

PREPARED FOR: Council
FROM: Andre Boel, Director of Community Building and Planning
MEETING DATE: July 21, 2025
SUBJECT: Blasting Regulation - Additional Consultation Results and Next Steps

RECOMMENDATION(S)

THAT the report titled Blasting Regulation Changes - Additional Consultation Results and Next Steps, authored by Andre Boel, Director of Community Building and Planning Services, dated July 21, 2025 be received.

And that Council consider the following staff recommendation(s):

THAT staff bring forward bylaw amendments for updated blasting regulations and related changes as outlined in the report titled Blasting Regulation Changes - Additional Consultation Results and Next Steps, authored by Andre Boel, Director of Community Building and Planning Services, dated July 21, 2025.

Alternatively, staff await another direction from Council.

PURPOSE OF REPORT

This report reports back on additional consultation regarding the proposed blasting regulations changes and outlines updated regulations for Council's consideration.

BACKGROUND/HISTORIC CONTEXT

2020 - In response to resident concerns, Council directed staff to update the District's blasting regulations.

2020–2023 - Incremental progress was made with the support of a consultant. This included a technical review and staff analysis, culminating in a report presented to Council in June 2023.

June 2023 - Following receipt of the report, Council directed staff to undertake additional research and consult with residents, blasters, and contractors.

March 18, 2024 - Findings from the consultation and further research were presented and discussed at the Committee of the Whole meeting.

April 8, 2024 - based on the March 18th Committee of the Whole discussion, Council adopted resolution 2024-186 directing staff to gather additional public input, using the Connect Oak Bay site, on the proposed blasting changes outlined in the March 18th staff report.

This additional consultation was completed in the fall of 2024 and this report summarizes the results and changes made to the proposed blasting regulation.

LEGISLATIVE REQUIREMENTS

The District has the authority under the *Community Charter* to establish regulations to impose requirements related to explosives and protection of the natural environment, buildings, and structures. Currently, Building and Plumbing Bylaw No. 4247 contains a number of blasting permit requirements.

ANALYSIS

In response to the April 2024 Council direction, the Connect Oak Bay platform was used to provide information and seek additional input. Moreover industry and insurance representatives were interviewed for more information around liability and insurance related concerns. In response to public input and further information staff updated the proposed regulation.

What we heard

Public input focused on property impacts, the timing of blasting, notification, liability and insurance and allowable rock volume for rock breaking. Public input suggested reducing hours for blasting and stricter limits on the allowable volume of rock blasting and rock breaking. A summary of public input (Attachment 1) and an overview of the questions and answers posted on Connect Oak Bay as well as two other submissions have been provided for further information as well (Attachment 2).

Other information and input

Insurance industry information as it relates to blasting activity was obtained through an interview. A summary (Attachment 3) was prepared and made available through Connect Oak Bay during the consultation period. The document explains roles and processes related to insurance claims for damage potentially caused by the blasting activity. Typically, damages directly related to blasting are dealt with and covered by the blaster's insurance without affecting the home owner's insurance. This explanatory document will be part of future guidance and background material about the topic of blasting.

The Minister of Housing commented on the District's blasting regulation in his letter following the report from the Provincial Advisors as part of the Housing Target Order process. The Minister specifically requested future updates regarding changes to the blasting regulation in consultation with the development community.

In follow up on concerns about the extent of blasting on recent construction sites, a visualization was prepared to explore the proposed volume limit of 600 cubic metres (Attachment 4).

Key changes made

In response to Council's review as well as public and development industry input in March, the following changes were made to the proposed regulation prior to the additional consultation:

- Removal of Qualified Environmental Professional (QEP) report during nesting season
- Removal of Post-Blast Inspection Report
- Removal of Requirement for a blasting related security deposit

- Addition of including heritage properties on required Context Map
- Removal of a requirement for a blasting specific topographical surveys before and after
- Removal of the requirement for a third party review by an Independent Blasting Consultant
- Increased time limits for completion of the blasting work

Upon further technical review the following further changes were made after the additional consultation:

- Addition of a Pre-Blasting Survey confirmation identifying investigated properties
- Added detail regarding the proof of insurance
- Updated that a Blasting Plan "summary" would be required to be "posted" at the site rather than a "detailed plan" and have it "marked" on site
- Updated Notice of completion is proposed to be provided to the Director only and not extend to all Affected Owners

Potential further changes

In response to fall consultation the following possible changes can be considered in response to the input received:

- Changes to the proposed volume limits for blasting and rock breaking
- Changes to the proposed available hours for blasting and rock breaking
- Requiring an approval / permit for Rock Hammering to ensure the proposed volume limit and proposed hours of operation are adhered to

Proposed Regulation

The current proposed blasting regulations are listed in attachment 5 and an overview in tracked changes of the changes made since March is included in attachment 6.

WORKPLAN IMPACT

Updating the blasting regulations will change the current blasting permit process. The amount of documentation provided would increase and result in extra staff time to process more complex applications and sending notice to additional areas. On the other hand, the updated regulations may result in fewer blasting permits being applied for as applicants might explore other siting options. The total number of blasting permits is a small portion of the overall permit volume. On balance, it is expected that the proposed regulations do result in a notable incremental increase in work load for building officials and administrative staff. The proposed fees are intended to off-set the additional effort required.

Other changes are being considered for the building permitting process through Council Priority Project #78 "Optimize Development Process". This offers an opportunity to integrate and balance the needed increased effort on blasting permit review with other changes aimed at reducing staff needs for example for minor scope building permits.

FINANCIAL IMPACT

Currently, the cost of a blasting permit typically lies between \$200 and \$400. This covers most but not all of the current staff time needed for permit review and issuance and the District's notification letter.

Under the proposed regulation blasting permits fees would be set at \$1,250 (including the cost of District notification). For rock breaking permits there would be a \$750 fee,

plus a charge depending on the volume of rock removed at \$100/m³. The proposed additional fees are intended to cover the cost of expanded review by staff and continuation of the District's notification. This should be monitored and adjusted after the new permit process is implemented.

OPTIONS

Option #1

Council could choose to proceed with the preparation of bylaw amendments; the following motion would be in order:

THAT staff bring forward bylaw amendments for updated blasting regulations and related changes as outlined in the report titled Blasting Regulation Changes - Additional Consultation Results and Next Steps, authored by Andre Boel, Director of Community Building and Planning Services, dated July 21, 2025.

Option #2

Council could choose to proceed with the preparation of bylaw amendments with specific changes; the following motion would be in order:

THAT staff bring forward bylaw amendments for updated blasting regulations and related changes as outlined in the report titled Blasting Regulation Changes - Additional Consultation Results and Next Steps, authored by Andre Boel, Director of Community Building and Planning Services, dated July 21, 2025;

AND THAT the proposed amended blasting regulations include: [insert additional amendments to be included].

Alternatively, staff await another direction from Council.

COUNCIL PRIORITY SUPPORTED

Livability

IAP2 FRAMEWORK ENGAGEMENT

☐ **INFORM** ☒ **CONSULT** ☐ **INVOLVE** ☐ **COLLABORATE**

The consultation process to date included an open house on October 11, 2023, interviews with two blasting professional, six contractors previously reported on at the Committee of the Whole meeting of March 18, 2024.

Additional public consultation through Connect Oak Bay took place in the period September - October 2024. A summary of input and a copy of the questions answered is provided in attachments 1 and 2.

TIMELINE/PROCESS/NEXT STEPS

The remainder of the process to establish and implement new blasting regulations is estimated to take approximately 3 months and includes the following steps:

- Finalization of bylaw amendment text
- Council consideration of amendment bylaw readings

- Preparation of implementation materials and processes
- Adoption of bylaw amendment

Respectfully submitted,

Andre Boel, Director of Community Building and Planning

With respect to the Financial Impact described in this report, I concur with the staff recommendation.

Rianna Lachance

Rianna Lachance, Director of Finance and Asset Management

Reviewed and approved by the Acting Director of Corporate Services.

