MEMORANDUM

CITY/BOROUGH OF JUNEAU

155 South Seward Street, Juneau, Alaska 99801

DATE:

December 6, 2012

TO:

Planning Commission

FROM:

Teri Camery, Senior Planner

Community Development Department

FILE NO.:

USE2012 0019

PROPOSAL:

A Conditional Use Permit to extract 240,000 cubic yards of gravel from the Lemon Creek streambed over a 6 year period

GENERAL INFORMATION

Applicant and Property Owner:

Colaska Inc (SECON)

Property Address:

Lemon Creek Streambed, No Access

Legal Description:

Mendota Park Parcel 2

Parcel Code Number:

5-B12-0-131-004-1

Site Size:

9.55 Acres

Zoning:

Rural Reserve and Industrial

Utilities:

CBJ water and sewer available; not needed on-site at

streambed

Access:

Anka Street

Existing Land Use:

Vacant Lemon Creek Streambed

Comprehensive Plan

Land Use Designation:

Heavy Commercial/Light Industrial

Surrounding Land Use:

North

Davis Avenue D-15 Residential

South

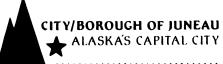
Anka Street; Industrial

East

Lemon Creek; CBJ Gravel Pit; Industrial

West

Lemon Creek; Rural Reserve



ATTACHMENTS

Attachment 1	Staff email message to applicant, 11/28/12
Attachment 2	Applicant response, 12/4/12
Attachment 3	USFWS/applicant correspondence, 12/4/12
Attachment 4	USFWS comments with Lemon Creek discharge information 12/4/12
Attachment 5	Aerial image with property lines
Attachment 6	CBJ Engineering comment, 12/5/12
Attachment 7	Juneau Police Department comment, 11/30/12
Attachment 8	Dau comment, 12/4/12

BACKGROUND

The Planning Commission reviewed the proposed development at the November 27, 2012 Planning Commission meeting. Due to concerns raised by adjacent residents regarding excessive noise, vibration, and property damage, the Planning Commission continued the hearing to the December 11, 2012 meeting with a request for more information from staff and the applicant Commissioners specifically requested answers to the following questions:

- 1) How was the original timing window developed with the Alaska Department of Fish and Game permit? Is there an option to change that timing window?
- 2) What time of year was SECON operating?
- 3) What kind of equipment has SECON been using? Is there equipment available that could have a lower impact?
- 4) Would a gravel extraction exclusion zone near the Rivers Edge Condominiums be possible, and would it reduce impacts to acceptable levels?

In response to these issues and other concerns raised at the hearing, staff asked the applicant to respond to additional questions as follows:

- 1) How will SECON address current and future complaints from the neighbors?
- 2) What are SECON's specific condition requirements to be able to mine? What is the full range of potential operating dates? Is there a minimum ice requirement in the creek to support the equipment?
- 3) Would SECON be amenable to a further reduction in operating hours on Saturdays?
- 4) Would SECON be amenable to a further reduction in the total number of days per season of operation?
- 5) Would SECON be willing to conduct seismic monitoring for the duration of the operation?

Discussion at the hearing also indicated that some of the conditions proposed by staff in the 11/21/12 staff report needed minor revisions, as follows:

1) Condition #18 is revised to state, "The permit shall expire after six years or extraction of 210,000 cubic yards of gravel, whichever comes first." (changed from 240,000 cubic yards)

- 2) Condition #3 is revised to delete "by November 1," and simply state, "one month before the commencement of the mining season the applicant shall..."
- 3) Condition #26 is revised to state "during the **operation**"
- 4) Condition #15 regarding the timing window is revised to refer to the Alaska Department of Fish and Game instead of DNR-Habitat.

This memo will address only the issues of concern raised at the 11/27/12 hearing and additional public comments. Unless specifically revised, the remainder of the analysis, findings, and recommendation in the original 11/21/12 staff report carries forward with this review.

ANALYSIS

Timing window, operational requirements, and equipment

Staff's current recommendation for the operational timing window is listed in Condition #15 from the 11/21/12 staff analysis, as follows:

Gravel operation shall take place between December 1 and March 15. No in-water work shall be allowed between March 16 and November 30 with the following exception: Instream work to connect the excavated sections of the creek shall be allowed for one 7-day period between May 15 and June 15. The applicant shall provide notice to CBJ Engineering and the Alaska Department of Fish and Game [corrected to replace DNR-Habitat] before work commences."

This recommendation follows the ADFG permit listed in Attachment 14 of the 11/21/12 staff report. Planning Commissioners have requested information about whether this timing window may be extended earlier or later to allow the applicant to operate in conditions with less ice, which would reduce noise and vibration impacts to adjacent neighbors.

In response to these questions, the applicant provided the following information. SECON has excavated in the stream only in the months of January and February in the three seasons of operation. The operation utilizes a 750 Hitachi or 700 Volvo Excavator, a D9 Dozer, a 20 CY truck, and a 10 CY truck. The applicant states that the excavator "is one of the quietest" because it does not use a back-up alarm to load trucks like a loader does. The excavator is the only equipment that can excavate from a flooded extraction zone and load trucks at the same time. (12/6/12 Attachment 2)

The applicant reports that the ground must be frozen to a minimum depth of 4-6 inches to protect equipment from getting stuck, because in some areas the fill is loose, silty sand. The operation also requires low water conditions. The applicant further explained that when the ground is frozen beyond 2 to 2.5 feet in depth, extracting the gravel becomes impracticable due to wear and tear on equipment and emphasized that, "SECON is not going to extract gravels in extreme conditions."

With these considerations, the applicant reported a range of potential operating dates from

November to May. However this time range does not appear to meet the applicant's requirements for ice cover or for low water conditions, which will be addressed later in this section.

CDD staff spoke with Jackie Timothy, Southeast Regional Supervisor with the Alaska Department of Fish and Game, on November 30, 2012. Ms. Timothy explained that the ADF&G permit establishes timing windows based on salmon spawning and salmonid migration in the area. She indicated that ADF&G might have some flexibility with the timing window, but this would require a formal permit modification that other agencies might oppose.

The current ADF&G Permit (then filed under DNR-OHMP) was issued on August 2, 2007 and expires on August 1, 2013. (11/21/12 staff report Attachment 14) The permit states that Dolly Varden char may be found in the area year-round. Chum fry and coho smolts migrate downstream from March through May. Adult chum and coho migrate to spawn from mid-July through early November. The permit specifically notes that "the best chum spawning habitat in Lemon Creek occurs in the reach of stream proposed for mining." Page 3 of the permit states that March 15 through May 15 is "the sensitive chum salmon hatching and outmigration period." ADF&G's timing requirement for gravel extraction of December 1 through March 15 exactly correlates with this information.

Staff also spoke with Neil Stichert, Habitat Restoration Biologist with the U.S. Fish and Wildlife Service (USFWS). Mr. Stichert provided a 1984 photograph of the creek in flood (included with the applicant's response, 12/6/12 Attachment 2), but noted there was no overbank flow. To his knowledge there has not been any overbank flow for 30 years.

Mr. Stichert stated in written comments that the rationale behind the timing window was to:

- 1) minimize impacts to eggs and fry by only excavating dry, exposed gravel bars at low flow periods of the year (December through February);
- 2) prohibit activities during juvenile emergence and emigration (March through May); and
- 3) avoid having the operation during periods of the year with high flow risks to the BMPs in place during the excavation itself. (12/6/12 Attachment 4).

Mr. Stichert provided monthly discharge rates for the creek from 1951 through most of 2011. These records consistently indicate that the months of December through March have the lowest flows. The month of November has greater flow variability, but is still much higher than December. Similarly, the month of April is variable but still much higher than March in all years except for 1968.

