Brooks (1990) suggests that expenses for a 3-year monitoring period be included in the cost projections for any mine reclamation plan

with a wetlands component. This allows for assessing of varying conditions over three growing seasons and should not result in unbearable economic burdens on the permittee (Brooks, 1990). Boule (1988) feels that annual monitoring of wetland creations over a 3-year period is the minimum acceptable term; 5 years would be more appropriate for some complex projects. Erwin (1990) agrees that post-construction monitoring should be conducted over a 5-year period, with a minimum of 3 years, and with annual inspections at the end of each wet season.

The short-term monitoring proposed here will not be sufficient for scientific research and data collection, and it will not help redirect evaluations toward establishment of wetland functions rather than appearance. Success in a 3-year time-frame may have to be measured in terms of survival and growth of plant species characteristic of a wetland community with no consideration of functional attributes.

Long-term research projects that will enhance our ability to predict the outcomes of mitigation policy should be encouraged and carried out whenever possible. These projects can focus on learning more about development of wetland functions within created systems and may eventually provide standards for evaluating function. Until such standards exist, personnel responsible for judging compliance with permit requirements will have to rely on the tools at hand. For wetlands created outside a mitigation context the establishment of self-perpetuating marsh vegetation, confirmed over a 3-year period of observation, seems a realistic and appropriately flexible reclamation objective.

Correcting Problems

In addition to verifying compliance with reclamation plan requirements, monitoring programs can also identify problems which might eventually lead to failure. Miller (1987)

and Garbisch (1986) list several reasons for poor results at some wetland creation projects: improper final grade, invasion or deliberate planting of nonnative plant species, poor planting techniques, inadequate water levels, vandalism, and wildlife predation. Mid-course corrections can often mitigate these problems before the project becomes a lost cause, but corrective measures are best determined by professionals qualified in fields such as wetland science or restoration ecology.

Some created wetlands need long-term management to survive and function as they were intended. This "may include water level manipulation, control of exotics, controlled burns, predator control, and periodic sediment removal" (Kusler and Kentula, 1990). Management of this type beyond a 3-to-5-year program coordinated with annual monitoring is probably not feasible for most reclaimed pit sites. Once the mine operator is released from further obligations under the reclamation permit, the site will have to be self-sustaining. This means that problems that are not correctable within the proposed 3-year monitoring period will continue to have a detrimental influence, perhaps a regional one.

This further emphasizes the importance of site-specific project designs developed from data gathered both before and during the mining operation. Although each site is an experiment within which complete control is never possible, development of a practical, self-sustaining design that uses knowledge of site characteristics is the best defense against the unexpected. Larson (1988) suggests that minimum data requirements for freshwater wetland creation projects include a baseline of information on land-use history, macrotopography, general surficial geology, streamflow, lake hydraulics, and ground water levels and quality. Hart and Keammerer (1992) stress the importance of accurate historical project records documenting the techniques used, including a detailed photographic record. "This information is of paramount importance relative to understanding successes or failures" (Hart and Keammerer, 1992).

Conclusions

The sand and gravel industry, increasingly under public scrutiny as its operations are encroached upon by suburban development, must now focus on the long-term regional implications of post-mining land-use decisions. It has been proven that worked-out pits lend themselves to a wide range of subsequent uses, but the majority of these uses have come about by accident rather than intent through planning. The natural regeneration that has occurred at many abandoned wet-pit sites indicates tremendous potential for increasing the nation's freshwater aquatic ecosystem resources, but this potential is not being fully used. Wetlands, in particular, have been neglected or overlooked in sand-and-gravel-mine reclamation planning.

Opportunities to balance use of an essential non-renewable resource with development of new resources may in time prove more valuable than the materials which have been extracted. Wetlands are in short supply and increasingly threatened. While creations are not a substitute for mature natural systems, they have the potential to initiate functional wetlands for future generations. For the immediate future, they can add to regional ecosystem diversity and provide habitat for many species of plants and animals. The hydrology of worked-out sand and gravel pits is typically ideal for wetland creation projects. What is needed is industry commitment, cooperation among government agencies, and support from an informed public.

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Nancy Street Wetland Enhancement: Assessment of Design and Construction

Prepared by the City and Borough of Juneau
Engineering Department
2006

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I. Introduction and Site Description

The Nancy Street Reclamation Project pioneers a creative strategy to partner development needs of a fill disposal site with conservation needs of wetland habitat and water quality enhancement. Six acres of wetlands along an impaired anadromous salmon stream became the site of fill disposal for a high school construction project in the Mendenhall Valley in Juneau, Alaska. The filling was designed to provide a platform for wetland emergent plantings and a meandering stream with riffles and deep water pools for juvenile salmon. For the City and Borough of Juneau (CBJ), the purchase of this parcel from a private landowner meant \$137,000 dollars to provide a disposal site only one mile from the construction site. Otherwise, the transport of the fill would require a three mile drive to Lemon Creek. The CBJ Engineering Department charged the contractor a lower rate for fill disposal and used this revenue to partially recover the cost of the land purchase (Appendix 3).

From the conservation perspective, this strategy met goals of a ten year old community watershed plan and the Juneau Wetland Management Plan to improve the habitat and water quality of the Nancy Street Wetland. In the 1950s and 1960s, the land was dredged to extract gravel deposits. The pit filled with groundwater that was high in iron and low in dissolved oxygen. The water from this system enters the Duck Creek system and ultimately flows into the valuable Mendenhall Wetlands. By filling to create an emergent wetland, the plants act as water filters and improve salmon and bird habitat.

The integration of a community participation component to the project raised support and enthusiasm for the creation of the wetland. Local volunteers planted willow and cottonwood in the wetland and various community groups donated time and money to the revegetation and the construction of a trail. Since the construction of the trail, nearby property owners have expressed approval and gratitude for the wetland reclamation.

This document summarizes the planning, design, and construction of the Nancy Street Wetland Reclamation Project. The site description presents the history and ecological problems found in the former gravel pit. Then the design and process of filling, revegetation and trail creation is discussed. Finally, a plan for monitoring and maintenance is proposed in order to measure the functionality and the success of the design and construction. Future plans to fill the Allison Pond as a wetland depend on the economic and ecological success of the reclamation as well as the public perception of the project. This document provides a guide to measure this success.

Site Description

The Nancy Street Wetland is located in the East Mendenhall Valley along Duck Creek, ten miles south of downtown Juneau. As part of a glacial valley, the land has been in flux for centuries, the most prominent example of this being glacial rebound. Only in the past century have people been continuously inhabiting this land. Juneau, as a gold rush town, formed in the late 19th century around two mines located near the downtown area. Prior to the arrival of the gold miners in Juneau, the Tlingit people had established a summer village a few miles north of the Mendenhall Valley. It is believed that the Tlingit only visited the valley occasionally. In 1885, the first record of land use in the valley identifies Daniel Foster as a homesteader. He raised animals and farmed the land at the mouth of the valley (Koski and Lorenz, 1999).

In the next 40 years, development of the valley occurred rapidly. A road was built to access a hydroelectric plant constructed near the glacier. Fox and mink farms, common in this part of Alaska in the 1920s, occupied much of the flat valley land. Salmon harvested from Duck Creek fed the animals. In the mid-1900s the Juneau airport was constructed on the land where Duck Creek flowed into the ocean. The creek was diverted to empty into the Mendenhall River. Along the creek bed, gravel pits were dug and homes, schools, and commercial areas were developed (Koski and Lorenz, 1999).

In the 1950s and 1960s the current Nancy Street wetland including land to the north and south of the site were dug for gravel extraction to support the rapid development of the city. After the mining was completed, the holes were left to fill with water. The pond then supported a stump dump and the neighborhood dumping of yard waste and many other household items. A private owner of the Nancy Street site sold the land to the City and Borough of Juneau to be used as a fill disposal site and reclaimed wetland. The northern portion of the site is still owned by the Church of the Nazarene

Photo from Koski and Lorenz, 1999.
Duck Creek, early 1900s



who has agreed to allow city access to the wetland for the reclamation project. From this early industrial history of the landscape, the only visible remnants are piles of gravel mining waste along the southern end of the Nancy Street Pond.

Currently, the Nancy Street Wetland is surrounded by dense suburban development with supporting infrastructure such as roads, schools, churches, and a commercial center. According to a study done by the Department of Parks and Recreation



Photo taken by Michele Elfers.

Nancy Street Pond 2005, prior to reclamation, Thunder Mountain is seen on the right

in Juneau, 11,000 people live in the East Mendenhall Valley with a higher than average density of 5 to 18 residential units per acre (1996). Immediately surrounding the Nancy Street Wetland is a church to the north, single family home developments to the east and south, and the collector road through the valley to the west that separates the wetland from a mobile home community. The dense development limits access to off street recreation for residents. It is difficult to move through this part of the valley without crossing streets or private property.

The Nancy Street Wetland site is seven acres of wetlands and uplands located on the East Fork of Duck Creek in the Mendenhall Valley in Juneau, Alaska. The East Fork drains 266 acres of land into the mainstem of Duck Creek. The entire Duck Creek Watershed drains 1.7 square miles of land into the Mendenhall River just upstream of the largest tidal wetland in Southeast Alaska. As part of this larger system, the water quality and habitat resources of this stream are vitally important to the ecosystem of Southeast Alaska. The Duck Creek Watershed has been recognized for its valuable habitat for salmon and its poor water quality. It is classified by the state as anadromous fish waters (Alaska Department of Fish and Game Catalog No. 111-50- 10500-2002) for its run of coho salmon. It is also designated an impaired water body by the Alaska 303(d) list of Impaired Waters, Alaska Department of Environmental Conservation. These two factors have motivated the city of Juneau and federal agencies to focus on the improvement of the stream system.

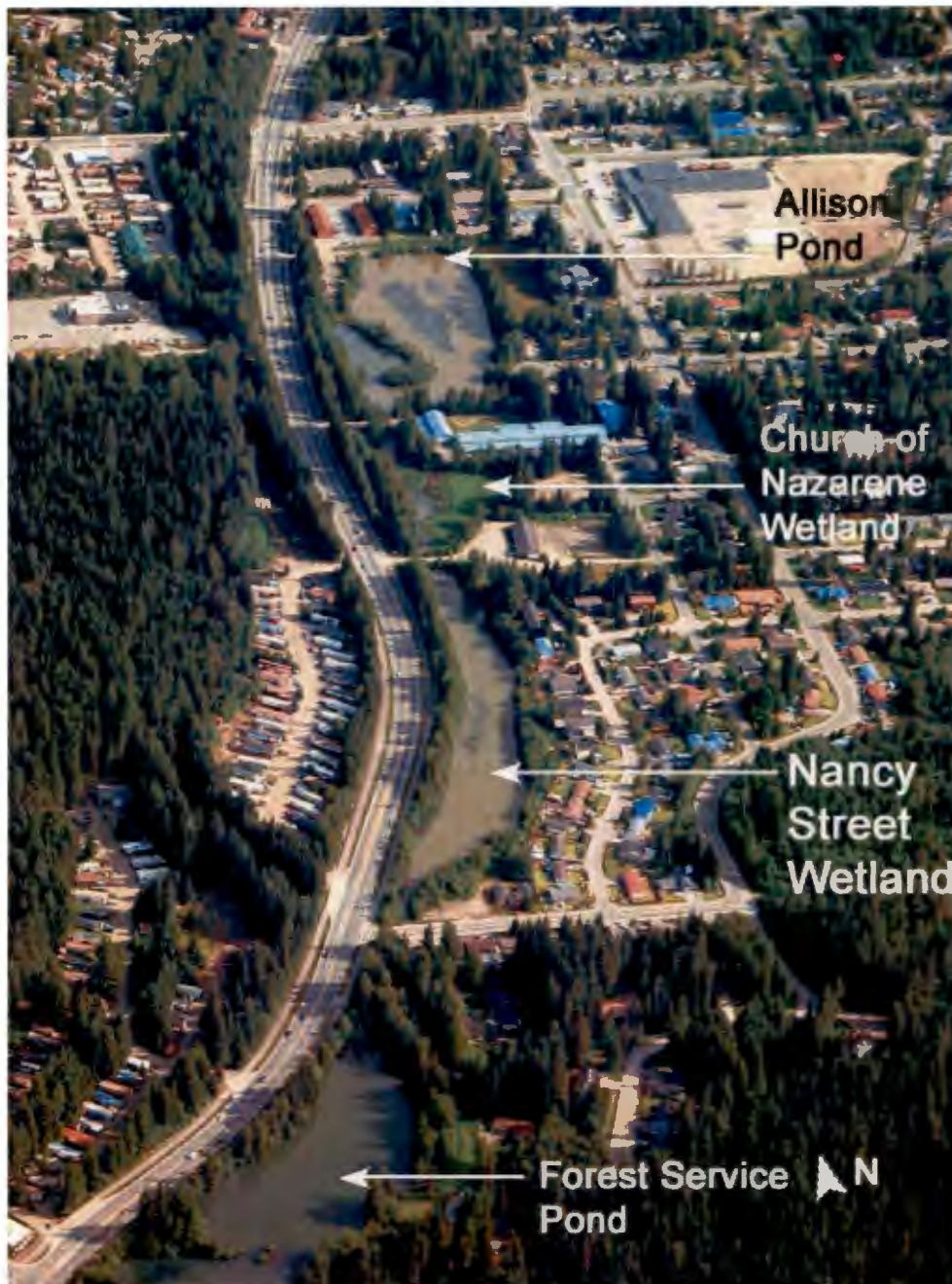


Photo from Koski and Lorenz, 1999.

The East Fork of Duck Creek flows through a chain of ponds and wetlands that were once gravel mines. Currently dense development crowds the ponds and wetlands into a narrow corridor along the main commuter road through the Mendenhall Valley.



Throughout its 250 year history as a watershed, the topography, stream flow and vegetation have massively changed due to glacial rebound, glacial succession and human influence. In its current state, the densely populated residential areas surrounding the wetland contribute to problems of turbidity, heavy metals, iron floc, fecal coliform and low dissolved oxygen rates within the watershed (Koski and Lorenz, 1999). However, many of the current water quality problems result from the geologic and cultural history within the Mendenhall Valley.

The known geologic history began during the Pleistocene Era 18,000 years ago. Metamorphosed igneous and sedimentary rock composed the Mesozoic bedrock under what is now the Mendenhall Valley. Glaciers advanced and covered the land with 4000-5000 feet of ice. When the glacier retreated, it carved out the depression that is now called the Mendenhall Valley. The glacial moraine deposited marine sediments, sand, gravel and organic materials in the valley. The most recent glacial advance in this valley began 700 years ago during the Wisconsin Age. The glacier advanced until 1750, and covered at least half of the current Duck Creek watershed. As the glacier retreated, Duck Creek gushed from the face and created an outwash plain as it flowed to the ocean. Several terminal moraines were deposited throughout the current watershed. As the glacier continued to melt, however, it formed a basin and a lake. The melt water from the glacier filled what is now Mendenhall Lake and spilled out into the Mendenhall River, cutting off the flow to Duck Creek. Today, groundwater is the primary source of the Duck Creek stream flow.

Since the retreat of the glacier, isostatic rebound has significantly impacted the landscape. In 1965, Hicks and Shofnos reported the rates of .05 feet/year uplift of land between 1936 and 1962. They believed the deglaciation of the land caused this uplift. The water table lowered relative to the surface of the land as a result of this process. Currently, low stream flow levels pose problems for fish habitat in Duck Creek. There is speculation that the isostatic rebound may contribute to this problem (Host and Neal, 2004).

In addition to isostatic rebound, the highly permeable soils in this area contribute to low flow. The soils characteristics of this flat landscape are common to alluvial plains and stream valleys: well to excessively well draining. The USDA, Soil Conservation Service, surveyed the soils in 1974 in the Juneau area and found along Duck Creek primarily soils in the He and Be series.

The He series of soils are composed of silty and sandy sediments that are generally waterlaid. For this reason, the soil is stratified. The stratification is generally 40 inches to 6 feet deep and is composed of silt, very fine sand, fine sand, deposits of organic matter, and coarse sand and pebbles. The depth to water table is usually greater than 4 feet, but can be less at times. HeA is the specific soil type in this series found along Duck Creek; this signifies slopes of 0 to 3 percent and a texture of Fine Sandy Loam.

The second series found in the Duck Creek watershed, the Be series, is also common on alluvial plains and terraces as well as hilly moraine landscapes. The gravelly sandy soils indicate an excessively well drained substrate. The first layer of the soil is very gravelly sand. The material 10 inches below the surface is 50 to 75 percent gravel and cobblestone by volume. Some large stones and boulders will be present. The water table, like the He series, is greater than 4 feet, but in some areas may be close to the surface. Flooding is rare in these soils; however, close to streams flooding may occur (Schoephorster and Furbush, 1974). Field testing close to the Nancy Street Wetland revealed a layer of approximately twenty inches of fine silt underlain by five feet of sand (Beilharz, 1998). This type of soil is highly permeable and contributes to the loss of stream flow to groundwater. In some reaches of Duck Creek, the stream goes dry or becomes puddles of standing water. Low flow destroys aquatic habitat and prevents aquatic life from moving through the stream.

The geologic conditions that create low flow in Duck Creek are compounded by the suburban land use within the watershed. The upper reaches of the stream flow through residential neighborhoods of primarily single family houses, while the lower sections abut commercial centers and the Juneau airport. According to studies done in the 1980s and 1990s, residential land use covers 540 acres of the watershed, commercial/industrial uses cover 282 acres, transportation 83 acres, and recreation/wetland cover 175 acres (TMDL, 2000). In 1969, the watershed was mapped to be 3.42 square miles. In 1988, it was estimated at 1.7 square miles. Riparian buffers and wetland areas have decreased as a result of the development (Koski and Lorenz, 1999). There is speculation that the moving of stream segments as a result of development may have moved the stream onto more permeable substrates. Stream flow is lost to groundwater when this occurs.

The water quality problems of turbidity, heavy metals, fecal coliform and low dissolved oxygen rates within the watershed in Duck Creek are largely caused by the suburbanization of the valley. Approximately 36 percent of the land cover is impervious surface and in 1997, there were a total of 39 road crossings over the creek. Stormwater runoff from the

impervious surface carries sediment, metals, oils and fluids from vehicles, and de-icing agents into the creek (Koski and Lorenz, 1999).

Within the Nancy Street Wetland, one of the most detrimental results of the gravel extraction is the increase in groundwater that is high in iron content seeping into the Nancy Street Pond and the other ponds along Duck Creek. Iron is commonly found in glacial outwash plains. While underground, it remains in a soluble form of Fe(II) because of the lack of oxygen in groundwater. When groundwater carries the iron to the surface, iron oxidizing bacteria are believed to oxidize the iron and create Fe(III). This oxidized form of iron is insoluble and settles on the ground surface as orange sediment known as iron floc (Megonigal, 2001). The process of conversion of Fe(II) to Fe(III) is detrimental to the Nancy Street Wetland because it robs the water of dissolved oxygen. Fish, macro invertebrates, and other animals require high levels of dissolved oxygen for survival. Additionally, the iron floc is small sediment that clogs interstitial spaces between gravel on the floor of the stream and prevents salmon eggs from accessing the oxygen and water flow they need to develop.

Wetland vegetation promotes the conversion of Fe(II) to Fe(III) and retains the iron floc in the roots of the plants. The roots of wetland plants leak oxygen into the soil. This zone surrounding the roots that contains oxygen is called the rhizosphere. Within the rhizosphere, Fe(II) is converted to Fe(III) by oxidizing bacteria. The Fe(III) precipitates to form a solid that sticks to the plant roots, called iron plaque (Megonigal, 2001). This characteristic of wetland plants creates the iron sink in the Church of Nazarene wetland. However, there may be some problems with this strategy in the long term. Wetland plants have been found to have high root turnover rates. Root turnover is the dying off of root hairs as part of a regular cycle of plant nutrient cycling and growth. Wetland plants are estimated to have 55% of their fine roots turnover annually (Gill and Jackson, 2000). If these roots are dislodged and carried downstream, the iron plaque may also be carried downstream, thereby negating the effects of the iron sink. Additionally, iron is known to diminish the uptake by plants of other metals or organic compounds. The iron plaque covers the root hairs, reduces oxygen in the rhizosphere, and minimizes the ability of microbes to interact with chemicals excreted by root hairs. This prevents the roots from uptaking other metals or organic compounds and reduces the phytoremediative effect of wetlands. The presence of iron could negate any other degradation of pollutants (Lanza lecture, 2005).

Historically, the Duck Creek Watershed was a rich habitat for coho, chum, and pink salmon. In its current state it provides limited habitat for coho spawning and overwintering as well as some habitat for birds and waterfowl (Koski and Lorenz, 1999). The Alaska Biological Monitoring and Water Quality Assessment Program Report rated Duck Creek the lowest of all streams studied in Southeast Alaska for habitat variables in 2003. The study measured dissolved oxygen, Ph, conductivity, temperature, taxa richness and stream structure characteristics. The mean habitat assessment value for urban streams was 157 and Duck Creek scored 96. Poor quality habitat resulting from an urban watershed with high erosion and low canopy cover combined with the geologic history have degraded habitat for the fish that once used the stream system.



Iron seepage in the Nancy Street Pond

The iron itself does not seem to harm fish and wildlife. However, the conversion process of Fe(II) to Fe(III) removes dissolved oxygen from the water. The photo is taken at Nancy Street Pond in July 2005.



Photos taken by Michele Elfers.

II. Design and Layout of Earthwork

The impetus for this partnership formed around the need for a waste disposal site for material extracted from the Mendenhall Valley high school construction project at Dimond Park. The initial design completed by Toner-Nordling Associates estimated the placement of 52,000 cubic yards of silty fill in the Nancy Street Pond. The proximity of the Nancy Street disposal site to Dimond Park ensured that this would be a cost effective fill site.

In 2004, Toner-Nordling worked with CBJ and the U.S. Fish & Wildlife Service to design the fill placement to achieve hydrologic, habitat and operational needs (See Figure 1 and 2). As part of a long-term plan to convert the upstream Allison Pond to a wetland through a similar filling process, this pond and the Church of the Nazarene water levels were designed to be controlled by an earthen dam at the southern end of the Nancy Street Wetland. The design of the Nancy Street fill and dam elevations were critical to the success of these three waterbodies. Additionally, the fill design determined habitat diversity. Low marsh and high marsh areas supported wetland emergent plants, deep water holes and the stream channel allowed for water flow and fish habitat, and the edge of the marsh maintained upland habitat. The need for efficient hauling of material required a haul road along the edge of the wetland and protruding fingers that would allow trucks access to the middle of the wetland to dump material. These access fingers became the low and high marsh habitat zones. The filling elevations below water surface elevation will be discussed in Chapter IV, Design and Layout of Vegetation.

In 2005, the design was revised by CBJ Engineering staff to enhance habitat and maximize fill placement (See Figure 3-7). As a former mining site, the extraction of gravel resulted in steep slopes at the edges of the pit. By modifying the design to increase the fill at the edges of the wetland, the slopes would be reduced to improve habitat and safety, as well as provide economic benefit through the disposal of fill. The modification reduced slopes on average from 30 to 60 percent to 7 to 15 percent throughout most of the wetland. Steep slopes were maintained where the stream channel curves at the edge of the pond to allow for overhanging vegetation that provides thermal protection for the water. The revegetation section discusses the variety of plant communities that are able to grow on the moderate slopes. The increase in fill along the slopes provided incentive for the expansion of the coho overwintering ponds by reducing the amount of fill added to these areas. The larger deep water areas benefit the juvenile coho salmon as well as providing more open water habitat for macro invertebrates.

To maintain the necessary water levels and provide a diversity of habitat, the U.S. Fish & Wildlife Service worked with R&M Engineering to design an earthen dam and outlet channel. The design of the dam called for an impermeable liner to wrap around the upstream side of the dam and fold back. The outlet stream design also included this liner to prevent water loss in the stream channel. The channel included a meander and two riffle sections for aeration. A combination of cobbles and gravel for spawning formed the streambed.

As an urban wetland, the heavy construction at the site required public meetings and compromises with adjacent property owners. The Church of Nazarene owns the northern portion of the wetland as well as the driveway needed to access the haul road (See Figure 1). To gain access to the wetland for filling, CBJ paved the Church's driveway and constructed the extension of their parking lot after construction along the northeast edge of the wetland. The property owners along the east edge of the wetland requested that the tree buffer be preserved along the Mendenhall Loop Road. For this reason, the haul road was built on the east edge of the wetland.

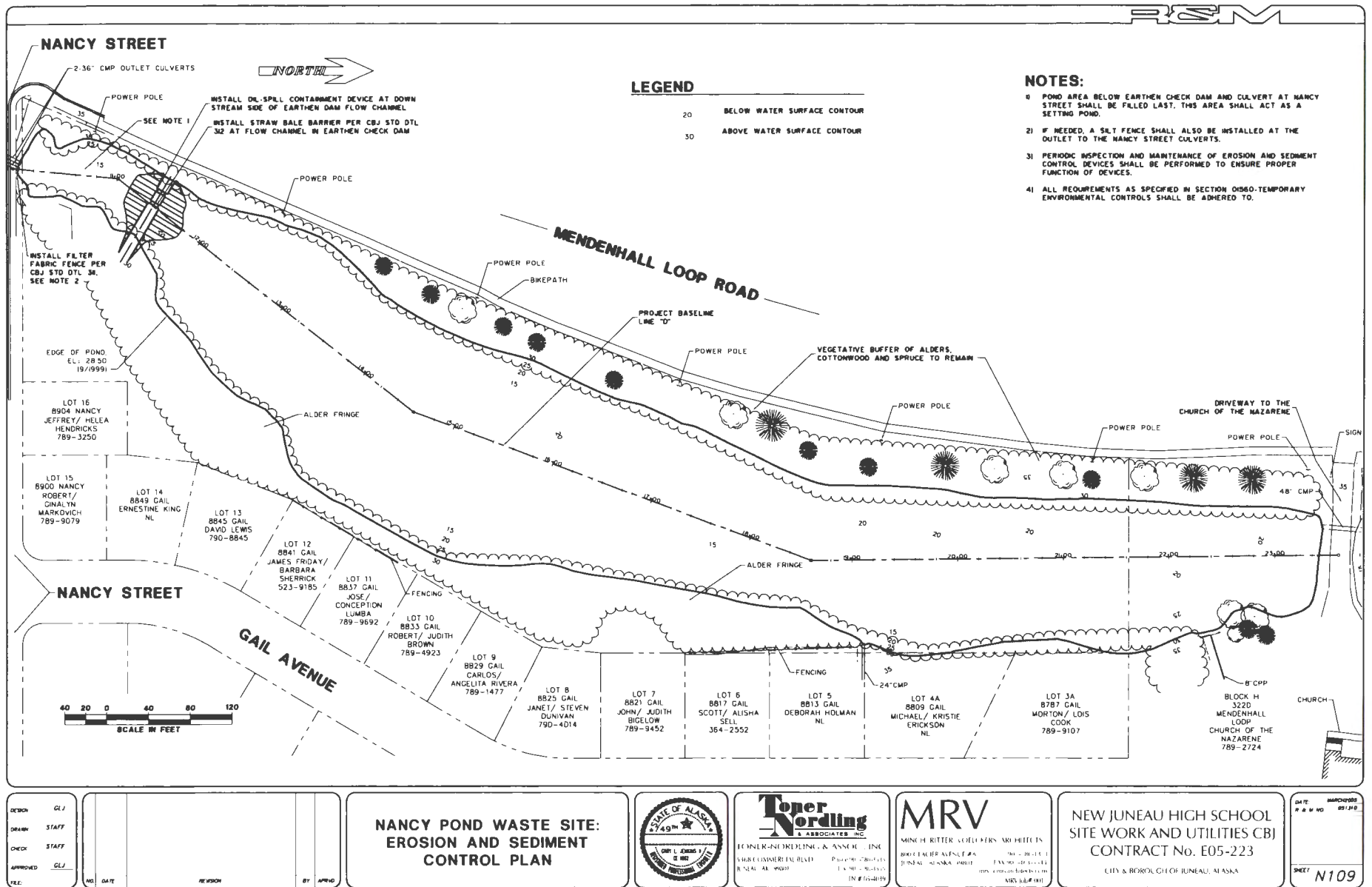


Figure 1. Existing Conditions for the Nancy Street Wetland

R&M Engineering and Toner Nordling Associates produced the existing plan for the Nancy Street Wetland Enhancement Project. The water surface elevation is approximately 28'. The plan shows a few holes that are 16' below the water's surface. Steep banks surround the pond and prevent wetland vegetation from growing.