C. Anderson

C. Anderson, Acting Director of Corporate Services

I have read and consider staff's recommendation to be supportable for Council's consideration.

Selina Williams

Selina Williams, Chief Administrative Officer

ATTACHMENTS(S):

[Attachment 1 - Additional Blasting Consultation - Summary](#)

[Attachment 2 - Connect Oak Bay Questions Answers and Other Submissions](#)

[Attachment 3 - Summary Insurance and Blasting](#)

[Attachment 4 - Volume Visualizations](#)

[Attachment 5 - Proposed Blasting Regulations](#)

[Attachment 6 - Proposed Blasting Regulations - Tracked Changes](#)

Attachment 1 - Additional Blasting Consultation - Summary

Following consultation in the fall of 2023, additional consultation was provided in the fall of 2024. This summary highlights the result of this second round of consultation.

Connect Oak Bay went live mid-September 2024 and ran through late October 2024 with notification to all Connect Oak Bay subscribers. In addition to 20 questions and comments that were reviewed, the project team also reached out directly to 17 individuals who had previously corresponded with the District.

Themes Arising from Connect Oak Bay - Fall 2024

A copy of all submitted questions and answers that were posted online is included in a separate attachment. The following summarizes key themes based on a review of the comments.

Most of those providing input are residents with a few commenting from an industry perspective. Several themes arose from the questions and comments posed through Connect Oak Bay, some comments addressing several issues. Comments related to property impact, scheduling, notification, liability, and rock volume seem to have been bolstered by the rock removal at site redevelopment of 2135 Granite Street concurrent with the Connect Oak Bay process.

1. **Property Impacts** (6) About one third of those engaged expressed concerns about property impacts, specifically related to historical homes with fragile physical structures like foundations and windows, and sometimes lengthy disruptions to one's quiet enjoyment of property due to construction (including blasting) noise and nuisance (dust and dirt).
2. **Timing / Scheduling of Blasting** (5) One quarter of Connect Oak Bay participants referenced the timing and scheduling of blasting as a concern. Residential respondents stated their desire to have noisy construction activities during limited hours per day and days per week to reduce impacts on their quality of daily life. Others desire ample notice of blasting so they can better secure their properties, selves, and pets against blasting impacts.

Industry participants suggested that time limitations could extend the overall construction timeline and result in challenging and dangerous situations as blasters respond to rock characteristics, site access, contractor coordination, crew availability, and atmospheric conditions to execute the safest rock breaking. Time limitations apply pressure compromising safety-related requirements in favour of local scheduling compliance.

3. **Liability / Insurance** (4) Resident concerns continued to surface about liability related to blasting. Some comments demonstrate confusion between the purpose of the blaster's commercial liability insurance and the resident's own property insurance, including the role of the blaster's insurance provider's potential requirement for pre-blast surveys. For example, comments reveal a belief that a resident's claim against the blaster's insurance for damage caused by blasting affects the resident's own insurance and related premiums. Another resident suggests that the District of Oak Bay assume some liability for blasting activity and that blasting be prohibited near houses built prior to 1950 (lath and plaster).

Insurance and industry representatives were interviewed, and information was summarized to support our collective understanding of this issue.

A [summary](#) regarding the topic of liability and insurance was posted on the Connect Oak Bay project page.

4. **Notification** (3) A couple of residents highlighted the need for increased notification about pending blasting activity and were unaware that the District of Oak Bay provides notification to all nearby residents, in addition to the notice that the blaster is required to distribute.

An industry participant questioned why Oak Bay undertakes more notification than other communities, given the extra cost. They also expressed concern about detailed onsite notification since external conditions (i.e. atmospheric and geological conditions, construction coordination) impact the exact timing and scope of blasting activity.

5. **Rock Volume** (3) Some respondents are concerned about excessive rock removal impact on the protection of natural features, Oak Bay charm, and structural / visual impact on adjacent properties. Other respondents are concerned that limits on the volume of rock removed will affect the development potential of their property, requiring variances for height, site coverage, and parking when the desired use cannot be accommodated through removal of the site's rock.

Industry feedback cautions that there is no way to accurately estimate how much rock will be removed. They suggest a related regulation, in practice, may not be feasible.

6. **Housing** (3) With a stated connection to the pressure put upon Oak Bay by the province to increase housing in the District, a few comments associated additional regulations for blasting (related to development) with the cost and expediency of housing construction. Cautions questioned the viability of obtaining

approval for height, parking, and site coverage variances to avoid excessive rock blasting to building living space below ground.

7. **Other** (6) Other topics included a request for clarification on proposed bylaw updates, a concern about who pays for increased fees, a request for Oak Bay to require alternative-to-blasting techniques like expanding grout, and clarification about the purpose and use of pre-blast surveys.

Attachment 2 - Connect Oak Bay Questions and Answers

The below questions and answers were provided during and after the additional consultation period in September / October 2024.

Q 1. Will this be a funded priority for 2025 and fully implemented?

A. The blasting regulations update is funded. Implementation in 2025 is subject to Council decisions on proposed changes.

Q 2. We have elementary and middle schools in this neighbourhood. These young minds are trying to focus during the day. Allowing blasting to occur during school hours for long duration is harmful - disturbance, disruption and potential long term ear damage if high DB are observed. Why is the real reason for Oak Bay needed to update the bylaw? How can you guarantee to us, property tax payers, that this is not another step to appease condominium developers.

A. Blasting and rock breaking have been permitted in Oak Bay for a very long time. The reason for the proposed changes is to respond to community concerns regarding blasting by establishing limits and requirements for blasting. In addition, rock breaking would become regulated as well.

Q 3. Mine is a comment rather than a question. I don't see a place for comments, apologies if I am putting this in the wrong place. My comment: Since rocky outcrops and visible rock is one of the charming features of Oak Bay and since earlier housing construction accommodated that topography without much remediation, how can we justify the major blasting that is occurring at this time? surely it would be better to insist that new housing accommodate and adapt to the topography that is so unique to the area. There is a building site near me where at least two meters depth of rock is being blasted and removed to prepare the building site. The action is going to completely change the street scape and curiously enough, change the street named for the very rock being removed....granite. I think this amount of blasting is excessive and should be prohibited. Susan MacRae, 2099 Granite Street.

A. The proposed changes do propose introducing a limit to the amount of rock removed from site. The proposed limits are a maximum 400m³ for lots less than 885m² and maximum 600m³ for lots 885m² or more.

Q 4. We (my husband and I) are currently living immediately adjacent to two lots that are being totally leveled. The blasting so far has gone on for 2 weeks, every day except for weekends. Added to this is the drilling which took another two weeks and the constant excavation and rock removal. Our lives are a nightmare, woken every day at 7 and enduring incredible noise until 4 or 4:30. None of these activities has yet been concluded. At times all three activities are carried out simultaneously with a combined noise level that is frequently excruciating. In fact, it is so noisy that it is hard to concentrate and put together some comments in response to your survey. We were told before all this started that there would be only “minimal” blasting. If this is “minimal”, what is maximum like? All of the natural features of the site are being flattened. Why is this allowed? Successive OCPs have clearly stated that residents value Oak Bay’s natural topography. Our house was built on rock and no blasting was undertaken. Isn’t it time to consider other approaches (to think outside the box frankly) than blasting to accommodate new houses, e.g. allowing houses to be built higher rather than digging/ blasting down. I understand that in North Saanich blasting is not permitted. There is no mention of the North Saanich example in the information provided on Connect Oak Bay. Why not? Infill development can be tricky, especially in an older municipality such as Oak Bay where many existing dwellings are decades old (ours is a 112-year old heritage house). Allowing a site to be blasted to the extent that the one next to us is, is mindboggling. Right now the drilling machine is literally feet away from our house and it looks like it is going to get even closer – right on the lot line, with blasting, excavation and rock removal to follow. We are understandably concerned about our rock and mortar foundation and leaded-paned windows. Practically every picture in the house is now hanging crookedly, we have had to remove objects from mantelpieces and shelves to prevent damage, our front porch has been partly dismantled, everything is covered in dust and all our windows will need cleaning. What protections for neighbouring dwellings are you proposing? Prior to the drilling and blasting, a Pre-blast Survey of our house was undertaken. However, it seemed very cursory – he literally just walked through the basement, did not go into the attic, took pictures on his phone of the plaster cracks I pointed out, took no notes. When asked if we could have a copy of the report, the answer was no, that there was not going to be a report, just photos and he would not share those. This is not adequate. The Pre-blast Survey, this should be mandatory and the results of the survey should be shared before blasting and drilling start? What if something is missed, not included or not described adequately, how will you know – and if damage to your property ensues, on what basis can you make a claim? Of course, you can try to take pre-emptive action – that is, take lots of photographs, hire your own surveyor, etc. But that involves considerable time, effort and cost and is a course of action that seems unfair – with the owners of the affected property having to pay for outcomes from others’ actions over which they have no control and have not caused. In the background information provided on Connect Oak Bay, it is recommended that if