In conclusion, the proposed timing window established by ADF&G, supported by USFWS, and recommended by staff as condition #15 appears to be necessary for several reasons. The timing window protects adult salmon spawning and juvenile salmonids by prohibiting activity during spawning and migration periods. It allows activity only during low flow conditions, which ensures preservation of viable salmon eggs, and also ensures protection of water quality by ensuring successful implementation of Best Management Practices. This timing window also correlates with the needs of the applicant for low flow periods to protect equipment from flood

damage, and for an ice layer of 4-6 inches to allow equipment to traverse the area.

Because the timing window appears to be necessary for habitat protection, the project would need additional review by the Wetlands Review Board and other resource agencies, along with a new analysis of CBJ habitat regulations, if this window was changed.

Mining exclusion zone, seismic monitoring, and response to neighbor concerns

CDD staff asked the applicant whether a gravel extraction exclusion zone near the Rivers Edge Condominiums would be a possibility and if so, what boundary would be acceptable. The applicant reported that this restriction would not be acceptable, because it could make entire gravel bars inaccessible to gravel extraction. (12/6/12 Attachment Two, p. 2)

Attachment Five of this report shows property lines in this area super-imposed over an aerial image. The imagery is outdated and the property lines are not guaranteed to be accurate. Nor is the gravel bar configuration current. Nonetheless, this reference provides information regarding the actual distance of the operation from the condominiums. The condominiums have a 50-foot setback from Lemon Creek as required by CBJ Code, and the condominium property line appears to extend approximately 50 feet into the creek in most places. Under the proposed staff recommendation, the applicant may not mine closer than 10 feet to a property line. Based on these estimates, the applicant would not be mining closer than 110 feet from the condominiums.

CDD staff asked CBJ Engineering to recommend a specific buffer width to protect the condominiums from potential damage from vibration, and also requested a specific seismic threshold at which extraction should be prohibited. In direct discussion and email correspondence, CBJ Engineering indicated that that developing such recommendations is outside the purview of the department. Engineering also indicated, however, that industry standards are available which provide exact monitoring protocols and acceptable seismic levels, and that it is the applicant's responsibility to address the issue. CBJ Engineering provided some background information for guidance, but still indicated that the information is too general to provide a clear recommendation. (12/6/12 Attachment 6)

The applicant has indicated a willingness to conduct seismic monitoring with the equipment that SECON uses for blasting. (12/6/12 Attachment p. 3) However a clear threshold needs to be established to ensure that seismic levels do not lead to property damage. Staff recommends the following conditions, supported by CBJ Engineering, to address these issues:

- 1) Prior to the issuance of a grading permit, the applicant shall provide a vibration control plan that includes the maximum safe threshold for seismic activity at the nearest adjacent residential structure to the operation, as established by a licensed engineer.
- 2) During extraction activity, the site shall be monitored by the applicant for seismic activity at the nearest adjacent residential property, or at a location agreed upon by the project engineer and adjacent property owners, during each day of operation.

- 3) The applicant shall submit seismic activity reports at the end of each month of mining activity to the CBJ Engineering Department.
- If seismic activity exceeds the threshold established in Condition #1, the applicant shall cease operations and notify the CBJ Engineering Department and CBJ Community Development. The applicant shall not continue with operations until alternative methods that do not exceed the threshold have been identified by the applicant and approved by CBJ Engineering.

This is in accordance with CBJ Sand and Gravel Section 49.65.230(5 and 10) regarding measures to protect private and public property adjoining the operation. CBJ Engineering also recommends, but will not require, that the applicant arrange for a pre- and post-excavation survey of potentially affected structures, completed by a licensed engineer who has experience in rock excavation, foundation design, building design and construction.

At this writing, the applicant is still reviewing and considering these conditions. In a phone conversation, the applicant reiterated that SECON is willing to conduct seismic monitoring, but stated that there are many variables involved with developing an exact threshold. Furthermore, it may not be possible to find a local professional with adequate expertise to determine the threshold and an appropriate monitoring protocol. CDD staff expects further correspondence on this topic before the hearing date, and expects additional discussion during the hearing. Staff has also encouraged the applicant to develop other measures to reduce neighborhood impacts, and to provide specifics regarding SECON's statement that gravel extraction will not occur in extreme conditions.

Lastly, the applicant provided SECON's business phone number to respond to neighbor concerns, as noted in Attachment 2, p. 2.

Potential reductions in operations

Staff asked the applicant if a further reduction in the hours of operation or the total number of days of operation was possible. The applicant responded that "operating less than 8 hours per day becomes economically and productively questionable." Similarly, reducing the total number of operating days to less than 40 would prohibit SECON from extracting 35,000 cubic yards per year as currently recommended.

PUBLIC COMMENT

Staff received a comment from the Juneau Police Department stating that JPD receives many complaints regarding road hazards from the gravel operation, and that the activity creates icy conditions. JPD requested project conditions to address the problem. (12/6/12 Attachment 7) This concern was also expressed by CBJ Streets, DOT, CBJ Engineering, and residents in the previous 11/12/12 staff report. The previous report provides a complete analysis of the issue with recommended conditions.

Staff also received a comment letter from adjacent owners from the River's Edge Condominiums. (12/6/12 Attachment 8) The residents note that Lemon Creek has not been known to flood and dispute the value of the gravel operation for flood control. The residents also note that this residential area, despite being adjacent to an industrial zone, is quiet and beautiful and therefore the extraction is extremely disruptive.

"The constant vibration of engines, movement of heavy equipment and the ongoing concussion of excavators, hydraulic rams, and rippers tearing through layers of frozen rock, and a steady flow of dump trucks rumbling in and out of the river is beyond nerve wracking. From 7 in the morning to well past the dinner hour, the earth literally moves."

The residents are concerned about impacts to property value, and do not believe that using a seismograph would adequately address the problem. They suggested that impacts might be reduced by digging from a platform, digging when the creek is not frozen, or by conducting mining operations farther up in Hidden Valley where the deposits originate.

There are no easy solutions to the concerns raised by adjacent residents. As described earlier in this updated report, adjusting the timing window to allow extraction in ice-free conditions does not appear to be a viable option because of habitat concerns, ground support for equipment, and flooding. Further reducing hours of operation or the total number of days of operation does not appear to be an option either. Staff has recommended additional conditions to protect adjacent properties from excessive vibration and property damage. This brings the total number of recommended conditions on this project to 36. If the Commission determines that these conditions have not adequately addressed impacts from the operation, the Planning Commission may wish to request further information and continue the item, or consider denial of the project.

REVISED FINDINGS

CBJ §49.15.330 (e)(1), Review of Director's Determinations, states that the Planning Commission shall review the Director's report to consider:

- 1. Whether the application is complete;
- 2. Whether the proposed use is appropriate according to the Table of Permissible Uses; and,
- 3. Whether the development as proposed will comply with the other requirements of this chapter.

The Commission shall adopt the Director's determination on the three items above unless it finds, by a preponderance of the evidence, that the Director's determination was in error, and states its reasoning for each finding with particularity.

CBJ §49.15.330 (f), Commission Determinations, states that even if the Commission adopts the Director's determination, it may nonetheless deny or condition the permit if it concludes, based upon its own independent review of the information submitted at the public hearing, that the development will more probably than not:

- 1. Materially endanger the public health or safety;
- 2. Substantially decrease the value of or be out of harmony with property in the neighboring area;

or,

3. Not be in general conformity with the comprehensive plan, thoroughfare plan, or other officially adopted plans.

Per CBJ §49.15.330 (e) & (f), Review of Director's & Commission's Determinations, the Director makes the following findings on the proposed development:

1. Is the application for the requested conditional use permit complete?

Yes. We find the application contains the information necessary to conduct full review of the proposed operations. The application submittal by the applicant, including the appropriate fees, substantially conforms to the requirements of CBJ Chapter 49.15. Furthermore, the application meets all requirements of CBJ Code 49.65.210, Contents of Sand and Gravel application, including the following: 1) a graphic and legal description of the property; 2-4) a topographic map and cross section with finished contours; 5) ingress and egress points for trucks and other equipment; 6) plan with buildings and structures; 7) a narrative describing the operation with a site drainage plan, method of securing the area, methods to minimize noise pollution and visual blight, hours and days operation, estimated amount of material present and to be removed, results of test holes to show the water level, date the operation will be completed, schedule for completion of site restoration, operating procedures for particulates beyond site boundaries, identification of geophysical hazards, and dates of establishment of the operation and history of land development. These application requirements have been included in Attachments 3-11 and 20 of the 11/21/12 staff report.