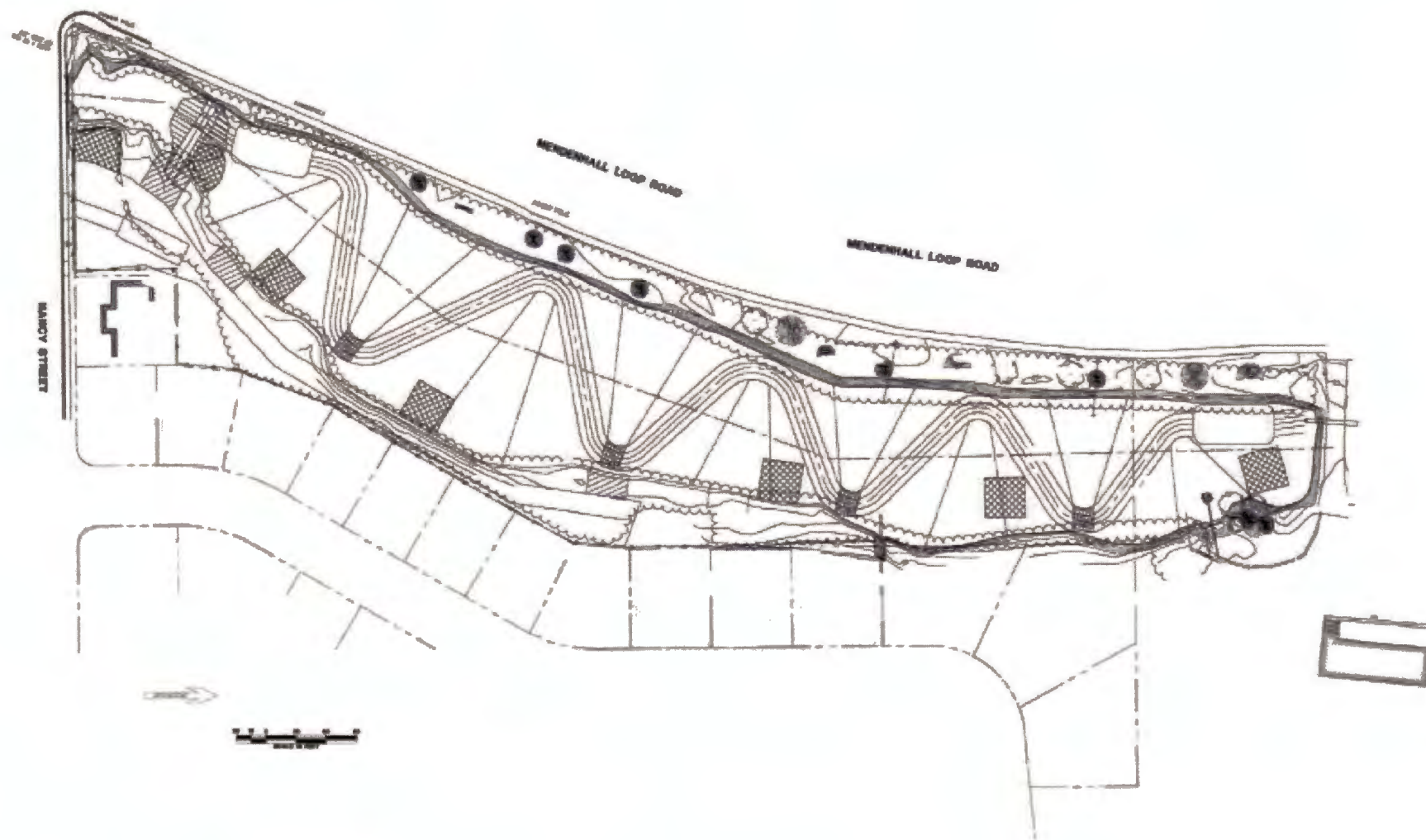


Figure 2. Initial Design for the Nancy Street Wetland Enhancement Project

R&M Engineering and Toner Nordling Associates worked with the U.S. Fish & Wildlife Service, the Natural Resource Conservation Service, and The Nature Conservancy to design the wetland enhancement. A meandering stream channel 4' deep flows from the North to the South through shallow marsh.

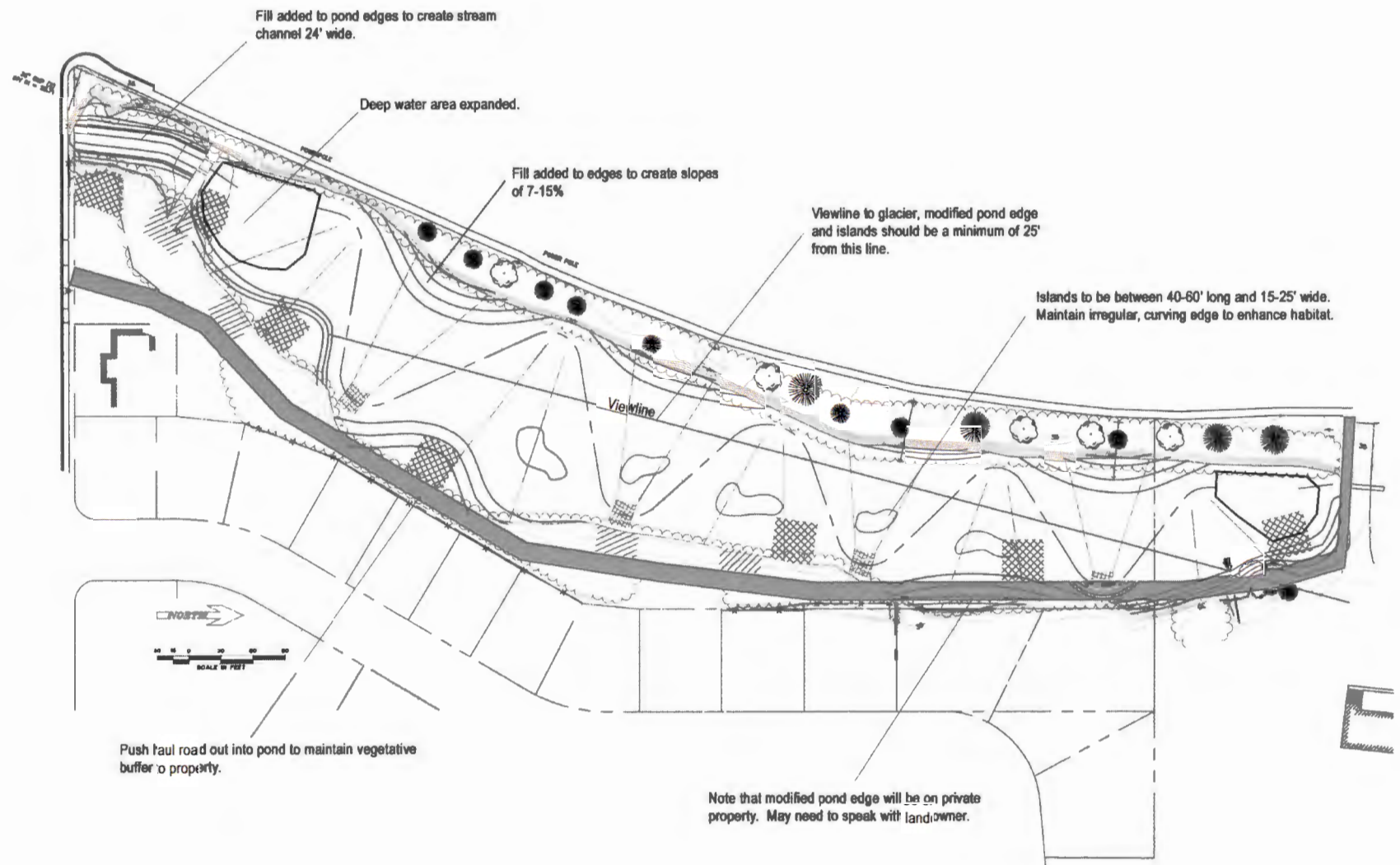


Figure 3. Modifications to the Nancy Street Wetland Design

In the summer of 2005, changes to the grading plan were proposed by CBJ to improve habitat by reducing the grade of the edges of the wetland. In anticipation of developing a trail plan, the islands were moved to allow for a view of the glacier.



Figure 4. Cross Section of the Coho Salmon Overwintering Pond

Fill is added to modify the steep wetland edge and cut is removed to allow the truck hauling road for the construction phase.



Figure 5. Cross Section of the Stream Channel, Marsh, and Island

Fill is added to create wetland emergent plant zones. The upland island will create protected bird nesting habitat.



Figure 6. Cross Section of the High marsh, Low Marsh, and Stream Channel



Figure 7. Cross Section of the Outlet Stream Channel
Fill and gravel is added to create a stream channel with salmon spawning habitat.

III. Earthmoving Process and Commentary

Based upon discussions among Glacier State, R&M Engineering, CBJ, and the U.S. Fish & Wildlife Service, the process of filling was undertaken by shaping the fingers around the stream channel without filling in the stream channel or coho overwintering ponds. The alternative, to fill the entire pond and then dig out the stream channel and deep ponds would result in much less habitat diversity and variety in landform.

Glacier State began hauling and placing fill in September, 2005 and placed 64,000 cubic yards of fill by May. Ten cubic yard capacity dump trucks were used requiring approximately 6400 trips. One excavator operator worked filling and spreading the material. The material excavated from the highschool site varied from silty, to rocky mineral soil, to sandy depending on the area of excavation. At the Nancy Street pond, the excavator operator completed the filling by section, working and finishing one finger at a time. For this reason, the type of fill varies by section. After the completion of each finger, a 6-8" lift of topsoil was added for re-vegetation purposes. The unscreened topsoil came from Stabler's Quarry and was delivered at no cost to the project as part of an EPA mitigation penalty to a local company. The topsoil quality was low in organic content and high in cobble rock and woody debris content.

At the time of filling, the dam was not constructed. The fingers were filled to approximately 1-4 inches above the summer water level. The heavy rainfall received during the summer helped to compact the fingers. Usually within two weeks of shaping a finger, it would compact and solidify enough to walk easily on it. In many areas, the rocky silty fill would compact with the rains, dry out and harden to a cement like substance.

The dam and outlet channel construction began in early July, 2006 and required approximately 1-2 weeks of work. Fill was placed through the entire area where the stream channel would be located except for a narrow channel along the west edge of the wetland. This channel maintained water flow from the wetland to the culverts. After filling the area, the stream channel was excavated according to survey markers placed by Toner-Nordling Associates. The liner was secured in place under the streambed and the cobbles placed on top of it. The dam was shaped with fill, but the liner was never folded across the upstream face of the dam. It was determined by the Glacier State Contracting, R&M Engineering, CBJ, and the U.S. Fish & Wildlife Service that the fill was stable enough to maintain its integrity. The water flow in the wetland is minimal and so erosion is not a concern.

After completion of the initial dam and outlet structures, the area was given two weeks to rest. After this period, it was observed that the liner in the stream channel was surfacing due to upwelling of air and water from the substrate. Also, the established dam elevation was determined to be high relative to the elevations of the fingers. This resulted in high water levels in the wetland emergent area which could affect plant growth.

Glacier State Contracting went back into the wetland, lowered the dam level by removing fill from under the liner, re-layed the liner, added more cobbles and gravel to settle it, and reworked the stream channel meandering form. After this second effort, the liner is less visible and the effect is much more aesthetically pleasing. Due to high precipitation levels, it is unknown if the lowering of the dam will result in lowered water surface elevation.

Early stages of filling in November, 2005.
Logs are used to support machinery as the
fill the fingers.

Photo taken by Neil Stichert.



Early stages of filling in November, 2005. Photo looks south at the filling of the fingers.
Photo taken by Alan Steffert.



Photos taken in April, 2006 by Michele Elfers.

Hay bales and silt fence used to control sediment at downstream end of wetland.



In May, 2006 the channel sinuosity begins to take shape.

Photos taken by Michele Elfers.





Digging of outlet stream channel, laying of impermeable fabric and initial stream shaping in July 2006.



Glacier State returned to the outlet channel and dam 2 weeks after initial construction and added more cobble, lowered the dam elevation, and reshaped the channel.

Photos taken by Michele Elfers.

IV. Design and Layout of Vegetation

To plan for the process of revegetation, native plant communities that will thrive in the conditions at the Nancy Street Wetland must be understood. There is little to no documentation or literature on the revegetation of wetland reclamation projects in Southeast Alaska. Interviews and qualitative evaluations of three constructed wetlands during the summer of 2005 form the foundation for the planning of the revegetation process. The Church of the Nazarene Wetland, the Floyd Dryden Middle School Wetland, and Kingfisher Pond are studied to understand the successes and failures of native species and transplants within constructed wetlands. The results are applied to the planning for the revegetation of the Nancy Street Wetland.

1. Church of the Nazarene (CoN) Wetland, Mendenhall Valley

The Church of the Nazarene Wetland is located immediately upstream of the Nancy Street Wetland. The two wetlands are separated by a culvert. Similar to the Nancy Street Wetland, most of the water comes from groundwater seepages which carry iron into the surface water. The soils, geologic and human use are the same for both wetlands. The Church of the Nazarene wetland was part of the gravel pit and then filled in 1997 as part of a wetland reclamation project headed by K Koski of the Duck Creek Advisory Group. The reclamation utilized 20,000 cubic yards of fill composed mostly

Church of the Nazarene Wetland

Photo taken by Michele Elfers.



of sand and gravel from a stormwater improvement project in the floodplain of Duck Creek. Approximately 1000 cubic yards of peat were placed on top of the fill in a 6-10 inch lift. To accomplish the filling and planting, the water level in the pond was lowered using pumps. The fill was then added to allow for a stream channel 2-4 feet below the water surface elevation that covered 20 percent of the wetland. The remainder of the wetland was graded to allow for three different levels: 50 percent of the wetland is high marsh at 0-3 inches below water surface elevation, 15 percent of the wetland is mid-level marsh at 0-6 inches below water surface elevation, and 15 percent of the wetland is low marsh at 6-18 inches below water surface elevation. Plants were chosen for revegetation based on the established elevations.

Low Marsh 6-18" water depth

Nuphar luteum,
Yellow Pond Lily
Potamogeton gramineus,
Grass-Leaved Pondweed
Sparganium emersum,
Narrow-Leaved Burrweed

Mid-Level Marsh 0-6" water depth

Carex aquatilis,
Water sedge
Equisetum fluviatile,
Swamp Horsetail
Caltha palustris,
Yellow Marsh Marigold
Menyanthes trifoliata,
Buckbean
Beckmania syzigachne,
American Slough Grass

High Marsh 0-3" water depth

Carex aquatilis,
Water Sedge
Equisetum fluviatile,
Swamp Horsetail
Caltha palustris,
Yellow Marsh Marigold
Menyanthes trifoliata,
Buckbean
Beckmania syzigachne,
American Slough Grass
Carex sitchensis,
Sitka sedge
Calamagrostis canadensis,
Bluejoint Reed Grass

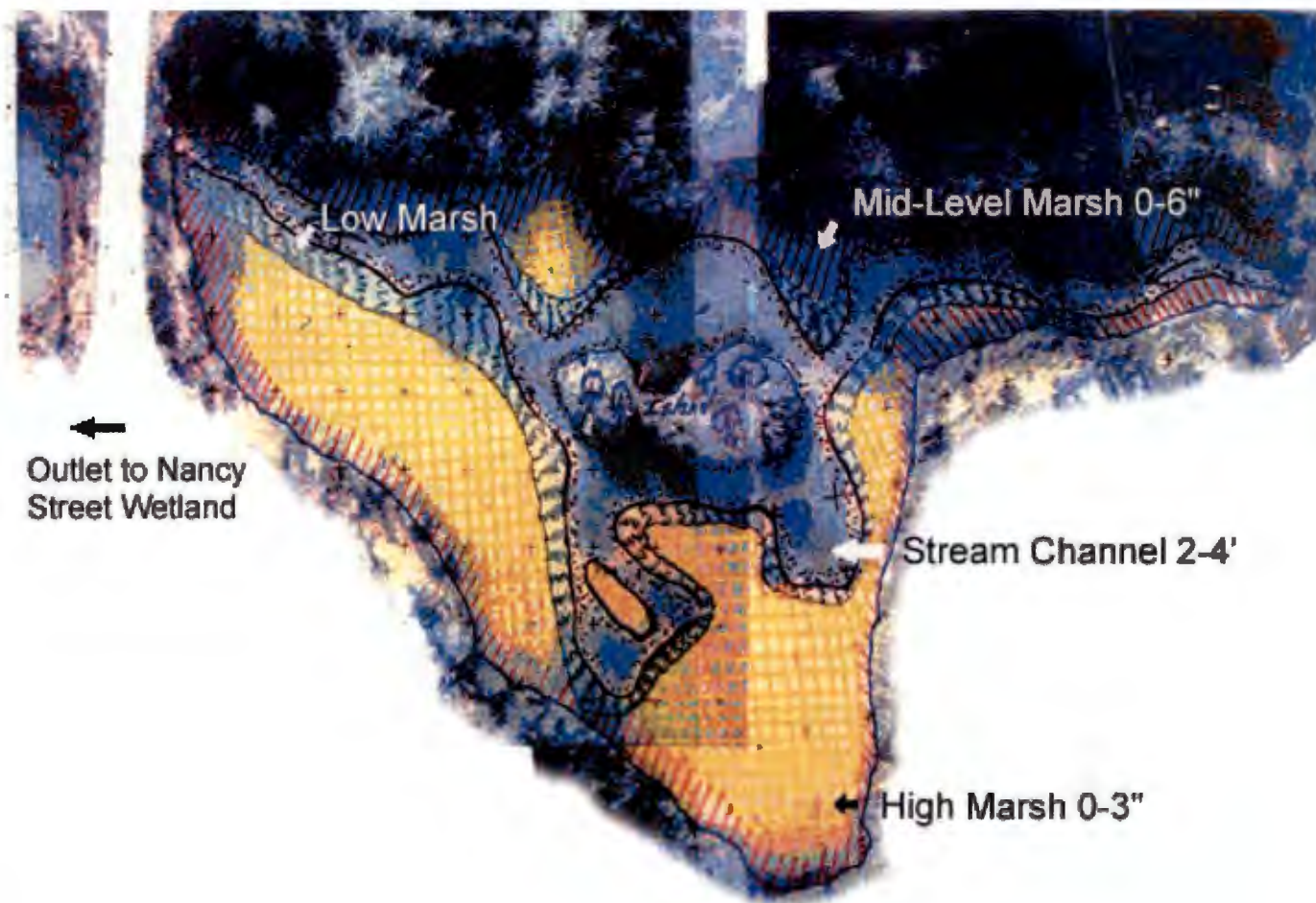


Figure 8. Church of the Nazarene Plan
Plan by K Koski.

The Wetland Enhancement Project for the Church of Nazarene Pond shows a grading plan that was developed to accomodate different plant communities. A meandering stream channel provides water to the marsh areas.

Table 1. Church of the Nazarene Plant Evaluation

site	water depth (cm)	% cover	live stems	description of quadrant	plant species
1a	7.5	90	57	saturated mud	horsetail, sitka sedge
1b	4	60	104	saturated mud	horsetail, sitka sedge
1c	3	95	14	saturated mud	horsetail, sitka sedge, blue joint grass
1d	14.5	35	17	standing water, iron oxide	horsetail, yellow marsh marigold
2a	5	75	50	saturated mud	horsetail, sitka sedge
2b	10.5	75	50	standing water	horsetail, sitka sedge
2c	6.5	35	37	saturated mud	horsetail, sitka sedge, western black willow, moss
2d	37.5	90	116	standing water, iron oxide	horsetail
3a	15	50	69	standing water	horsetail, sitka sedge, blue joint grass, bullrush
3b	35.5	95	89	standing water	horsetail, sitka sedge
3c	47.5	30	48	standing water	horsetail
3d	15.5	80	78	standing water	horsetail, sitka sedge
3e	12	20	9	standing water	sitka sedge
4a	13.5	40	90	standing water	carex, merten's sedge
4b	21.5	80	76	standing water	horsetail, sitka sedge
4c	22	40	32	standing water	horsetail

Table from "Inventory of Created Wetland and Baseline Data for Future Wetland Creation Sites". Hoferkamp, Lisa. Prepared for United States Fish and Wildlife Service, 2004-2005.

A combination of seeding, transplanting and planting of container grown stock were used for revegetation. During the transplanting, the plants that were dug from nearby wetlands were based more on availability and less on the planned species list. The plants were planted in rows four feet apart and with a spacing of two feet. Additionally, a local nursery planted upland species from container stock on a bank of the wetland (notes and plans from K Koski, 2005). Salix and Alder species were planted but did not survive. The wetland vegetation was counted and evaluated in 2004 by Lisa Hoferkamp, an assistant professor and a student at the University of Alaska, Southeast as part of a study of the water quality in the constructed wetland. Sixteen quadrants of .5 square meters were delineated within the saturated zone. Estimates of vegetative cover and an analysis of dominant species cover were performed.

The report estimates overall vegetative coverage of the wetland at 30-95 percent in 2004. This is an increase from an estimated 1 percent coverage in 1997 when it was first planted. The current plant community in the Church of Nazarene Wetland is dominated by Horsetail and Sitka Sedge with a few other species growing. According to the report by Lisa Hoferkamp, it is functioning as an iron sink and so the lack of diversity may not be a problem for this objective.

From the perspective that Nancy Street Wetland is part of ongoing experimentation and research into constructed wetlands in Southeast Alaska, expanding the diversity of the plant community may be beneficial to learn which types of plants colonize rapidly and if there are species that retain iron more efficiently. Species of Horsetail have long, thin root systems that may not be the most effective option for the trapping and retention of iron. Sedges, with dense fibrous root systems may be a better choice. Also, increasing the diversity of the plant community will allow for increased forage and habitat options for various species of birds and macro invertebrates.

2. Floyd Dryden Middle School Wetland, Mendenhall Valley

The Floyd Dryden Wetland is located north of the Nancy Street Wetland in the Mendenhall Valley. It occupies the post-glacial landscape but it does not have the same gravel extraction history. The constructed wetland is on school grounds and has been a wet area since the creation of the school. Surrounded by playfields and a building, it has become a detention



Photo taken by Michele Elfers.
View of the Floyd Dryden Wetland in July 2005

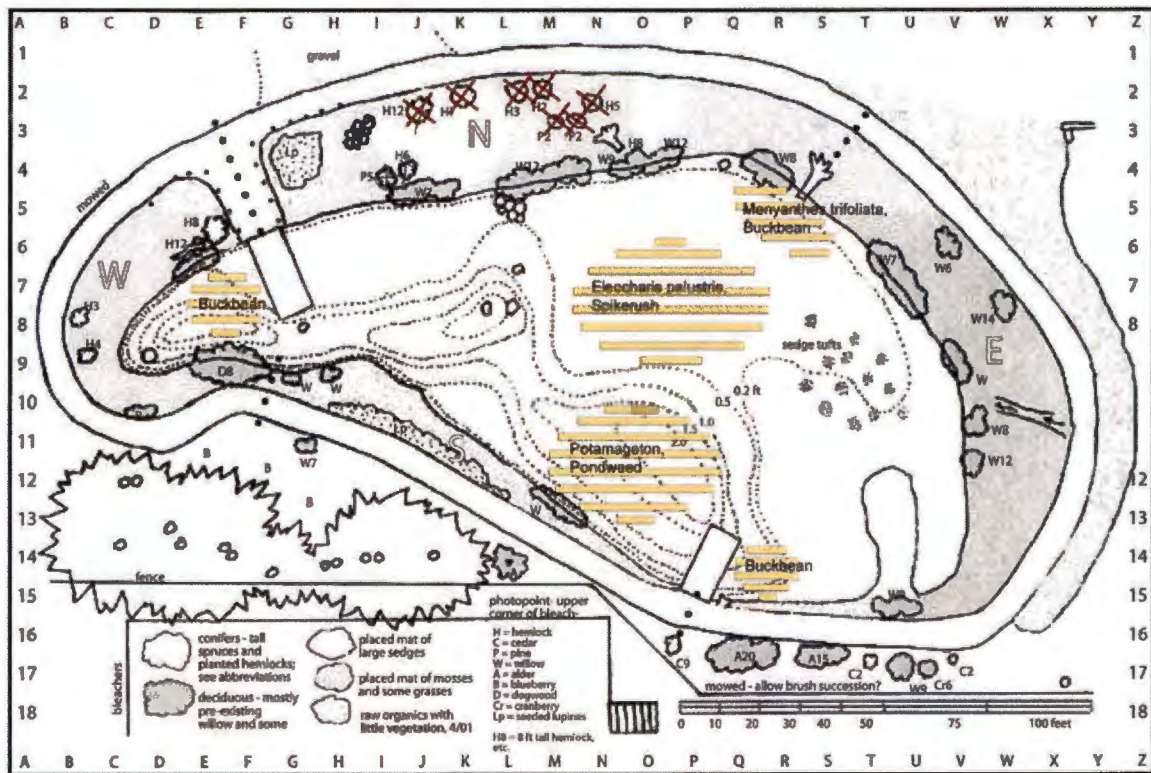


Figure 9. Floyd Dryden Pond

Original plan from Richard Carstensen of Discovery Southeast.

Observation of major species colonization in July 2005 shows that the Hemlocks and Pines did not survive, the Sedge, Spikerush, Buckbean, and Pondweed did very well.

area for stormwater. Between 1999 and 2001 the current wetland was graded and planted. The deepest area is roughly 450 square feet at a depth of 2 feet below water surface elevation and the grade rises to approximately 2.5 inches below water surface elevation within a large area of the wetland.

Richard Carstensen of Discovery Southeast, a nature education organization in Juneau, developed a vegetation plan for the wetland. Hemlock, Cedar, Pine, Willow, Alder, Blueberry, Dogwood, Cranberry, mats of Sedges, mats of Moss and Grasses, and Lupine seeds were used for the revegetation. Observation in August of 2005 showed that within the saturated zone the plants that are thriving are species of *Carex* (Sedge), *Equisetum* (Horsetail), *Eleocharis palustris* (Spikerush), *Menyanthes trifoliata* (Buckbean), and species of *Juncus* (Rush). Moving out of the saturated zone into the uplands, Willows, Alders, and Dogwood are thriving. The Hemlocks and Pines are either dying or are very small plants and there are very few Lupine plants. There is little open water in the wetland and a species of *Potamogeton* densely covers a significant amount of surface area in the deeper water areas.