damage occurs you should contact your home insurance company. This “information” is misleading and should be corrected. The response we got when we asked our insurer was “Something like blasting is considered Earth movement in the insurance wordings, and this is not something that any insurance company will cover. It is a very hard thing to prove how it originated and could be from another cause – you would be responsible to seek out a solution.” This response was corroborated when several friends asked their insurers the same question. This leaves the affected property owner having to deal directly with the blasting firm’s insurer or even needing to hire a lawyer – both courses of action involving considerable time, effort, and cost, not to mention stress. These are some of the points that should be addressed before a new by-law is approved. I think it would be helpful and result in a better by-law if the framers stopped and took a look at the by-law from the perspective of neighbouring property owners – that would provide more balance between the various parties involved and possibly solutions other than blasting. Diana Butler

A. We empathize with the experience of living next to a noisy construction site. As re-development and infill development occur in urban areas, nuisance related to construction is an unfortunate reality in urban areas. Local governments adopt and rely upon building, noise and nuisance bylaws to put certain parameters in place. The proposed new regulation does address some of your concerns as it would put in limitations to the amount and timing of blasting and is proposed to extend to rock breaking as well.

The [North Saanich blasting bylaw\(External link\)](#) permits blasting between 8:00am – 5:00pm each day except Sunday or Statutory holidays. The regulations are typical but less specific than the proposed Oak Bay blasting bylaw under discussion.

The pre-blast survey undertaken by the blaster’s adjuster is proprietary and not subject to distribution to other parties. If homeowners wish to undertake their own pre-blast inspections, they could engage their home inspector.

Blasting is not usually a property-type insurance that a homeowner could buy. Blasting insurance is for those who undertake the activity of blasting.

Q 5. Because all, or almost all, home-owner insurance policies exclude blasting damage as an insurable claim, claimants must rely on the blaster's policy. It would be helpful if residents were made aware of this situation and the steps they should take to support and make a successful claim. (a) how does Oak Bay ensure that the blaster's insurance coverage remains in force throughout blasting projects? (b) is the current coverage of \$25, 000 for medical payments considered adequate in the event of a major blasting mishap? and (c) One suggestion was made to mitigate insurance issues was to have Oak Bay "backstop" the blaster's coverage. At its March 18, 2024

meeting, Council directed that discussions be held with the insurance industry by staff/ the consultant. What were the results of those discussions?

A. The staff team continue their discussions with representatives of the insurance industry to better understand the processes at play when a homeowner reports damage to their insurer and/or the blaster's insurer. So far, we have learned that

- Oak Bay requires applicants for blasting permits to submit evidence of insurance as a condition of the blasting permit issuance to ensure that the blaster's insurance is current and in force and effect during the time of the permitted blast.
- Blasting insurance is not usually a property insurance but insurance purchased by a blaster, as you have mentioned. Coverage for property damage arising from the use of explosives for blasting is typically excluded in a property policy and more often forms part of a stand-alone construction policy. This form of coverage protects against losses caused by a contractor using explosives for blasting. Any liability issues from the use of explosives would be covered in a wrap-up liability policy. Residential property owners rarely use wrap-up policies for their construction projects and rely on their blasting contractor to provide the specific insurance.
- It is common for a homeowner's insurance adjuster to investigate damage done to the home upon the homeowner's report to their insurer of damage to their home, and request for an inspection by their insurer.
- Should the damage be caused by an external action like blasting, then it is the blaster's insurance that is subject of the claim.
- The investigation must include the blaster's insurance adjuster and, if the damage is caused by the blasting, the blaster's insurance would cover the damage.
- If the damage is a result of factors other than blasting, then the blaster's insurance would not cover the damage, and the homeowner would rely on further discussions with their own insurer about the cause, repair, and insurability of the damage.
- In addition to WorkSafeBC, blasting companies must also comply with the requirements of their insurance companies.
- Insurance companies have requirements for blasting notification, pre-blast surveys and intensities of allowable blasts.
- The pre-blast survey undertaken by the blaster's adjuster is proprietary and not subject to distribution to other parties. If homeowners wish to undertake their own pre-blast inspections, they could engage their home inspector.

Q 6. There is currently no compliance checking of blasters providing notification so that any omissions leave those residents in an exposed position, especially with respect to proving the "before situation" in a damage claim. Will residents be made aware by Oak Bay, rather than by the blaster, that a permit has been granted in order to undertake their own pre-blast property survey?

A. Yes, this is already our practice. In addition to the blaster's notification, Oak Bay will continue to provide direct notice to affected residents of planned blasting as they have been doing over the past few years.

Q 7. Will Oak Bay residents affected by blasting be notified that a blasting permit has been sought so that heritage or other special concerns can be provided to Oak Bay officials prior to the granting a a permit?

A. The blaster is required by provincial regulation to notify affected properties, and the District of Oak Bay also proactively mails notification to properties near the planned blasting, of the anticipated activity. However, this notification process is for information only. The blasting permit process is not set up to consider input from neighbours. Instead, residents are encouraged to contact the blaster directly to convey any specific concerns.

Q 8. Allowing blasting for the personal benefit of one party, (who may not even be an Oak Bay resident), continues to take precedence over the potential for damage to all near-by neighbours' homes, the loss of enjoyment of that property from the ongoing drilling and scraping noise that can last for weeks, and possible health issues arising from air-borne contaminants. Where there is no public benefit, (such as allowing for increased housing), what is the policy rationale for allowing blasting on private land rather than requiring development to conform to the land?

A. Private development in Oak Bay and elsewhere has historically relied on common construction techniques often including rock removal by mechanical means and, sometimes, rock removal by blasting.

Q 9. Will this bylaw change still allow blasting from property line to property line?

A. Yes, it will not restrict the extent of blasting on site, except for a volume limit. The bylaw does not contemplate setbacks for blasting and instead relies on the safety requirements imposed by provincial blasting regulations.

Q 10. 1. Blasting causes damage to older houses with lathe and plaster walls as opposed to 4 x 8 sheets of drywall. 2. There are many old homes in Oak Bay. Our home where we have lived for over 40 years suffered damage to all rooms except the three which had been renovated so had walls of drywall instead of lather and plaster. (and that was years ago so what has Council and its lawyers done in the meantime. So here is my question (I am guessing that I already know the answer.) Is there any thought in bylaw amendments to something along the lines of stating that there is to be NO blasting with X number of feet from a houses built before 1950, or whatever was the date that drywall 4 x 8 sheets replaced lathe and plaster, or at least the power of the blasting kept to a minimum. PS- The damage to our home was in excess of \$50,000.00 and the frustration and stress and inconvenience unbelievable. I wrote to Council years ago on blasting. Get on with it please.

A. Blasting regulations specific to the age of homes surrounding the site are currently not being considered. As is currently the case, the blaster would review the homes in the area around the site for his blasting planning and take any necessary precautions warranted for safe blasting and insurance coverage.

Q 11. What is the consideration for more use of Expanding Grout? GeoBreak is a local supplier that we used for a bedrock basement removal. It broke the rock with no vibrations.

