

To: Electoral Area Services Committee  
From: Aiming Liao, Development Technologist

Date: 2026-04-23  
File No. 4530-20 2026-02

**Subject: Commercial Gravel Operations Permit 2026-02 for 13361 Stave Lake Quarry, Electoral Area F**

**Reviewed by:** Katelyn Hipwell, Manager of Planning;  
Graham Daneluz, Director of Planning and Development | Emergency Management;  
Jennifer Kinneman, Chief Administrative Officer

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### RECOMMENDATION

**THAT** the Fraser Valley Regional District Board Issue Commercial Gravel Operation Permit 2026-02 to 426969 B.C Ltd. and Fraser Valley Aggregates Ltd. for Stave Lake Quarry located at 13361 Stake Lake Rd, Area F.

### FOR INFORMATION:

- Appendix A: FVRD Commercial Gravel Operation Draft Permit 2026-02
- Appendix B: British Columbia Ministry of Mining and Critical Minerals Permit G-7-078
- Appendix C: Evaluation of Noise Emissions Associated with Aggregate Operations in the FVRD
- Appendix D: 5-Year Mine Development Plan
- Appendix E: Hydrogeology Assessment for Aquifer Protection Stave Lake Quarry, Miracle Valley, B.C.
- Appendix F: What We Heard Report

### BACKGROUND

Stave Lake Quarry is an existing aggregate mine operation located at 13361 Stave Lake Road, owned by 426969 BC Ltd., northeast of the City of Mission, BC. The subject quarry is located in Hatzic Valley, approximately 10 km north of Highway 7 at Sylvester Road.

Stave Lake Quarry was initially authorized by the Ministry of Mines under Mines Act Permit (Q-7-123) in July 1993. A new Mines Act Permit (Q-7-78) was issued in September 2002 to reflect amendments to the approved mining areas. The most recent amendment was issued in September 2018 to update the permittee to the 426969 BC Ltd.

The subject quarry is operated to supply aggregates to the local construction market over an estimated 50-year operating life, with an annual extraction rate of approximately 136,000 m<sup>3</sup> and a remaining extractable volume of about 5,681,000 m<sup>3</sup>. Between 2020 and 2025, the total extracted volume was approximately 419,598 m<sup>3</sup>. Based on current extraction rates and remaining reserves, the mine closure is expected to occur in 2065. The proposed final land use is R1 Residential.

Quarry development has occurred in the northwestern portion of the lands and is expected to shift toward the southwestern areas over the next five years, before progressing southeast into the 25-year mining phase (approx. 2.44 ha), followed by a future phase covering approximately 1.69 ha. A large, vegetated buffer (approx. 8.33 ha) will be retained in the eastern portion of the mine site, which is adjacent to the site entrance. Upon completion of the mining, the stockpiled topsoil and overburden will be re-distributed across the quarry floor and seeded with grass and other native plant species. However, no reclamation activities have been performed to date, and none are expected in the next five years, as final grades and setbacks will not be achieved in that timeframe.

The proponent of Stave Lake Quarry wishes to ensure all levels of government compliance and has applied for a Gravel Permit under FVRD *Commercial Gravel Operations Bylaw No. 1181 (Bylaw No. 1181)*. Property details are summarized below.