The failure of the Hemlock and Pine trees may be due to the lack of adequate soil conditions. Hemlock requires a soil with a high organic content that is rare in the recently deglaciated Mendenhall Valley. Native Pine trees only grow in peat bogs in this part of Southeast Alaska. Sedges, Spikerush and Buckbean have thrived in this wetland at water depths of 2-6 inches for the Spikerush and Sedges and 2.5 inches for the Buckbean. These species are potential candidates for the Nancy Street Wetland.

It is important to note in this wetland that the deepest water is 2 feet and that there is little open water without vegetation. Potamogeton as well as other aquatic species such as Nuphar polysepalum are able to grow in 2 feet of water. In order to diversify habitat at Nancy Street and encourage the macro invertebrate population, open water is desired and the deep water levels must be greater than 2 feet deep. A study by Nelson, Roline, et al. shows that in constructed wetlands for wastewater treatment, the most productive habitat for invertebrates is open water with oxygen producing submerged plants. The least productive habitat is open water that has a continuous cover of duckweed and low dissolved oxygen levels (2000).

3. Kingfisher Pond at the Juneau Police Department, Lemon Creek

Kingfisher Pond at the Juneau Police Department is located at the mouth of a glacial valley, Lemon Creek. The primary source of water is groundwater supplemented by runoff as well as a small amount of brackish tidal water that enters through a faulty control structure at the outlet of the pond. As a reclaimed gravel pit, iron seepage is a problem in this wetland as well as pre-reclamation dumping of oil and other contaminants.



Photo taken by Michele Elfers.
View of Kingfisher Pond in July 2005

Between 2002 and 2003, the pond was filled and shaped to create a wetland and then planted with seeds, vegetative mats, and limited container stock plants. A section of the saturated zone was delineated to study the success of the seeding and the colonization of plants. The evaluation of the twelve study plots is recorded in Table 2. The evaluation is taken from observation in July 2005 of the plants growing compared to a seeding plan done at the time of revegetation. In the uplands area, Alder dominates, in some areas it is growing in dense thickets. There is also some Lupine, Dogwood, and

Highbush Cranberry in the upland areas. Both Tufted Hairgrass and Merten's Sedge have spread from saturated lowlands into well-draining upland areas. In the saturated areas to standing water, Small Leaf Bulrush, and Mare's Tail have colonized.

Table 2.
Kingfisher Pond
Plant Evaluation

Plot	Conditions	Seeded in 2000	Growing in 2005	Plot	Conditions	Seeded in 2000	Growing in 2005
1	Saturated	Merten's Rush	Merten's Rush	7	Moist ground, upslope	Hardtack Steeplebush	Merten's Sedge
			Merten's Sedge			Goat's Beard	Tufted Hairgrass
			Tufted Hairgrass				Lupine Alder
2	Saturated	Merten's Rush	Merten's Rush	8	Moist ground, upslope	Hardtack Steeplebush	Merten's Sedge
		Small Leaf Bulrush	Merten's Sedge				Tufted Hairgrass
			Tufted Hairgrass				Lupine Alder
3	Saturated	Control, no seeding	Merten's Rush	9	Moist ground, upslope	Control, no seeding	Merten's Sedge
			Merten's Sedge				Tufted Hairgrass
			Tufted Hairgrass				Lupine Alder
4	Saturated, beginning of upslope	Sawbeak Sedge	Merten's Sedge	10	Well-drained, upland	Tufted Hairgrass	Tufted Hairgrass
			Tufted Hairgrass				
5	Saturated, beginning of upslope	Control, no seeding	Merten's Sedge	11	Well-drained, upland	Tufted Hairgrass	Tufted Hairgrass
			Tufted Hairgrass			Meadow Barley	Meadow Barley
			Sawbeak Sedge				
6	Saturated, beginning of upslope	Merten's Sedge	Merten's Sedge	12	Well-drained, upland	Control, no seeding	Lupine
		Sawbeak Sedge					Alder

Data from observation in July 2005 and a Seeding Plan provided by the U.S. Fish & Wildlife Service.

A few species did not survive and many showed only one or two plants. *Spiraea douglasii*, or Hardtack Steeplebush was seeded but not growing on the site. This plant grows in southern Southeast Alaska, but it is not native to the northern part of the region. It will grow only in certain microclimates in this area and is therefore not hardy enough for a reclamation project. Meadow Barley, although native in this area, did not colonize successfully. The seeds may not have been viable, or the ground may have been too wet for the plants. This plant will not be recommended for revegetation of Nancy Street Wetland as literature suggests it is most successful in maritime areas (Pojar and Mackinnon, 1994). Sawbeak Sedge was only found in one area and may not be hardy enough to start from seed in a reclamation project.

By documenting the evaluation of these three constructed wetlands, interviews with local naturalists experienced in reclamation and revegetation projects, and literature pertinent to Southeast Alaskan plant communities, a table was created to document the successes, failures and potential for freshwater wetland species in reclamation wetlands. (See Appendix 1).

At the Nancy Street Wetland, plants have been selected based on the assessment and evaluation of their success in constructed wetlands in the region, experience of local naturalists, their ability to be transplanted or seeded, and their potential for the phytoremediation of iron. For the purpose of a planting design the plants were divided into zones based on the depth of water in which they grow. (See Table 3). The Nancy Street Wetland is designed with a water surface elevation of 28 feet. Although the Nancy Street Wetland is primarily ground water fed, runoff has been observed to affect water levels significantly in different seasons. However, the water level will fluctuate throughout the season with the rise and fall of precipitation rates. Rainfall increases between July and November and decreases between January and April. For this reason, the communities and water depths are general and meant as guidelines only. The zones are delineated on the wetland planting plan in Figures 10 and 11.

The deep water zone consists of the stream channel that flows from the inlet culvert to the outlet culvert as well as two deep pools at either end. This zone covers 55,000 square feet and is 28 percent of the total area to be revegetated. However, less than 5 percent of this area will be planted. Water will be 4 feet deep through most of this area with greater depths in each deep pool. This zone will be planted with *Potamogeton natans* (Floating Pondweed), *Sparganium angustifolium* (Narrow Leaved Burreed) , and *Nuphar polysepalum* (Yellow Pond Lily). The first two species were observed growing in the Nancy Street Pond prior to filling. Both are present upstream in the Church of the Nazarene



Figure 10. Planting Communities

The revegetation plan for the Nancy Street Wetland incorporates different plant communities based on elevation above the water surface. This revegetation plan was developed prior to the completion of the trail design.

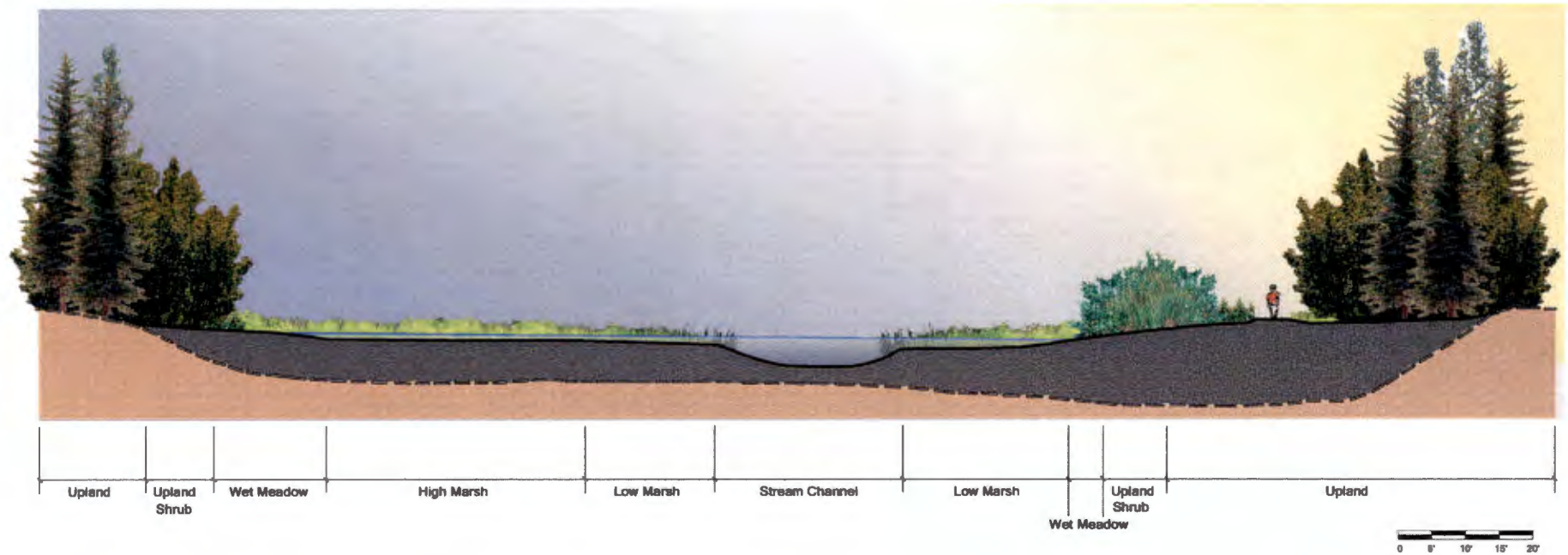


Figure 11. Typical Planting Zone Elevation

The revegetation plan for the Nancy Street Wetland is based on the elevation of the land above or below the water surface.

Pond. *Sparganium* is known to be a local food for muskrat. *Nuphar polysepalum* is found in a nearby pond downstream of the Nancy Street Wetland.

The low marsh zone covers 30,000 square feet and comprises 15 percent of the total area to be revegetated. The land between the stream channel and the high marsh ‘fingers’ is designed to the elevation of 27 feet to 27.5 feet. The plants in this zone include *Carex sitchensis* (Sitka Sedge), *Eleocharis palustris* (Spikerush), *Juncus mertensianus* (Merten’s Rush), and *Scirpus microcarpus* (Small Leaf Bulrush). All of these plants have been successful at colonizing constructed wetlands in Juneau and can be transplanted or started by seed. *Carex sitchensis* is one of the two dominant plants in the Church of the Nazarene Wetland. The dense root system of this plant may be capable of retaining large amounts of iron.

The stream channel winds around fingers of high marsh zone areas at an elevation of 27.5 feet to 28 feet. The high marsh zone encompasses 35,000 square feet and covers 18 percent of the total area to be revegetated. *Carex sitchensis* and *Eleocharis palustris* have exhibited the ability to survive in a variety of water levels. They will transition the communities from low marsh to high marsh zones. Other plants in this zone include *Carex mertensii* (Merten’s Sedge), *Juncus effusus* (Common Rush), *Lysichiton americanum* (Skunk Cabbage), *Deschampsia cespitosa* (Tufted Hairgrass), and *Menyanthes trifoliata* (Buckbean). All of these plants have been grown successfully in the constructed wetlands in Juneau. The *Lysichiton americanum* grows throughout Juneau in shaded wetland edges or stream banks. In the early spring it ‘blooms’ with a yellow spadex that is very attractive and provides food for animals. It has been transplanted successfully by naturalists in the region.

At the edge of the standing water zones is the transition zone of wet meadow. This zone is at an elevation of 28 feet to 29 feet and will be saturated most of the time and may flood during parts of the year. The wet meadow covers 12,000 square feet and comprises 6 percent of the total area to be revegetated. Many plants that can tolerate different water levels and periodic flooding are planted here. *Carex mertensii*, *Deschampsia cespitosa* ssp. *beringensis*, and *Juncus effusus* will all do well closer to the water’s edge. Moving up through this zone, grasses and flowering plants that do well in wet meadows are planted. *Calamagrostis canadensis* (Bluejoint Reedgrass), *Festuca rubra* (Red Fescue), *Viola palustris* (Marsh Violet), *Frittilaria camschatcensis* (Chocolate Lily), *Iris setosa* (Wild Flag), *Lupinus nootkatensis* (Lupine), and *Aquilegia formosa* (Columbine) thrive in saturated soils and provide color during the summer season.

The wet meadow zone and the upland shrub zone will be indistinguishable in many areas as many of these plants thrive in saturated to moist soils. The upland shrub zone is delineated from 29 feet to 30 feet and covers 11,500 square feet. It comprises 6 percent of the total area to be revegetated. Many grasses and flowering plants including *Deschampsia cespitosa* (Tufted Hairgrass), *Calamagrostis canadensis* (Bluejoint Reedgrass), *Festuca rubra* (Red Fescue), *Aquilegia Formosa* (Columbine), and *Lupinus nootkatensis* (Lupine) will form the transition from wet meadow to upland shrub. Also in this zone will be *Cornus stolonifera* (Dogwood), *Salix barclayii* (Barclay's Willow), *Salix sitchensis* (Sitka Willow), *Alnus viridus* (Sitka Alder), *Aruncus dioicus* (Goat's Beard), *Rubus spectabilis* (Salmonberry), and *Viburnum edule* (Highbush Cranberry). The *Salix*, *Alnus*, *Aruncus* and *Viburnum* species were all observed on this site prior to filling.

Above 30 feet elevation is the well-drained upland zone. The uplands to be revegetated cover 52,500 square feet and 27 percent of the total area to be revegetated. The plants include many of the shrubs from the upland shrub zone: *Aruncus dioicus*, *Cornus stolonifera*, *Rubus spectabilis*, *Viburnum edule*, *Alnus viridus*, *Salix barclayi*, and *Salix sitchensis*. Additional trees to be planted that exist elsewhere on the site are *Populus balsamifera* (Cottonwood), *Alnus rubra* (Red Alder) and *Picea sitchensis* (Sitka Spruce). An understory of grasses and herbaceous perennials include *Festuca rubra*, *Calamagrostis canadensis* and *Aquilegia formosa*.

From this general planting zone plan in Figure 10, a detailed planting design for the uplands and upland shrub zones was created. This allows for numbers of each species needed for transplant, purchase or seeding. The design strives to create diversity in plantings to allow for habitat diversity while also considering the experience of the visitor along the trail, and the relationship of the adjacent private property owners to the wetland and the trail. For example, Detail 5 in Appendix 5 shows clusters of *Rubus spectabilis*, *Cornus stolonifera*, and *Viburnum edule*. These shrubs fruit from mid summer into fall and provide food into the winter for birds and small animals. Also, a combination of *Picea sitchensis* groupings as well as deciduous trees of *Alnus* and *Populus balsamifera* allow for varied habitat for birds. Detail 3 in Appendix 3 shows a narrow buffer between the adjacent property owners and the trail and wetland. The large cluster of *Alnus* and *Picea* is in front of homes with fencing. This choice of trees will further separate the homes from the wetland and trail.

The diverse planting communities represent the ideal revegetation plan. However, the objective of using only native plants limits the availability and spectrum of species that can be obtained and planted in the wetland. Native plant

nurseries and native seed sources do not exist in Southeast Alaska. Small amounts of native seeds are available in the area from individuals who collect seed seasonally. A few native species of grasses are sold commercially in the northern part of Alaska. The best solution to the reclamation of wetlands in Juneau is to gather wetland seed in the years prior to the reclamation of the wetland and then start them in greenhouses based on the specific needs of the plants. This process works well if the reclamation of the wetland is planned at the time of the surface mining or land disturbance. However, the circumstances of the Nancy Street Enhancement Project do not allow for the gathering and starting of seed. Therefore, transplanting of plugs will be the major source of revegetation, with some hardwood cuttings and seeding.

V. Vegetation Process and Commentary

The planning and design of the revegetation process provided a guide for the actual implementation. However, the decision by the resource agencies to focus on transplanting of local plants to preserve local gene stock and minimize the purchase of plants largely determined the revegetation process. For a 6 acre revegetation, transplanting is feasible, but for a freshwater emergent wetland that is much larger, the limitations of transplanting may warrant a different strategy.

For the Nancy Street Wetland revegetation, the availability, accessibility, and diversity of source wetlands determined the process (See Tables 3,4). Source wetlands were selected in the Mendenhall Valley and Lemon Creek to minimize cost and driving time to Nancy Street. Additionally, only wetlands that were accessible for a crew with a vehicle were considered. The ownership of the wetlands ranged from CBJ land, U.S. Coast Guard land to private land. In all cases, permission for access and transplanting was granted. Another consideration in choosing source wetlands was the size of plant population present for the targeted species. The population had to be large enough to be able to remove a sizable quantity without decimating or affecting the source wetland population.

With all of these limitations, it was difficult to find appropriate wetlands to source plants. The majority of the Nancy Street wetland is freshwater marsh with emergent species, however in Juneau there is much more forested wetland habitat than emergent wetland. The revegetation of an emergent wetland much larger than Nancy Street would be very difficult using only transplants. The source wetlands used for Nancy Street should not be used again for at least two years and finding adequate populations of emergent species may be difficult. A potential source that exists for this type of wetland is along Department of Transportation (DOT) Right of Ways. There are many drainage ditches along Glacier Highway, particularly between Fred Meyer's and McDonald's in the Valley that are sedge and bulrush emergent wetlands. DOT utilizes SAGA crews for maintenance of Right of Ways to prune and remove shrubs and trees. An opportunity exists for a partnership to be formed with DOT where SAGA crews maintain and transplant simultaneously on future reclamation projects.

In addition to the transplanting of emergent wetland species, the revegetation included cuttings of willow and cottonwood, transplanting of berry shrubs and alder, and seeding. To accomplish these tasks, various sources of labor were used over a period of five months. Volunteers cut stakes in April and planted in June, paid SAGA workers transplanted emergent species and seeded in June and July, and paid Trail Mix workers transplanted trees and shrubs in August (See Table 4).

While the volunteers only worked for two days, their work in taking cuttings of willow, cottonwood and high bush cranberry was very important to the revegetation of the upland shrub and upland zones. Also, the involvement of community volunteers raised enthusiasm and support for the project. The volunteers were members of Full Circle Farms, a farm and distributor of organic produce in Juneau. The farm solicited volunteers through emails and donated \$5000 to the project. The cuttings were taken on April 8 with twenty volunteers. The group divided in three and went to sites near Back Loop Road. With pruners, 1000 Barclay's Willow stakes, 200 High Bush Cranberry stakes, and 75 Black Cottonwood stakes were cut. Full Circle Farms donated the use of their cold storage facility in Lemon Creek to hold the cuttings until planting. On June 7, fifteen volunteers planted the cuttings at Nancy Street. Many of the stakes were cut in half or thirds. Steel rods with mallets or sharp pointed shovels were used to plant single stakes or bouquets of 3-5 stakes. The High Bush Cranberry stakes all died in storage, however many of the willow and cottonwoods sent out roots and shoots.

For the next phase in planting, the U.S. Fish & Wildlife Service contracted a SAGA crew for 4 weeks. In 13 days, the crew worked approximately 650 labor hours. They accomplished 70% of the revegetation process by planting 3600 plugs, shrubs and small trees and seeding portions of the wetland. The crew developed efficient methods for transplanting and solved problems effectively throughout the four weeks. Each day, two workers stayed at the wetland and used an augur to dig holes in the soil for planting. The other six crew members went to the source wetland. To extract plants they found that a sharp shovel was most effective. Often they would take small mats and then cut them into plugs using a knife or sharp shovel. They suggested using a hand held shovel to cut the mats in the future. They found that bulb planters were time consuming and difficult to use in gravel or dense mud. To remove shrubs, pulaskis were the most efficient and shovels were used for trees. Despite the efficient work of the crew, the lack of proper gear and equipment at the start of the project slowed down progress. The crew needed shoulder length waterproof gloves, hip waders, rubber boots, and five gallon buckets for transporting plants. Additionally, throughout the four weeks, the augur would break down and slow progress. Better preparation and support for the crew is needed in the future.

SAGA accomplished most of the remaining revegetation work; however the grading and shaping of the outlet channel, earthen dam, and trail were not completed in time to finish the planting. Trail Mix crews transplanted alders and berry bushes into the upland and upland shrub areas and a small amount of sedges along the boardwalk and earthen dam using similar techniques as SAGA. Additionally, CBJ staff purchased and planted *Cornus stolonifera* plugs along the steep

northeast slope on the Church of the Nazarene property. These plants were purchased because of the significant benefit to the project and the lack of an appropriate population from which to take cuttings in Juneau. They grow rapidly in the Juneau climate, provide berries for birds, and control erosion with spreading rhizomes. CBJ also purchased and spread seed throughout the five month period of revegetation for erosion control and habitat enhancement.

To improve on the revegetation process for future projects, better planning for irrigation should be in place prior to transplanting. This summer in Juneau was very rainy with only a few periods of sunny dry weather. However, for two weeks in June, the sun came out and dried the high marsh area. During the revegetation period, the water level was approximately 1-3 inches below the high marsh elevation. The rocky and sandy topsoil combined with the silty fill dried in sunny conditions to form a cement like consistency. Watering was necessary to keep the plants alive during this period. SAGA crews used buckets and a garden quality gasoline powered water pump to irrigate the wetland. If the dry sunny weather persisted, these methods would not be able to keep the plants alive. To prevent this from happening on future projects a soil with a higher organic content would help to retain moisture better in dry conditions. Also, working with the Department of Public Works to obtain a permit for fire hydrant access would allow for an appropriate water source. Other strategies include the control of water levels to keep soil saturated while planting or the delay of planting until July when precipitation is more frequent.

Table 3: Recommended Plant Species

Actual Planted Species

Low and High Marsh		Low and High Marsh	
<u>Species</u>	<u>Common Name</u>	<u>Species</u>	<u>Common Name</u>
<i>Caltha palustris</i>	Marsh Marigold	<i>Caltha palustris</i>	Marsh Marigold
<i>Carex sitchensis</i>	Sitka Sedge	<i>Carex sitchensis</i>	Sitka Sedge
<i>Eleocharis palustris</i>	Spike Rush	<i>Eleocharis palustris</i>	Spike Rush
<i>Scirpus microcarpus</i>	Small Leaved Bulrush	<i>Scirpus microcarpus</i>	Small Leaved Bulrush
<i>Juncus mertensianus</i>	Merten's Rush	<i>Carex lyngbae</i>	Lyngby's Sedge
<i>Lysichiton americanum</i>	Skunk Cabbage		
<i>Menyanthes trifoliata</i>	Buckbean		
<i>Carex mertensii</i>	Merten's Sedge		
<i>Calamagrostis canadensis</i>	Blujoint Reedgrass		
<i>Deschampsia cespitosa</i>	Tufted Hairgrass		
Wet Meadow		Wet Meadow	
<i>Aquilegia formosa</i>	Western Columbine	<i>Aquilegia formosa</i>	Western Columbine
<i>Calamagrostis canadensis</i>	Bluejoint Reedgrass	<i>Calamagrostis canadensis</i>	Bluejoint Reedgrass
<i>Deschampsia cespitosa</i>	Tufted Hairgrass	<i>Deschampsia cespitosa</i>	Tufted Hairgrass
<i>Fritillaria camschatcensis</i>	Chocolate Lily	<i>Fritillaria camschatcensis</i>	Chocolate Lily
<i>Iris setosa</i>	Iris	<i>Iris setosa</i>	Iris
<i>Aconitum delphinifolium</i>	Monkshood	<i>Lupinus nootkatensis</i>	Lupine
<i>Dodecatheon pulchellum</i>	Shooting Star	<i>Hierchloe odoratum</i>	Sweet Grass
<i>Eriophorum angustifolium</i>	Cottongrass		
<i>Viola palustris</i>	Marsh Violet		
Upland Shrub		Upland Shrub	
<i>Alnus viridus</i>	Sitka Alder	<i>Alnus viridus</i>	Sitka Alder
<i>Aruncus dioicus</i>	Goat's Beard	<i>Aruncus dioicus</i>	Goat's Beard
<i>Cornus stolonifera</i>	Red Twig Dogwood	<i>Cornus stolonifera</i>	Red Twig Dogwood
<i>Rubus spectabilis</i>	Salmonberry	<i>Rubus spectabilis</i>	Salmonberry
<i>Salix barclayi</i>	Barclay's Willow	<i>Salix barclayi</i>	Barclay's Willow
<i>Salix sitchensis</i>	Sitka Willow	<i>Festuca rubra</i>	Red Fescue
<i>Viburnum edule</i>	High Bush Cranberry	<i>Rubus parviflorus</i>	Thimbleberry
		<i>Alnus rubra</i>	Red Alder
Upland		Upland	
<i>Alnus rubra</i>	Red Alder	<i>Alnus rubra</i>	Red Alder
<i>Alnus viridus</i>	Sitka Alder	<i>Alnus viridus</i>	Sitka Alder
<i>Cornus stolonifera</i>	Red Twig Dogwood	<i>Cornus stolonifera</i>	Red Twig Dogwood
<i>Picea sitchensis</i>	Sitka Spruce	<i>Picea sitchensis</i>	Sitka Spruce
<i>Populus balsamifera</i>	Black Cottonwood	<i>Populus balsamifera</i>	Black Cottonwood
<i>Rubus spectabilis</i>	Salmonberry	<i>Rubus spectabilis</i>	Salmonberry
<i>Salix barclayi</i>	Barclay's Willow	<i>Salix barclayi</i>	Barclay's Willow
<i>Salix sitchensis</i>	Sitka Sedge	<i>Rubus parviflorus</i>	Thimbleberry
<i>Viburnum edule</i>	High Bush Cranberry	<i>Festuca rubra</i>	Red Fescue

Table 4: Record of Planting Quantity, Source and Labor

Date	Species	Type	Quantity	Source	Labor
18-Apr	<i>Festuca rubra</i>	seed	10 lbs	Alaska Mill and Feed	USFWS
7-Jun	<i>Salix barclayi</i>	cutting	1500	Wren Drive/Back Loop Road	volunteer
7-Jun	<i>Populus balsamifera</i>	cutting	150	Behind Community Gardens	volunteer
13-Jun	<i>Carex lyngbae</i>	plug	130	Coast Guard Wetland	SAGA
14-Jun	<i>Carex sitchensis</i>	plug	450	Duck Creek by Superbear	SAGA
14-Jun	<i>Caltha palustris</i>	plug	40	Duck Creek by Superbear	SAGA
15-Jun	<i>Carex</i>	plug	300	Coast Guard Wetland	SAGA
15-Jun	<i>Carex sitchensis</i>	plug	375	Church of Nazarene Wetland	SAGA
15-Jun	<i>Carex sitchensis</i>	plug	200	Church of Nazarene Wetland	SAGA
19-Jun	<i>Calamagrostis/ Deschampsia</i>	plug	164	Lemon Creek Wetland	SAGA
19-Jun	<i>Fritillaria camschatensis</i>	plug	34	Lemon Creek Wetland	SAGA
19-Jun	<i>Hierchloe odoratum</i>	plug	31	Lemon Creek Wetland	SAGA
19-Jun	<i>Iris nootkatensis</i>	plug	31	Lemon Creek Wetland	SAGA
20-Jun	<i>Calamagrostis/Deschampsia</i>	plug	276	Lemon Creek Wetland	SAGA
20-Jun	<i>Fritillaria camschatensis</i>	plug	83	Lemon Creek Wetland	SAGA
20-Jun	<i>Hierchloe odoratum</i>	plug	49	Lemon Creek Wetland	SAGA
20-Jun	<i>Iris nootkatensis</i>	plug	60	Lemon Creek Wetland	SAGA
21-Jun	<i>Rubus spectabilis</i>	transplant	200	Duck Creek by Superbear	SAGA
22-Jun	<i>Carex sitchensis</i>	plug	20	Duck Creek by Superbear	SAGA
22-Jun	<i>Picea sitchensis</i>	transplant	8	DOT ROW Loop Rd	SAGA
23-Jun	<i>Lupinus nootkatensis</i>	seed	unweighed	US Forest Service, Ketchikan	NRCS
26-Jun	<i>Eleocharis palustris</i>	plug	100	Coast Guard Wetland	SAGA
26-Jun	<i>Scirpus microcarpus</i>	plug	100	Lemon Creek Wetland	SAGA
27-Jun	Thimbleberry	transplant	55	DOT land on channel by GCI	SAGA
27-Jun	<i>Rubus spectabilis</i>	transplant	35	Duck Creek by Superbear	SAGA
29-Jun	<i>Carex</i>	plug	175	DOT ROW north of SE Vet	SAGA
29-Jun	<i>Festuca rubra</i>	seed	20 lbs	Alaska Mill and Feed	SAGA
29-Jun	<i>Calamagrostis canadensis</i>	seed	10 lbs	Alaska Mill and Feed	SAGA
29-Jun	<i>Deschampsia cespitosa</i>	seed	10 lbs	Alaska Mill and Feed	SAGA
30-Jun	<i>Cornus sericea</i>	plug	216	Nat's Nursery, BC	CBJ
30-Jun	<i>Festuca rubra</i>	seed	10 lbs	Alaska Mill and Feed	CBJ
30-Jun	<i>Calamagrostis canadensis</i>	seed	10 lbs	Alaska Mill and Feed	CBJ
30-Jun	<i>Deschampsia cespitosa</i>	seed	8 lbs	Alaska Mill and Feed	CBJ
5-Jul	<i>Carex</i>	plug	490	DOT ROW north of SE Vet	SAGA
6-Jul	<i>Carex</i>	plug	245	DOT ROW north of SE Vet	SAGA
20-Jul	<i>Picea sitchensis</i>	transplant	?	DOT ROW Loop Rd	CBJ
20-Jul	<i>Festuca rubra</i>	seed	20 lbs	Alaska Mill and Feed	CBJ
20-Jul	<i>Calamagrostis canadensis</i>	seed	5 lbs	Alaska Mill and Feed	CBJ

cont. Table 4: Record of Planting Quantity, Source and Labor

Date	Species	Type	Quantity	Source	Labor
20-Jul	<i>Deschampsia cespitosa</i>	seed	5 lbs	Alaska Mill and Feed	CBJ
24-Jul	<i>Cornus stolonifera</i>	transplant	17	old Fred Meyer landscape	CBJ
26-Jul	<i>Rubus spectabilis</i>	transplant	24	Duck Creek by Superbear	Trail Mix
7-Aug	<i>Carex sitchensis</i>	plug	50	Church of Nazarene Wetland	Trail Mix
8-Aug	<i>Alnus</i>	transplant	100	Duck Creek by Superbear	Trail Mix
9-Aug	<i>Rubus spectabilis</i>	transplant	60	Duck Creek by Superbear	Trail Mix
15-Aug	<i>Festuca rubra</i>	seed	40 lbs	Alaska Mill and Feed	CBJ
15-Aug	<i>Deschampsia cespitosa</i>	seed	10 lbs	Alaska Mill and Feed	CBJ
		Total Quantity	4993		



Above: Volunteer planting of willow and cottonwood cuttings in June. Right: Cuttings send out leaves in August.