A. Expanding grout is an alternative to blasting for rock breaking that reduces noise and vibration.

The Close Proximity Blasting Committee of the Western Chapter International Society of Explosive Engineer recommends that other methods of rock removal such as hydraulic splitting, the use of expanding grouts, or other methods should be considered as an alternative to Extreme Close Proximity Blasting. Find their guide [here](#). Expanding grout is a great alternative to blasting when the site characteristics and rock configuration present the opportunity for their use, especially because it eliminates vibrations. Blasting can be a better option when there are extensive amounts of rock to be removed, and the location cannot be disrupted for lengthy periods of time to accommodate more refined techniques. Expanding grout also has its own safety risks and nuisance impacts. Here are some that have been brought to our attention:

- Using expanding grout when temperature variations are beyond 5 degrees Celsius can be problematic. The product is temperature sensitive and can be difficult to place, shooting out of the drilled holes if temperature does not cooperate, causing safety and property issues. This is typically more of an issue here in summer than winter.

- Expanding grout requires intensive drilling patterns (a required 10"x10" pattern) that requires up to two weeks of drilling compared to blasting that uses a more efficient 1 square metre drilling pattern that requires about 3 days of drilling for blasting.
- Expanding grout increases rock breaking costs exponentially, up to 10 times more cost for than for blasting. Including both options leaves room for the property owner, together with their blasting contractor, to determine the best option for the specific circumstance.
- Hoe ramming is the companion tool used along with expanding grout to remove the remnant rock stands and shards that the grout leaves behind, exacerbating noise issues for nearby properties.

Q 12. How will you determine what the appropriate amount of rock that can be removed from a given site? Will Oak Bay grant delegated parking variances or height variances if a certain amount of rock can't be removed? If I wanted to put my 110 year old house on a proper foundation and add parking for a basement suite will I be told NO because my lot is all rock? This just seems like another crafty way to discourage new housing being built in Oak Bay because a few people don't like construction noise.

A. For low density residential zones, the proposed bylaw would limit the total volume to 400m³ on lots less than 885m², and 600m³ on lots over and equal to 885m². This provides space for a modest basement or pool if the site happens to be a currently undeveloped property. The limit also discourages low density residential development that significantly alters the topography. There is no limit specified for commercial or higher density development.

Q 13. A previous response indicated that the bylaw changes would not affect Oak Bay's ability to meet the mandated housing targets. Given that Oak Bay is very rocky, and that Oak Bay explicitly made it so missing middle basically has to build mostly underground, I would like a more detailed explanation on how Oak Bay plans to reach the housing targets.

A. Oak Bay can meet housing targets by permitting additional density on existing lots, through Infill Housing and other housing forms. The Infill Housing Program promotes small-scale multi-unit housing that is ground-oriented typically built at a scale of single detached and duplex housing and could include secondary suites, garden suites, laneway homes, townhomes, triplexes and house-plexes. The new program allows for 3 floors of residential used and increased height allowance in order to avoid deep basements.

Q 14. What responsibilities/liabilities does the blaster have re a neighbouring property? Should OB be issuing permits for blasting when it is known to cause fractures/damage to adjoining properties?

A. Oak Bay issues permits for development, construction, and building activities in accordance with provincial legislation and adopted District bylaws. The District does not withhold permits on the basis of potential damage as any construction activity has an inherent potential for damage.

A property owner who has contracted a blaster to undertake work on their property has the same responsibilities to their neighbour as any other owner who undertakes activities that may impact neighbours and their properties. Blasting companies have insurance for their operations and plan their operations in ways to avoid damage to adjacent property. Their insurance is meant to cover any damage that is a result of their work.

Q 15. Some of the proposed changes will make for a dangerous situation if blasters are forced to limit blasting by number of days and time. In addition the topography of Oak Bay has a lot of rock and there is no way to estimate accurately how much rock will be removed. There are some serious issues with the proposal and better care should be taken to talk to the experts in the field including the builders and blasting companies.

A. Oak Bay continues to reach out and invite input from residents and industry representatives. The currently proposed 20 or 30 day period can be extended. All input is considered as staff updates a set of proposed regulations. Much of the industry-relevant content has been taken from the [*Best Practices Guide for Close Proximity Blasting Operations*](#). The Guide is cross-referenced, where relevant, in the working summary of changes document.

Q 16. It would be helpful to get a schedule / notification of rock blasting so that windows can be closed and sensitive pets moved. The blasting on my neighbours property was at the height of summer. We could not use our outdoor space as everything was constantly covered with dirty and dust. It would also be considerate if blasting will continue beyond the initial time estimate that neighbours are notified. (an additional 3.5 weeks in our case.) Surely this should be monitored. Also it would be considerate to put up screens to try to contain the dirt and dust. Many days because of the on shore ocean breeze I had to wash my car before I could use it just to be safe. You can only imagine the rest of my property.

A. The District's regulation will continue to require notification by the blaster and by the District (the change includes a proposed wider area of 150 meters around the site). This notice would include the period of time allowed for blasting. Due to technical reasons related to blasting (atmospheric conditions) it is not always possible to give detailed notice about the exact moments. Regarding dust control the regulation does already contain a provision that this should be suppressed. In case of concerns please contact the District.

Q 17. There appears to be an increase in various fees associated with obtaining a blasting permit. Are these fees charged by OB to the developer/blaster? If so, what costs are these increases in fees intended to offset?

A. The project team is proposing an increase in fees for a blasting permit. The fees are paid by the permit applicant, who is usually the property owner's contractor, in this case often a blaster. The fees will offset the cost incurred by the District in processing blasting permit applications include: (1) due diligence by the District to confirm bylaw requirements are met, (2) the District's direct notification of upcoming blasting to nearby residents and property owners by mail and online, and (3) the District's time researching and responding to resident enquiries about the application.

Q 18.

- i) **Is there a link to the detailed proposed bylaw change? ii) Earlier reports suggested that a P.Eng. would be required to be approve a blasting plan - is this still the case? iii) Are there updated requirements for topo surveys prior to and after blasting?**

A.

- ii) (i) The current proposed bylaw changes are displayed in the right hand side under Documents in the [Blasting Regulations Changes Overview](#)
- iii) (ii) The most recent proposed changes do not include a District requirement for a third party P.Eng associated with a blasting application.
- iv) (iii) The most recent proposed changes do not include pre- and post-rock removal topographic surveys.

Q 19. This seems like a lot of extra hoops to jump through for any sort of development, how do you see this working with the province's housing targets for Oak Bay?

A. The blasting bylaw updates complement provincial and federal regulations, providing additional communication and transparency respecting local blasting activities that can mitigate some of the concerns residents are experiencing in the past related to blasting

activity. Projects that do not require excessive rock removal will not require the level of blasting activity targeted by the proposed changes. We do not foresee the blasting bylaw updates impacting Oak Bay's efforts to achieve provincial housing targets.

Q 20. Rock breaking is the bigger nuisance to my wife and I than blasting. The continual hammer sounds penetrate our whole home and often go on all during the day. Will the new regulations limit hours/day and/or days/week for this activity?

A. Yes, this is proposed to be included in the new regulation. Rock breaking is not currently regulated in Oak Bay. The proposed changes would require a permit for rock breaking (over ten cubic metres). Rock hammering (a type of rock breaking deemed a particular noise nuisance) would be prohibited for all for rock volumes beyond ten cubic metres and limited to 12pm - 4pm on the days rock-breaking is permitted.

August 21, 2024

Dear: District of Oak Bay
Andre Boel (Director of Community Building and Planning)
Councillor Lesley Watson

We are writing out of concern for the widespread practice of ground blasting during home development projects in Oak Bay. We are residents of Oak Bay who own a historically valued home located at 1241 Monterey Ave, which was built in 1912 on a stone foundation, and has a finished/renovated basement. A nearby property, located on the street behind ours at 1256 Oliver St, gave notice earlier this spring, that they are planning to have blasting undertaken.