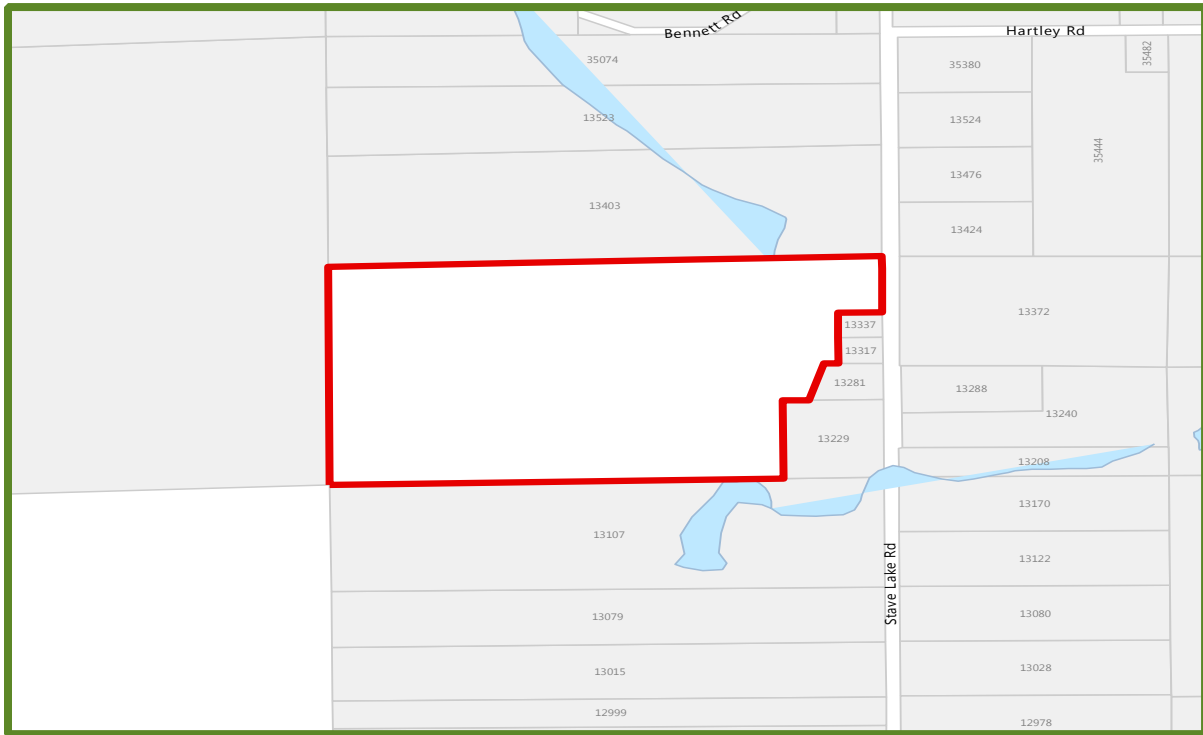
#### PROPERTY DETAILS

<b>Electoral Area</b>	F		
<b>Address</b>	13361 Stave Lake Road, Mission, BC, V2V 0A5		
<b>PID</b>	003-761-401		
<b>Folio</b>	775.02339.000		
<b>Property Size</b>	Approx. 29.19 ha		
<b>Owner</b>	426969 BC Ltd.	<b>Agent</b>	1) Ronnie Franklin, Fraser Valley Aggregates Ltd. 2) Derek Holmes, Holmes Mining Consultants Ltd.
<b>Current Zoning</b>	Rural 4 (R-4)		
<b>Current OCP</b>	Limited Use (LU)		
<b>Current Use</b>	Commercial Gravel Operation		
<b>Development Permit Areas</b>	Geological Hazard Development Permit Area 1-F Riparian Areas Development Permit Area 2-F		
<b>Agricultural Land Reserve</b>	No		

#### ADJACENT ZONING & LAND USES

<b>North</b>	^	Rural 4 (R-4); Agricultural 2 (AG-2); Forest
<b>East</b>	>	Stave Lake Road; Agricultural 2 (AG-2)
<b>West</b>	<	Rural (R-4); Forest
<b>South</b>	v	Rural (R-4); Agricultural 2 (AG-2)

# NEIGHBOURHOOD MAP



# PROPERTY MAP



## DISCUSSION

The subject quarry operates under a valid provincial Mines Act Permit (Q-7-78), issued by the Ministry of Mining and Critical Minerals. However, it has never been permitted by the FVRD under its relevant bylaws, such as the repealed *Aggregate Removal and Deposit Bylaw No. 0729, 2006* or *Commercial Gravel Operations Bylaw No. 1181, 2014 (Bylaw No. 1181)*. **While the subject quarry's activities are** evidenced by the annual aggregate volume statement and removal fee letters that were submitted to and acknowledged by the FVRD, it still lacks a Commercial Gravel Permit. Therefore, the applicant is seeking to achieve full compliance with FVRD *Bylaw No. 1181* through this permit application.

The Commercial Gravel Operation Permit was submitted on November 19, 2018. Since submission, the application has not proceeded forward to the Board due to outstanding issues identified through the review process and public feedback. Opposition from nearby residents raised concerns regarding potential impacts on noise, dust, groundwater quality in the community areas from operational blasting activities, and traffic on the highway from increased vehicles accessing the subject mine site.

The extended review period allowed staff sufficient time to undertake and assess additional technical studies and monitoring, including groundwater quality monitoring and noise emission, to better evaluate potential impacts of the proposed operation and to inform consideration of the permit application. Noise monitoring conducted in 2022 and 2023 did not indicate that the subject quarry exceeded the applicable noise limits set out in *Bylaw No. 1181* at the time of monitoring. The evaluation of noise emissions report can be found in Appendix C. Groundwater quality monitoring conducted between 2022 and 2025 did not indicate evidence of Nitrate-N contamination either.