Above: SAGA extracts sedges from a wetland in Lemon Creek. Right: Transport of sedges and marsh marigold in buckets.



Above: SAGA plants wet meadow grasses.
Right: Low marsh and high marsh sedges
and bulrushes.



Left: Alders transplanted along
stream channel.

Photos taken by Michele Elfers.

VI. Trail Design and Construction

The design and development of a community trail through the wetland has become an important component to gaining public approval and support of the project. Adjacent landowners initially viewed the reclamation project as disruptive, but through the process of filling, planting and trail construction, many neighbors and community members have expressed that the reclamation is an improvement to the neighborhood. It offers recreational opportunities for a neighborhood of streets and private property and it allows access to a successional landscape with a fantastic view of the Mendenhall Glacier (See Figure 12-14).

CBJ applied for a Recreational Trails Grant through the Department of Natural Resources, Division of Parks and Outdoor Recreation. To administer the grant funds, the CBJ Engineering Department, the CBJ Department of Parks and Recreation, and Trail Mix formed a partnership to accomplish the administration, construction and management of the trail. The Engineering Department was responsible for the design, permitting and construction oversight, the Department of Parks and Recreation provided equipment, design review, and maintenance and management of the completed trail, and Trail Mix constructed the trail and administered the grant.

The trail construction began in July 2006 and continued through August. A few details will be completed in late fall and early spring such as the installation of trash cans and interpretive signage. Silty gravel forms a compact base for the six foot wide trail. A deck is sited at the south end to capture a remarkable view across the wetland of the Mendenhall Glacier. An island at the north end is accessed by a bridge and boardwalk and offers a bench and viewing point south. Eight steel pilings and a frame of treated lumber support the observation deck. The decking on the observation deck and boardwalk, railings, and benches are recycled plastic lumber. The 70' bridge is a steel gangway removed over the summer from a CBJ Ports and Harbors project.

Many of the materials and labor were donated to allow completion of the trail with only grant funding. The bridge and benches were donated by CBJ Ports and Harbors, the rough grading and shot rock placement on the trail was donated by Glacier State Contractors, and the construction of the observation deck was done by the U.S. Coast Guard Engineers in Juneau.



Figure 12. Trail Master Plan

The trail design includes the extension north of the trail to the Church of Nazarene Wetland. This extension was not constructed. Currently, the trail connects to the Mendenhall Bike Loop Path.



Figure 13. Cross Section of the Observation Deck

The deck is sited to allow for close viewing of open water and to capture a magnificent view of the Mendenhall Glacier as a backdrop to the wetlands.



Figure 14. Cross Section of the Bridges

The two bridges across the wetland are connected by an island. The first is a 25' wooden boardwalk across emergent wetlands, the second is a 70' steel bridge with metal grate decking across the stream channel. On the island, a gravel seating area with boulders allows for resting and wildlife viewing.

The constructed trail represents Phase I of the Duck Creek Greenway Trail that will extend through the Nancy Street Wetland and the upstream Church of Nazarene Wetland and the Allison Pond (See Figure 15). Ultimately, it will connect from the north and south to the Under Thunder trail to form a loop. The creation of a trail that links the three wetlands will raise awareness of the ecological connection for fish, birds and other wildlife among these stepping stone habitats.

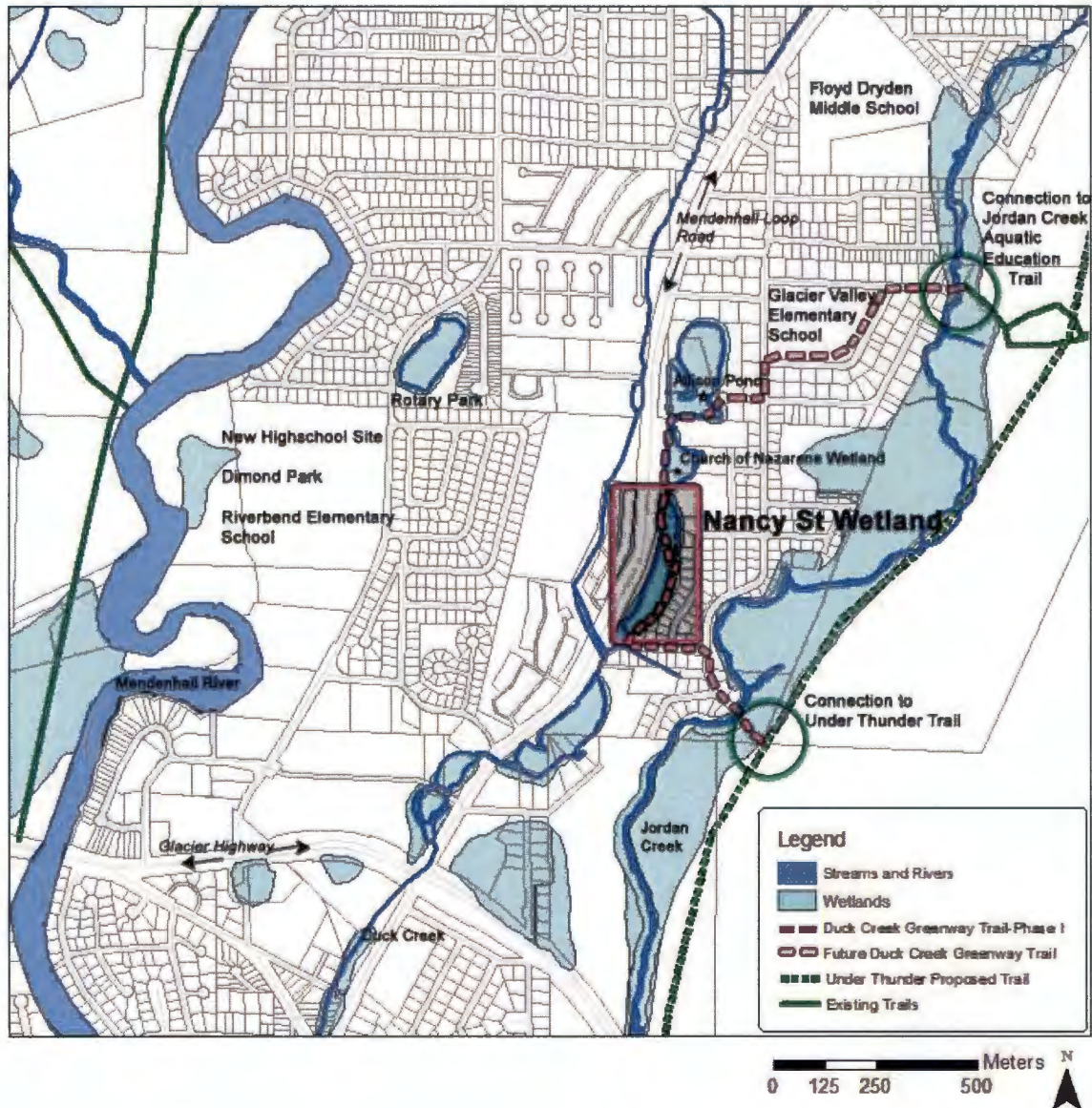


Figure 15. Duck Creek Greenway Trail Master Plan.

The trail through Nancy Street will connect the three former gravel pits to provide neighborhood connections, recreational opportunities, and to increase awareness of the ecological connections among the enhanced wetlands.

Glacier State shaped the rough trail bed and placed shot rock in May.



Trail Mix hauls gravel to build the trail across the island in August.

Trail Mix drives pilings for the observation deck and shapes the gathering area.





The finished bridge and boardwalk cross the wetland to an island with a bench for viewing.

Right: The steel gangway donated by CBJ Ports and Harbors extends from the northwest end of the trail to the east side. Trail Mix built new cedar rails for safety.



Below: The finished observation deck and gathering area.



VII. Monitoring and Maintenance

The monitoring and maintenance plan for the Nancy Street Wetland addresses issues of survival and performance of wetland vegetation, changes in wetland composition, the control of invasive species, and the general upkeep of the trail and interpretive areas. The plan for monitoring of wetland vegetation is informed by a plan for wetland monitoring in Bellevue, Washington by Herrera Environmental Consultants, a guide to “Wetland Restoration, Creation, and Enhancement” written by various federal resource agencies, and research done by Elzinga, Salzer, and Willoughby in *Measuring and Monitoring Plant Populations*. The plan for trail maintenance is based on observations of wetland trail requirements over time in Juneau.

Monitoring Plan

It is proposed that this work be performed in conjunction with the existing UAS water and fish monitoring plan and the data be combined into one report.

1. Establish plots in different plant community zones to measure species composition, aerial cover, and vegetative density. Measure water level above ground surface. Take measurements once per year in late July from 2007 to 2012. See Appendix XX for plot locations.
 - a. Plot 1 Upland - monitor a 5 meter radius around stake.
 - b. Plot 2 Island – monitor the entire island.
 - c. Plot 3 Emergent – monitor a 1 meter radius around stake.
 - d. Plot 4 Emergent – monitor a 1 meter radius around stake.
2. Establish 4 photopoints that capture each plot and 2 photopoints that capture emergent wetland, one from the observation deck looking north to the glacier and the second from the bench on the island looking south to the observation. See Appendix 2b and 2c for photopoints and 2006 photographs.
3. Complete table of information and draw maps recording the location, density and cover of each plot. See Appendix 2a for baseline data and sample table.

Maintenance Plan

The Nancy Street Wetland will be transferred to the CBJ Parks and Recreation Department for management. This department and Trail Mix can coordinate to maintain the trail using the excess trail grant money.

1. Prune and clear shrubs and trees obstructing passage along the trail.
2. Empty garbage cans, refill doggy bag dispenser and remove garbage from the trail.
3. Clear drainage culverts along trail.

VIII. Conclusion

The Nancy Street Wetland Enhancement Project offers an economically feasible, ecologically beneficial, and socially supported model of wetland reclamation for municipalities. Based on the data and assessment of the design and construction presented in this report, the project has been successful in the aspects of earthwork, transplanting, cost benefit and public participation. However, areas of improvement include the refining of final water levels, soil quality, and irrigation strategies during transplanting.

The design and implementation of the filling process determined largely the improvement of habitat, the efficiency of operations, and the accuracy of the as-built site to the design. By filling and completing each finger and section of the wetland individually, greater variety and attention to each landform was introduced. The other option, filling the entire site and then returning to dredge the stream channel would have resulted in less diversity of habitat and less attention to the design details. There is some concern that the water level is higher than the designed level. However, the rainfall was higher than average in 2006, so it is difficult to tell if the water levels in the wetland will drop. Designing elevations to within 3 inches to allow for necessary habitat for plants and wildlife is very difficult on a project where over 60,000 CY of fill are being placed. For this reason, designing a dam with adjustability to account for the discrepancy in water level would improve the function and success of the project.

The high rainfall this summer maintained a moist planting substrate throughout most of the summer. In late June, a sunny period of two weeks revealed the problems that would have been encountered had it been a drier summer. The soil dried and cracked around the newly transplanted plants and a hasty irrigation plan of buckets and a garden pump with hose was used to keep the plants alive. An irrigation plan should be in place prior to the revegetation phase. Tapping into city water through fire hydrants, or a private source are two potential solutions. Also, improving the quality of topsoil will improve moisture retention. The mineral topsoil had little organic content and was full of rock and cobble. Plant survival in 2007 will reveal whether higher quality topsoil is needed. At the end of the 2006 planting season, there was approximately 70% survival rate of transplanted species. Based on this estimate, the revegetation effort was very successful.

In addition to the improvement of fish and wildlife habitat, the other measure of success of the Nancy Street Wetland Enhancement is the strong base of public support. Throughout the construction process, volunteers donated time,

materials and money to the project. Many neighbors began to come out during the summer construction and comment on how happy they were about the project.

As a result of the success of this project, a similar process is planned for the Allison Pond upstream of the Nancy Street Wetland. The process will be improved based on this assessment and applied to the Allison Pond site needs. The CBJ has saved the community money by pioneering this alternative option to fill disposal. The support of the U.S. Fish & Wildlife Service and the Natural Resource Conservation Service has enhanced habitat for fish and wildlife and reclaimed a valuable community resource.

Plant List for Freshwater Wetlands											
Scientific Name	Common Name	Recommendation by	Water Level	Height	Transplant Potential	Seed Potential	Wildlife Benefits	Human Benefits	Iron phytoremediation	Liabilities	Other Issues
Deep Water											
<i>Caltha natans</i>	Floating Marsh Marigold	Book	aquatic floating	1-3'				attractive flower			floats or creeps in mud, stolons root at nodes
<i>Nuphar polysepalum</i>	Yellow pond-lily	Patti Krosse, Ed Buyarski	3-4' average water depth, up to 6' stalk		successful, use fork or clam digger to dig up entire root, or monofilament tied to root with rock to get plant it.		food, habitat for fish, cover for ducklings, frog habitat	very attractive open water flower		Patti-very difficult to dig roots, often extensive, and hard to get roots back into the water completely	found in pond near Superbear, very shallow water, may be easy to remove
<i>Potamogeton natans</i>	Floating Pondweed	Observed at Nancy Street	aquatic floating from bottom 3-8'		yes		very valuable food source for mallards and other marsh birds		Existed in Nancy Street Pond so it is tolerant of iron	In CoN it forms a dense cover in open water areas, too much shade and it may limit macroinvertebrate population	present at Nancy Street Pond prior to filling, present at CoN, Floyd Dryden, becomes very dense in areas, keep deep water areas in pools if open water habitat is desired
<i>Sparganium angustifolium</i>	Narrow-Leaved Bur-reed	Observed at Nancy Street	aquatic floating	1-3'			nesting, cover, seeds, muskrats		Existed in Nancy Street Pond so it is tolerant of iron		present at Nancy Street Pond prior to filling
Marsh											
<i>Caltha palustris</i>	Yellow Marsh Marigold	Book	wet areas with slow running water	variable	divide rootball	seed direct sow in fall		attractive flower			limited survival at CoN
<i>Carex mertensii</i>	Mertens's Sedge	Patti Krosse	upland, more dry conditions, in transition zone	4'	one of the easiest types of carex to transplant	yes		attractive colorful, large spikes	dense root system may hold more iron	Carex more difficult to dig roots	germinates easily, some found in CoN, planted in Kingfisher Pond, growing very well in low saturated soil, but also growing on wet slopes.
<i>Carex sitchensis</i>	Sitka Sedge	Observed at CoN Wetland	emergent	1-5'	yes	yes	excellent waterfowl habitat		dense root system may hold more iron	hard to dig up because of root system	transplanted into CoN, excellent survival rate
<i>Carex stipata</i>	Sawbeak Sedge	Observed at Kingfisher Pond	marsh and bog	1-3'		yes		attractive seed head	dense root system may hold more iron		planted in Kingfisher Pond (seed), found only a few plants, did not do well
<i>Eleocharis palustris</i>	Spike Rush	Observed at Floyd Dryden Wetland	in shallow standing water, 1-2"	8-24"				attractive head			spread very well in Floyd Dryden Pond and has an attractive head and reddish hue to the stems
<i>Equisetum</i>	Horsetail sp.	Patti Krosse	aquatic to semi-aquatic		yes				the roots are small and probably do not trap much iron, roots do not hold much soil	Has shown invasive tendencies in the CoN wetland	probably easy to transplant some rhizomes, excellent survival rate in CoN(dominates wetland-maybe too aggressive), also abundant in Floyd Dryden
<i>Hordeum brachyantherum</i>	Meadow Barley	Observed at Kingfisher Pond	moist soils	3'		yes	food for blacktail deer			Primarily a maritime species, along beaches and meadows	planted in Kingfisher Pond (seed), found only one plant

Scientific Name	Common Name	Recommendation by	Water Level	Height	Transplant Potential	Seed Potential	Wildlife Benefits	Human Benefits	Iron phytoremediation	Liabilities	Other Issues
Juncus effusus	Common Rush	Patti Krosse	some water-a little drier, gravelly disturbed land	1-4'	Difficult	yes		less attractive, smaller			germinates easily
Juncus mertensianus	Merten's Rush	Observed at Kingfisher Pond	marsh and bog	1'		yes		attractive seed head			planted in Kingfisher Pond (seed), growing in saturated soil
Lysichiton americanum	Skunk Cabbage	Observed at CoN, Ed Buyarski	wet edges of water	1-4'	thick root, need to get down deep to dig it out	yes, direct sow in fall	food for deer, bear, and gnats	attractive flower, color		Shady, forested areas	present at edges of CoN
Menyanthes trifoliata	Buckbean	Patti Krosse	aquatic to semi-aquatic	1'	easy to dig up but difficult to establish in soil	yes	fruit is food for flies, beetles, bees, and birds	attractive flower		rhizomes	planted in past with water around it at all times, creeping rhizomes should be separated in fall or early spring. Transplanted into Floyd Dryden wetland, has spread and is doing well there
Scirpus Microcarpus	Small-Leaf Bulrush	Patti Krosse, Dave Maddix	water with a gradient	4'	very easy to dig roots and transplant successfully	yes	nesting, cover, seeds	attractive seed heads, medium height	root uptake potential		some bulrush present in CoN, believed to be this type, planted in Kingfisher Pond. It is doing very well and has spread
Wet Meadow											
Aconitum delphinifolium	Monkshood	Book	wet meadow, streambanks	3'				attractive flowers		poisonous	needs the drier upslope of wet meadow, often found at higher elevations
Aquilegia formosa	Columbine	Ed Buyarski	wet meadow, streambanks, often in rocky areas	2'	yes	yes	food for hummingbirds, cover for nesting species	attractive flower			prefers drier areas, well-drained, Ed Buyarski says seeding works very well
Calamagrostis canadensis	Bluejoint Reedgrass	Book, Dave Maddix	wet meadows and well-drained uplands	3'	yes with sprigs	limited, grassroots or sprigging plugs	bird seed, nesting, cover for small mammals		dense fibrous root system, slightly rhizomatous		forms overhanging banks, aggressive colonizer in disturbed areas
Deschampsia cespitosa ssp. beringensis	Tufted Hairgrass	Book	moist soils	1-4'		yes, but high demand	low to moderate fishery and habitat value			Must be careful with seed, none being collected in SE AK. DNA issues with new varieties.	adaptable to many conditions, tufted growth form, seeded in Kingfisher Pond did well from low saturated locations moving up on wet slopes
Dodecatheon pulchellum	Shooting Star	Patti Krosse, Ed Buyarski	moist soil but not standing water	1-1.5'	very easy	difficult, needs to be wet and cold through winter		attractive flower			challenging to start from seed

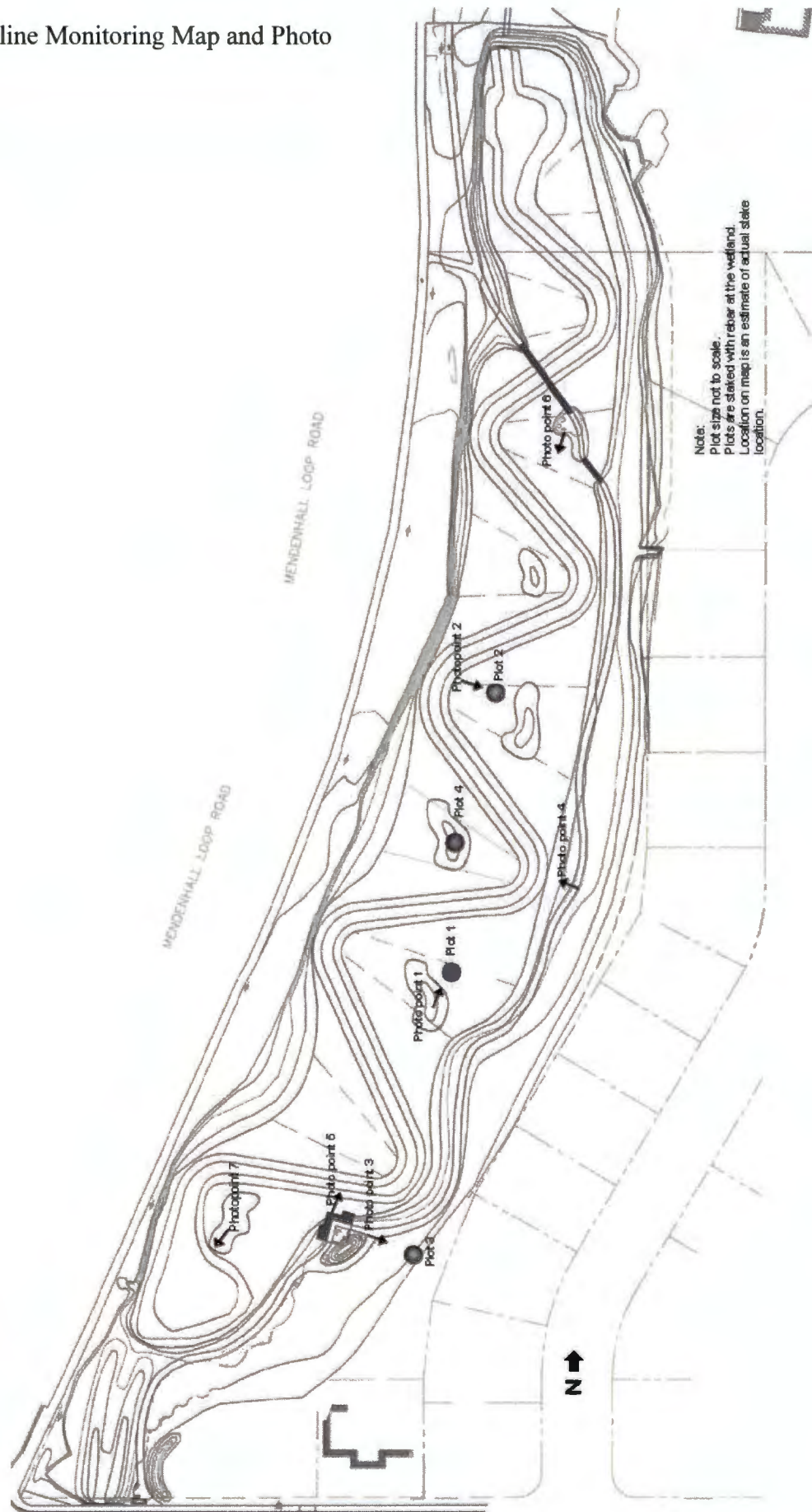
Scientific Name	Common Name	Recommendation by	Water Level	Height	Transplant Potential	Seed Potential	Wildlife Benefits	Human Benefits	Iron phytoremediation	Liabilities	Other Issues
Eriophorum angustifolium	Narrow-Leaved Cotton Grass	Book	wet, moist soil	2'				attractive seed head		rhizomes	
Festuca rubra	Red Fescue	Book	moist to well-drained	6"-40"		yes	low habitat and fishery value	reddish hue			very common in Alaska in low elevation meadows and mountain meadows, easy to seed, used for agriculture, horticulture, lawns, tolerates flooding
Fritillaria camschatcensis	Chocolate Lily	Patti Krosse	moist soil but not standing water	2.5'	Patti Krosse says it is very easy, and they take well (bulb form)			attractive flower			
Iris Setosa	Wild Flag	Book	moist soil	1-3'	easy			attractive flowers			Rhizomes can be divided and gathered in spring or in fall in mild areas
Lupinus nootkatensis	Nootka Lupine	Ed Buyarski	moist soils	2-3'	very difficult to transplant because of extensive root system	yes-gather in pods, dry out pods so they pop and capture the seeds	food for hummingbirds, cover for nesting species	attractive flowers		Needs mineral soil, likes gravel, well-drained	Fixes nitrogen, volunteered at Kingfisher Pond, seeded areas at Floyd Dryden did not take well, only a few plants
Rubus spectabilis	Salmonberry	Book	wet areas	3-9'	dig up rhizomes with many root off shoots, fairly easy		berries good for food	attractive flowers and berries, good screening		attracts bear	
Valeriana sitchensis	Sitka Valerian	Book	moist soil	1-3'				attractive flowers			
Viola palustris	Marsh Violet	Ed Buyarski	saturated soils	low	yes, easy			attractive flowers			
Tree/Shrub											
Acer glabrum	Douglas Maple		floodplain, moist, into uplands	30'	Seed, transplant, softwood cutting	yes	birds eat seeds, cover	attractive fall foliage, yellow-crimson		found mostly in Juneau on rocky coast	
Alnus rubra	Red Alder	Book	wet soils	75'	Hedge layer, transplant, seed, hardwood cutting	yes	food, cover				nitrogen fixing, good on steep slopes
Alnus viridus (Alnus sinuata)	Sitka Alder	Book	wet soils	18'	Hedge layer, transplant, seed, hardwood cutting	yes	food, cover				nitrogen fixing, longpointed teeth of two sizes
Arnica montana	Goat's Beard	Observed at Kingfisher Pond	wet soils to dry uplands	3-6'	yes	yes					Planted in Kingfisher Pond (seed), no mature plants found