We are concerned about blasting for the following reasons:

1. Blasting poses risk to adjacent structures. There is the potential for causing not just broken windows, but significant structural damage, within a 20-100 feet range from the blasting site, particularly within basement walls (*NRC Publications - Blasting Vibrations and Building Damage, written by: Northwood, T. D.; Crawford, R.; Edwards, A. T.*).
2. Approving blasting next to older homes, especially those with historical significance, seems to be dichotomous and inconsistent with the value placed on these historical homes, which are often built on stone foundations, and which are particularly vulnerable to the effects of blasting.
3. There is no consultation process with the neighbours for something as intrusive and risky as blasting activity. Blasting has seemed to become a normalized and expected part of the building / redevelopment process, despite its inherent risks.
4. Liability issues: An insurance company took photos and notes of our property related to the planned blasting at the 1256 Oliver St site. Nevertheless, just deferring the issue and saying "insurance will pay" is not sufficient. Insurance companies make it inherently difficult to approve a claim, and not all damage will be visually apparent, especially foundation damage, damage behind walls, especially in a finished basement. And even when insurance companies do eventually approve a claim, the owners are still left paying higher premiums into

the future. Furthermore, the insurance adjuster who visited our house said she is not aware of any claims ever being paid out from damage due to the blasting, which was not particularly reassuring.

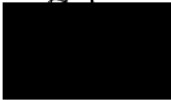
The risk is not worth the reward when it comes to blasting. If Oak Bay continues to be approving of this practice indiscriminately, then local government also needs to assume the financial burden, if damage does ensue.

Given the above concerns, we respectfully request a re-assessment of the blasting practices and related by-laws in Oak Bay at large, particularly when it is impacting nearby valued historical homes.

With respect to our situation specifically, we were told that the blasting on Oliver St would take place in April 2024, but no activity has occurred thus far. Are they obligated to notify us of changes to the blasting activity? An update would be much appreciated.

Thank you for your attention to this matter. We look forward to hearing your response.

Sincerely


Andrea Streilein & Tyler Rolling
(1241 Monterey Ave, Oak Bay)

Photographs of the blasting and drilling operations in a solid granite rock setting which were needed to prepare for the construction of two houses on two lots at 2135 Granite Street



April 2024 - Demolition of duplex which had occupied the land from 1957 to 2024



April 2024 – Last remains of bungalow foundation showing its shallow footprint



September 3, 2024 - Empty bungalow footprint, before blasting began



October 11, 2024 - Load of granite rock produced by early blasting



October 15, 2024 - Drilling holes to fill with explosives



October 16, 2024 - The orange holes for explosives are spaced quite closely together



November 12, 2024 – The huge size of the blasting area



November 12, 2024 – Looking west: another view of the blasting area



November - A hydraulic rock breaker 60 feet away emits dangerous noise levels (112 decibels).



Pictures in this presentation were taken from the Butler house
2149 Granite St.



From: [Planning](#)
To: [Planning](#)
Subject: FW: Blasting
Date: July 8, 2025 1:35:30 PM

From: Patrick S. Wolfe [REDACTED] >
Sent: Tuesday, June 4, 2024 9:31 AM
To: Oak Bay Council <obcouncil@oakbay.ca>
Subject: Blasting

You don't often get email from [REDACTED] [Learn why this is important](#)

Dear Council,

I am writing in support of Diana Butler's letter-to-the-editor of June 4 in the TIMES COLONIST (p. A10), which criticized Oak Bay Council, except councillors Cairine Green and Hazel Braithwaite, for not taking stronger steps to protect nearby properties when blasting occurs.

[Our growing population: cost of strawberries: military jobs - Victoria Times Colonist](#)

While I am sensitive to increasing development costs, I believe it should be clearly understood that it is the blaster's responsibility when blasting damages nearby properties.

Decades ago, my parents home at 2311 Oak Bay Avenue (demolished in 1997), on the southeast corner where Oliver Street abuts the Avenue, and where my father also had his medical practice from 1950 to 1984, received minor damage (large cracks in the plaster in the entry hallway and the living room) when blasting occurred on the other side of the Avenue (i.e., Clive Drive, as I recall).

My recollection is that this inconvenient annoyance was quite quickly resolved when the problem was identified to the municipality and/or the construction site, with the blaster or developer taking responsibility for the matter.

Still, in the interests of protecting residents, I'd like to see a clear policy statement that it is the blaster's responsibility when blasting damages nearby properties.

Sincerely yours,

Patrick Wolfe
2998 Cadboro Bay Road
Victoria, B.C., V8R 5J9

Attachment 3 - Summary Insurance and Blasting

Governance of the insurance industry in BC

Insurance brokers and adjusters are subject to a code of ethics and are independently licensed. The Insurance Council of BC is governed by a council of industry and public representatives appointed under the *Financial Institutions Act* and given the overall responsibility for carrying out the Insurance Council's mandate and overseeing its operations. The Insurance Council of British Columbia licences and regulates insurance agencies, agents (brokers), salespersons or adjusters. The BC Financial Services Authority ("BCFSA") is a Crown agency of the Government of British Columbia and is responsible for regulating insurance companies operating in British Columbia.

Consultation with insurance industry

In response to Council's request to further consult with the insurance industry about how claims from blasting damage are handled, the consultant met with qualified leaders from the Board of Directors of the Insurance Council of British Columbia. The purpose of the meeting was two-fold:

- to gather feedback on insurance-related information collected over the course of researching best practice for local government regulation of blasting activity, and
- to collect information that would assist in responding to resident enquiries and concerns about how to deal with insurance when nearby blasting activity damages their property.

A board representative from The Western Canada Chapter of the International Society of Explosive Engineers (ISEE), a non-profit organization that represents the blasting industry in Western Canada, participated in the meeting to clarify blasting terminology as it relates to insurance and distinguish aspects of the process that differ between the blaster and insurer as it relates to a local blasting bylaw.

Insurance policies during construction activities in urban neighbourhoods

There are four insurance policies at play during redevelopment in urban neighbourhoods:

1. Policy of the property owner who is developing their site.
2. Policy of the contractors who are doing the work, including blasting.
3. Policy of the municipality related to local government activity and operations.
4. Policy of any property owner who may experience damage to their property and seek an investigation and remedy for damage on their property.

Coverage for property damage arising from the use of explosives for blasting is typically excluded in a property policy and more often forms part of a stand-alone construction policy. This form of coverage protects against losses caused by a contractor using explosives for

blasting. Any liability issues from the use of explosives would be covered in a wrap-up liability policy. Residential property owners rarely use wrap-up policies for their construction projects and rely on their blasting contractor to provide the specific insurance.

Liability insurance as a blasting permit requirement

Oak Bay requires blasting permit applicants to submit evidence of general commercial liability insurance as a condition of permit issuance to ensure that the blaster's insurance is current and in force and effect during the time of the permitted blast. This general commercial liability insurance is not property insurance as a residential homeowner would purchase.

Liability insurance in action: examples

Liability is a legal process in the insurance industry. It is fact driven and highly transparent from the adjuster's perspective. Liability is based on the individual circumstances of each case. For this reason, any scenario about what an investigation yields would be highly speculative. Each allegation is fact-specific in its unique context and circumstances, and each claim is dynamic. The interviewees provided to recent Oak Bay examples that offer a glimpse into how insurance works respecting claims of damage due to blasting:

1. The homeowner involved their BCAA home insurer who subrogated to the blaster's insurer. The mechanism of damage was deemed to be caused by the blasting as confirmed by the adjuster and the blaster's insurance covered the cost of the damage. Mechanisms of damage from blasting include a flying object or vibration. In this case, rocks were moved onto a nearby property as a result of blasting.
2. Cracks in driveways is a common claim experienced by the blaster and investigated by the adjuster. In this case, it is not typically adequate to factually determine a causal relationship between blasting activity and incremental damage such as may be suggested by a driveway that shows 9 cracks in a pre-blast survey but then has a 10th crack (or slightly bigger cracks) in a post-blast survey. The cause cannot be clearly determined as unrelated to seasonal temperature variations and/or an underlying construction fault already apparent in the driveway's construction. Without rationale for a causal relationship upon investigation by the adjuster, the blaster's insurance cannot cover the driveway crack. However, the homeowner can make a claim to their own insurer, have the damage investigated, and the homeowner's insurer will deal with the blaster's insurer to address the liability.