### Five-year Mine Development Plan (2026-2031)

Over the next five years, mining will focus on the western portions of the quarry, as shown in the orange polygon in the 5-year mine development plan, starting from the southwest corner. The initial work will target on the uppermost level at 275 m in elevation. Operations will proceed downward in a series of benches, reaching the 215 m in elevation toward the eastern pit rim. This will include developing two to three benches situated around 230-235 m in elevation below the top of the eastern pit rim. The 5-year mine development plan can be found in Appendix D.

### FVRD Commercial Gravel Operations Bylaw

FVRD regulates commercial gravel operations through *Bylaw No. 1181*, which addresses matters **within the Regional District's authority, including noise and dust impacts, drinking water assurance,** reporting requirements, compliance monitoring, and community communication. Matters related to mine operations and highway access are regulated by provincial *Ministry of Mines and Critical Minerals (MMCM)* under the Mines Act Permit (Q-7-078) and *Ministry of Transportation and Transit (MOTT)*, respectively.

### *Official Community Plan (OCP) and Zoning*

The subject quarry is designated as Limited Use (LU) in the OCP for the portions of Electoral Area F. The primary intent of the LU designation is to restrict development in environmentally sensitive areas, areas subject to geological and flooding hazards and with limited or poor road access, and areas isolated from community service and development.

Pursuant to OCP Use Policy 5.5.7, permitted use within LU designation include agriculture, conservation, film production facility, low density commercial recreation, park and park reserve, public, single family residential, and associated rural residential uses. As such, aggregate extraction is not consistent within LU designation.

The subject quarry is zoned as Rural 4 (R-4) in the *Zoning Bylaw No. 1638, 2021*. Pursuant to s. 7.4.1, permitted uses include resource extraction, residential, and farm. Therefore, the gravel mine operation is consistent with permitted uses in the R-4 zone. Additionally, all buildings are located away from the property lines and exceed the minimum setback requirements established under s. 7.4.3 of the *Zoning Bylaw No. 1638*. The regulation of resource extraction uses in a zoning bylaw is likely to be ultra vires, or beyond the powers of a zoning bylaw<sup>1</sup>. However, aspects of extraction are regulated by *Bylaw No. 1181*.

### *Development Permit Area (DPA)*

The subject quarry is located within Geological Hazard Development Permit Area (1-F) and Riparian Areas Development Permit Area (2-F). While gravel extraction is categorized as land alteration, development permit is exempted from the FVRD *Bylaw No. 1181*, as the province has exclusive jurisdiction over the regulation of quarries or mines and their related site reclamation activities<sup>1</sup>.

### *Community Impacts*

FVRD Commercial Gravel Operations *Bylaw No. 1181* is primarily aimed at managing the impacts of gravel operations on surrounding properties. Stave Lake Quarry is located in a rural area on a 29 ha parcel of land with crown land to the west, large holding properties to the north and south and smaller lot rural residents to the east along Stave Lake Rd.

*Bylaw No. 1181* defines Community Area where gravel operations may have a significant impact on surrounding land uses. Stave Lake Quarry is located within a *Community Area* under *Bylaw No. 1181*. Therefore, the applicant is required to provide a noise control and dust mitigation plan, as well as a communication plan, addressing how the permit holder will communicate with the surrounding community.

#### 1. Noise Control Plan

Pursuant to s. 25(a) of *Bylaw No. 1181*, the applicant has submitted a detailed Noise Control Plan prepared by a qualified professional. This plan identifies key noise sources, including

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<sup>1</sup> O.K. Industries Ltd. v District of Highlands, 2021 BCSC 81

mobile equipment, loading, crushing, screening, hauling, excavation, blasting, and drilling. It also outlines a multi-faceted mitigation strategy to ensure operation in compliance with the **FVRD bylaw's requirements. This includes natural controls such as utilizing topographical features and vegetative buffers for sound dampening, and operational controls such as enforcing low speed limits, securing truck tailgates, using non-audible backup alarms, and a commitment to ongoing noise monitoring.** The coordinating professional for the application confirms that the implementation of this noise control plan will minimize the noise impacts and meet the requirements of *Bylaw No. 1181* and the guidelines set forth by *Aggregate Operators Best Management Practices Handbook for British Columbia* (April 2022).

## 2. Dust Mitigation Plan

Pursuant to s. 25(b) of *Bylaw No. 1181*, the applicant provided a Dust Control Plan developed by a qualified professional. This plan identifies the primary dust sources including haul roads, stockpile areas, aggregate processing, and weather, and outlines the control strategy to achieve compliance with the specific limits for dust fall (i.e.,  $<1.7 \text{ mg}/(\text{dm}^2\text{-d})$ ) and total suspended particulate matter (i.e.,  $<120 \text{ }\mu\text{g}/\text{m}^3$ ). Key measures include best operational practices such as road spraying, minimizing drop heights, regular road maintenance and dust suppressant spray. Annual dust monitoring is also committed to by the mine operator to ensure that the dust levels comply with the requirements of *Bylaw No. 1181*.