2. Is the proposed use appropriate according to the Table of Permissible Uses?

Yes. The requested Conditional Use Permit is appropriate according to the Table of Permissible Uses. The permit is listed at CBJ §49.25.300, Section 14.500 for the Industrial and Rural Reserve zoning districts.

3. Will the proposed development comply with the other requirements of this chapter?

Yes. The proposed development complies with the other requirements of this chapter. Public notice of this project was provided in the November 16, 2012, November 23, 2012, November 30, 2012, and December 7, 2012 issues of the Juneau Empire's "Your Municipality" section, and a Notice of Public Hearing was mailed to all property owners within 500 feet of the subject parcel. Moreover, a Public Notice Sign was posted on the subject parcel, visible from the public Right of Way.

4. Will the proposed development materially endanger the public health or safety?

No. As described in the staff reports dated 11/21/12 and 12/6/12, available evidence indicates that the proposed development will not materially endanger the public health or safety. With acceptance of the suggested conditions requiring warning signs and a 4:1 slope along excavated areas, potential threats to public safety will be adequately addressed. Additional conditions regarding the establishment of a safe vibrational threshold and seismic monitoring will provide further public safety protection.

File No.: USE2012 0019 Additional Information and Revised Recommendation

December 6, 2012

Page 9 of 13

5. Will the proposed development substantially decrease the value of or be out of harmony with property in the neighboring area?

1. No. As described in staff reports dated 11/21/12 and 12/6/12, heavy equipment operating in the stream will generate substantial noise and vibration for properties facing the creek. However hours of operation shall be reduced on Saturdays and prohibited on Sundays. Extraction will be limited to 40 days per year. Traffic flow will blend in with existing industrial traffic on main roads and will not go through residential areas. The mining development will benefit surrounding properties by reducing the flood hazard, while extensive project conditions are in place to prevent damage to banks of the properties adjacent to the creek. Additional conditions regarding the establishment of a safe vibrational threshold and seismic monitoring will provide further protection for property values. With these restrictions, the proposed development will not substantially decrease the value of or be out of harmony with property in the neighboring area.

6. Will the proposed development be in general conformity with the land use plan, thoroughfare plan, or other officially adopted plans?

Yes. The gravel extraction proposal is a heavy industrial use in an area designated as Heavy Commercial/Light Industrial in the Comprehensive Plan. However with the recommended conditions which limit the hours and days of operation and prohibit truck traffic in the adjacent residential area, the project meets the intent of the Comprehensive Plan. Moreover, the project complies with Comprehensive Plan Policy 5.9 and 7.16 regarding extraction of mineral resources in an environmentally-sound manner.

Per CBJ §49.70.900 (b)(3), General Provisions, the Director makes the following Juneau Coastal Management Program consistency determination:

7. Will the proposed development comply with the Juneau Coastal Management Program?

Yes. As described in staff reports dated 11/21/12 and 12/6/12, the proposed development complies with the Juneau Coastal Management Program because the mining method, with recommended conditions, minimizes the impact on vegetated gravel bars, replaces large woody debris to create habitat, minimizes pollutants, and protects water quality. The project timing window protects spawning adult salmon and migrating juvenile salmon.

8. Would the mandatory condition listed in CBJ Code 49.65.235(1) serve no useful purpose?

Yes. CBJ Code Section 49.65.235(1) states that a strip of land no less than 15 feet in width shall be retained at the periphery of the site wherever the site abuts a public way. The Code states that the commission may not waive or modify the requirement except up on a finding that the requirement would serve no useful purpose. The requirement would serve no useful purpose

File No.: USE2012 0019 Additional Information and Revised Recommendation

December 6, 2012 Page 10 of 13

because the development is located in a streambed, because it does not abut a public way, and because CBJ Engineering has determined that a 10-foot buffer from adjacent property lines is sufficient.

RECOMMENDATION

Staff recommends that the Planning Commission adopt the Director's analysis and findings and grant the requested Conditional Use permit. The permit would allow extraction of 210,000 cubic yards of gravel from the Lemon Creek streambed over a period of six years. The approval is subject to the following conditions:

Annual Grading Permit, Bank Protection, and Seismic Monitoring -

- 1. The operator shall stockpile about 50 cubic yards of broken rap, equivalent to Class I riprap, near the project area to address emergencies if the flow becomes redirected towards the bank. If the rock is not used it may be sold when the project ends.
- 2. Prior to issuance of the first year's grading permit and approval of the first year mining plan, the operator shall submit a bond of \$30,000, sufficient to repair any serious bank damage.
- 3. One month before the commencement of each mining season, the applicant shall submit a mining plan. The mining plan shall be processed by the Engineering Department as an annual grading permit. Such plan shall include:
 - a. Estimation of material to be removed
 - b. Map of area to be worked (showing property lines)
 - c. Map showing proposed culverts, access roads, bank stabilizations, berm details (including height, location, material composition and removal plan) stream relocations and other proposed features
 - d. Methods for protecting Lemon Creek from oil, fuel and hydraulic fluid (including leaks from heavy equipment)
 - e. Prior to the commencement of mining, the applicant shall verify property line location and delineate offset distance to the extraction area.
- 4. The top of excavation slopes shall be prohibited within 10' of any banks or the property lines.
- 5. The applicant shall directly hire, or pay permit inspection fees to provide for periodic inspection of the mining area by an appropriately licensed engineer and/or hydrologist.
- 6. Periodic inspections shall be made as determined by the engineer and/or hydrologist, sufficient to monitor the operation. Such periodic inspections shall include visits during or after high water events.
- 7. Inspection reports shall be submitted to the Engineering Department for each 10,000 cubic yards of material removed from the stream, and those reports shall include the following information:
 - a. Volume of material removed

File No.: USE2012 0019 Additional Information and Revised Recommendation

December 6, 2012 Page 11 of 13

- b. Map of area worked
- c. Verification of compliance with mining plan
- d. Report of bank destabilizations
- e. Opinion whether bank/property line setbacks are adequately protecting adjacent properties
- f. Bank protection/stabilization measures if merited
- 8. An inspection report shall be submitted at the end of the mining season which includes all items in numbers 4-7. The report shall be submitted to the Engineering Department and to the Community Development Department within one month of the end of the mining season, or April 15.
- 9. The applicant/operator shall confine all excavations to within existing rip-rap banks. Prior to proceeding with annual excavations, the applicant must find and stake adjacent rip-rap banks.
- 10. The applicant/operator shall protect the structural integrity of existing stream banks and rip-rap banks. A no-disturbance zone of at least 10 feet horizontal distance from adjacent rip-rap and banks is required. (This condition is necessary because rip-rap boundaries may or may not correlate with property boundaries, as noted in the earlier requirement to mine 10 feet from property boundaries.)
- 11. The applicant shall protect all vegetated slopes and maintain a similar non-disturbance zone identified above, unless a site-specific engineering analysis indicates otherwise.
- 12. All cut-slopes shall be less than 2 horizontal to 1 vertical unless a site-specific engineering analysis proves that a steeper slope protects adjacent properties.
- Excavated areas within the creek bed must be clearly marked with warning signs.