The second example illustrates the roles of the blaster's insurer and adjuster and the homeowner's insurance and adjuster, distinguishing roles. The homeowner has their own first party insurance, that engages an adjuster upon a damage claim. If damage is deemed to be due to blasting, the first party insurer (the homeowner's) reaches out to the third party insurer (the contractor's or blaster's).

The interviewees have never experienced a homeowner whose insurer refused or charged to inspect damage done to the insured property (the homeowner's property). However, interviewees acknowledged that property owners may be hesitant to engage their insurers in case the damage is proved unrelated to the blasting but may instigate required repairs to the home or a claim unrelated to blasting that affects future premiums.

Who to call when your property has been damaged

What happens when you believe you have sustained property damage from nearby blasting?

1. Notify the first party insurer. This is the homeowner's insurer. Call your own insurer to investigate the damage. It is a logical, rational, and reasonable option to engage one's own home insurer about damage to one's property. The insurer has an obligation to investigate damage claimed by the insured homeowner. They will subrogate the claim when warranted.
2. Notify the third parties suspected to have caused the damage. They may include one or more of the following:
 - a. General contractor
 - b. Blasting contractor
 - c. Excavation contractor
 - d. Road builder
 - e. Municipality (in the event of public works)
3. Is there liability or property damage caused to others? This is the question to be asked and answered by the first party insurer and each relevant third party insurer. Yes or no. Should the damage be caused by an external action like blasting, then it is the blaster's insurance that is subject of the claim. The investigation must include the blaster's insurance adjuster and, if the damage is caused by the blasting, the blaster's insurance would cover the damage. If the damage is a result of factors other than blasting, then the blaster's insurance would not cover the damage, and the homeowner would rely on further discussions with their own insurer about the cause, repair, and insurability of the damage.

Data collected and shared respecting blasting

In addition to WorkSafeBC regulations, blasting companies must also comply with the requirements of their insurance companies. Insurance companies have requirements for blasting notification, pre-blast surveys and intensities of allowable blasts. The blaster's insurer may require that the blaster retain an independent insurance adjuster to complete a pre-blast survey. The survey itemises the condition of each surveyed structure before detonation, supported by photos. Some local governments also require the blaster to retain an independent adjuster, at the permit holder's costs, to complete a pre blast survey.

A vast amount of data is collected for each blasting project and distribution of all datasets is often unreasonable. The pre-blast survey is only one of six or seven data points, like seismic records, that an insurance adjuster will use to create the complete picture of blasting activity,

establishing the facts using data-driven methodology. The format and instruction for sharing data rests with the contractor who owns the information collected about the blasting work. The insurance company cannot disclose the contractor's information. Best practice in the blasting industry is to release specific photography and data that is related to a specific claim. Interviewees suggest a clause in the municipal blasting bylaw could help clarify this situation, as follows:

If a homeowner makes a claim for damage related to blasting, relevant data and images shall be released by the contractor to the claimant in an accessible format and with instructions for sharing the data.

Conclusion

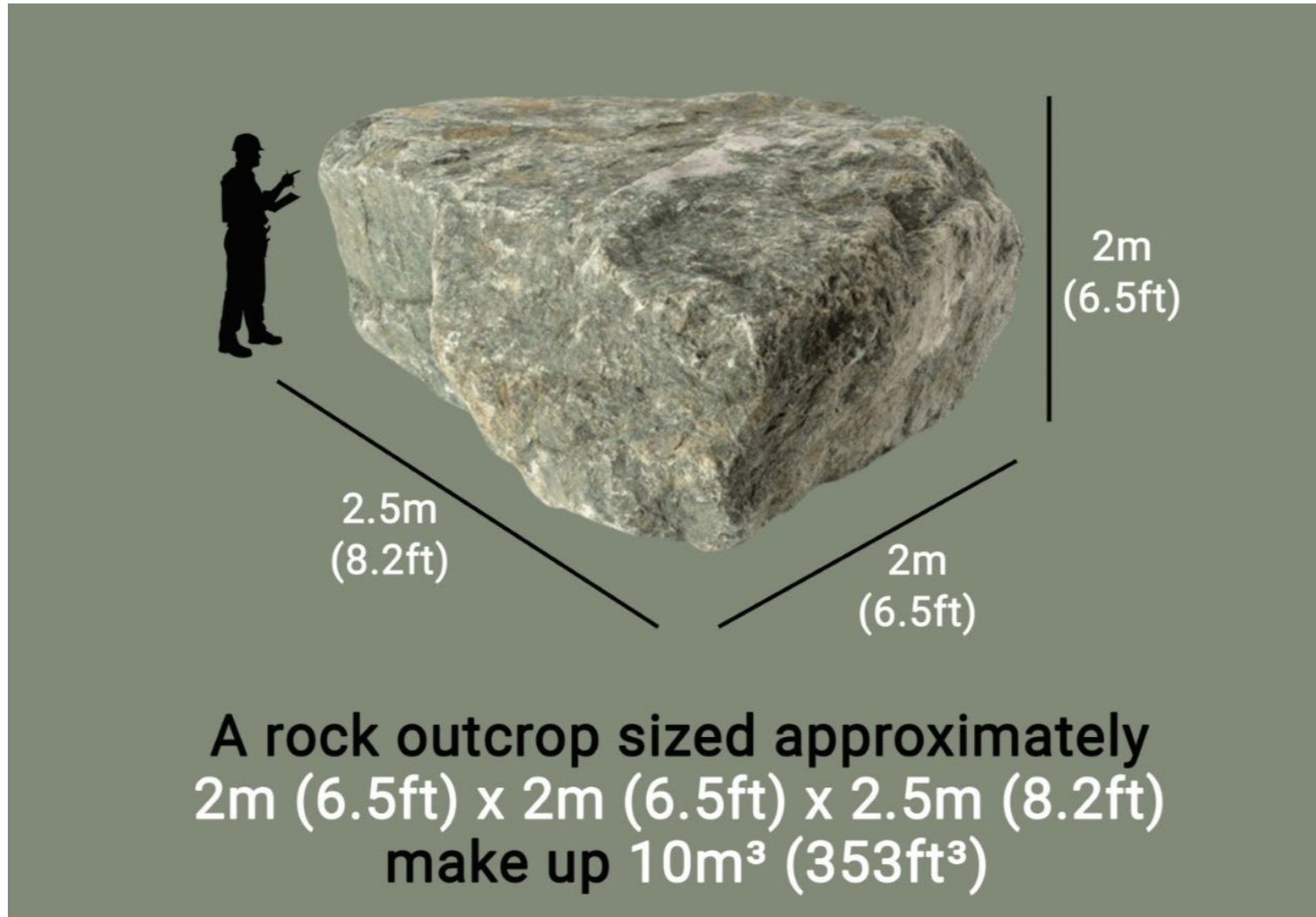
If the damage to property is causal, it is most likely covered by third party liability insurance. If homeowners are sceptical of the process and systems in place, they may wish to undertake their own pre-blast inspections. They could engage their home inspector or one offering services directly related to blasting.