Scientific Name	Common Name	Recommendation by	Water Level	Height	Transplant Potential	Seed Potential	Wildlife Benefits	Human Benefits	Iron phytoremediation	Liabilities	Other Issues
<i>Cornus stolonifera</i>	Red Osier Dogwood	Book	moist soils	3-18'	dormant cutting, live stakes, bundles, brush layer, hedge layering, rooted cuttings, transplants, seed	yes	berries provide winter food for deer	attractive white flowers, berries, and red twigs			2-4 specimens planted in Kingfisher Pond, looks like the original shoots died, but root base survived and is sending up new shoots.
<i>Picea sitchensis</i>	Sitka Spruce	Book	wet soils to dry uplands	200'	transplant, seed	yes	birds eat seed, habitat, winter nesting	evergreen, good screen			
<i>Populus balsamifera</i>	Black Cottonwood	Book	water edge	150'	dormant cuttings, live stakes, bundles, brush layer, hedge layering, rooted cuttings, transplants, seed	yes	birds eat seed, habitat				
<i>Salix barclayi</i>	Barclay's Willow	Ellen Anderson	water edge	6-8'		yes	habitat				often has 'willow roses' at end of twigs from deformed leaves and insects
<i>Salix sitchensis</i>	Sitka Willow	Book	water edge	3-24'	dormant cutting, live stakes, bundles, brush layer, live stiltation, hedge layering, rooted cuttings, transplants, seed	yes	habitat				
<i>Spirea douglasii</i>	Hardhack Steeplebush	Observed at Kingfisher Pond	wet soils							Juneau is north of its zone	Seeded in Kingfisher Pond, no plants found.
<i>Tsuga heterophylla</i>	Western Hemlock		wet soils	180'	transplant, seed	yes	habitat	evergreen, good screen			needs significant organic content on site to grow, does not do well in recently deglaciated areas, shade tolerant
<i>Viburnum edule</i>	Highbush Cranberry	Observed at Nancy Street in uplands	wet soils and streambanks to dry uplands	5-8'	cuttings possible		berries	attractive and edible berries			Ed Buyarski says its easy to take cuttings, similar to willow
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Appendix 2a. Baseline Monitoring Data
October 2006

Sample Plot	Dominant Species	Common Name	Coverage (%)	Density (number count of species)	Standing water (in)
Plot 1	Carex sitchensis	Sitka sedge		17	11.5
	Caltha palustris	Marsh marigold		1	11.5
Plot 2	Carex sitchensis	Sitka sedge		12	10
	Scirpus microcarpus	Small-Leaf Bulrush		2	10
	Equisetum	Horsetail		2	10
Plot 3	Salix barclayi	Barclay's Willow		11	0
	Alnus	Alder		3	0
	Rubus spectabilis	Salmonberry		2	0
	Athyrium filix-femina	Lady Fern		2	0
	Festuca rubra	Red Fescue			
Plot 4	Salix barclayi	Barclay's Willow		11	0
	Rubus spectabilis	Salmonberry		1	0
	Cornus stolonifera	Red-Twig Dogwood		1	0
	Deschampsia cespitosa	Tufted Hairgrass			0
	Calamagrostis canadensis	Blue-Joint Reed Grass			0
	Festuca rubra	Red fescue			0

Appendix 2b. Baseline Monitoring Map and Photo Point Locations



Appendix 2c. Photo points
October 2006

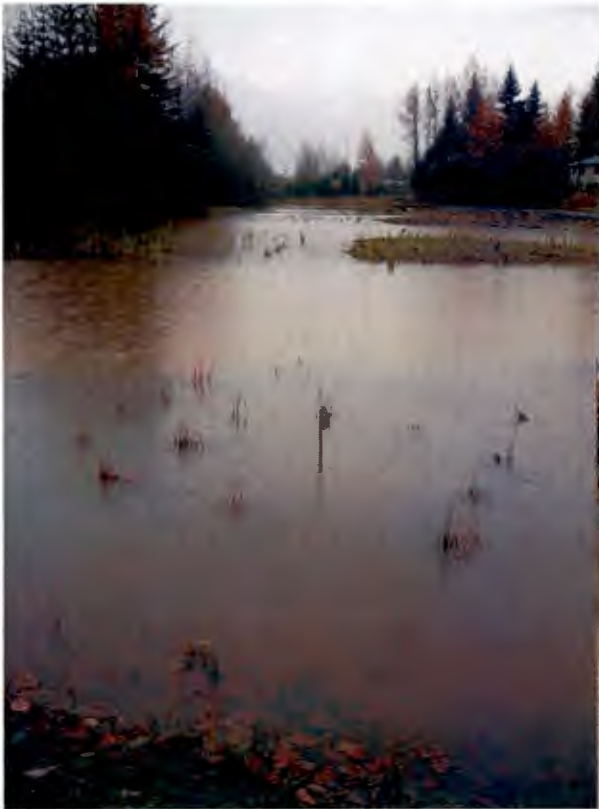


Photo point 1



Photo point 2



Photo point 3

Photo point 4



Photo point 5



Photo point 6



Photo point 7



Appendix 3A. Budget - CBJ Cost Benefit for New High School Project

Option 1: Typical Cost for Filling at Lemon Creek					
	Price	per Unit	Quantity	Unit	Cost
<i>Filling Lemon Creek 52,000 cy</i>					
tipping fee	\$2.50	cy	52,000	cy	\$130,000
trucking fee	\$68	load (8 cy)	6,500	loads	\$442,000
				Total Cost for Lemon Creek Filling	\$572,000
Option 2: Nancy Street Wetland Filling					
	Price	per Unit	Quantity	Unit	Cost
<i>Filling Nancy Street 52,000 cy</i>					
tipping fee	\$1	cy	52,000	cy	\$52,000
trucking fee	\$20	load (8 cy)	6,500	loads	\$130,000
				Total Cost for Nancy Street Filling	\$182,000
				Total Cost for Lemon Creek Filling	\$572,000
				Total Cost for Nancy Street Filling	-\$182,000
				CBJ cost of land purchase of Nancy Street Wetland	-\$137,000
				Savings for CBJ after land purchase	\$253,000

The City and Borough of Juneau saved \$253,000 by purchasing, filling and enhancing the Nancy Street Wetland instead of following the following the typical process of fill disposal at Lemon Creek. The reasons for the savings include:

1. The distance from the construction site to the Nancy Street Wetland is approximately 3 miles shorter than the distance to the Lemon Creek disposal site. This reduces fuel and transportation costs.
2. The CBJ owned the disposal property and could reduce the tipping fees considerably, thereby saving the project money.
3. The process of enhancing the Nancy Street Wetland was funded entirely by the U.S. Fish & Wildlife Service, the Natural Resource Conservation Service, and other grants and donations. The involvement of the resource agencies at all stages of planning, design and construction facilitated the filling and enhancement process. See Appendix 3B for contribution details.

Appendix 3B. Budget - Contributions

	Entity	Program	Task	Amount
1.	Land Purchase			
	CBJ	Street Sales Tax	Land Purchase	\$137,000
			Total	\$137,000
2.	Earthwork			
	USFWS	Partners for Fish and Wildlife Program	Intern	\$9,000
			Earthwork	\$31,000
	NRCS	Wildlife Habitat Improvement Program	Fill placement and rough grading	\$75,000
			Total	\$115,000
3.	Planting, Final Grading, Outlet Channel and Control Structure			
	USFWS	Partners for Fish and Wildlife Program	Outlet Design, Final Grading	\$45,000
			SAGA-FWS Contract - Reveg	\$26,800
			Intern	\$10,000
	NRCS	Wildlife Habitat Improvement Program	Fish passage channel	\$6,000
			Structure for water control	\$3,750
			Final grading, topsoil placement, planting	\$42,000
	Full Circle Farms	Donation-Cash	Plant Materials	\$5,000
	Full Circle Farms	Donation-Labor	Collection and Planting	\$5,600
	Full Circle Farms	Donation-In Kind	Plant Storage	\$3,000
	Duran Construction Co.	Third Party EPA Mitigation Compliance	Topsoil Delivery, 5500cy	\$30,000
			Total	\$177,150
4.	Trail Construction			
	DNR	Recreational Trails Grant	Trail materials, construction	\$46,746
	Glacier State Contractors	Private Donor	Trail grading and gravel	\$14,000
	Juneau Docks and Harbors	Donation- In Kind	Bridge and Delivery	\$14,900
			Total	\$75,646
			GRAND TOTAL	\$504,796

Timeline for Purchase, Filling and Enhancement

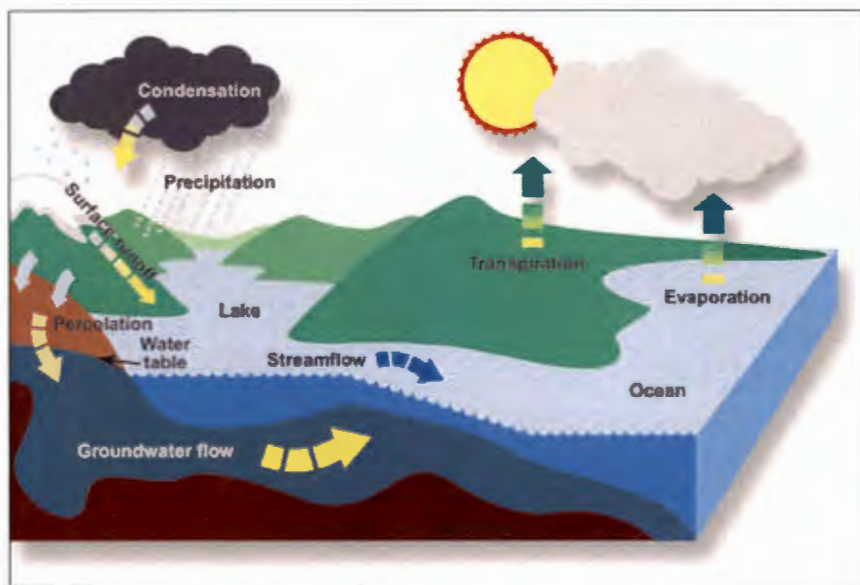
	2005															2006				
	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Land Purchase																				
Planning and Design for Filling																				
Planning and Design for Revegetation																				
Earthwork and Filling																				
Outlet Channel and Control Structure																				
Planting																				
Trail Construction																				

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GROUNDWATER IN THE AGGREGATE INDUSTRY

Groundwater is a renewable resource that is in constant motion as part of the hydrologic cycle. Above-water pits and quarries have little or no effect on water levels or the flow of groundwater.



What is Groundwater?

Just as the name implies, groundwater is water contained in the pores and fissures of the earth. Groundwater is a renewable resource. It is in constant motion, part of the hydrologic cycle (see Hydrologic Cycle on the cover page). Rainfall and snowmelt infiltrate into the earth to recharge groundwater, which then flows as baseflow into streams and lakes. Evaporation from open water, and transpiration from plants, returns water to the atmosphere to complete the cycle.

A common misconception is that groundwater flows in underground rivers and lakes like surface water. Instead, groundwater seeps very slowly through the pore spaces and small fissures in the soil and rock. Materials such as clay have a low permeability, and hence very slow groundwater flow, while sand and gravel, or highly fractured rock, have high permeability and permit groundwater to flow faster. These more permeable layers are called aquifers.

The water table is the depth at which the soils or rock become completely saturated with groundwater. If a hole were dug, and left to stand for a while for groundwater to seep in, the water level in the hole would represent the water table. The water table elevation is not static, though, and it can fluctuate in different seasons and from year-to-year, depending on the amount of recharge. Natural depressions can intersect the water table to form lakes, ponds and wetlands.

Water Wells

Groundwater is a critical resource in Ontario - nearly one quarter of us rely on wells for our water supply. Some of these are municipal wells serving urban communities, but the vast majority are private water wells, mainly in the rural parts of the province. Two common types of wells are shallow dug wells which draw water from the water table, and bored or drilled wells which draw water from deeper aquifers.

The *Ontario Water Resources Act* and the *Environmental Protection Act* both serve to protect the quality and quantity of groundwater. They are administered by the Ontario Ministry of the Environment, which will respond to public complaints regarding interference with water wells. The Ministry has several excellent publications available to

Fact Sheet

Groundwater at Pits and Quarries

- Groundwater is a renewable resource.
- Water wells are protected under provincial legislation.
- Above-water pits and quarries can have a beneficial effect on groundwater and aquatic resources.
- Below-water pits and quarries can be operated without significant groundwater impacts if they are carefully designed and operated.
- Permits to Take Water ensure that aggregate wash plants do not harm water resources.

Aggregate extraction and processing is a clean industry that does not provide groundwater contaminants.

homeowners on subjects including proper water well construction and maintenance, protecting water quality in wells and managing water shortages (1-800-565-4923 or www.ene.gov.on.ca).

Wells and their associated equipment require ongoing maintenance. Even with the best maintenance, though, they still tend to degrade naturally over a period of years, through mechanical wear and clogging of the well screen, pump and pipes, .

Can Pits and Quarries Affect the Flow of Groundwater?

The answer depends on the type of pit or quarry.

Above-Water Pits and Quarries

Most of Ontario's sand and gravel pits, and a few of its rock quarries, are excavated entirely above the water table. This type of operation has little or no effect on water levels or the flow of groundwater because there is no direct, physical alteration of the water table or any aquifers. Monitoring programs at above-water pits and quarries across Ontario have confirmed that groundwater is unaffected.

In some ways, above-water pits and quarries can actually be beneficial to groundwater. They create a "bowl" that captures and infiltrates all rainfall and snowmelt rather than allowing some of it to run off across the ground surface. A study on the Oak Ridges Moraine documented a number of benefits related to this extra groundwater recharge (Hunter/Raven Beck,

1996). One of the important benefits is to reduce direct run-off to surface water streams and increase cold groundwater baseflow which is critical to fish habitat.

Below-Water Pits

Below-water pits usually use large excavators or draglines to dredge sand and gravel from the *pit ponds* that form below the water table level. Generally, this type of extraction does not have major impacts because most of the groundwater remains in the pit, or drains back into the pit. This type of pit also captures surface water run-off and promotes more groundwater recharge, but these benefits are offset by the increased evaporation that will occur from the surface of a pit pond. Minor water losses also occur due to residual moisture contained in the aggregate products that are shipped from the site. Finally, the removal of solid sand and gravel particles from below the water table has the effect of temporarily lowering the water level in a pit pond (imagine removing a rock from a bucket of water).

The water surface in very large below-water pit ponds will stabilize at a uniform level, whereas the groundwater table before extraction may have been irregular or sloping. Therefore, the water table around the pit will have to “adjust” to the water level in the pit pond, possibly resulting in slightly different groundwater flow patterns. Fortunately, there is a simple solution where this may be a problem – digging several smaller pit ponds rather than one large pond (Ostrander *et al.*, 1998).

When all of these factors are combined, the net effects of below-water extraction are normally minor and very localized. However, in certain circumstances they could still be significant if there are sensitive features such as wetlands or shallow wells in close proximity. As a result, a detailed and careful hydrogeological study is necessary when licencing this type of pit (Ministry of Natural Resources, 1997), and mitigation (solutions) to any negative impacts will be required. An ongoing groundwater monitoring program may be required.

Below-Water Quarries

Most quarries that extract from below the water table pump water out of the excavation so that the work of blasting and recovering the bedrock can be done on a dry floor. *Dewatering* usually does affect groundwater levels and flow patterns around the site, since it artificially lowers the water table to at least the base of the quarry. Hydrogeologists call the area around the quarry that is affected by the dewatering the *drawdown cone* or the *radius of influence*. Wells, streams, wetlands, or other sensitive features within

this area must be carefully studied to predict the impacts and devise mitigation measures before the quarry can be licenced (Ministry of Natural Resources, 1997) and a groundwater monitoring program will normally be required.

There are many locations in Ontario where below-water quarries are successfully operated while sensitive water uses continue nearby – it depends very much on the specific hydrogeological setting. Recently, some innovative technologies have been introduced in Ontario to lessen the effects of quarry dewatering, such as pumping the water from the quarry back into the groundwater system around the quarry to artificially recharge the water table. This has so far proven to be quite successful (Gartner Lee Limited, 2001).

Other Water Takings

Pits and quarries have uses for water, similar to other businesses, such as supplying offices and shops with drinking water, watering lawns and gardens, etc., but these tend to be relatively minor. Most types of aggregate processing, such as crushing and screening, are dry operations and do not require water supply.

However, to minimize dust (which is a byproduct of excavation in a pit or quarry) spray water is used on internal haul roads, processing equipment, stockpiles and trucks.

One exception is aggregate washing plants, which are used at some sites, and do require relatively large quantities of water. Most plants recycle wash water through a “closed loop” series of holding ponds and settling ponds (i.e., the water is re-circulated, with no off-site discharge), so that the amount of water actually consumed in the process is usually less than about 10%. This *make-up water* normally comes from local groundwater or surface water sources. A common configuration would be to have a well that would be used occasionally during the production season to “top up” the ponds.

These water takings are regulated separately from the pit licence under the *Ontario Water Resources Act*, and controlled through Permits to Take Water. The applications and related hydrogeological studies are carefully reviewed by the Ministry of the Environment, other government agencies, and the interested public through the Environmental Bill of Rights process to ensure there will be no unacceptable impacts from these water takings, before the permit is issued.

GROUNDWATER IN THE AGGREGATE INDUSTRY

Can a Pit or Quarry Contaminate Groundwater?

It surprises some people to learn that aggregate extraction is a clean industry. Processing aggregates is a purely mechanical process of crushing, screening, blending, and sometimes washing (with water), without the need for chemicals. At most sites, fuels and lubricants for the equipment are the only potential sources of groundwater contamination, and these are closely regulated under the *Technical Standards and Safety Act*. A spills contingency plan is a standard condition of every new aggregate licence.

Bacteriological contamination of the type responsible for the Walkerton tragedy comes from human and animal wastes. Aggregate extraction and processing is not a source of this type of contamination.

As a result, water quality in and around pits and quarries is not normally an issue. This was confirmed through a study in 1989 as part of the Ontario government's MISA program, where monitoring at a selected number of pits and quarries found good water quality, with only sporadic traces of organic compounds at some sites that might indicate the use of petroleum products (SENES, 1989). In addition, there are many site specific monitoring programs in place at aggregate operations.

What About Water Temperature?

Water temperature concerns are occasionally raised in conjunction with below-water pits. A pit pond warmed through the summer months could result in a flow of warmer groundwater to nearby points of baseflow discharge and, in turn, affect cold water fisheries resources. An analysis conducted on behalf of the Credit

Valley Conservation Authority in 1998 concluded that pit ponds have minimal impact on groundwater temperatures, and that these minor effects are completely dissipated within a few hundred metres from a pit (Ostrander *et al*, 1998). Field monitoring has also confirmed that groundwater returns to its normal background temperature within tens of metres of pit ponds (Harden Environmental, 1995).

As a result of the research to-date, thermal effects of pits and quarries is not considered to be a major issue in most cases. However, where there are cold water fisheries close to a pit pond, appropriate investigations and studies are required, and the setbacks and buffer zones will be adjusted accordingly.

For further information, please contact the OSSGA Environment and Resources Manager, at (905) 507-0711 or visit the OSSGA website at www.ossga.com.

Prepared by Gartner Lee Limited in consultation with OSSGA's Environment Committee.

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The "About Aggregates" series:

1. Aggregates and the Law
2. Bronze Plaque Award
3. Rehabilitation of Pits and Quarries
4. Being a Good Neighbour
5. Importance of Aggregates
6. Geology and Aggregate Extraction
7. Controlled Blasting at Quarries
8. Groundwater in the Aggregate Industry
9. Management of Abandoned Aggregate Properties (MAAP) Program



365 Brunel Road, Unit 2
Mississauga, ON L4Z 1Z5
T: (905) 507-0711 F: (905) 507-0717
www.ossga.com
www.theholestory.ca

January 17, 2022

Mr. Ed Martin III, President
Kenai Peninsula Aggregate and Contractors Association
Via email: Kpac (kpacassocoation@yahoo.c0m)

Subject: Comments on KPB proposed material site ordinance amendments

As requested, I have reviewed the ordinance proposed to amend KPB 21.25 and 21.50.055 regarding material site permits, applications, conditions and procedures and offer the following comments, observations and suggestions. These comments are provided pro bono as a courtesy to your organization as well as to the Kenai Peninsula Borough and its residents.

I have been retired, as a principal partner with the engineering firm of Wince-Corthell-Bryson in Kenai, for the past three years and therefore have no further interest in contracts or projects within the Borough. I have been a Kenai Peninsula resident since childhood when my parents homesteaded the Kasilof area in 1957 and have over 50 years of construction and engineering experience in the central, southcentral and southwestern regions of Alaska.

I have over 40 year's experience in the planning, design, and management of federally funded highway and airport projects where the National Environmental Protection Policy Act (NEPA) procedures are followed to evaluate and mitigate environmental impacts caused by construction and use of the resulting infrastructure.

All this being said I will offer my comments from a engineering prospective and as a good neighbor in the order of the documents you provided.

Whereas #1and2: Not clear to me what Climate Change has to do with this ordinance

Whereas #3: I assume "other uses" refers to material production. I.e.. Crushing, screening, asphalt and concrete supply.

Whereas #4: I agree larger setbacks are not the answer where a material barrier will address impacts off site.

Whereas #5: Protecting, maximizing, minimizing is not a very definitive word, perhaps mitigating should be considered.

Whereas #12: *Dust, noise, traffic and visual aesthetics appears to me to be the crux of this ongoing debate and as a good neighbor is a reasonable topic. Its how they are reasonably addressed is the issue to me.*

Whereas #17: I agree this catchall statement that additional requirements may be required casts uncertainty in the process and should be removed. The permit process should establish the conditions up front.

SECTION 1. KPB 21.25.030

21.25.030. – Definitions

Permit Area and Haul routes I think this is a valid issue that should be addressed in the permit process. While I agree all vehicles have the right to use the borough roads, most of the Borough roads are not designed and built to carry high numbers of heavy trucks on a daily basis. Alternate access and/or upgrading existing roads may be something to consider to mitigate damage to existing roads as well as other traffic concerns.

21.29.020 Material extraction and activities requiring a permit

B. Conditional land use permit (CLUP) I see no problem with including material processing in with the site plan as crushing and screening operations can be noisy and dusty and can be addressed with effective barrier plans such as earth berms. For the smaller pits processing is not usually not going on so would be a non applicable item on a checklist.

21.29.030 Application Procedure

9. Site Plan. The Site plan along with accompanying SWEPP, Traffic, and Environmental mitigation proposals should be prepared or at least reviewed and signed off on by a Alaska registered Civil Engineer. A checklist would be convenient with this process.

9f. Test Holes. Perhaps the mining plan should be limited to the depth of test holes with provisions to amend the plan later or utilize a drill rig to bore the test holes.

9h. Waterbodies and wetlands. The Borough GIS source provides good planning level information on wetlands. Definitive designations can easily be requested with a two-page application to the local Corp of Engineers office in Soldotna for little to no cost and only takes 2-4 weeks to obtain.

21.29.040. Standards for sand, gravel or material sites. This section addresses protecting or minimizing environmental conditions again perhaps mitigating would be an acceptable term. Regarding damage to adjacent properties, I believe that goes with out saying. Any damage to another person's property is protected under state law and pursuable in civil court.

21.29.050. Permit Conditions

2. Buffer Zone. A) I don't believe a 50-foot strip of trees affectively buffers adjacent property and ROW from visual, noise or dust impacts. A 10-foot minimum, neatly shaped and seeded, earth berm would affectively mitigate those three impacts and is readily available from site stripping as well as being available for reclamation activities. The buffer should not overlap ROW utility easements as those are dedicated for utility use.

I think it might be a good idea to establish some parameters to be achieves with the buffer such as visibility level which a 10-foot berm achieves. Noise levels which the borough proposes late at 75 decibels should be achievable considering FAA noise standards for airport noise is 65 decibels and easily measured with a decibel meter which I have can loan you. Airborne particulate is a difficult to measure without special equipment so maybe a visible standard could be used.

4. Water Source Separation b. I don't believe a few feet of gravel separation to the ground water protects it at all from fuel and oil spills, on the contrary. Minor spills that can be obscured by pit operations can build up over time and steadily leach into the water table not showing up for quite some time and well down gradient resulting in a long term impact.

Dredging operations below water table can be boomed off and if a spill occurs is immediately visible and can be quickly boomed in, skimmed and absorbed.

5. Excavation in the water table. Simply dredging into the water table should have little affect on its level or down gradient wells. I agree some horizontal separations is required and would think the 200-foot separation required by ADEC would be sufficient.

If dewatering is proposed, then the following requirements address those impacts .

6. Waterbodies. I believe a 100-foot buffer with appropriate SWEPP practices will adequately protect surface water and wetlands.

11. Hours of Operation. Over my career I have only been involved with a few double shifting projects and they were on airports well away from residential areas. From what I have observed most operations run about 12 hours a day 5-7 days a week. Perhaps a special use permit could be utilized for unusual working hours.

17. Sound Level. The 75 decibel limit may be impossible to meet during initial pit development until the clearing, stripping, berming and the pit is to a depth below grade. Perhaps the permit could allow the 1.5 increase during initial development. This should be achievable during the first season of operation.

The smaller pits (1-2.5 acres) should be exempt from this requiremen, as I don't believe they can ever meet the requirement and they are normally project specific, only operating for a few weeks to a few months.

19. Ingress and Egress. Should be addressed in the permit process to assure existing Borough roads are capable of accommodating the increase in heavy truck traffic.

I have no comments on the Decision and Reclamation sections as that is housekeeping between the operators and the Borough in m my mind.

I also think that the final product of this ordinance should be a result of a consensus of the stakeholders and not simply a mater of majority vote rule. In the end a Permit Checklist should be provided that addresses all the impacts, their limits and provides a template for proposed mitigation .

One last observation is that considering how important gravel borrow sites are to the long term development and economics of the Peninsula I think the Borough and State should be encouraged to set aside some suitable land in proximity to the road system but buffered from private holding for land lease or sale. Making land available that is more neighbor friendly would solve not only this current issue but insure the continued growth of our area.

I hope my comments provide some ideas for consideration and wish you and the Borough success with the continued process to address this matter

Sincerely

A handwritten signature in cursive script, reading "Casey Madden". The signature is written in dark ink and is positioned above a horizontal line.