 Excavated slopes must be graded to a gentle slope of 4 horizontal to 1 vertical before signs are removed. These measures shall be integrated into the annual grading permit.
- 14. The approved access points at 1721 Anka Street, 1791 Anka Street, and Ralph's Way shall be inspected each year to verify that no changes have been made to the embankment due to heavy creek flows during the previous year. Alterations to the proposed access will require approval by the Community Development Department and the CBJ Engineering Department.
- Prior to the issuance of a grading permit, the applicant shall provide a vibration control plan that includes the maximum safe threshold for seismic activity at the nearest adjacent residential structure to the operation, as established by a licensed engineer.
- During extraction activity, the site shall be monitored by the applicant for seismic activity at the nearest adjacent residential property or at a location agreed upon by the project engineer and adjacent property owners, during each day of operation.
- 17. The applicant shall submit seismic activity reports at the end of each month of mining activity to the CBJ Engineering Department.
- 18. If seismic activity exceeds the threshold established in Condition #15, the applicant shall cease operations and notify the CBJ Engineering Department and CBJ Community Development Department. The applicant shall not continue with operations until

File No.: USE2012 0019 Additional Information and Revised Recommendation

December 6, 2012 Page 12 of 13

alternative methods that do not exceed the threshold have been identified by the applicant and approved by CBJ Engineering.

Project Expiration and Dates and Times of Operation -

- 19. Gravel operations shall take place between December 1 and March 15. No in-water work shall be allowed between March 16 and November 30 with the following exception:

 In-stream work to connect the excavated sections of the creek shall be allowed for one 7 day period between May 15 and June 15. The applicant shall provide notice to CBJ Engineering and the Alaska Department of Fish and Game before work commences.
- Operating hours shall be 7 a.m. to 6 p.m. on weekdays and 9 a.m. to 6 p.m. on Saturdays. Operations shall not be allowed on Sundays.
- 21. Gravel extraction shall be limited to 40 days per year.
- 22. The permit shall expire after six years or extraction of 210,000 cubic yards of gravel, whichever comes first.
- 23. The extraction amount shall not exceed 35,000 cubic yards per year.

Truck Traffic and Street Maintenance -

- 24. Truck traffic from the development shall be routed only through the Anka Street/Glacier Highway intersection.
- 25. Truck traffic and heavy equipment operation associated with gravel extraction is strictly prohibited from the Davis Avenue side of the river.
- Prior to leaving the excavation area, the transport truck bed, with the tailgate locked, shall be raised to a minimum twenty degree angle for a timed 5 minutes to allow excess water to escape. Tilt time may be reduced if water escapement occurs sooner based on the project engineer's visual assessment and approval.
- 27. The applicant shall protect catch basins along the route from sediment infiltration by use of manufactured Catch Basin filters.
- 28. The applicant shall inspect the traveled route a minimum of twice daily for escaped material from the haul.
- 29. The applicant shall sweep and clean the roadway at the end of each day if any water or material has escaped, or if a major spill occurs.
- The applicant shall immediately respond to any additional clean-up requests during the operation from the project engineer, CBJ or ADOT.
- The applicant shall construct a rockery lane for debris removal from truck tires prior to entering Anka Street.

Habitat Protection -

32. No sediment migration from the truck or ramp shall be allowed in the waterway.

File No.: USE2012 0019 Additional Information and Revised Recommendation

December 6, 2012 Page 13 of 13

- Prior to commencement of mining and prior to gravel bar coverage with snow and ice, the applicant shall field stake the exact excavation configuration and setbacks from flowing water.
- 34. The applicant shall place any large woody debris encountered during excavation activities at the surface of the floodplain, upstream or adjacent to the excavation area to encourage gravel bar formation and/or side channel creation. The woody material shall be partially buried to anchor the material during high flows.
- 35. There shall be no on-site fueling or equipment maintenance performed within 100 feet of the creek banks. This includes fueling or maintenance of portable equipment such as generators and pumps.
- 36. There shall be no on-site storage of fuel or other chemicals.

From: Teri Camery

Sent: Wednesday, November 28, 2012 10:02 AM

To: 'SHORT, Michael (JUNSC)'

Cc: Greg Chaney

Subject: Information Request

Hello Mike,

Per our phonecall this morning, please respond to the following questions raised by the Planning Commission at last night's hearing. You're also welcome to address any other issues from the hearing that may need clarification. I encourage you to respond with great detail to ensure that the Commission has all the information they need.

- 1) Exactly what months has SECON been operating during the three years that extraction has been conducted?
- 2) What kind of equipment has SECON been using? Is there equipment available that could have a lower impact? Please specify.
- 3) Is a mining exclusion zone near the Rivers Edge Condominiums a possibility? If so, what boundary would be acceptable?
- 4) How will SECON address current and future complaints from the neighbors?
- 5) What are SECON's specific condition requirements to be able to mine? What is the full range of potential operating dates? What is the minimum ice requirement in the creek to support the equipment?
- 6) Would SECON be amenable to a further reduction in operating hours on Saturdays? If so, what hours would be acceptable?
- 7) Would SECON be amenable to a further reduction in the total number of days of operation? If so, what number would be acceptable?
- 8) Would SECON be willing to conduct seismic monitoring during each day of operation?

Thanks very much for your prompt attention to these questions, and please call me if you have questions. I will be out of the office on Thursday and Friday, but will check messages again over the weekend. This research needs to be completed and written for a new staff report by next Tuesday, so time is very short.

Cheers, Teri Camery

Teri Camery, Senior Planner City and Borough of Juneau Community Development Department 155 S. Seward Juneau, AK 99801 (907) 586-0755 phone; (907) 586-3365 fax



Please consider the environment before printing this email.

From:

SHORT, Michael (JUNSC) [MShort@COLASKA.com]

Sent:

Tuesday, December 04, 2012 1:19 PM

To:

Teri Camery

Subject:

Lemon Creek Stream Information Request

Attachments: Lemon Creek Stream Information Request.docx; Lemon Creek Excavation Practices 1982.pdf

Teri per our phone conversation a revised letter with an attached photo.

Michael Short

Secon

Engineering Manager



500 108th Ave. NE Suite 1740 Bellevue, Washington 98004 (425) 827-3193 Fax (425) 576-5113

P.O. Box 32159 Juneau, Alaska 99801 (907) 780-5145 Fax (907) 780-5896 P.O. Box 7035 Ketchikan, Alaska 99901 (907) 225-6491 Fax (907) 225-6492

December 4, 2012

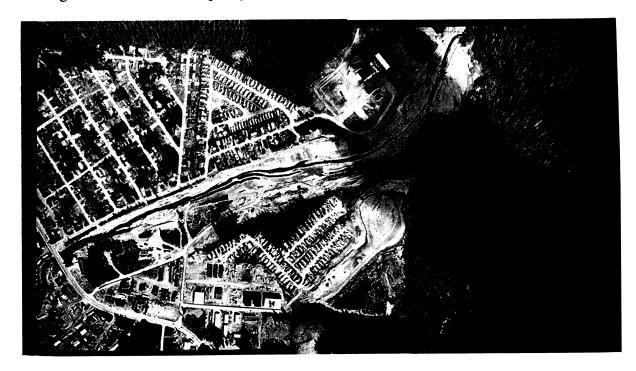
Ms. Teri Camery, Senior Planer City and Borough of Juneau Community Development Department 155 South Seward Street Juneau, AK 99801

RE: USE PERMIT 2012-0019

Lemon Creek Gravel Information Request from Planning Commission Meeting

Dear Ms. Camery;

SECON believes that the gravel extraction from Lemon Creek is a community service. SECON has a shared interest in the potential flooding of Lemon Creek. Along with our neighbors SECON owns property along Lemon Creek. In extracting the gravel from Lemon Creek the stream bed is maintained at a lower elevation in relation to the top of the rip rap slopes. Thus ensuring the creek has more capacity for the occasional severe flooding.