Reference: The information included in this summary was collected from insurance industry sources in addition to an interview (October 23, 2024) with members of the Board of Directors of the Insurance Council of British Columbia and The Western Canada Chapter of the International Society of Explosive Engineers (ISEE), a non-profit organization that represents the blasting industry in Western Canada

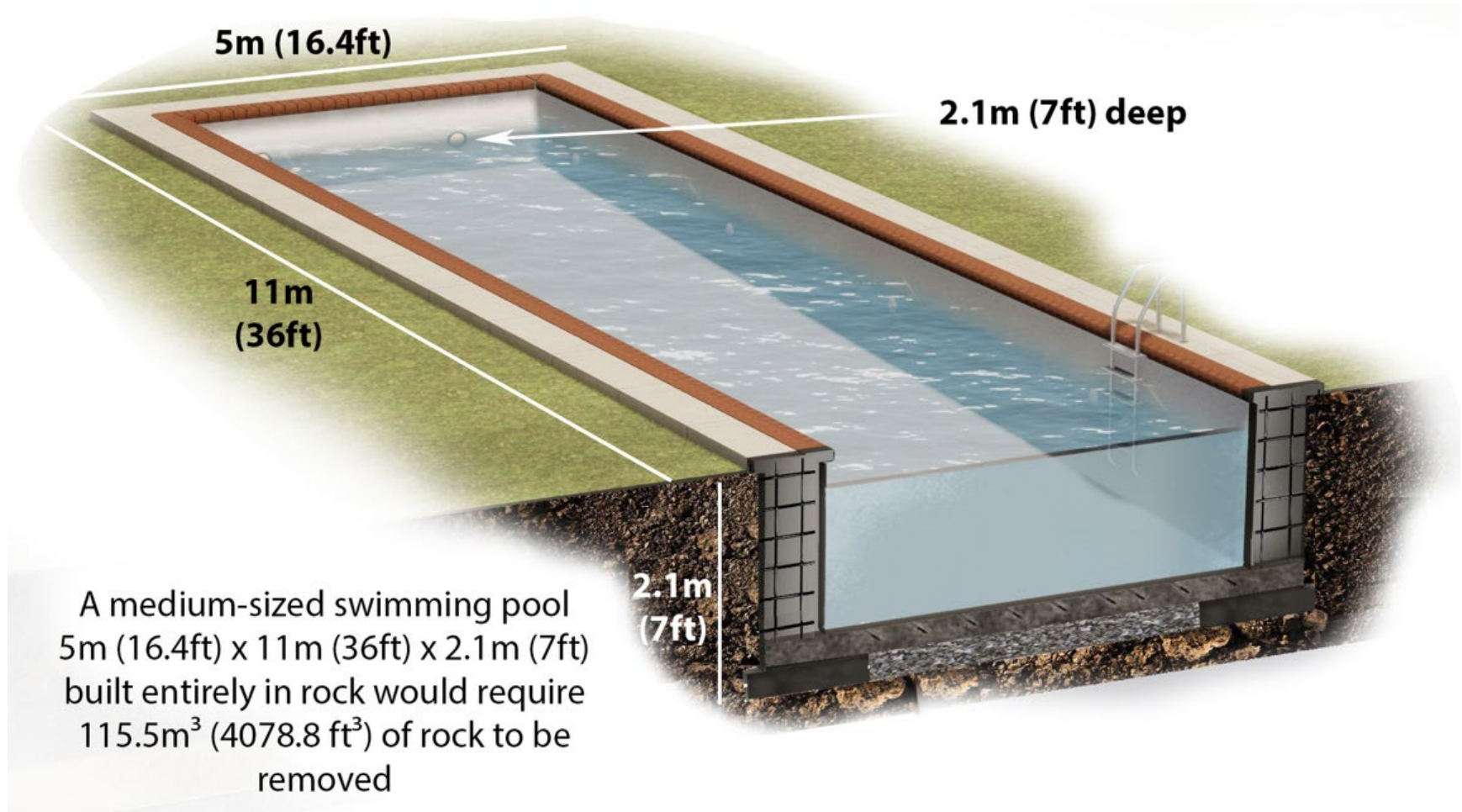
Volume Visualizations

1. Volume of rock breaking exemption (proposed at 10m³)
2. Example mid-sized pool (approximately 115m³ of material)
3. Volume limit of blasting / rockbreaking (proposed at 400m³ for lots up to 885m²)
4. Volume limit of blasting / rockbreaking (proposed at 600m³ for lots 885m² and up)
5. Example blasting for two new homes (reported as a total of 1440m³, or about 720m³ per lot/home)

1. Volume of rock breaking exemption (proposed at 10 m³)



2. Example mid-sized pool (approximately 115m³ of material)



3. Volume limit of blasting / rockbreaking (proposed at 400m³ for lots up to 885m²)

Lot size 35m (114.8ft) x 25m (82ft)
Lots 885m² (9,526ft²) or lesser - maximum of 400m³
(14,125.9ft³) of rock could be removed.

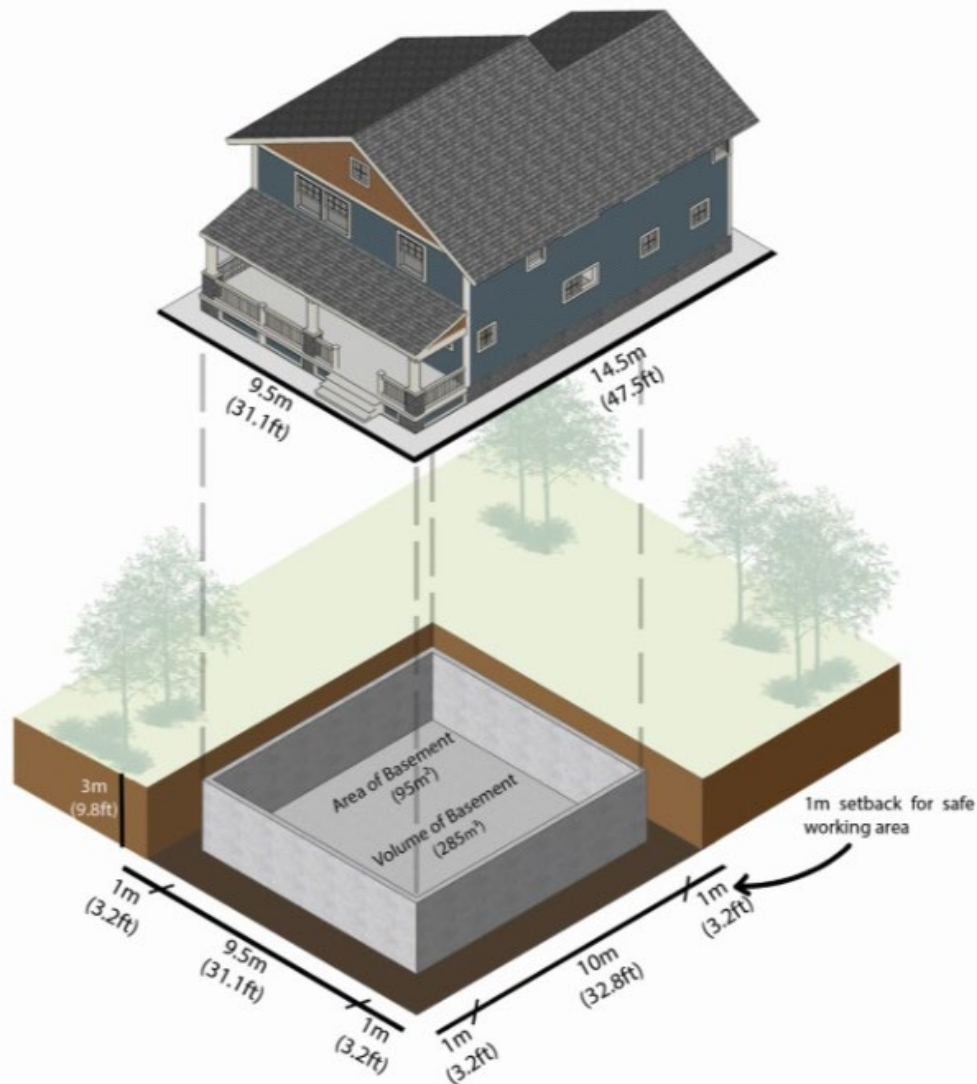


Figure showing 396m³ (13,984.6ft³) of rocks removed to build a partial basement of area 90m² (968.7ft²) for a house of 137.75m² (1,482.7ft²).

**4. Volume limit of blasting / rockbreaking
(proposed at 600m³ for lots up to 885m² and
up)**

Lot size 35m (114.8ft) x 28m (91.8ft)

Lots 885m² (9,526 ft²) or larger - maximum of 600m³ (21188.8ft³) of rock could be removed.