## 3. Communications Plan

Pursuant to s. 24(d), a communications plan addresses how the permit holder proposes to communicate with the surrounding community both before and during the operations. The applicant has submitted a formal communication plan to address the community engagement through three primary channels.

- First, it is to install and maintain all required signage in accordance with *Bylaw No. 1181* and Mines Act Permit (G-7-078), including a publicly visible sign briefing the application and providing the contact information of a designated person.
- Second, it is to outline the protocols for proactive notifications to the nearby residents regarding the relevant activities, such as blasting.
- Finally, it establishes a process for responding to public inquiries and concerns, ensuring an open and transparent line of communication. This entails setting up clear point of contact for the public, assigning staff to monitor and respond to questions, outlining expected response timelines, and maintaining a record of inquiries to ensure issues are addressed promptly.

## 4. Drinking Water Assurance Plan

*Bylaw No. 1181* requires that where aggregate removal occurs within a Community Water System Protection Area, the application must be accompanied by a drinking water protection

plan. The subject property is located outside a Community Water System Protection Area, as such a drinking water protection plan is not required as part of the commercial gravel permit application.

However, persistent public feedback has indicated a high level of concern over the mining activity's impact on the Miracle Valley Aquifer and nearby drinking water sources. As an added protection measure, and in addition to annual water testing under MMCM permit requirements, FVRD has conducted annual groundwater quality tests at three locations north and south of the mine, as shown in *Figure 1* below. These specific locations were **recommended for continued monitoring per Piteau Associates' technical memorandum, Hydrogeology Assessment for Aquifer Protection Stave Lake Quarry, Miracle Valley, BC**, dated October 14, 2021 (Appendix E). This monitoring is carried out in accordance with s. 54 and 55 of *Bylaw No. 1181* to ensure no changes in water quality are occurring. Water testing by FVRD is anticipated to continue in 2026 and 2027.

Test results from September 2022 to April 2025 show no indication of Nitrate-N pollution, which is a regulated contaminant that poses health risks even at very low concentrations. A summary of groundwater testing results is presented in *Table 1*.



*Figure 1. Well locations subject to annual quality testing*

Water Quality Testing Summary 2022-2025				
Sample Date	Sample Location	Key Parameter	Test Results (mg/L)	Guideline Limit (mg/L)
2022-09-14	12443 Stave Lake Rd	Nitrate -N	<0.01	10
	13403 Stave Lake Rd			
	13281 Stave Lake Rd			
2023-08-30	12443 Stave Lake Rd	Nitrate -N	<0.01	10
	13403 Stave Lake Rd			
	13281 Stave Lake Rd			
2024-08-20	12443 Stave Lake Rd	Nitrate -N	<0.01	10
	13403 Stave Lake Rd			
	13281 Stave Lake Rd			
2025-03-31	13403 Stave Lake Rd	Nitrate -N	<0.01	10
	13281 Stave Lake Rd		0.22	
2025-04-28	12443 Stave Lake Rd	Nitrate -N	<0.01	10
	13281 Stave Lake Rd		<0.01	

Table 1. FVRD Annual Groundwater Testing Results Near Stave Lake Quarry located at 13361 Stave Lake Rd, Area F

### FVRD Gravel Permit - Public Input

Staff launched an invitation for the public to provide input on the Gravel Permit at Stave Lake Quarry through the FVRD Have Your Say webpage. The discussion forum was open for comments from February 6 to March 2, 2026. During this period:

- 136 people visited the Have Your Say project webpage
- 36 people visited the Stave Lake Quarry Comment Forum
- 4 comments were received via the online discussion forum related to the Stave Lake Quarry Permit

The comments submitted in the discussion forum are compiled verbatim in the *What We Heard Report* (Appendix F). **To better support the Board's decision-making**, staff summarized the primary issues raised together with the applicable regulatory authorities and proposed or implemented action in the *Table 2*. **Many of the concerns raised fall outside the FVRD's jurisdiction to regulate. Where** issues pertain to another agency or provincial ministry, FVRD staff can forward concerns for consideration.