Lemon Creek 1984



SECON is also providing a needed resource to the community; sand and gravel. Originally Lemon Creek was mined for the gold during the late 1800's and early 1900's. Lemon Creek has historically been the location for gravel mining since the 1940's. If the sand and gravel is not mined in Juneau it is imported from sources elsewhere on a barge, namely from Washington State. Anything that is produced here in Juneau is much cheaper than buying from out of state and shipping here. Various products are made from the sand and gravels of Lemon Creek but most is sold to the Alaska DOT and CBJ as sanding chips for winter road maintenance. The remainder is sold to the public for various private projects.

The following is to answer the questions from the Planning Commission meeting of November 27, 2012.

1) Exactly what months has SECON been operating during the three years that extraction has been conducted?

answer. January and February

- 2) What kind of equipment has SECON been using? Is there equipment available that could have a lower impact? Please specify.
 - answer. 750 Hitachi or 700 Volvo Excavator, D9 Dozer, 20 CY Truck and 10 CY Truck. The excavator is one of the quietest; it does not use a backup alarm to load trucks like a loader does. The excavator is the only equipment that can excavate from a flooded extraction zone and load trucks at the same time.
- 3) Is a mining exclusion zone near the Rivers Edge Condominiums a possibility? If so, what boundary would be acceptable?
 - answer. No. I do not know what the condominium set back from the property line is, SECON's gravel extraction is 10 feet from the Property line and/or Rip Rap vegetative bank (riparian zone). There may be a 40 foot buffer in place currently from the structure. This zone potentially has the impact of making whole gravel bars inaccessible to gravel extraction.
- 4) How will SECON address current and future complaints from the neighbors?
 - answer. SECON's business phone number is 780-5145. Any calls as with any project will be directed to the supervisor for that project. If you do not get a response call back and state that there was no follow up and ask for a manager.



5) What are SECON's specific condition requirements to be able to mine? What is the full range of potential operating dates? What is the minimum ice requirement in the creek to support the equipment?

answer. November to May.

The stream bed is layered in different soils when it is filled back with the flooded alluvial gravels. In some areas the fill is mostly silty sand and is loose in nature. The equipment and trucks become "bogged down" in these areas with the potential to lose traction and get stuck. The amount of frozen ground needed to cross the silty sand areas is 4 to 6 inches minimum.

The conditions that are need to extract gravel from the gravel bars is low water and firm soils. Extending the time into late winter or early spring while the stream is still low and the ground is still partially frozen would be beneficial. If the soils are stable there is no need for frozen ground.

When the ground is frozen beyond 2 to 2.5 feet in depth extracting the gravel becomes impracticable. The wear and tear on the equipment gets expensive and productions suffer. The effort to mine the frozen ground increases the noise levels and the transmission of ground vibrations. SECON is not going to extract gravels in extreme conditions.

- 6) Would SECON be amenable to a further reduction in operating hours on Saturdays? If so, what hours would be acceptable?
 - answer. Operating less than 8 hours per day becomes economically and productively questionable.
- 7) Would SECON be amenable to a further reduction in the total number of days of operation? If so, what number would be acceptable?
 - answer. No. This last season SECON took 14 days to extract 9,750 cubic yards. That equates to 696 cubic yards per day. To extract the 35,000 cubic yards in 40 days, SECON would have to do 875 cubic yards per day.
- 8) Would SECON be willing to conduct seismic monitoring during each day of operation?
 - answer. SECON can perform seismic monitoring with our equipment that we use for blasting. This information can be submitted in a report to CBJ. This requires a technician to setup, collect the data and then take back down at the end of the season.



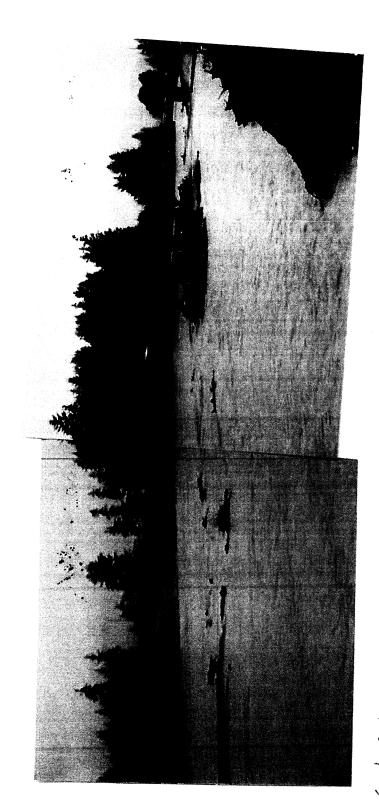
SECON understands the need for conditions required for the permit, but keep in mind that each condition or requirement is an added cost to the gravel extraction. It cost money for a technician to setup for data collection, collect the data and file reports. The new added time to drain the trucks of water cost money, but do to safety concerns SECON is willing bear that expense as long as it is manageable. All these are added cost that is passed on to customers. At some point it is no longer a sellable product from the stand point of the numerous regulations and/or the cost of producing the products. It is just easier to import from out of state and pass that cost on to the people of Juneau. This last year it cost twice as much to import gravel from out of state than to produce locally. Any gravel that is imported also means the labor earnings for manufacturing these products are no longer retained in Juneau for our neighbors here.

Attached is a photo of Lemon Creek flooding in 1981.

Thank you.

Sincerely,

Michael Short Engineering Manager



Sept 9, 17.51

From:

Stichert, Neil [neil_stichert@fws.gov]

Sent:

Tuesday, December 04, 2012 12:31 PM

To:

Teri Camery

Subject:

Fwd: Lemon Creek

Attachments: Lemon Creek Excavation Practices 1982.pdf

Teri-

My recent correspondence with SECON. In any case, having social reasons for moving into a riskier operational scenario does not make this a better project.

Neil

----- Forwarded message -----

From: Stichert, Neil < neil_stichert@fws.gov >

Date: Tue, Dec 4, 2012 at 12:17 PM

Subject: Re: Lemon Creek

To: "SHORT, Michael (JUNSC)" < MShort@colaska.com >

Michael-

They are likely correct in that there have not been overbank flows over the past 30 years since the system has been constrained to create buildable uplands. Here is the photo I think you are recalling, with what appears to be a weigh station shack and a haul road leaving the floodplain at high flows in September 1982. There does not appear to be overbank flow in this photo either. Figure 8 of the CBJ report shows the dramatic changes in the planform of the creek from 1974 to 1984.

With respect to the effects of the current extraction practices, SECON has the ability to re-survey its pre-project cross sections and topographic planforms to quantitatively determine any changes to date. I've discussed this with Bryce Kidd annually as a means to monitor the project activities and inform annual plans and permit re-authorizations. I do not know if it has ever been done for this purpose.

Sincerely-

Neil

On Tue, Dec 4, 2012 at 8:23 AM, SHORT, Michael (JUNSC) < MShort@colaska.com > wrote:

Hi Neil

ATTACHMENT 3

It was stated in the Planning Commission Meeting of 11/27/12 from the residents of the condominiums that Lemon Creek has not flooded in recent memory nor is there much risk. The photo that showed Lemon Creek flooding (1982?) was what I was looking for.

Michael Short

Secon

Engineering Manager

From: Stichert, Neil [mailto:neil stichert@fws.gov]
Sent: Monday, December 03, 2012 4:05 PM

To: SHORT, Michael (JUNSC) **Subject:** Re: Lemon Creek

Hi Micheal--

I am not totally recalling the photos you requested. At our recent meeting, I think I shared some historic images from 1982 or so which wouldn't really reflect the planform of the contained channel now. The most definitive answer (2004) to date about Lemon Creek flood risk is the CBJ report, where modeled data showed overbank flows to be likely near the old Glacier Highway bridge due to backwater effect from the relic Redi-Mix bridge and its abutments. This railcar bridge was then removed in 2006 or so as part of the development of the Lacano subdivision. I am not aware of any updated cross-sections or models informing the potential for current flood risk in Lemon Creek after the Redi-Mix bridge removal and floodplain gravel extraction to date.