Casey Madden, P.E.
Alaska Registered Civil Engineer No. 7235



Broyles, Randi

From: Blankenship, Johni
Sent: Monday, January 24, 2022 10:52 AM
To: Broyles, Randi
Subject: FW: New Public Comment to Assembly Members

Public comment

From: Kenai Peninsula Borough <webmaster@borough.kenai.ak.us>
Sent: Monday, January 24, 2022 10:48 AM
To: BoroughAssembly <Borough-Assembly@kpb.us>; Mayor's Department <MayorDepartmental@kpb.us>
Subject: New Public Comment to Assembly Members

Your Name: Joseph Ross

Your Email: smokeross@alaska.net

Subject: Gravel ordinance

Message:

No other industry in the borough is regulated to the extent that you are considering for our local gravel producers. Where are the regulations for the dirt burner? There was an immense amount of public outcry about it, but no task force was formed by KPB to address it. Homeless shelters? Same deal. Marijuana growers? Crickets. What you are attempting is spot zoning, and will cripple the gravel industry. One item you are considering in the new list of zoning is back up alarms. Will you be making rules about back up alarms for everyone, or just gravel producers? I hear back up alarms from Peak Construction every day. Sometimes even at night. How about the back up alarms on the graders out plowing snow at night?

Need to look @
18 AAC 80 SOA Drinking
Water Dept - there are
some source water provisions
80.015.

- differentiate Bt major
and minor extraction operations
and those in GWT that
stay above GWT

and are valid for one year. The site development plan may be renewed on an annual basis subject to the planning director's approval.

21.29.020. Material extraction and activities requiring a permit.

- A. *Counter permit.* A counter permit is required for material extraction which disturbs no more than 2.5 cumulative acres and does not enter the water table. Counter permits are approved by the planning director, and are not subject to the notice requirements or planning commission approval of KPB 21.25.060. A counter permit is valid for a period of 12 months, with a possible 12-month extension.
- B. *Conditional land use permit.* A conditional land use permit (CLUP) is required for material extraction which disturbs more than 2.5 cumulative acres, or material extraction of any size that enters the water table. A CLUP is required for materials processing. A CLUP is valid for a period of five years. The provisions of KPB Chapter 21.25 are applicable to material site CLUPS and the provisions of KPB 21.25 and 21.29 are read in harmony. If there is a conflict between the provisions of KPB 21.25 and 21.29, the provisions of KPB 21.29 are controlling. (Material processing occurs on every civil construction jobsite. This is a burden to the public at large to develop their property)

21.29.030. Application procedure.

- A. In order to obtain a counter permit or CLUP, an applicant shall first complete and submit to the borough planning department a permit application, along with the fee listed in the most current Kenai Peninsula Borough Schedule of Rates, Charges and Fees. The planning director may determine that certain contiguous parcels are eligible for a single permit. The application shall include the following items:
 1. Legal description of the parcel, KPB tax parcel ID number, and identification of whether the permit is for the entire parcel, or a specific location within a parcel;
 2. Expected life span of the material site;
 3. A buffer plan consistent with KPB 21.29.050(A)(2);
 4. Reclamation plan consistent with KPB 21.29.060;
 5. The depth of excavation;

6. Type of material to be extracted and type of equipment to be used;
7. Any voluntary permit conditions the applicant proposes. Failure to include a proposed voluntary permit condition in the application does not preclude the applicant from proposing or agreeing to voluntary permit conditions at a later time;
8. Surface water protection measures, if any, for adjacent properties designed by a SWPPP certified individual civil engineer (many of the operators are certified), including the use of diversion channels, interception ditches, on-site collection ditches, sediment ponds and traps, and silt fence;

DEC Regs
on "Certified
Individual"
may not incl
Civil Engr

Don't know what this means

9. A site plan and field (verification) prepared by the site operator or a professional surveyor licensed and registered in the State of Alaska, including the following information: (surveyors don't offer this service, nor are qualified)

Should separate
site plan from other issues
calling it a "site plan" may
bring other state requirements
into play

- a. Location of excavation, and, if the site is to be developed in phases, the life span and expected reclamation date for each phase;
- b. Proposed buffers consistent with KPB 21.29.050(A)(2), or alternate buffer plan;
- c. Identification of all encumbrances, including, but not limited to easements;
- d. Points of ingress and egress. Driveway permits must be acquired from either the state or borough as appropriate prior to the issuance of the material site permit;
- e. Anticipated haul routes;
- f. Location and [DEPTH] elevation of test holes, and depth of groundwater, if encountered between May and December. At least one test hole per ten acres of excavated area is required to be dug. The test holes shall be at least four feet below the proposed depth of excavation; (can't dig that deep many times, if resource is deeper than conventional equipment can dig without stage excavation)
- g. Location of wells of adjacent property owners within 300 feet of the proposed parcel boundary;

may not be enough for
Public wells
- separate Private
From public sources

- h. Location of any water body on the parcel, including the location of any riparian wetland as determined by "Wetland Mapping and Classification of the Kenai Lowland, Alaska" maps created by the Kenai Watershed Forum; (wetland mapping by KWF under contestment and found unreliable)
- [I]. SURFACE WATER PROTECTION MEASURES FOR ADJACENT PROPERTIES, INCLUDING THE USE OF DIVERSION CHANNELS, INTERCEPTION DITCHES, ON-SITE COLLECTION DITCHES, SEDIMENT PONDS AND TRAPS, AND SILT FENCE; PROVIDE DESIGNS FOR SUBSTANTIAL STRUCTURES; INDICATE WHICH STRUCTURES WILL REMAIN AS PERMANENT FEATURES AT THE CONCLUSION OF OPERATIONS, IF ANY;]
- [J]i. Location of any processing areas on parcel, if applicable;
- [K]i. North arrow;
- [L]k. The scale to which the site plan is drawn;
- [M]l. Preparer's name, date and seal; (A site operator may not have a seal)
- [N]m. Field verification shall include staking the boundary of the parcel at sequentially visible intervals. The planning director may grant an exemption in writing to the staking requirements if the parcel boundaries are obvious or staking is unnecessary.

*Separate Site
Plan From other
Requirements*

- B. In order to aid the planning commission or planning director's decision-making process, the planning director shall provide vicinity, aerial, land use, and ownership maps for each application and may include additional information.

21.29.040. Standards for sand, gravel or material sites.

- A. These material site regulations are intended to protect against (protects against is an absolute term and most of the time is unobtainable) Minimize aquifer disturbance, road damage, physical damage to adjacent properties, dust, and, noise, and visual impacts. (See explanation below) Only the conditions set forth in KPB 21.29.050 may be imposed to meet these standards:
 - 1. Protects against Minimizes the lowering of water sources serving other properties;

- properties;
2. Protects against Minimizes physical damage to [OTHER] adjacent
 3. [MINIMIZES] Protects against off-site movement of dust;
 4. [MINIMIZES] Protects against noise disturbance to other properties;
 5. [MINIMIZES] Protects against visual impacts of the material site; [AND] (visual impacts implies the taking of visual rights from one citizen and giving to another. I have done extensive research on this and found the KPB just doesn't have the authority. Keeping this language puts the KPB at risk of litigation.)
 6. Provides for alternate post-mining land uses[.];
 7. Protects Minimizes Receiving Waters against adverse effects to fish and wildlife habitat;
 8. Minimizes Protects against traffic impacts; and
 9. Provides consistency with the objectives of the Kenai Peninsula Borough Comprehensive Plan and other applicable planning documents. (Possible Zoning)

21.29.050. Permit conditions.

- A. The following mandatory conditions apply to counter permits and CLUPs issued for sand, gravel or material sites:

1. [PARCEL]Permit boundaries. [ALL BOUNDARIES OF THE SUBJECT PARCEL] The buffers and any easements or right-of-way abutting the proposed permit area shall be staked at sequentially visible intervals where parcel boundaries are within 300 feet of the excavation perimeter. Field verification and staking will require the services of a professional land surveyor or site operator. Stakes shall be in place [AT TIME OF APPLICATION] prior to issuance of the permit. (Many site operators have GPS capability accurate to +/- 1".)

2. BUFFER ZONE. A BUFFER ZONE SHALL BE MAINTAINED AROUND THE EXCAVATION PERIMETER OR PARCEL BOUNDARIES. WHERE AN EASEMENT EXISTS, A BUFFER SHALL NOT OVERLAP THE EASEMENT, UNLESS OTHERWISE CONDITIONED BY THE PLANNING DIRECTOR OR PLANNING COMMISSION.

A. THE BUFFER ZONE SHALL PROVIDE AND RETAIN A BASIC BUFFER OF:

I. 50 FEET OF UNDISTURBED NATURAL VEGETATION, OR

II. A MINIMUM TEN SIX-FOOT EARTHEN BERM WITH AT LEAST A 2:1 SLOPE, OR (THIS 10FT BERM IS CONTINGENT ON THE SETTLEMENT OF THE WATER TABLE ACCESS)

III. A MINIMUM SIX-FOOT FENCE.

B. A 2:1 SLOPE SHALL BE MAINTAINED BETWEEN THE BUFFER ZONE AND EXCAVATION FLOOR ON ALL INACTIVE SITE WALLS. MATERIAL FROM THE AREA DESIGNATED FOR THE 2:1 SLOPE MAY BE REMOVED IF SUITABLE. STABILIZING MATERIAL IS REPLACED WITHIN 90 DAYS FROM THE TIME OF REMOVAL.

C. THE PLANNING COMMISSION OR PLANNING DIRECTOR SHALL DESIGNATE ONE OR A COMBINATION OF THE ABOVE AS IT DEEMS APPROPRIATE. THE VEGETATION AND FENCE SHALL BE OF SUFFICIENT HEIGHT AND DENSITY TO PROVIDE VISUAL AND NOISE SCREENING OF THE PROPOSED USE AS DEEMED APPROPRIATE BY THE PLANNING COMMISSION OR PLANNING DIRECTOR.

D. BUFFERS SHALL NOT CAUSE SURFACE WATER DIVERSION WHICH NEGATIVELY IMPACTS ADJACENT PROPERTIES OR WATER BODIES. SPECIFIC FINDINGS ARE REQUIRED TO ALTER THE BUFFER REQUIREMENTS OF KPB 21.29.050(A)(2)(A) IN ORDER TO MINIMIZE NEGATIVE IMPACTS FROM SURFACE WATER DIVERSION. FOR PURPOSES OF THIS SECTION, SURFACE WATER DIVERSION IS DEFINED AS EROSION, FLOODING, DEHYDRATION OR DRAINING, OR CHANNELING. NOT ALL SURFACE WATER DIVERSION RESULTS IN A NEGATIVE IMPACT.

E. AT ITS DISCRETION, THE PLANNING COMMISSION MAY WAIVE BUFFER REQUIREMENTS WHERE THE TOPOGRAPHY OF THE PROPERTY OR THE PLACEMENT OF NATURAL BARRIERS MAKES SCREENING NOT FEASIBLE OR NOT NECESSARY. BUFFER REQUIREMENTS SHALL BE MADE IN CONSIDERATION OF AND IN ACCORDANCE WITH EXISTING USES OF ADJACENT PROPERTY AT THE TIME OF APPROVAL OF THE PERMIT. THERE IS NO REQUIREMENT TO BUFFER THE MATERIAL SITE FROM USES WHICH COMMENCE AFTER THE APPROVAL OF THE PERMIT.]

with a
steeper not steeper
than 2:1

Comply w/
18 AAC 70-50A
Water Quality
Regulations

2. Buffer Area. Material sites shall maintain buffer areas in accord with this section.

- a. A buffer area of a maximum of 100 feet shall be established between the area of excavation and the parcel boundaries. The buffer area may include one or more of the following: undisturbed natural vegetation. (Historically, choosing the natural vegetation buffer has almost always ended with both neighbors disappointed. The home owner doesn't realize that the forest isn't very dense and can see and hear the material operation.) a minimum six-foot fence, a minimum six-foot berm or a combination thereof. (The berms are historically the best tool. Does a great job of minimizing the dust and noise, as well as providing a visual screen. A ten-foot berm will add 280% more in size and reclaimable material stored for later use in reclamation.)
- b. A 2:1 slope shall be maintained between the buffer zone and excavation floor on all inactive site walls. Material from the area designated for the 2:1 slope may be removed if suitable, stabilizing material is replaced within 90 30days from the time of removal. (30 days may not be enough time to move the amount of material)
- c. Where an easement exists, a buffer shall not overlap the easement, unless otherwise conditioned by the planning commission or planning director, as applicable. (Basically, stacking buffers)
- d. The buffer area may be reduced where the planning commission or planning director, as applicable, has approved an alternate buffer plan introduced by the applicant. (This is necessary to clarify that the planning commission or director cannot make an alternate plan at will) The alternate buffer plan must consist of natural undisturbed vegetation, or a minimum ten six-foot berm, or a minimum six-foot fence or a combination thereof, consisting of only one option in a single geographical location; (prevents stacking of buffers, and provides consistency in permit requirements) unless the permittee proposes another solution approved by the planning commission or planning director, as applicable, to meet this condition.
- e. The buffer requirements may be waived by the planning commission or planning director, as applicable, where the

topography of the property or the placement of natural barriers makes screening not feasible or unnecessary.

f. There is no requirement to buffer a material site from uses that commence after approval of the permit.

g. When a buffer area has been denuded prior to review of the application by the planning commission or planning director revegetation may be required. (Could be a lot cleared years before or an old wildfire site)

3. *Processing.* In the case of a CLUP, any equipment which conditions or processes material must be operated at least 300 feet from the parcel boundaries. At its discretion, the planning commission may waive the 300-foot processing distance requirement, or allow a lesser distance in consideration of and in accordance with existing uses of [OF ADJACENT PROPERTY AT THE TIME] the properties in the vicinity at the time of approval of the permit. (Until vicinity is better defined, we can't consider this)

4. *Water source separation.*

a. All permits shall be issued with a condition which prohibits any material extraction within 100 horizontal feet of any water source existing prior to original permit issuance.

b. All counter permits shall be issued with a condition which requires that an excavation distance of 15 feet below the seasonal high-water table must be maintained under these conditions:

1. No dewatering is allowed.
2. The bottom of excavation must be 15 feet above the nearest, shallowest private wells intake, within 500 ft of operation.
3. A spill response kit.
4. Operations shall not breach an aquifer-confining layer.

A four-foot vertical separation [FROM] between extraction operations and the seasonal high-water table be maintained. (I have talked with multiple hydrologists and engineers and have come to a conclusion that this is not only possible, but preferable in regard to reclamation, spill response and potential clean up. I will have letters of opinion in favor. The ponds or lakes created will be reclaimed upon existence, provide habitat for wetlands and wildlife, potentially raise property values as lake front property, etc.)

He above seems conflicting - Allows operator to excav. 15' into GWT but requires a 4' vert separation to GWT?

Drinking water source - 700' for public well / source

who provides the adjacent well information? How is it obtained? What if adjacent property owner refuses to give that info? well drillers will not provide a log for someone's well who owns approval - especially in a contested situation.

see 18 AAC 80.1990(A)

- c. All CLUPS shall be issued with a condition which requires that a [TWO] four-foot vertical separation [FROM] between extraction operations and the seasonal high-water table be maintained. (Null and void if minimum water table excavation regulation is considered)
- d. There shall be no dewatering either by pumping, ditching or some other form of draining unless an exemption is granted by the planning commission. The exemption for dewatering may be granted if the operator provides a statement under seal and supporting data from a duly licensed and qualified impartial civil engineer, that the dewatering will not lower any of the surrounding property's water systems and the contractor posts a bond for liability for potential accrued damages.

5. Excavation in the water table. Excavation in the water table greater than 15 vertical (300 horizontal feet) of a water source may be permitted with the approval of the planning commission based on the following: (15 vertical feet is better measurement if minimum water table excavation regulation is considered)

- a. Certification by a qualified independent civil engineer or professional hydrogeologist that the excavation plan will not negatively impact the quantity of an aquifer serving existing water sources.
- b. The installation of a minimum of three water monitoring tubes or well casings as recommended by a qualified independent civil engineer or professional hydrogeologist adequate to determine flow direction, flow rate, and water elevation.
- c. Groundwater elevation, flow direction, and flow rate for the subject parcel, measured in three-month intervals by a qualified independent civil engineer or professional hydrogeologist, for at least one year prior to application. Monitoring tubes or wells must be kept in place, and measurements taken, for the duration of any excavation in the water table.
- d. Operations shall not breach an aquifer-confining layer.

6. Waterbodies.

- a. An undisturbed buffer shall be left and no earth material extraction activities shall take place within [100] 200 linear feet from excavation limits and the ordinary high water level

of surface water bodies such as a lake, river, stream, [OR OTHER WATER BODY, INCLUDING] riparian wetlands and mapped floodplains as defined in KPB 21.06. This regulation shall not apply to ponds less than one acre on private land, man-made waterbodies being constructed during the course of the materials extraction activities. In order to prevent discharge, diversion, or capture of surface water, an additional setback from lakes, rivers, anadromous streams, and riparian wetlands may be required. (Again, we can not trust the current adopted wetland mapping. It has been found incorrect. Also, we would like to manipulate and possibly enlarge waterbodies within private land. Promoting wetland expansion and environmental habitat.)

- b. Counter permits and CLUPS may contain additional conditions addressing surface water diversion.

Containment Areas
are problematic bk
they collect water
that will prob. stain
a sheep - then what?

7. *Fuel storage.* Fuel storage for containers larger than 50 gallons shall be contained in impermeable berms and basins capable of retaining 110 percent of storage capacity to minimize the potential for uncontained spills or leaks. Fuel storage containers 50 gallons or smaller shall not be placed directly on the ground, but shall be stored on a stable impermeable surface. Double wall tanks are also acceptable. (Double wall tanks are an acceptable standard for many other agencies)
8. *Roads.* Operations shall be conducted in a manner so as not to damage borough roads as required by KPB 14.40.175 and will be subject to the remedies set forth in KPB 14.40 for violation of this condition.
9. *Subdivision.* Any further subdivision or return to acreage of a parcel subject to a conditional land use or counter permit requires the permittee to amend their permit. The planning director may issue a written exemption from the amendment requirement if it is determined that the subdivision is consistent with the use of the parcel as a material site and all original permit conditions can be met.
10. *Dust-control.* Dust suppression is required on haul roads within the boundaries of the material site by application of water or calcium chloride.
11. *Hours of operation.* [ROCK CRUSHING EQUIPMENT SHALL NOT BE OPERATED BETWEEN 10:00 P.M. AND 6:00 A.M.]
- a. Processing equipment shall not be operated between 10:00 7:00 p.m. and 6:00 a.m. (Construction season is short and

processing operations are usually job specific. This puts a burden on development at all levels and can extend the length of days on a job that effects public safety.)

- b. The planning commission may grant exceptions to increase the hours of operation and processing based on surrounding land uses, topography, screening the material site from properties in the vicinity and conditions placed on the permit by the planning commission to mitigate the noise, dust and visual impacts caused by the material site.

12. *Reclamation.*

- a. Reclamation shall be consistent with the reclamation plan approved by the planning commission or planning director as appropriate in accord with KPB 21.29.060.
- b. [AS A CONDITION OF ISSUING THE PERMIT, THE APPLICANT SHALL SUBMIT A RECLAMATION PLAN AND POST A BOND TO COVER THE ANTICIPATED RECLAMATION COSTS IN AN AMOUNT TO BE DETERMINED BY THE PLANNING DIRECTOR. THIS BONDING REQUIREMENT SHALL NOT APPLY TO SAND, GRAVEL OR MATERIAL SITES FOR WHICH AN EXEMPTION FROM STATE BOND REQUIREMENTS FOR SMALL OPERATIONS IS APPLICABLE PURSUANT TO AS 27.19.050.] The applicant shall operate the material site consistent with the approved reclamation plan and provide bonding pursuant to 21.29.060(B). This bonding requirement shall not apply to sand, gravel or material sites for which an exemption from state bond requirements for small operations is applicable pursuant to AS 27.19.050.

13. *Other permits.* Permittee is responsible for complying with all other federal, state and local laws applicable to the material site operation, and abiding by related permits. These laws and permits include, but are not limited to, the borough's flood plain, coastal zone, and habitat protection regulations, those state laws applicable to material sites individually, reclamation, storm water pollution and other applicable Environmental Protection Agency (EPA) regulations, clean water act and any other U.S. Army Corp of Engineer permits, any EPA air quality regulations, EPA and ADEC air and water quality regulations, EPA hazardous material regulations, U.S. Dept. of Labor Mine Safety and Health Administration (MSHA) regulations (including but not limited to noise and safety standards), and Federal Bureau of Alcohol, Tobacco and Firearm regulations regarding using and storing explosives. Any violation of these regulations or permits reported to

or observed by borough personnel will be forwarded to the appropriate agency for enforcement.

14. ~~[VOLUNTARY]~~Volunteered permit conditions. Conditions may be included in the permit upon agreement of the permittee and approval of the planning commission for CLUPs or the planning director for counter permits. Such conditions must be consistent with the standards set forth in KPB 21.29.040(A). Planning commission approval of such conditions shall be contingent upon a finding that the conditions will be in the best interest of the borough and the surrounding property owners. ~~[VOLUNTARY]~~ Volunteered permit conditions apply to the subject parcel and operation, regardless of a change in ownership. A change in ~~[VOLUNTARY]~~ volunteered permit conditions may be proposed ~~[AT]~~ by permit ~~[RENEWAL OR AMENDMENT]~~ modification.
15. *Signage.* For permitted parcels on which the permittee does not intend to begin operations for at least 12 months after being granted a conditional land use permit, the permittee shall post notice of intent on parcel corners or access, whichever is more visible. Sign dimensions shall be no more than 15" by 15" and must contain the following information: the phrase "Permitted Material Site" along with the permittee's business name and a contact phone number.
16. Appeal. No clearing of vegetation shall occur within the 50 100-foot maximum buffer area from the permit boundary nor shall the permit be issued or operable until the deadline for the appeal, pursuant to KPB 21.20, has expired. ~~(No need for this regulation as the natural vegetative buffer is not and should not be a best choice. If the need for additional buffing is required, the ten foot berm will suffice.)~~
17. Sound level.
 - a. No sound resulting from the materials extraction activities shall create a sound level, when measured at or within the property boundary of the adjacent land, that exceeds 75 dB(A).
 - b. For any sound that is of short duration between the hours of 7 a.m. and 7 p.m. the levels may be increased by:
 - i. Five dB(A) for a total of 15 minutes in any one hour; or
 - ii. Ten dB(A) for a total of five minutes in any hour; or
 - iii. Fifteen dB(A) for a total of one and one-half minutes in any one-hour period.

- c. At its discretion, the planning commission or planning director, as applicable, may reduce or waive the sound level requirements on any or all property boundaries. Sound level requirements shall be made in consideration of and in accordance with existing uses of the properties in the vicinity at the time of approval of the permit.
 - d. Mandatory condition KPB 21.29.050(A)(17) shall expire 365 days from adoption of KPB 21.29.050(A)(17) unless extended or modified by the assembly.
(There is no science behind this. Almost every instance, it will be impossible to achieve with OSHA and MSHA standards. Also, will be further managed by the introduction of larger 10ft berms)
18. Reverse signal alarms. Reverse signal alarms, used at the material site on loaders, excavators, and other earthmoving equipment may shall be more technically advanced devices; such as, a multi-frequency "white noise" alarms rather than the common, single (high-pitch) tone alarms. At its discretion, the planning commission or planning director, as applicable, may waive this requirement or a portion of this requirement. The waiver of this requirement shall be made in consideration of and in accordance with existing uses of the properties in the vicinity at the time of approval of the permit. (May is the proper term and gives flexibility)
19. Ingress and egress. The planning commission or planning director may determine the points of ingress and egress for the material site. The permittee is not required to construct haul routes outside the parcel boundaries of the material site. Driveway authorization must be acquired, from either the state through an "Approval to Construct" or a borough road service area as appropriate, prior to issuance of a material site permit when accessing a public right-of-way. (This can only be instituted with strict standards and limitations of the planning commissions discretionary power. As written, it gives the planning commission discretion at will in an area of construction that they don't have the expertise.)
20. Dust suppression. Dust suppression may shall be required when natural precipitation is not adequate to suppress the dust generated by the material site traffic on haul routes within property boundaries. Based on surrounding land uses the planning commission or planning director, as applicable, may waive or reduce the requirement for dust suppression on haul routes within property boundaries. (As explained before)

21. Surface water protection. Use of surface water protection measures as specified in KPB 21.29.030(A)(8) must be approved by a licensed civil engineer or SWPPP certified individual.

22. Groundwater elevation. All material sites must maintain one monitoring tube per ten acres of excavated area four feet below the proposed excavation. (This will be unnecessary as the material site will be digging in the water table or unable to reach it and not effecting its formation.)

23. Setback. Material site excavation areas shall be 250-feet from the property boundaries of any local option zoning district, existing public school ground, private school ground, college campus, child care facility, multi-purpose senior center, assisted living home, and licensed health care facility. If overlapping, the buffer areas of the excavation shall be included in the 250-foot setback. At the time of application. (This gives consistency in the regulation)

21.29.055. Decision.

The planning commission or planning director, as applicable, shall approve permit applications meeting the mandatory conditions or shall disapprove permit applications that do not meet the mandatory conditions. The decision shall include written findings supporting the decision, and when applicable, there shall be written findings supporting any site-specific alterations to the mandatory condition as specifically allowed by KPB 21.29.050(A)(2)(a), (2)(c), (2)(d), (2)(e), (2)(g), (3), (4)(d), (5), (11)(b), (12), (14), (17)(c), (18), (19), and (20) and as allowed for the KPB 21.29.060 reclamation plan. (This is written that the planning commission will disapprove of applications that do not meet the mandatory conditions. It contradicts many previous languages that gives the planning commission discretion to approve applications that may need special modifications.)

21.29.060. Reclamation plan.

- A. All material site permit applications require an overall reclamation plan along with a five-year reclamation plan. A site plan for reclamation shall be required including a scaled drawing with finished contours. A five-year reclamation plan must be submitted with a permit extension request. (Why the need for a five-year reclamation plan? As site operators, we cannot foresee the market in a five-year span, therefore, cannot provide an accurate plan for five years.)
- B. The applicant may shall revegetate with a non-invasive plant species and reclaim all disturbed land (There are many ways to reclamation. This limits it to one method) [UPON EXHAUSTING THE MATERIAL ON-SITE, OR WITHIN A

What's the purpose of the monitoring well? Is it (are they?) down gradient? Testing?



To whom it may concern:

The Kenai Peninsula Aggregate and Contractors Association does not support ordinance 2021-41. We feel that it is flawed in many ways, and in some respects, impossible to follow.

The lack of all information or slanted information in the whereas is misleading. The use of Changing Climate has nothing to do with material extraction nor is scientifically proven without a doubt. The lack of mention that this exact document other than its previous designation of 2019-30 mayor substitute, was voted down, reconsidered, then voted down again, is important to note.

We feel the creation of this document was not done in a fair, well educated, and well represented way. The Material Site Work Group was formed using 8 members, and only 2 from the industry it would regulate. A 6 to 2 vote was all too common, as the majority of its members had limited experience if any at all. This ultimately created an ordinance that no one could support. That being said, we feel if such document should be created, this ordinance should not be considered as a guide whatsoever, as it would be counterproductive. Our reasoning is stated below.