Key Issues Raised		
Issue Raised	Regulatory Authority	Proposed/Implemented Action
Blasting Notification Requirements	MMCM	Blasting design, vibration limits, fly rock control are regulated by MMCM. The request has been addressed into the Communication Plan and will be formally conveyed to MMCM and Mine Operator for consideration
Truck Operation and Road Impacts	MOTT	The concern will be conveyed to MMCM, MOTT and Mine Operator for review and response
Dust Issues	FVRD	The applicant has submitted detailed Dust Control Plan. Both Mine Operators and FVRD

		staff will monitor the Total Suspended Particulate Matter (TSP) Threshold to ensure compliance with FVRD Bylaw No. 1181
Noise Issues	FVRD	FVRD will closely work with the Mine Operator in monitoring and evaluating the noise level. The Operator will also submit an annual Assurance of Professional Field Review and Compliance Report
Drinking Water Risk	FVRD	FVRD has conducted groundwater quality testing at three locations near the subject quarry from 2022-2025. The results indicated no signs of nitrate contamination. Monitoring will continue in 2026 & 2027
Public Community Meeting Request	FVRD	The public input period was open from Feb 6 – March 6 via the Have Your Say webpage to gather public input for this gravel permit application
Incorrect Answers on FVRD Permit Application Forms	FVRD	FVRD staff reviewed and confirmed the application information to be correct
Historical Spill Incidents and Inadequate Cleanup	MMCM	The concern will be forwarded to MMCM and Mine Operator for further review and investigation

*Table 2. Summary of Public Input for the FVRD Gravel Permit of Stave Lake Quarry located at 13361 Stave Lake Rd, Area F*

*Previous Engagement on Trucking, Traffic, and Road Impacts*

FVRD staff acknowledge the community's concerns regarding the truck traffic, vehicle speed, and road degradation associated with Stave Lake Quarry. While regulation of these matters falls outside of the authority of FVRD Bylaw No. 1181, FVRD staff has proactively engaged with relevant Provincial Ministries and Agencies and conducted independent site inspections to better understand and address the concerns.

1. Engagement with Ministry of Transportation and Transit (MOTT)

MOTT holds the exclusive jurisdiction over haul routes, speed limits, and bridge infrastructure in the area. FVRD staff performed site inspection in July 2022 and found that quarry trucks complied with speed limits (i.e., under 65 km/h), while most passenger vehicles exceeded the 60 km/h limit. All roads and bridges in the area are maintained by MOTT, which is responsible for enforcement and maintenance.

2. Engagement with Commercial Vehicle Safety Enforcement (CVSE)

CVSE works with Royal Canadian Mounted Police (RCMP) and is responsible for commercial vehicle inspections and weight compliance. Periodic inspections confirmed that Stave Lake Quarry is only one of several truck traffic sources, which includes logging, agriculture, construction, and road maintenance. All quarry trucks are owned independently with drivers paid hourly, which reduces the incentives to speed.

3. Engagement with School District 75 (SD 75)

FVRD staff consulted the Mission School District Transportation Department regarding the school operation in the Hatzic Area. No truck-related safety concerns or complaints have been reported and recorded by school bus drivers. The School District 75 will continue to monitor the school routes.

**FVRD Field Review and Compliance**

Pursuant to Mines Act Permit G-7-078, the annual production volume shall not exceed 202,500 m<sup>3</sup>. FVRD records indicate that annual aggregate removal volume did not exceed this threshold. The operator, Fraser Valley Aggregates Ltd., also promptly submitted annual aggregate volume statement and removal fees upon request in the past five years as follows.

Annual Volume Reports and Fees		
Year	Removal Volume (cubic metres)	Fee
2025	32,014.44	\$6,402.89
2024	60,598.94	\$12,119.79
2023	44,786.00	\$8,957.00
2022	175,510.00	\$18,955.10
2021	66,607.38	\$13,321.47
2020	40,081.40	\$8,016.28

*Table 3. FVRD Annual Aggregate Removal Volume Statement and Removal Fee of Stave Lake Quarry, Located at 13361 Stave Lake Rd, Area F*

**COST**

FVRD has received the mine application fee of \$2,500.00 as set out in Part 5, Section 19 of *Commercial Gravel Operations Bylaw No. 1181*.

## CONCLUSION

The applicant has demonstrated a history of cooperation with FVRD staff and has provided the information required under *FVRD Bylaw No. 1181* upon request. S. 62 of *Bylaw No. 1181* authorizes the FVRD Board to issue a permit, subject to a complete application being made, the proposed aggregate removal and processing conforming with the provisions of *Bylaw No. 1181*, and the applicable fees being paid to the Regional District.

Staff recommend that the Board issues an FVRD Commercial Gravel Permit to 426969 BC Ltd. and Fraser Valley Aggregates Ltd. for the Stave Lake Quarry at 13361 Stave Lake Road, Electoral Area F.