In any case, any photos we have are available for you to inspect and scan.

Neil

On Mon, Dec 3, 2012 at 2:50 PM, SHORT, Michael (JUNSC) < MShort@colaska.com > wrote:

Neil do you still have that photo of Lemon Creek flooding? Is it possible to get a scanned copy email to me.

Thanks.

Michael Short

Secon

Engineering Manager

1836 Anka Street

Juneau, AK 99801

P.O. Box 32159

Juneau, AK 99801

Office (907) 780-5145

Cell (907) 378-4767

Neil Stichert

Habitat Restoration and Coastal Program Biologist

Juneau Fish and Wildlife Service Field Office

3000 Vintage Blvd., Suite 201

Juneau, AK 99801

neil stichert@fws.gov

(907) 780-1180 Desk

(907) 209-6954 Cell

From:

Stichert, Neil [neil_stichert@fws.gov]

Sent:

Tuesday, December 04, 2012 2:42 PM

To:

Teri Camery

Cc:

SHORT, Michael (JUNSC)

Attachments: USGS Surface Flow_Monthly Mean_Lemon Creek.docx

Teri-

Thanks for the outreach with respect to the timing windows for gravel extraction activities in the Lemon Creek floodplain. The original rationale behind the timing for this operation was to 1) minimize impacts to eggs and fry by only excavating dry, exposed gravel bars at low flow periods of the year (December through February) 2) prohibit activities during juvenile emergence and emigration (March through May), and 3) avoid having the operation during periods of the year with high-flow risks to the BMPs in place during the excavation itself. Attached is the USGS period of record mean monthly flow summary statistics for Lemon Creek.

You can view daily statistics as well if you need that resolution (http://waterdata.usgs.gov/nwis/dvstat/?
search site no=15052000&agency cd=USGS&referred module=sw&format=sites selection lir

Sincerely-

Neil

Neil Stichert
Habitat Restoration and Coastal Program Biologist
Juneau Fish and Wildlife Service Field Office
3000 Vintage Blvd., Suite 201
Juneau, AK 99801
neil_stichert@fws.gov
(907) 780-1180 Desk
(907) 209-6954 Cell
(907) 586-7099 Fax

USGS Surface-Water Monthly Statistics for the Nation

The statistics generated from this site are based on approved daily-mean data and may not match those published by the USGS in official publications. The user is responsible for assessment and use of statistics from this site. For more details on why the statistics may not match, <u>click here</u>.

USGS 15052000 LEMON C NR JUNEAU AK

		15052000	USGS
Available data for this site	Time-series: Monthly statistics		GO MARIANTA

City & Borough Of Juneau, Alaska Hydrologic Unit Code 19010301 Latitude 58°23'30", Longitude 134°25'15" NAD27 Drainage area 12.3 square miles Gage datum 650 feet above NGVD29

Output formats

HTML table of all data

Tab-separated data

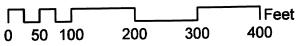
Reselect output format

							: feet p					000000000000000000000000000000000000000		
YEAR	Mont	hly m	ean i	n cfs	(Calc	(Calculation Period: 1951-08-01 -> 2011-09-30)								
TEAR	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1951							***************************************	406.5	369.0	100.9	18.9	5.00		
1952	1.50	1.00	1.50	7.00	47.0	157.8	310.1	382.8	429.0	349.7	66.9	10.0		
1953	3.00	2.00	1.50	12.0	115.1	310.2	446.3	514.7	358.0	199.5	28.0			
1954							345.8	324.0	338.0	78.6	77.8	30.3		
1955	5.50	2.50	1.50	4.50	44.4	179.6	391.4	446.6	290.3	51.1	22.0	6.00		
1956	3.00	2.00	1.50	5.50	93.3	186.0	405.9	601.9	291.0	50.8	70.3	41.9		
1957	14.0	5.00	3.00	9.50	107.5	293.3	367.0	420.8	543.5	169.3	100.5	9.70		
1958	12.0	5.00	3.50	21.1	101.7	370.9	479.9	460.8	227.6	130.0	28.0	7.00		
1959	5.00	4.00	4.00	9.63	85.5	292.2	518.3	428.5	224.2	155.4	38.5	13.8		
1960	6.00	5.00	5.00	20.7	102.8	233.0	489.5	436.5	482.7	179.3	54.2	32.		
1961	10.7	8.60	9.23	21.4	101.5	375.4	556.7	718.0	320.1	176.4	21.4	4.7		
1962	9.81	5.64	3.00	9.23	59.9	247.3	397.9	446.1	407.1	142.3	120.4	67.		
1963	11.1	7.96	9.52	12.3	189.2	219.5	419.7	416.9	525.8	209.6	17.8	14.		
1964	10.0	6.00	3.90	13.1	66.3	303.7	437.8	375.2	204.9	209.1	43.1	25.		
1965	25.8	6.96	5.95	18.1	51.1	181.3	385.2	381.4	377.3	203.0	32.2	11.		
1966	2.98	1.91	8.13	15.1	52.7	225.3	382.1	474.6	375.5	132.0	30.1	10.		
1967	7.59	5.94	4.62	10.9	72.5	320.9	369.8	515.2	504.1	96.2	55.2	14.		
1968	7.71	13.6	23.5	13.2	115.6	263.5	432.7	351.4	405.9	58.3	17.5	6.0		
1969	2.57	2.75	6.73	23.4	108.0	381.9	471.7	348.5	309.5	159.8	128.7	32.		

1970	5.83	11.5	11.1	12.1	61.3	263.7	392.8	448.1	372.8	160.0	60.4	6.08
1971	9.79	4.55			42.6	241.7	423.7	521.5		75.4	16.4	7.28
	4.86	4.88			96.8	228.3	428.9	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	351.6			13.4
1972		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				206.4	·	454.4		150.0		000000000000000000000000000000000000000
1973	9.27	8.48	6.55	16.5	77.8					428.5	86.0	69.6
2002	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	****************	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	110.8	344.8	442.0	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				panananananani
2003	34.0	14.1	7.43	47.1	98.7	284.6	405.1	474.1	506.2	200.9	28.8	21.0
2004	29.3	20.6	8.63	21.6	164.7	351.1	474.4	415.8	401.8	218.8	36.3	46.4
2005	14.2	11.8	26.2	86.4	249.0	329.2	470.1	523.0	528.7	104.7	240.4	35.4
2006	12.0	7.93	6.98	15.1	97.3	354.4	450.8	558.5	563.7	214.3	11.9	14.5
2007	12.4	5.27	3.64	32.9	96.0	296.1	533.2	312.7	502.3	95.9	18.4	5.14
2008	5.50	4.35	4.92	13.7	149.9	212.6	507.0	522.5	511.8	190.0	26.5	12.2
2009	16.2	6.64	4.65	14.5	98.9	299.7	485.1	579.5	419.6	120.6	24.1	12.6
2010	11.4	10.7	14.7	29.7	146.7	313.1	427.4	430.7	307.8	148.6	45.5	7.72
2011	12.1	10.2	6.77	15.0	114.5	291.4	419.0	588.9	400.4			
Mean of monthly Discharge	11	6.9	6.8	18	101	276	432	471	384	160	52	20

** No Incomplete data have been used for statistical calculation





ATTACHMENT 5

From:

Ron King

Sent:

Wednesday, December 05, 2012 10:43 AM

To:

Teri Camery; Alan Steffert

Cc:

Hal Hart; Greg Chaney

Subject:

Secon Gravel Extraction

Attachments: LC vibration analysis.pdf

Teri, language below or something similar may already be included as a condition. I checked CBJ code with a word search "vibration" and found nothing that referenced this type of construction. It would be possible to put together a requirement for pre/post inspection and seismic monitoring based on the attached specifications but it would have to be very general. This is outside my job description therefore I may offer suggestions but certainly not an authority. The onus to provide an exacting plan will be placed on the applicant.