The use of aesthetics, view, unsightliness, or any term that insinuates regulating view shed rights is not a power afforded to the KPB. After many hours of research, we have found that there are only 3 ways view shed rights have been regulated or transferred in the USA. The federal government regulates view shed on federal land containing historical sites and parks. Local first-class governments have zoning power. Some local governments have regulated through zoning, view shed rights over large zones containing all parcels of land within. There is no precedent of any government regulating view shed on singular parcels of land pertaining to one industry. The KPB is a second-class government with no zoning power. Last, we have found some instances where view shed rights have been transferred in the private sector through purchase.

This ordinance was founded by its initial goals. Those goals contained view shed language and concerns. Therefore, the ordinance was given wrong direction from its inception. All language concerning view must be stricken from its contents.

The definition of "disturbed" should not include "stockpiles" as it is used in 21.29.060 (b). The intent of reclamation is to put the land back to a suitable condition after operations have ceased. If operations have truly ceased, and the land has been put back to a suitable condition, there will be no stockpiles.

Eliminating the term "exhausted" was counterproductive in the intent of the original use of the land.

The definition of "haul route" and its use in the ordinance is unfairly singling out one industry as many others haul commercially in the KPB. Also, we are already regulated by KPB 21.29.050 (8), KPB 14.40.175, and subject to KPB 14.40.

The definition of "vicinity" is too broad and can give other residents not effected by operations by geographic and topographic locations the ability to diminish operations such as processing. Adjacent was a better term used.

21.29.030 (8) is already regulated by the federal government through SWPPP plans. This is unneeded, and a further burden to the KPB and the operator.

21.29.030 (9) (f) the timeframe from May to December does not coincide with construction season. Many bids come out before May for the upcoming season and a contractor will have to speculate and possibly apply for a permit before bidding a project. This will only burden the public to unnecessary costs and safety by denying the opportunity to obtain a close source of material.

21.29.040 (a) (3,4,5) the definition of “minimizes” and the inclusion of “protects against” is an unobtainable condition. “Minimizes” allowed the operator the ability to mitigate the situation. “Protects against” insinuates the absolute disbursements of, and is an impossible and unfair condition. It also contradicts other conditions levied in this ordinance. (3) is impossible as written, as dust moves naturally. It is not only unfair, because everyone creates dust, such as a parking lot on a windy day, or a homeowner mowing their lawn, but impossible to comply to because one particle across the property line defies the law. (4) is already regulated by the federal government agency MSHA. This is a further burden on the KPB and the operator. (5) is unlawful for the KPB to regulate as it insinuates the taking of view shed rights and the KPB is a second-class government with no zoning power.

(8) also includes the term “protects against” and is an impossible condition. As soon as an operator uses a public road to travel, they will impact traffic just by their presence. We have the right to travel by federal law, 5th amendment to the U.S. constitution.

21.29.050 (2) we feel the changes in the buffer zones were negotiated on incorrect information by KPB staff. Our representatives were misinformed as well as the rest of the MSWG and public as to the current distance and application of buffers conditioned to the applicant. As we read the current law, you may impose a combination of buffer requirements on an application, but only one in any geographical location. “Stacking” is prohibited. For instance, you may have a 50ft natural vegetative buffer on the north border and a minimum 6ft fence on the west, and a minimum 6ft berm on the east, but not all on one border. The word “or” in (2) (a) supports that. The KPB has already misused this law by asking for or requiring operators to comply with “stacking”. We feel the MSWG and the public did not receive the correct data to make an informed decision or to give public comment. A 100ft maximum buffer is an unnecessary burden to the applicant as it locks up a rare and high demanded commodity.

(2) (b) is in conflict with other conditions such as noise and undisturbed natural vegetation. How can we remove and replace material near or on the border of our site with heavy machinery if we cannot make noise, dust, or disturb vegetation?

(3) the use of “vicinity” is too broad. A property over a large hill, across a forest, on another road, may affect the use of processing even though they cannot see, hear, or be troubled in any way.

(4) we feel that the changes from 2 vertical ft. to 4ft is unnecessary. We don’t feel the MSWG was really given the option to go the other way and scientific data to make an informed decision. To our knowledge, there has been no conflict proven in the KPB with a 2ft separation. Many sites in Alaska mine in the water table. Some right here in the KPB. There is no precedent to support the taking of 2ft of resources away from an operator. We feel this section could have been abolished in its entirety and section (5) is sufficient.

(6) Again, we feel this is a product of lack of scientific data and there is no precedence to support the taking of 100ft of horizontal distance. State mining law is very different and allows for a much closer distance.

(17) this is also conceived by lack of scientific knowledge. Also, we are already regulated by the federal agency MSHA. This should be abolished in its entirety.

(18) this is unfairly enforcing a regulation on one industry. The KPB doesn't want to get involved in the type of safety equipment used. If an accident occurred, the KPB could be held liable. Also, we cannot control other possible members of the industry from outside the KPB who may not have these devices and come here to work for the season.

(19) this is unfair to the operator as we have the right to travel on any road. The possible burden to an operator could be massive because of topography and diminish the opportunity to access resources.

(20) this is unfair to the industry. We already supply dust suppression as good neighbors and stewards of the land. This is singling out one industry as almost all industries on the KPB are involved with a heavy truck creating dust on a road at some point. School busses create the same dust.

(21) Again, already regulated by federal SWPPP plans.

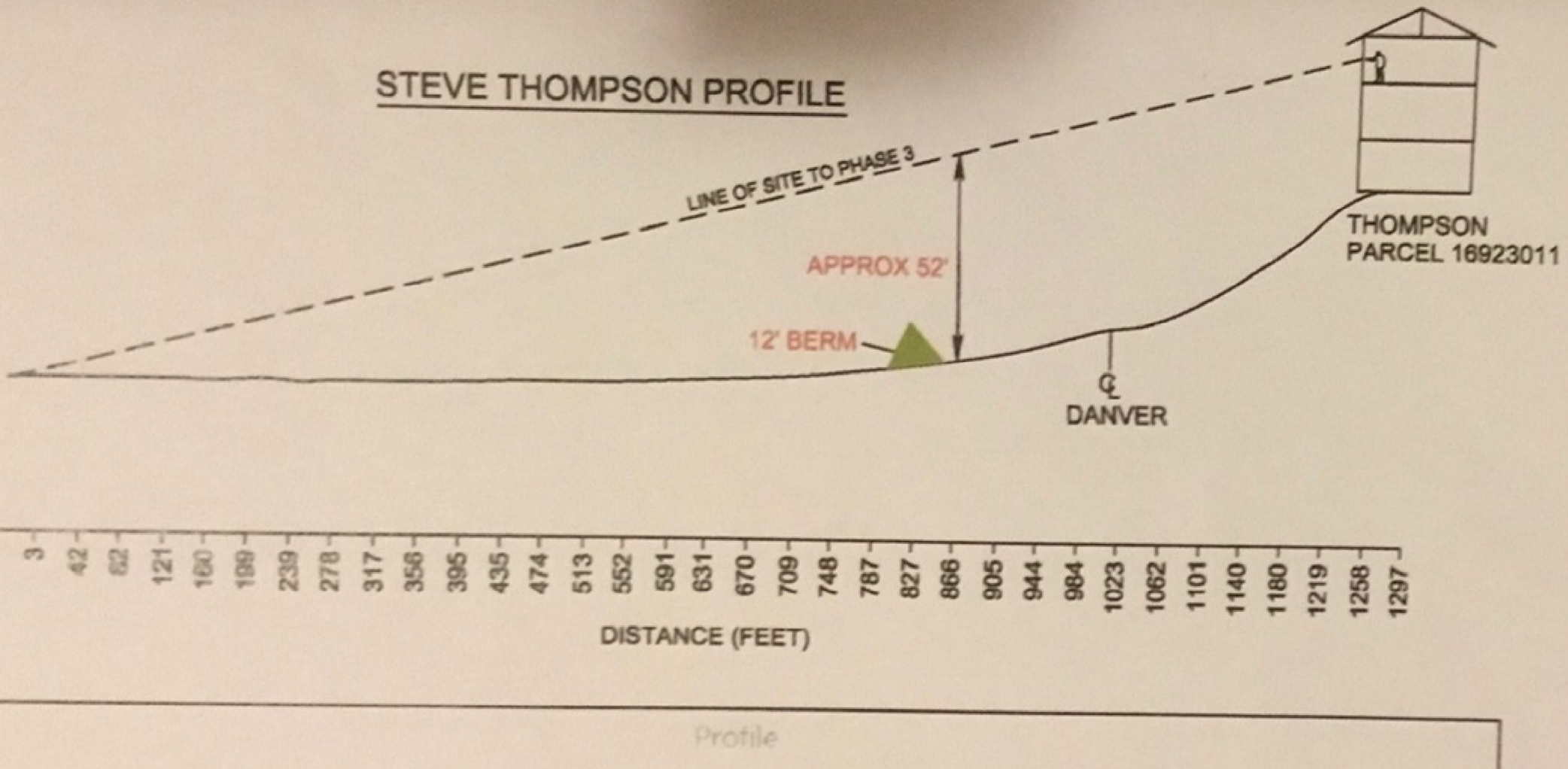
(22) unnecessary. Mining in the water table is common throughout Alaska.

21.29.060 (b) the use of "disturbed" includes basically, the whole site, including stockpiles. This is unrealistic. If there was more industry input, the MSWG would know that in general, the geology on the KPB is quite scarce of suitable topsoil. Every time you move it, you lose some. If we constantly reclamated our sites, we won't have the material to finish the job. Also, this doesn't have the provisions for other uses of the site such as a commercial property or parking lot needing no reclamation. The bonding requirement is also an undue burden as the State requires only \$750.

21.29.120 (c) we feel this is unjust to current operators. While to all it is reneging on the deal they agreed to at time of origin, some PEU's aren't required to submit a reclamation plan with the state and have no way of complying. This is just a way for government to not hold up their end of a deal struck with a citizen and harass them. It is not very becoming of the KPB to do so.

So, as you can see, the Kenai Peninsula Aggregate and Contractors Association and its members, families, and dependents, can find inconsistencies and faults in almost every aspect of this ordinance. It is inconsistent with industry standards, lacks scientific merit, isn't in harmony with other government agencies such as MSHA, OSHA, and DEC. This ordinance lacks an avenue for operators to complete discovery and reclamation that coincides with best management practices. In many areas it is based on false or inconsistent fact and overreach of regulatory power. Such as viewshed rights and wetland mapping. We consider this document as a form of a taking without just compensation and a form of zoning to a specific industry. We urge you to vote no on 2021-41 to save us all the conflict and burden it will surely cause.

Thank you for your consideration, Ed Martin III, President, KPACA.



Turner, Michele

From: Blankenship, Johni
Sent: Tuesday, January 18, 2022 4:23 PM
To: Turner, Michele
Subject: FW: <EXTERNAL-SENDER>Please provide to the Assembly for tonight's meeting on Ord. 2021-14

From: K, E, & E Martin <keeconstructionllc@yahoo.com>
Sent: Tuesday, January 18, 2022 4:02 PM
To: Blankenship, Johni <JBlankenship@kpb.us>
Subject: <EXTERNAL-SENDER>Please provide to the Assembly for tonight's meeting on Ord. 2021-14

CAUTION: This email originated from outside of the KPB system. Please use caution when responding or providing information. Do not click on links or open attachments unless you recognize the sender, know the content is safe and were expecting the communication.

To all it may concern :

Below is a Opinion of Jim Valenine of Reno ,NV Posted last Sunday Jan.16th in the "Nevada Appeal " News paper serving Carson City , NV I could not better put one's Rights to Private Property & the Constitutional Rights of Ownership & Due Process unobstructed by Government or anyone else!

Please review all Whereas's for facts & truth before considering any Therefore(s) that don't meet constitutional muster!

This second Class Borough shouldn't legislate ZONING without the power to do so & then only if a" taking is warranted " for a public good , then be prepared to pay just compensation . As I have told several Assembly members " Have the courage" to introduce new Zoning Powers for a vote of the people of this Borough. Otherwise this appears as a " BACK DOOR " way to those means. Ed Martin Jr., 702 Lawton Drive , Kenai, Ak

The Fifth Amendment of the U.S. Constitution includes a provision known as the Takings Clause, which states that "private property (shall not) be taken for public use, without just compensation."

This is a very important component of our Constitution that effects all property owners. Some governmental agencies in recent years have implemented laws, rules, policies and procedures that have impacted the quiet enjoyment of the property and the owner's use of the property which is, in fact, an uncompensated taking. More are being proposed as efforts to redistribute wealth become more commonplace. These often include giving rights to tenants that are adverse to the interest of the property owner with no compensation for their loss(es). Richard B. Sanders, Washington State Supreme Court justice, wrote a treatise about the "Fifth Amendment" wherein he wrote, "Our State, and most other states, define property in an extremely broad sense." He continued, "Property in a thing consists not merely in its ownership and possession, but in the unrestricted right of use, enjoyment, and disposal. Anything which destroys any of the elements of property, to that extent, destroys the property itself. The substantial value of property lies in its use. If the right of use be denied, the value of the property is annihilated and ownership is rendered a barren right."

Two more statements we find relevant: Founding Father John Adams, "The moment the idea is admitted into society that property is not as sacred as the law of God, and that there is not a force of law and public justice to protect it, anarchy and tyranny commence."

From Nevada's own Wayne Hage, property rights activist, "If you don't have the right to own and control property then you are property."

It is so important to those of us living in the free world environment of the United States to understand that you can own real estate and you can enjoy all of the components of the bundle of rights of real estate ownership, as long as you don't willingly, or unwillingly, let them take them from you.

The bundle of rights affords the owner the right of possession, the right of control, the right of exclusion, the right of enjoyment and the right of disposition. We take it for granted that we have this with our property ownership because of the Fifth Amendment, but like all of the freedoms we enjoy in these United States, we must work to protect them.

.[One must be diligent in protecting private property rights for all of us.

If you willingly allow a governing body to make a change that adversely affects you, then you cannot claim an uncompensated taking. If a body such as a Local Planning Commission makes changes to which you don't agree that have a negative impact on your, your use of your property and ultimately the value of your property, then you may be the victim of a Fifth Amendment breach.] Other factors can come into play so it is best to do your best to avoid such actions gaining any traction.

Don't let others push their agenda to your detriment. Your real property is yours, yours to do what you want with, not what you are told to do with it. That's why you bought it and that's why others still aspire to experience the American dream of home ownership without it being given to them.

KEE Construction, LLC



DATE: January 19, 2022

TO: KPB Assembly Members

SUBJECT: KPB 2021-41 Version 1
Material Site Permits, Applications, Conditions and Procedures

RE: Assembly Mtg January 18th Testimony

I was asked by multiple Assembly Members to discuss or provide my testimony regarding KPB2021-41 V1. Below are the talking points that I prepared prior to the Assembly meeting. Not all this information was included in my testimony due to time constraints and/or the climate of the chambers.

21.29.030.A.9 (Application Requirements)

Requiring that the site plan be prepared by a licensed surveyor is outside the Surveyors' area of work. Surveyors don't offer site development plan services. The portion of the application that should require a licensed and registered surveyor should be limited to the boundary survey, encumbrances, location and elevation of test holes, adjacent well locations, and location of water bodies. Essentially, a property as-built and boundary survey.

If KPB wants to require a professional to prepare the CLUP site development plan, then the ordinance should specify that a licensed Civil Engineer prepare the remainder of the required items.

The ordinance should require that site elevations (including those of test holes and groundwater) tie to a published datum or benchmark. Otherwise, each site may reference an assumed elevation and not a real-world elevation.

21.29.030.A.9(m) says 'field verification shall include staking the boundary of the parcel as sequentially visible intervals'. This conflicts with 21.29.050.A.1 which says 'stakes shall be in place prior to the issuance of the permit'. It is my recommendation that staking the parcel should be part of the field verification process otherwise prior to application.

21.29.050.A (Permit Conditions)

21.29.050.A.2. Buffer Zones. I caution the Assembly on continuing to increase buffer width requirements without granting the Applicant a means to extract the material that is under or within the buffer zone. Gravel is a commodity that is utilized by all and will continue to be so. By providing the mechanisms for a material site to responsibly extract as much gravel as possible from said site, there becomes less need for additional material sites.

21.29.050.A.6 Waterbodies. The US Army Corps of Engineers no longer has jurisdiction on wetlands that are not connected to Waters of the US. Waterbody setbacks should not apply to these isolated wetlands. These isolated wetlands are often ideal locations of peat mining and often have marketable sand or gravel beneath the peat.

Page 1 of 2



21.29.050.A.21 Groundwater Elevation. Recommend adding that the groundwater monitoring tube be installed when excavation is within 10' or such of the groundwater elevation. Many of the area material sites exceed 20' of usable material and installing a monitoring tube to this depth is a major undertaking. As an example, installing a 25' deep monitoring tube would require an excavation of approximately 2,500 SF hole to gain that depth utilizing traditional excavation equipment.

21.29.050.A.13. Other Permits. Alaska Department of Natural Resources (Division of Land and Water) should be added to this list.

21.29.060 Reclamation Plan. ADNR updated their requirements for Material Sales Reclamation Plans in June 2021. This should be reviewed in context to KPB's reclamation requirements. ADNR has set per-acre bond amount at \$750/acre. ADNR allows for an operator to post bond with another government agency as allowed by a cooperative management agreement between that agency and ADNR Division of Land and Water. Does the Borough have a cooperative management agreement with ADNR? Otherwise, there is the potential for material site operators to have to 'double-bond' for reclamation.

Please feel free to contact me if you have any questions or comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Gina DeBardelaben".

Gina DeBardelaben, P.E.
Vice President
McLane Consulting, Inc.

Introduced by:	Martin
Substitute Introduced:	03/14/06
O2006-01 (Long, Martin, Superman)	See Original Ord for Prior History
Hearing:	03/14/06
Action:	Substitute Introduced and Set for Public Hearings on 04/04/06 and 04/18/06
	Additional Hearing on 05/16/06
Action:	Postponed until 04/18/06
Action:	Time did not Allow for Action
Date:	05/02/06
Action:	Postponed until 05/16/06
Action:	Additional Hearing on 08/01/06
Date:	05/16/06
Action:	Postponed until 08/01/06
Action:	Enacted as Amended
Vote:	8 Yes, 0 No, 0 Absent, 1 Abstention

**KENAI PENINSULA BOROUGH
ORDINANCE 2006-01 (MARTIN) SUBSTITUTE**

**AN ORDINANCE REPEALING KPB CHAPTER 21.26 AND ENACTING KPB
CHAPTER 21.29, MATERIAL SITE PERMITS**

WHEREAS, Goal 6.5, Objective 1 of the 2005 Kenai Peninsula Borough Comprehensive Plan is to ensure that land use regulations adopted by the borough are necessary to control uses that affect public health and safety and address adverse impacts on the rights of adjacent property owners; and

WHEREAS, Goal 6.5, Objective 1, Implementation Action A, is to continue to periodically review and update existing regulations to reflect changing conditions and policies in the borough; and

WHEREAS, Goal 6.6 of the 2005 comprehensive plan is to reduce land use conflicts outside of the cities; and

WHEREAS, Goal 6.6, Objective 1, Implementation Action D, is to improve the land use regulations currently in existence including those related to material sites to minimize the impacts of erosion and flooding of neighboring properties and to minimize conflicts with surrounding land uses; and

WHEREAS, Goal 7.1, Objectives 1 and 2, of the 2005 comprehensive plan are to work with other agencies to protect public health and environment, to avoid duplications of other agencies' regulations, and to provide input to federal and state agencies on local conditions and opinions; and

WHEREAS, Goal 1 of the Mining and Minerals Processing section of the 1990 Kenai Peninsula Borough Coastal Management Program is to provide opportunities to explore, extract and process minerals, sand and gravel resources, while protecting environmental quality and other resource users; and

WHEREAS, a review of the material site ordinance was undertaken in 1998 after a citizen task force comprised of citizens and industry made recommendations; and

WHEREAS, the mayor sponsored Ordinance 98-33 after considering the task force recommendations and supplementing the same; and

WHEREAS, assembly members sponsored a substitute Ordinance 98-33 which was ultimately adopted in 1999; and

WHEREAS, the planning department has been administering Ordinance 98-33, codified as KPB 21.26 as amended, for six years; and

WHEREAS, KPB 21.25.040 requires a permit for the commencement of certain land uses within the rural district of the Kenai Peninsula Borough; and

WHEREAS, the planning department has recognized that certain provisions of the material site ordinance could be better clarified for the operators, public, and staff; and

WHEREAS, the planning department receives comments expressing concerns about dust, noise, and aesthetics which are minimally addressed by the current code; and

WHEREAS, there are parcels registered as nonconforming prior existing uses which have not been operated as material sites for a number of years; and

WHEREAS, certain additional conditions placed on material site permits would facilitate a reduction in the negative secondary impacts of material sites, e.g. dust, noise, and unsightliness; and

WHEREAS, an assembly subcommittee was formed in 2005 to review the material site code; and

WHEREAS, at its regularly scheduled meeting of July 17, 2006, the Planning Commission recommended enactment of the amended ordinance by unanimous consent.

NOW, THEREFORE, BE IT ORDAINED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH:

SECTION 1. KPB 21.26 Material Site Permits is hereby repealed and KPB 21.29, Material Site Permits, is adopted as follows:

CHAPTER 21.29. MATERIAL SITE PERMITS

21.29.010. Material extraction exempt from obtaining a permit.

- A. Material extraction which disturbs an area of less than one acre that is not in a mapped flood plain or subject to 21.29.010(B), does not enter the water table, and does not cross property boundaries, does not require a permit. There will be no excavation within 20 feet of a right-of-way or within 10 feet of a lot line.
- B. Material extraction taking place on dewatered bars within the confines of the Snow River and the streams within the Seward-Bear Creek Flood Service Area does not require a permit, however, operators subject to this exemption shall provide the planning department with the information required by KPB 21.29.030(A)(1), (2), (6), (7) and a current flood plain development permit prior to beginning operations.
- C. A prior existing use under KPB 21.29.120 does not require a permit.

21.29.020. Material extraction and activities requiring a permit.

- A. Counter permit. A counter permit is required for material extraction which disturbs no more than 2.5 cumulative acres and does not enter the water table. Counter permits are approved by the planning director, and are not subject to the notice requirements or planning commission approval of KPB 21.25.060. A counter permit is valid for a period of 12 months, with a possible 12-month extension.
- B. Conditional land use permit. A conditional land use permit (CLUP) is required for material extraction which disturbs more than 2.5 cumulative acres, or material extraction of any size that enters the water table. A CLUP is required for materials processing. A CLUP is valid for a period of five years. The provisions of KPB Chapter 21.25 are applicable to material site CLUPS and the provisions of KPB 21.25 and 21.29 are read in harmony. If there is a conflict between the provisions of KPB 21.25 and 21.29, the provisions of KPB 21.29 are controlling.

21.29.030. Application procedure.

- A. In order to obtain a counter permit or CLUP, an applicant shall first complete and submit to the borough planning department a permit application, along with the appropriate fee as established by resolution of the planning commission and approved by the borough assembly. The planning director may determine that certain contiguous parcels are eligible for a single permit. The application shall include the following items:

1. Legal description of the parcel, KPB tax parcel ID number, and identification of whether the permit is for the entire parcel, or a specific location within a parcel;
2. Expected life span of the material site;
3. A buffer plan consistent with KPB 21.29.050(A)(2);
4. Reclamation plan consistent with KPB 21.29.060;
5. The depth of excavation;
6. Type of material to be extracted and type of equipment to be used;
7. Any voluntary permit conditions the applicant proposes. Failure to include a proposed voluntary permit condition in the application does not preclude the applicant from proposing or agreeing to voluntary permit conditions at a later time;
8. A site plan and field verification prepared by a professional surveyor licensed and registered in the State of Alaska, including the following information:
 - a. location of excavation, and, if the site is to be developed in phases, the life span and expected reclamation date for each phase;
 - b. proposed buffers consistent with KPB 21.29.050(A)(2), or alternate buffer plan;
 - c. identification of all encumbrances, including, but not limited to easements;
 - d. points of ingress and egress. Driveway permits must be acquired from either the state or borough as appropriate prior to the issuance of the material site permit.
 - e. anticipated haul routes;
 - f. location and depth of test holes, and depth of groundwater, if encountered;
 - g. location of wells of adjacent property owners within 300 feet of the proposed parcel boundary;

- h. location of any water body on the parcel, including the location of any riparian wetland as determined by “Wetland Mapping and Classification of the Kenai Lowland, Alaska” maps created by the Kenai Watershed Forum;
 - i. surface water protection measures for adjacent properties, including the use of diversion channels, interception ditches, on-site collection ditches, sediment ponds and traps, and silt fence; provide designs for substantial structures; indicate which structures will remain as permanent features at the conclusion of operations, if any;
 - j. location of any processing areas on parcel, if applicable;
 - k. north arrow;
 - l. the scale to which the site plan is drawn;
 - m. preparer's name, date and seal;
 - n. field verification shall include staking the boundary of the parcel at sequentially visible intervals. The planning director may grant an exemption in writing to the staking requirements if the parcel boundaries are obvious.
- B. In order to aid the planning commission or planning director’s decision-making process, the planning director shall provide vicinity, aerial, land use, and ownership maps for each application and may include additional information.

21.29.040. Standards for sand, gravel or material sites.

- A. These material site regulations are intended to protect against aquifer disturbance, road damage, physical damage to adjacent properties, dust, noise, and visual impacts. Only the conditions set forth in KPB 21.29.050 may be imposed to meet these standards:
- 1. protects against the lowering of water sources serving other properties;
 - 2. protects against physical damage to other properties;
 - 3. minimizes off-site movement of dust;
 - 4. minimizes noise disturbance to other properties;

5. minimizes visual impacts; and
6. provides for alternate post-mining land uses.

21.29.050. Permit conditions.

- A. The following mandatory conditions apply to counter permits and CLUPs issued for sand, gravel or material sites:
 1. **Parcel Boundaries.** All boundaries of the subject parcel shall be staked at sequentially visible intervals where parcel boundaries are within 300 feet of the excavation perimeter. Field verification and staking will require the services of a professional land surveyor. Stakes shall be in place at time of application.
 2. **Buffer Zone.** A buffer zone shall be maintained around the excavation perimeter or parcel boundaries. Where an easement exists, a buffer shall not overlap the easement, unless otherwise conditioned by the planning director or planning commission.
 - a. The buffer zone shall provide and retain a basic buffer of:
 - i. 50 feet of undisturbed natural vegetation, or
 - ii. A minimum six-foot earthen berm with at least a 2:1 slope, or
 - iii. A minimum six-foot fence.
 - b. A 2:1 slope shall be maintained between the buffer zone and excavation floor on all inactive site walls. Material from the area designated for the 2:1 slope may be removed if suitable, stabilizing material is replaced within 30 days from the time of removal.
 - c. The planning commission or planning director shall designate one or a combination of the above as it deems appropriate. The vegetation and fence shall be of sufficient height and density to provide visual and noise screening of the proposed use as deemed appropriate by the planning commission or planning director.
 - d. Buffers shall not cause surface water diversion which negatively impacts adjacent properties or water bodies. Specific findings are required to alter the buffer requirements of KPB 21.29.050(A)(2)(a) in order to minimize negative impacts from surface water diversion. For purposes of this section, surface

water diversion is defined as erosion, flooding, dehydration or draining, or channeling. Not all surface water diversion results in a negative impact.