Per Alan ...

Contractor is advised that structures are located close to the proposed work and that construction activities shall be conducted so as to preclude damage to same. The Contractor shall be responsible for any damage caused by gravel extraction activities.

DESCRIPTION

- **A. Building Condition Survey.** This work shall consist of performing a building condition survey(s) and preparing permanent records as indicated in the contract documents prior to the commencement of work, after completion of work, and at locations and times during construction as directed by the Engineer.
- **B. Vibration Monitoring (Nonblasting).** This work shall consist of performing vibration monitoring of background and construction activities and preparing daily and summary report(s) of vibration readings.

MATERIALS

- **A. Building Condition Survey.** Provide general photography and video equipment, analog or digital, capable of superimposing the date and time on all images.
- **B. Vibration Monitoring (Nonblasting).** Provide a 3-component seismograph, capable of measuring particle velocity data in three mutually perpendicular directions. Annual factory calibration is required throughout the duration of the work.

CONSTRUCTION DETAILS

- A. General. The Contractor shall engage the services of a firm capable of furnishing a New York State licensed Professional Engineer to conduct a condition survey of the existing building(s) indicated in the contract documents in the Special Note entitled <u>Vibration Criteria</u> and an experienced vibration monitoring Consultant to measure peak particle velocities prior to, and during, construction operations. Submit as proof to the Deputy Chief Engineer Technical Services (DCETS) the experience and qualifications of the firm's personnel conducting the work.
- B. Building Condition Survey. Provide, as a minimum, the following information:
 - 1. Photographic and videotape documentation of the interior and exterior condition of the building(s).
 - 2. Extent and location of existing signs of building distress such as cracks, spalling, signs of settlement, flooding, leaking, etc.

The Engineer may accompany the Contractor on each building condition survey for verification of the data recorded. Provide two copies of all documentation of each building condition survey to the Engineer.

C. Vibration Monitoring (Nonblasting). The DCETS may waive the requirements of vibration monitoring based on the results of the building condition survey.

Perform continuous vibration monitoring during construction operations when adjacent construction activities make monitoring prudent. The Contractor shall perform contract work in

ITEM 634.99010017 - BUILDING CONDITION SURVEY ITEM 634.99020017 - VIBRATION MONITORING (NONBLASTING)

a manner that will limit construction vibration at the specified locations to within the limits set within the contract documents.

1. Submittal of Written Vibration Monitoring Plan. Prior to performing work adjacent to specified locations, a written Vibration Monitoring Plan prepared by the Contractor shall be submitted to the Engineer a minimum of 10 work days in advance for approval. The Engineer will send a copy of the Vibration Monitoring Plan to the Geotechnical Engineering Bureau, Engineering Geology Section, for review and written comment. The vibration monitoring plan may be returned to the Contractor for revision or clarification.

The vibration monitoring plan shall include the necessary information to outline the recording collection. The vibration monitoring plan shall include, but not be limited to, the following items:

a. Contract Designations

- The name of vibration monitoring specialist(s).
- The scheduled start date and length of construction operations which require vibration monitoring.
- The limits of vibration monitoring work, including sites on or off State-owned right-of-way.
- The location of all structures to be monitored in proximity to the construction operation.
- The location of any underground utilities in proximity to the construction operation.

b. Experience and Equipment

- Submit proof and details, as references, of two projects in the past five years
 where the vibration monitoring consultant performing the work has satisfactorily
 monitored construction operations by recording maximum peak particle velocities
 (PPVs). Include contact information for each reference.
- Submit information on the required 3-component seismograph, capable of measuring particle velocity data in three mutually perpendicular directions, including: the manufacturer's name, model number, and documentation of factory calibration performed within the last 12 months.

c. Methods and Procedures

- The location of adjacent structures to be monitored and maximum allowable PPVs as indicated in the contract documents. If not otherwise specified, a maximum allowable PPV in accordance with the United States Bureau of Mines (USBM) Vibration Criteria (Figure 1) shall be observed at all structures.
- The location of seismograph(s) placements, as directed by the Contractor's Professional Engineer. Recording seismographs may be installed on selected structures.
- Appropriate details for anchoring the geophone(s).

• The procedure for tracking PPV throughout construction operations (e.g., Pile Driving Operations: pile tip vs. vibrations may be correlated through time of day. A record of the time of day at each depth interval, included on the pile driving records, would be required to correlate to a time-based readout of PPV).

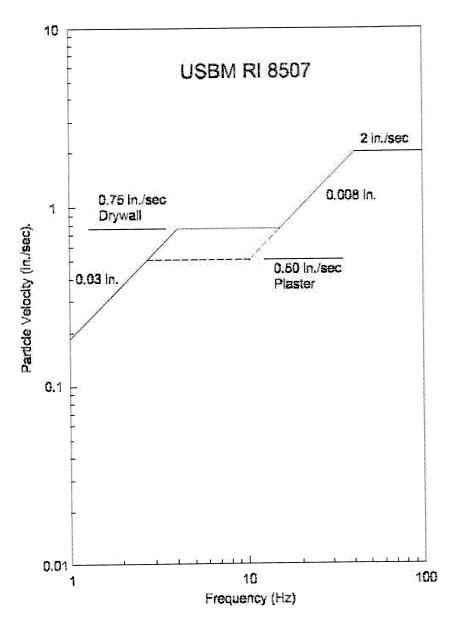


Figure 1—Safe Vibration Limit Recommendations for Residential Structures

Figure 1 – USBM Vibration Criteria (after Siskind et al, 1980)

The figure provides a "threshold damage" limit, defined as cosmetic damage (e.g., cracking) within the structure, categorized by both frequency ranges and particle velocity

ITEM 634.99010017 - BUILDING CONDITION SURVEY ITEM 634.99020017 - VIBRATION MONITORING (NONBLASTING)

2. Measuring Vibrations. The Contractor shall inform the Engineer immediately each time measured particle velocities exceed 85% of the allowable peak particle velocity. The Contractor shall make equipment or procedural modifications as required to avoid exceeding the allowable vibration intensity.

If the measured velocities exceed the maximum allowable PPVs, the Contractor shall stop operations immediately and revise equipment and procedures to reduce vibrations to allowable levels.

The Contractor shall be in communication with his monitoring firm's personnel during vibration monitoring at all locations to verify the data recorded.

The Contractor shall provide the Engineer with the results of daily vibration monitoring, one work day after the readings are taken. Upon completion of the construction operations for those locations requiring vibration monitoring, the daily submittals shall be synthesized into a final report.

If the seismographs show any indication of damage or vandalism, the seismographs shall be immediately recalibrated or replaced.

METHOD OF MEASUREMENT

- A. Building Condition Survey. This work will be measured on a lump sum basis.
- B. Vibration Monitoring (Nonblasting). This work will be measured on a lump sum basis.

BASIS OF PAYMENT

The unit price bid for building condition survey(s) and vibration monitoring shall include the cost of furnishing all labor, materials, and equipment necessary to satisfactorily complete the work.

Vibration Monitoring (Nonblasting). Progress payments will be made for this item paid proportionally in accordance with the amount of work completed, measured on a workday basis.