- e. At its discretion, the planning commission may waive buffer requirements where the topography of the property or the placement of natural barriers makes screening not feasible or not necessary. Buffer requirements shall be made in consideration of and in accordance with existing uses of adjacent property at the time of approval of the permit. There is no requirement to buffer the material site from uses which commence after the approval of the permit.
3. Processing. In the case of a CLUP, any equipment which conditions or processes material must be operated at least 300 feet from the parcel boundaries. At its discretion, the planning commission may waive the 300-foot processing distance requirement, or allow a lesser distance in consideration of and in accordance with existing uses of adjacent property at the time.
4. Water Source Separation.
- a. All permits shall be issued with a condition which prohibits any material extraction within 100 horizontal feet of any water source existing prior to original permit issuance.
 - b. All counter permits shall be issued with a condition which requires that a four-foot vertical separation from the seasonal high water table be maintained.
 - c. All CLUPS shall be issued with a condition which requires that a two-foot vertical separation from the seasonal high water table be maintained.
 - d. There shall be no dewatering either by pumping, ditching or some other form of draining unless an exemption is granted by the planning commission. The exemption for dewatering may be granted if the operator provides a statement under seal and supporting data from a duly licensed and qualified impartial civil engineer, that the dewatering will not lower any of the surrounding property's water systems and the contractor posts a bond for liability for potential accrued damages.

5. Excavation in the Water Table. Excavation in the water table greater than 300 horizontal feet of a water source may be permitted with the approval of the planning commission based on the following:
 - a. certification by a qualified independent civil engineer or professional hydrogeologist that the excavation plan will not negatively impact the quantity of an aquifer serving existing water sources.
 - b. the installation of a minimum of three water monitoring tubes or well casings as recommended by a qualified independent civil engineer or professional hydrogeologist adequate to determine flow direction, flow rate, and water elevation.
 - c. groundwater elevation, flow direction, and flow rate for the subject parcel, measured in three-month intervals by a qualified independent civil engineer or professional hydrogeologist, for at least one year prior to application. Monitoring tubes or wells must be kept in place, and measurements taken, for the duration of any excavation in the water table.
 - d. operations shall not breach an aquifer-confining layer.
6. Waterbodies.
 - a. An undisturbed buffer shall be left and no earth material extraction activities shall take place within 100 linear feet from a lake, river, stream, or other water body, including riparian wetlands and mapped floodplains as defined in KPB 21.06. This regulation shall not apply to man-made waterbodies being constructed during the course of the materials extraction activities. In order to prevent discharge, diversion, or capture of surface water, an additional setback from lakes, rivers, anadromous streams, and riparian wetlands may be required.
 - b. Counter permits and CLUPS may contain additional conditions addressing surface water diversion.
7. Fuel Storage. Fuel storage for containers larger than 50 gallons shall be contained in impermeable berms and basins capable of retaining 110 percent of storage capacity to minimize the potential for uncontained spills or leaks. Fuel storage containers 50 gallons or smaller shall not be placed directly on the ground, but shall be stored on a stable impermeable surface.

water diversion is defined as erosion, flooding, dehydration or draining, or channeling. Not all surface water diversion results in a negative impact.

- e. At its discretion, the planning commission may waive buffer requirements where the topography of the property or the placement of natural barriers makes screening not feasible or not necessary. Buffer requirements shall be made in consideration of and in accordance with existing uses of adjacent property at the time of approval of the permit. There is no requirement to buffer the material site from uses which commence after the approval of the permit.
- 3. Processing. In the case of a CLUP, any equipment which conditions or processes material must be operated at least 300 feet from the parcel boundaries. At its discretion, the planning commission may waive the 300-foot processing distance requirement, or allow a lesser distance in consideration of and in accordance with existing uses of adjacent property at the time.
 - 4. Water Source Separation.
 - a. All permits shall be issued with a condition which prohibits any material extraction within 100 horizontal feet of any water source existing prior to original permit issuance.
 - b. All counter permits shall be issued with a condition which requires that a four-foot vertical separation from the seasonal high water table be maintained.
 - c. All CLUPS shall be issued with a condition which requires that a two-foot vertical separation from the seasonal high water table be maintained.
 - d. There shall be no dewatering either by pumping, ditching or some other form of draining unless an exemption is granted by the planning commission. The exemption for dewatering may be granted if the operator provides a statement under seal and supporting data from a duly licensed and qualified impartial civil engineer, that the dewatering will not lower any of the surrounding property's water systems and the contractor posts a bond for liability for potential accrued damages.

5. Excavation in the Water Table. Excavation in the water table greater than 300 horizontal feet of a water source may be permitted with the approval of the planning commission based on the following:
 - a. certification by a qualified independent civil engineer or professional hydrogeologist that the excavation plan will not negatively impact the quantity of an aquifer serving existing water sources.
 - b. the installation of a minimum of three water monitoring tubes or well casings as recommended by a qualified independent civil engineer or professional hydrogeologist adequate to determine flow direction, flow rate, and water elevation.
 - c. groundwater elevation, flow direction, and flow rate for the subject parcel, measured in three-month intervals by a qualified independent civil engineer or professional hydrogeologist, for at least one year prior to application. Monitoring tubes or wells must be kept in place, and measurements taken, for the duration of any excavation in the water table.
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 - a. An undisturbed buffer shall be left and no earth material extraction activities shall take place within 100 linear feet from a lake, river, stream, or other water body, including riparian wetlands and mapped floodplains as defined in KPB 21.06. This regulation shall not apply to man-made waterbodies being constructed during the course of the materials extraction activities. In order to prevent discharge, diversion, or capture of surface water, an additional setback from lakes, rivers, anadromous streams, and riparian wetlands may be required.
 - b. Counter permits and CLUPS may contain additional conditions addressing surface water diversion.
7. Fuel Storage. Fuel storage for containers larger than 50 gallons shall be contained in impermeable berms and basins capable of retaining 110 percent of storage capacity to minimize the potential for uncontained spills or leaks. Fuel storage containers 50 gallons or smaller shall not be placed directly on the ground, but shall be stored on a stable impermeable surface.

8. Roads. Operations shall be conducted in a manner so as not to damage borough roads as required by KPB 14.40.175 and will be subject to the remedies set forth in KPB 14.40 for violation of this condition.
9. Subdivision. Any further subdivision or return to acreage of a parcel subject to a conditional land use or counter permit requires the permittee to amend their permit. The planning director may issue a written exemption from the amendment requirement if it is determined that the subdivision is consistent with the use of the parcel as a material site and all original permit conditions can be met.
10. Dust control. Dust suppression is required on haul roads within the boundaries of the material site by application of water or calcium chloride.
11. Hours of Operation. Rock crushing equipment shall not be operated between 10 p.m. and 6 a.m.
12. Reclamation.
 - a. Reclamation shall be consistent with the reclamation plan approved by the planning commission or planning director as appropriate in accord with KPB 21.29.060.
 - b. As a condition of issuing the permit, the applicant shall submit a reclamation plan and post a bond to cover the anticipated reclamation costs in an amount to be determined by the planning director. This bonding requirement shall not apply to sand, gravel or material sites for which an exemption from state bond requirements for small operations is applicable pursuant to AS 27.19.050.
13. Other permits. Permittee is responsible for complying with all other federal, state and local laws applicable to the material site operation, and abiding by related permits. These laws and permits include, but are not limited to, the borough's flood plain, coastal zone, and habitat protection regulations, those state laws applicable to material sites individually, reclamation, storm water pollution and other applicable Environmental Protection Agency (EPA) regulations, clean water act and any other U.S. Army Corp of Engineer permits, any EPA air quality regulations, EPA and ADEC water quality regulations, EPA hazardous material regulations, U.S. Dept. of Labor Mine Safety and Health Administration (MSHA) regulations (including but not limited to noise and safety standards), and Federal Bureau of Alcohol, Tobacco and Firearm regulations regarding using and storing explosives. Any violation of these regulations or permits

reported to or observed by borough personnel will be forwarded to the appropriate agency for enforcement.

14. Voluntary permit conditions. Conditions may be included in the permit upon agreement of the permittee and approval of the planning commission for CLUPs or the planning director for counter permits. Such conditions must be consistent with the standards set forth in KPB 21.29.040(A). Planning commission approval of such conditions shall be contingent upon a finding that the conditions will be in the best interest of the borough and the surrounding property owners. Voluntary permit conditions apply to the subject parcel and operation, regardless of a change in ownership. A change in voluntary permit conditions may be proposed at permit renewal or amendment.
15. Signage. For permitted parcels on which the permittee does not intend to begin operations for at least 12 months after being granted a conditional land use permit, the permittee shall post notice of intent on parcel corners or access, whichever is more visible. Sign dimensions shall be no more than 15" by 15" and must contain the following information: the phrase "Permitted Material Site" along with the permittee's business name and a contact phone number.

21.29.060. Reclamation plan.

- A. All material site permit applications require a reclamation plan.
- B. The applicant shall revegetate with a non-invasive plant species and reclaim all disturbed land upon exhausting the material on-site, or within a pre-determined time period for long-term activities, so as to leave the land in a stable condition. Reclamation must occur for all exhausted areas of the site exceeding five acres before a five-year renewal permit is issued, unless otherwise required by the planning commission. If the material site is one acre or less in size and has been granted a CLUP due to excavation in the water table, reclamation must be performed as specified by the planning commission or planning director in the conditional use or counter permit.
- C. The following measures must be considered in preparing and implementing the reclamation plan, although not all will be applicable to every reclamation plan.
 1. Topsoil that is not promptly redistributed to an area being reclaimed will be separated and stockpiled for future use. This material will be protected from erosion and contamination by acidic or toxic materials and preserved in a condition suitable for later use.

2. The area will be backfilled, graded and recontoured using strippings, overburden, and topsoil to a condition that allows for the reestablishment of renewable resources on the site within a reasonable period of time. It will be stabilized to a condition that will allow sufficient moisture for revegetation.
 3. Sufficient quantities of stockpiled or imported topsoil will be spread over the reclaimed area to a depth of four inches to promote natural plant growth that can reasonably be expected to revegetate the area within five years. The applicant may use the existing natural organic blanket representative of the project area if the soil is found to have an organic content of 5% or more and meets the specification of Class B topsoil requirements as set by Alaska Test Method (ATM) T-6. The material shall be reasonably free from roots, clods, sticks, and branches greater than 3 inches in diameter. Areas having slopes greater than 2:1 require special consideration and design for stabilization by a licensed engineer.
 4. Exploration trenches or pits will be backfilled. Brush piles and unwanted vegetation shall be removed from the site, buried or burned. Topsoil and other organics will be spread on the backfilled surface to inhibit erosion and promote natural revegetation.
 5. Peat and topsoil mine operations shall ensure a minimum of two inches of suitable growing medium is left or replaced on the site upon completion of the reclamation activity (unless otherwise authorized).
 6. Ponding may be used as a reclamation method as approved by the planning commission.
- D. The plan shall describe the total acreage to be reclaimed each year, a list of equipment (type and quantity) to be used in reclamation, and a time schedule of reclamation measures.

21.29.070. Permit extension and revocation.

- A. Conditional land use permittees must submit a request in writing for permit extension every five years after the permit is issued. Requests for permit extension must be made at least 30 days prior to permit expiration. Counter permittees must submit any request for a 12-month extension at least 30 days prior to the expiration of the original 12-month permit period.
- B. A permit extension certificate for a CLUP may be granted by the planning director after 5 years, and after one year for a counter permit where no modification to operations or conditions are proposed.

- C. Permit extension may be denied if: (1) reclamation required by this chapter and the original permit has not been performed; (2) the permittee is otherwise in noncompliance with the original permit conditions; or (3) the permittee has had a permit violation in the last two years and has not fulfilled compliance requests.
- D. A modification application shall be processed pursuant to KPB 21.29.030-050 with public notice given as provided by KPB 21.25.060 when operators request modification of their permit conditions based on changes in operations set forth in the modification application.
- E. There shall be no fee for permit extensions approved by the planning director. The fee for a permit modification processed under KPB 21.29.070(D) will be the same as an original permit application.
- F. Failure to submit a request for extension will result in the expiration of the permit. The borough may issue a permit termination document upon expiration pursuant to KPB 21.29.080. Once a permit has expired, a new permit application approval process is required in order to operate the material site.
- G. Permits may be revoked pursuant to KPB 21.25.080.

21.29.080. Permit termination.

When a permit expires, is revoked, or a permittee requests termination of their permit, a review of permit conditions and site inspections will be conducted by the planning department to ensure code compliance and verify site reclamation prior to termination. When the planning director determines that a site qualifies for termination, a termination document shall be issued to the permittee.

21.29.090. Permit modifications.

If a permittee revises or intends to revise operations (at a time other than permit extension) so that they are no longer consistent with the original application, a permit modification is required. The planning director shall determine whether the revision to operations requires a modification. Permit modification shall be processed in the same manner as original permits.

21.29.100. Recordation.

All permits, permit extensions, modified permits, prior existing uses, and terminations shall be recorded. Failure to record a material site document does not affect the validity of the documents.

21.29.110. Violations.

- A. Violations of this chapter shall be governed by KPB 21.24.
- B. In addition to the remedies provided in KPB 21.24, the planning director may require bonding in a form and amount adequate to protect the borough's interests for an owner or operator who has been cited for three violations of KPB 21.24, 21.25, and 21.29 within a three-year period. The violations need not be committed at the same material site. Failure to provide requested bonding may result in permit revocation proceedings.

21.29.120. Prior existing uses.

- A. Material sites are not held to the standards and conditions of a CLUP if a prior existing use (PEU) determination was granted for the parcel in accordance with KPB 21.29.120(B). To qualify as a PEU, a parcel's use as a material site must have commenced or have been operated after May 21, 1986, and prior to May 21, 1996, provided that the subject use continues in the same location. In no event shall a prior existing use be expanded beyond the smaller of the lot, block, or tract lines as they existed on May 21, 1996. If a parcel is further subdivided after May 21, 1996, the pre-existing use may not be expanded to any lot, tract, or parcel where extraction had not occurred before or on February 16, 1999. If a parcel is subdivided where extraction has already occurred, the prior existing use is considered abandoned, and a CLUP must be obtained for each parcel intended for further material site operations. The parcel owner may overcome this presumption of abandonment by showing that the subdivision is not inconsistent with material site operation. If a parcel subject to a prior existing use is conveyed, the prior existing use survives the conveyance.
- B. Owners of sites must have applied to be registered as a prior existing use prior to January 1, 2001.
- C. Any prior existing use that has not operated as a material site between May 21, 1996, and May 21, 2011, is considered abandoned and must thereafter comply with the permit requirements of this chapter. The planning director shall determine whether a prior existing use has been abandoned. After giving notice to the parcel owner that a PEU is considered abandoned, a parcel owner may protest the termination of the PEU by filing written notice with the planning director on a form provided by the planning department. When a protest by a parcel owner is filed, notice and an opportunity to make written comments regarding prior existing use status shall be issued to owners of property within a one-half mile radius of the parcel boundaries of the site. The owner of the parcel subject to the prior existing use may submit written information, and the planning director may gather and consider any information relevant to whether a material site has operated. The planning director may conduct a hearing if he or she

believes it would assist the decision-making process. The planning director shall issue a written determination which shall be distributed to all persons making written comments. The planning director's decision regarding termination of the prior existing use status may be appealed to the planning commission within 15 days of the date of the notice of decision.

SECTION 2. That KPB 21.24.030(C) is hereby amended as follows:

- C. Fine Schedule. The following fines are the scheduled fines for violations. The scheduled fine for an offense may not be judicially reduced.

<i>Code Chapter Section Citation</i>	<i>Chapter / Section Title</i>	<i>Scheduled Fine</i>
KPB 21.06.040	Failure to obtain a development permit	\$75.00
KPB 21.09.060	Violation of nonconforming use/structure provisions	\$50.00
KPB 21.09.070	Prohibited use	\$100.00
KPB 21.09.080	Violation of development standards	\$50.00
KPB 21.09.090(A)	Violation of home occupation standards	\$100.00
KPB 21.09.090(B)	Sign size violation	\$50.00
KPB 21.09.090(C)	Prohibited home occupations	\$100.00
KPB 21.14.030	Failure to obtain a mobile home park permit	\$75.00
KPB 21.18.050(A)	Failure to obtain fuel storage/logging permit	\$75.00
KPB 21.18.060	Prohibited activity in habitat protection area	\$100.00
KPB 21.18.072	Failure to obtain commercial activity permit	\$75.00
KPB 21.18.080	Failure to obtain a conditional use permit	\$75.00
KPB 21.18.090(D)	Failure to obtain expansion/enlargement conditional use permit	\$100.00
KPB 21.24.050	Violation of or removal of an enforcement order	\$100.00
KPB 21.25.040	Failure to obtain land use permit	[\$75.00] <u>\$300.00</u>
<u>KPB 21.29.050</u>	<u>Violation of conditions</u>	<u>\$300.00</u>
KPB 21.42.060	Violation of nonconforming use/structure provisions	[\$75.00] <u>\$300.00</u>
KPB 21.42.090	Prohibited use	\$100.00
KPB 21.42.100	Violation of development standards	\$50.00
KPB 21.42.110(D)	Failure to obtain a home occupation permit	\$75.00
KPB 21.44.110	Violation of nonconforming use standards	\$75.00
KPB 21.44.130	Failure to obtain a home occupation permit	\$75.00
KPB 21.44.160(A)(B)	Prohibited use	\$100.00
KPB 21.44.160(C)	Violation of development standards	\$50.00
KPB 21.44.170(A)(B)	Prohibited use	\$100.00
KPB 21.44.170(C)	Violation of development standards	\$50.00
KPB 21.44.180(A)(B)	Prohibited use	\$100.00
KPB 21.44.180(C)	Violation of development standards	\$50.00
KPB 21.44.190(A)(B)	Prohibited use	\$100.00
KPB 21.44.190(C)	Violation of development standards	\$50.00

KPB 21.44.200(A)	Prohibited use	\$100.00
KPB 21.44.200(B)	Violation of development standards	\$50.00
KPB 21.44.210(B)(C)	Prohibited use	\$100.00
KPB 21.44.210(D)	Violation of development standards	\$50.00

SECTION 3. That KPB 21.24.070 is hereby amended as follows:

21.24.070. Civil fine.

The Borough code compliance officer may assess a [\$100.00] \$300.00 civil fine for each violation of this chapter. Notice of a fine shall be served personally or by certified mail on the property owner, lessee, operator, or occupant of the parcel upon which the violation occurs. The fine may be appealed to the Planning Commission pursuant to the terms of KPB 21.20. Each day a violation occurs is a separate violation. Citations for fines may be included in an enforcement order. Appeals from the planning commission's determination shall not be taken to the board of adjustment, but shall proceed to the superior court pursuant to the Alaska Rules of Appellate Procedure, Part 6.

SECTION 4. KPB 21.25.030, Definitions, is amended to add the following definitions in alphabetical order:

Abandon means to cease or discontinue a use without intent to resume, but excluding short-term interruptions to use or activity during periods of remodeling, maintaining, or otherwise improving or rearranging a facility or during normal periods of vacation or seasonal closure. An "intent to resume" can be shown through continuous operation of a portion of the facility, maintenance of utilities, or outside proof of continuance, e.g., bills of lading or delivery records. Abandonment also means the cessation of use, regardless of voluntariness, for a specified period of time.

Commercial means any [USE] provision of services, sale of goods, or use operated for production of income whether or not income is derived, including sales, barter, rental, or trade of goods and services[, AND INCLUDING ALL ACTIVITIES DIRECTLY SUBSIDIARY].

Conditioning or processing material means a value-added process including batch plants, asphalt plants, screening, washing, and crushing by use of machinery.

Groundwater means, in the broadest sense, all subsurface water, more commonly that part of the subsurface water in the saturated zone.

[ON-SITE USE MEANS MATERIAL USED ENTIRELY WITHIN THE BOUNDARIES OF THE PARCEL IT WAS EXTRACTED FROM, OR WHEN

DEVELOPMENT OF THE PARCEL REQUIRES DISPOSAL OF THE MATERIAL OFF-SITE THROUGH BARTERING.]

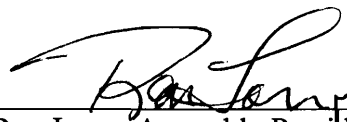
Surface Water means water on the earth's surface exposed to the atmosphere such as rivers, lakes, and creeks.

Topsoil means material suitable for vegetative growth.

Waterbody means any lake, pond, stream, riparian wetland, or groundwater into which stormwater runoff is directed.

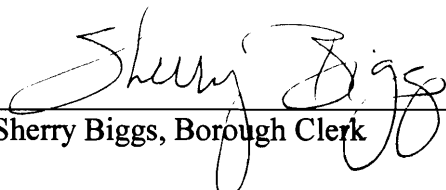
SECTION 5. That this ordinance shall take effect immediately upon its enactment.

ENACTED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH THIS 1ST DAY OF AUGUST, 2006.

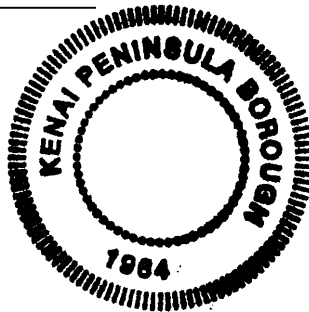


Ron Long, Assembly President

ATTEST:



Sherry Biggs, Borough Clerk



Yes: Chay, Fischer, Germano, Gilman, Martin, Sprague, Superman, Long
No: None
Absent: None
Abstained: Merkes

Introduced by:	Mayor
Substitute Introduced:	01/16/18
Resolution 2018-004 (Mayor)	See Original for Prior History
Action:	Adopted
Vote:	8 Yes, 0 No, 1 Absent

**KENAI PENINSULA BOROUGH
RESOLUTION 2018-004
(MAYOR) SUBSTITUTE**

A RESOLUTION ESTABLISHING A MATERIAL SITE WORK GROUP

WHEREAS, KPB 21.25.040(A)(2) requires a permit for the commencement of commercial sand, gravel or material sites within the rural district of the Kenai Peninsula Borough; and

WHEREAS, KPB 21.29 provides for a permit process to extract material from the ground; and

WHEREAS, with the exception of one minor change relating to floodplain permits, the material site code was last updated in 2006; and

WHEREAS, the assembly, administration, planning department and the planning commission have recognized that certain provisions of the material site ordinance can be clarified for the operators, public, and staff; and;

WHEREAS, the public has expressed many concerns about dust, noise, water, and negative secondary impacts of material sites; and

WHEREAS, it is the intent of the assembly and administration to involve the public and industry in a collaborative discussion designed to incorporate possible changes to the material site code;

NOW, THEREFORE, BE IT RESOLVED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH:

SECTION 1. That a work group is established for the purpose of examining the current material site permit process and potentially recommending amendments to the material site code provisions.

SECTION 2. That the work group shall consist of at least two assembly members; two planning commissioners; two members of the public; and, two material site industry members. The group shall elect from among its members a chair and a vice-chair who may serve in the absence of the chair. The two members of the assembly shall be appointed by the assembly. The remaining members shall be appointed by the mayor.

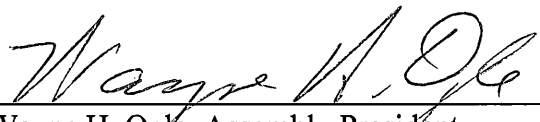
SECTION 3. That each meeting time and place shall be advertised, open to the public and subject to the Open Meetings Act.

SECTION 4. The material site work group shall have no authority to act on behalf of the assembly or the administration or communicate on the borough's behalf other than to make recommendations to the planning commission, administration and assembly.


SECTION 5. The work group shall provide a final report to the planning commission, administration and assembly by June 5, 2018, and then discontinue unless extended by the assembly.

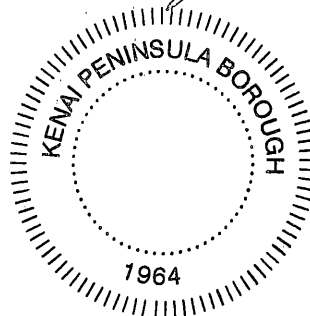
SECTION 6. That this resolution shall take effect immediately upon its adoption.

ADOPTED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH THIS 16TH DAY OF JANUARY, 2018.


Wayne H. Ogle, Assembly President

ATTEST:


John Blankenship, MMC, Borough Clerk



Yes: Bagley, Blakeley, Carpenter, Dunne, Fischer, Hibbert, Smalley, Ogle

No: None

Absent: Cooper

Introduced by:	Ogle
Date:	05/15/18
Action:	Adopted as Amended
Vote:	9 Yes, 0 No, 0 Absent

**KENAI PENINSULA BOROUGH
RESOLUTION 2018-025**

**A RESOLUTION EXTENDING THE DEADLINE FOR SUBMISSION OF THE
MATERIAL SITE WORKING GROUP'S FINAL REPORT**

WHEREAS, a material site working group ("MSWG") was formed by Resolution 2018-004 on January 16, 2018; and

WHEREAS, a final report is due to the administration, planning commission and assembly by June 5, 2018; and

WHEREAS, the MSWG needs additional time to consider proposed revisions to the material site code, explore additional revisions, and hear and consider public testimony regarding the same; and

WHEREAS, the summer months are the most active for material site operators who may not have time to be involved in the public process during that time frame; and

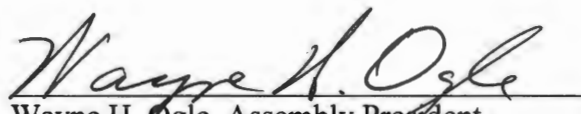
WHEREAS, the planning commission considered this resolution at its May 14, 2018 meeting and recommended approval by majority consent;

NOW, THEREFORE, BE IT RESOLVED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH:

SECTION 1. The deadline for the final report of the MSWG is extended to April 30, 2019. Meetings of the MSWG are suspended from June 1, 2018 through September 30, 2018.

SECTION 2. That this resolution takes effect immediately upon its adoption.

**ADOPTED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH THIS
15TH DAY OF MAY, 2018.**


Wayne H. Ogle, Assembly President

ATTEST:


John Blankenship, MMC, Borough Clerk



Yes: Bagley, Blakeley, Carpenter, Cooper, Dunne, Fischer, Hibbert, Smalley, Ogle
No: None
Absent: None

Kenai Peninsula Borough Assembly

MEMORANDUM

TO: Brent Johnson, Assembly President
Members, Kenai Peninsula Borough Assembly

FROM: Bill Elam, Assembly Member *BE*

DATE: January 18, 2022

SUBJECT: Elam Amendment #1 to Ordinance 2021-41, Amending KPB 21.29, KPB 21.25, and KPB 21.50.055 Regarding Material Site Permits, Applications, Conditions, and Procedures (Johnson, Mayor)

[Please note the bold underlined language is new and the strikeout bold language in brackets is to be deleted.]

➤ Amend Section 3, KPB 21.29.030(A)(9)(h), as follows:

21.29.030. Application procedure.

...

- h. Location of any water body on the parcel, including the location of any riparian wetland as determined by **best available data** [~~**"WETLAND MAPPING AND CLASSIFICATION OF THE KENAI LOWLAND, ALASKA" MAPS CREATED BY THE KENAI WATERSHED FORUM**~~];

Your consideration of this amendment is appreciated.