Payment will be made under:

Item No.	Item	Pay Unit
634.99010017	Building Condition Survey	Lump Sum
634.99020017	Vibration Monitoring (Nonblasting)	Lump Sum

From:

Bob Dilley [RDILLEY@juneaupolice.com]

Sent:

Friday, November 30, 2012 3:04 PM

To:

Teri Camery

Subject: SEACON gravel permit

Hi Teri,

I understand you might be dealing with the planning commission on this issue and wanted to share a concern that we get a lot of complaints about when they do this operation. Gravel is usually taken out when it is very cold and they load the gravel into dump trucks and drive it from Anka to Concrete Way. When they do this it leaks water and gravel out of the dump trucks and creates quite a mess along Anka and Glacier. JPD receives numerous complaints from citizens about the hazards on the roadway. Maybe it could be a condition of the permit that they cannot allow water and or gravel to spill from the trucks, or perhaps they can remove it from the stream, store it until the water runs out of it and then truck it. I realize all of this adds cost to the operation however they should not be able to turn these streets into an ice rink with pieces of rock in it.

There, got it off my chest!

Thanks for your time,

Bob Dilley Lead Community Services Officer Juneau Police Department 6255 Alaway Ave. Juneau, AK 99801 Phone (907)500-0828 Fax (907)463-4808

From:

Michael and Cynthia [dauntoit@gci.net]

Sent:

Tuesday, December 04, 2012 2:56 PM

To:

Teri Camery

Cc:

PC Comments

O O .

Subject:

Thank you for your time this morning, Teri

Attachments: CBJ Planning Commission Followup 12_12re Lemon Creek Gravel Extraction.docx

Here's our followup in writing because we may not have the opportunity to speak on Dec 11, depending on the agenda and matters before the commission. We do hope that IF Secon returns with their ideas and proposed solutions, that we would get the opportunity to respond.

At any rate. After both of us talking back and forth, rehashing phone conversations and looking at notes, this is an attempt at relaying everything we feel important re the application to renew Lemon Creek 240,000 cubic yard Gravel Extraction permit.

It's much easier in writing than with all eyes and a microphone! And this way, we hope, none of our points, or responses to comments get lost in the stress of 'public' comment.

Let us know if you have questions.

Thanks again.

Mike and Cindy Dau

Cel 957-1994/1993

City Permit Renewal Hearing re Lemon Creek "Flood Control"/Now understood as gravel extraction Mike and Cindy Dau, Unit A-10 (and 11) Riveredge Park Written/Submitted December 4, 2012 to Teri Camery, CBJ Senior Planner

Thank you Teri, for the opportunity to speak again regarding our concerns.

Upon consideration of our first condominium purchase, we were told that digging would occur in the river. It was clearly presented to us as 'flood control'. At the time, we were pleased to know that somebody was watching out for us. What has taken place in the past years, however, is in no way flood control. When purchased, we had no idea this building was in a D-10 zone, effectively putting us in the middle of a gravel pit. We <u>did</u> know the river bed was privately owned only because we are long-time Juneau families. We didn't know at the time that further investigation was necessary. We know now.

This is pit mining. It is our observation that the deep pits of excavation have created and/or exacerbated back eddy's, low flow areas and debris accumulation. It's pit mining in frozen river bed a stone's toss from residences. It's pit mining for gravel. Not flood control.

As stated at the Nov. 27 meeting, none of us have known Lemon Creek to flood, even during high water events. FEMA does not list this area as a flood zone. We'd add here that yes, the creek could change course or even flood, but Juneau has historically addressed bank stabilization issues at Mendenhall River, Gold Creek and other areas as the need arises. Lemon Creek has a wide out flow and, even at high tide, has not been blocked to date.

But now we know this is not a flood control issue. It is a gravel operation. One that other construction companies in Juneau do not benefit from. Interestingly, there are multiple instances of historic mining claims in Juneau. None of them are allowed to continue to this extent. Zoning changes are implemented to meet needs, awareness of habitat brings about change, and community conversation shines a light on the 'this is the way we've always done it' way of doing business.

Two cases in point; A small rock plant operated on Alaway Avenue until a few years ago. It was neighbors that were unable to find a compromise and, working with the city, shut them down after years of unquestioned operation. And we all remember Chuck Keen and Mt Juneau. He was blocked from putting a restaurant, a possible hotel and, most notoriously, a tram, on his property. Things change.

We recognize that we chose to live in an industrial area. At the Nov. 27 meeting we heard conversation regarding 'heavy commercial 'and 'light industrial' in this area. We do sometimes see the lights of Costco or Home Depot. We often hear the low hum of the brewing company. Sometimes we hear a heavy truck, maybe distressed dogs at the Pet Nanny. Sometimes a helicopter goes over and sometimes we hear Alaska Airlines. We sometimes hear a garbage truck or a city bus or a snow plow. Most of these things are very much normal for residents of Juneau and far from extraordinary.

We have lived downtown, out the road, in the valley, on the back loop, in the airport area and in the Lemon Creek area. This has become one of our favorite places. We get sun that most don't. The sound of the river is a constant. We hike the area frequently and have easy access to shopping and the bus line. We had a friend from England see her first salmon up the river, and we'll never forget the girlfriend from South Africa reduced to heartfelt tears at the sight of a local black bear. This is a beautiful place to live.

Then comes Secon. Every year they build their road into the frozen river bed. The constant vibration of engines, movement of heavy equipment and the ongoing concussion of excavators, hydraulic rams, and rippers tearing through layers of frozen rock, and a steady flow of dump trucks rumbling in and out of the river is beyond nerve wracking. From 7 in the morning to well past the dinner hour, the earth literally moves. For days on end. It's an impressive operation, this gathering of hundreds of thousands of cubic yards of gravel.

We heard testimony that some of us have been awakened startled. We heard about lives being severely disrupted. We heard concerns about habitat and the flow of the river. We heard concerns regarding damage to our homes that occurs

during the time they are in the river, or shortly thereafter. Every year. We work toward relief of repairs. Every year. And now we have the public's attention following a write up in the Empire, which puts another dent in property values. Calling this a 'noise' issue diminishes what's happening in a local waterway. And Secon wants to continue. We weren't even aware that continuing after the first 5-6 years was an option. Because it is an option for them, we have to take this opportunity to be heard.

In no way do we wish to take work away from locals. We understand that work has been done to protect salmon, fry, and trout. This is, at best, subjective. We can say that the heron and king fisher population has diminished, but again, this is subjective. We are not 'greenies' and we are not 'NIMBY's. This operation is no longer hidden from view. It is at best disruptive. At worst, severely damaging. And now we know this operation is unnecessary.

A suggestion at the Nov 27 meeting was to place a seismograph. Although it would have been interesting to see what the reverberations measured, it wouldn't have stopped them. As mentioned at the Nov 27 hearing, it is quite possible that these buildings, on gravel, get more travel of vibration than that of buildings on bedrock. Surprising though, that after moving into the condominium we don't feel the earthquakes that others report feeling. And previously, when we lived on fill/clay, we felt every single one.

We've spoken with DEC and Fish and Wildlife. We haven't yet had a return call from Fish and Game. We have to find a solution. Maybe digging can be from a platform, solely on one of the many 'islands' of deposited gravel, a different time of year (not in the river and not when it's frozen), dig a 'channel' so it's flood control AND gravel extraction at the same time, and/or maybe gravel mining can take place further up in the hidden valley area where supposed deposits originate. Or maybe it's time to halt the practice of pit mining in Lemon Creek.

By some oversight, Riveredge Condominiums were not pictured in any of the Nov 27, 2012 presentation handouts. The Nov 14, 2012, Notice of Public Hearing showing the 'subject property' doesn't even give a nod to structures near the river. A "2007" Google map didn't show even the first building (the one Secon is repeatedly dredging in front of), and multiple visual presentations failed to incorporate structures at the 'subject property.' We, along with a few neighbors in the area and quite a few of us living at Riveredge are certainly on the map now. We were not looking for this kind of attention (public hearings and comments in the Empire), but, at the same time, we can't be overlooked.

We are grateful for the interest, the support shown, and suggestions offered by members of the Planning Commission. Thank you all for the opportunity to be heard regarding this project. We will attend the next meeting and look forward to problem solving solutions and your decision on Secon's application to renew gravel extraction operations in Lemon Creek.