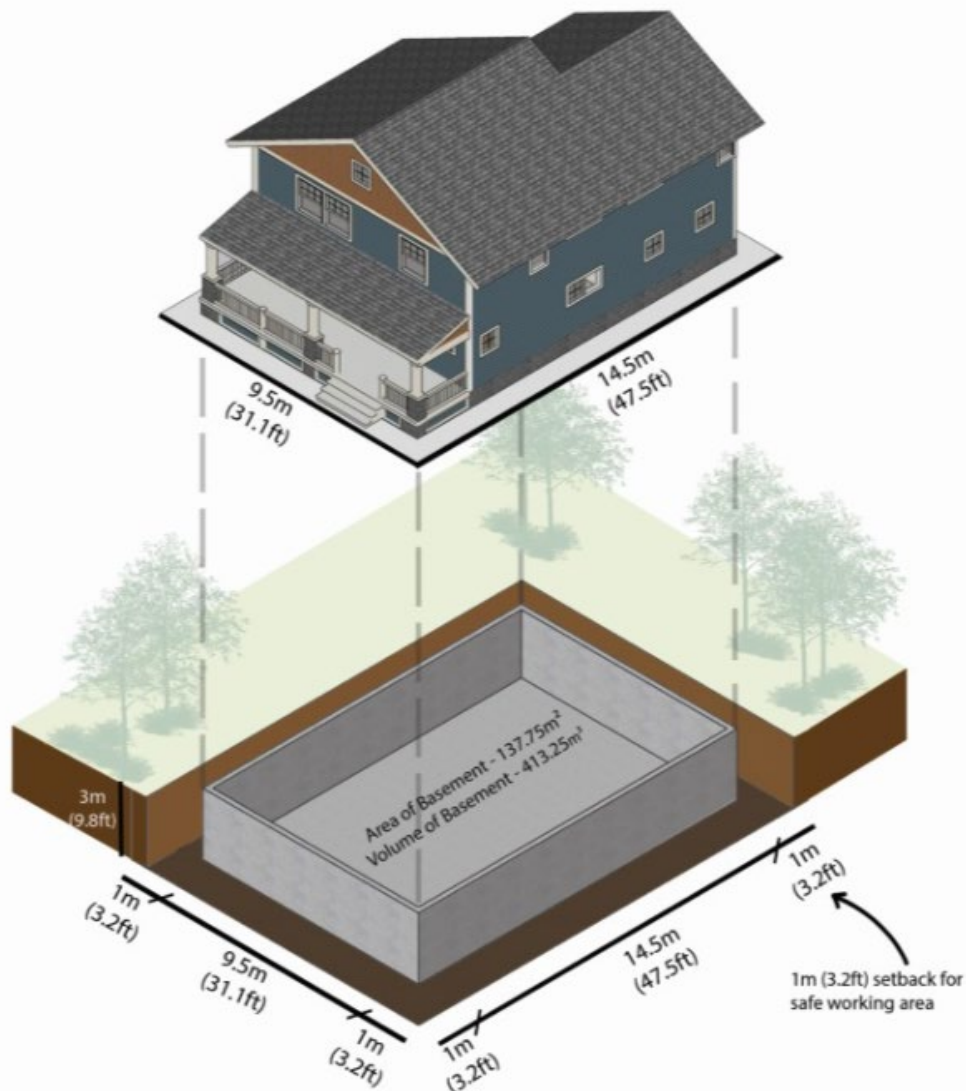


Figure showing 569.25m³ (20,102ft³) of rocks removed to build 137.75m² (1,482.7 ft²) of basement for a house of 137.75m² (1,482.7 ft²).

**5. Example blasting for two new homes
(reported as a total of 1440m³, or about 720m³ per lot/home)**





Attachment 5 – Proposed Blasting Regulation

Building and Plumbing Bylaw No. 4247, 2005			
Sec.	Current	Proposed	Rationale
	DEFINITIONS		“DWV” is the District of West Vancouver Soil Removal, Deposit, Blasting and Rock Breaking Bylaw No. 5130, 2021 “ISEEW” is the Best Practices Guide for Close Proximity Blasting Operations 3rd Edition, International Society of Explosives Engineers Western Canada Chapter
1	N/A	“ Affected Owner(s) ” means the owners or occupiers of parcels of land to be surveyed before a Blasting Permit is issued pursuant to Section 24 (2)(h) (Pre-Blast Survey);	Differentiates between the Owner who is initiating the Blasting or Rock breaking and those properties who may be impacted (DWV) 
	N/A	“ Blast ” or “ Blasting ” means the use of explosives, or chemicals, for the purpose of moving, displacing, or breaking rock or other material;	Reference to Bylaw regulations (DWV) 
	N/A	“ Blaster ” means the person, firm or corporation engaged by the Owner to conduct Blasting and includes an agent, contractor, or employee of the Blaster;	Reference to Bylaw regulations (DWV) 
	N/A	“ Control Measures / Blasting Plan ” is the Blasting plan developed for a site that specifies in what manner Blasting operations are to be undertaken;	This definition explains how the Blasting Plan is a technical document about the activity (ISEEW) 
		(removed)	
		(removed)	

	N/A	“Pre-Blast Survey” is a record typically including photos/video, of the condition of private or public property, sometimes required by an insurance company prior to the commencement of Blasting operations; “Pre-Blast Survey Report” is a report submitted by the Owner or their Blasting contractor that summarizes the efforts undertaken to complete Pre-Blast Surveys for all Affected Owners’ properties.	For increased clarity and improved communication in reference to Bylaw regulations. (ISEEW)  
	N/A	“Rock breaking” means the removal of boulders or bedrock from land by drilling, percussive breaking (other than Rock Hammering), or splitting, but excluding Blasting;	Reference to Bylaw regulation scope (DWV)  
	N/A	“Rock hammering” means the use of a sharp-tipped hydraulic hammer that is fitted on a piece of mobile machinery to break concrete or rock surfaces;	Reference to Bylaw regulations. Also known as hoe ramming  
4(1)	(d) Blasting.	(d) subject to section 4(2)(d), the removal of rock by Blasting and other acceptable Rock breaking .	The broader definition allows the District to regulate all Rock breaking activities.  
4(2)	N/A	(d) Blasting or Rock breaking in any of the following circumstances: (i) Rock breaking that involves the removal of less than 10 cubic metres of rock; (ii) The rock to be removed consists entirely of boulders separate from bedrock; (iii) If the rock removal is specifically authorized by a statute or regulation other than the Community Charter or Local Government Act; or (iv) If the work is, in the Director’s opinion, required on an urgent basis to lessen or eliminate an imminent threat to life, safety, property damage or public transportation routes and communication systems.	Exemptions avoid unnecessary steps in the right circumstances They are reasonable consideration (DWV)  
5(4)	No person shall carry out Blasting unless a building official has issued a permit for the work.	No person shall carry out Blasting or Rock breaking unless a building official has issued a permit for the work.	Typical bylaw clause to confirm permit requirement
24	BLASTING	BLASTING AND ROCK BREAKING The following regulations apply to Blasting and Rock breaking with the purpose of regulating the removal of rock from, and deposit of rock on, lands within the Municipality, to regulate and prohibit the use of explosive agents for Blasting, to require the holding of a permit for such purposes, and to fix a fee for such permit.	Provides an introduction to Section 24 of the Building Bylaw to make clear that Blasting and Rock breaking are regulated subject to this section 

		PERMIT REQUIREMENTS	
24	(1) No person shall Blast, carry on Blasting operations, or use any explosive agent without first obtaining a permit and paying the fees set out in Schedule "A" of this Bylaw.	1) No person shall remove or cause to be removed rock unless the person has obtained a Blasting or Rock breaking permit for such removal under this bylaw, and every such removal shall conform in all respects to the regulations and requirements of this bylaw and the terms and conditions of the permit;	Permit required for Blasting or Rock breaking provides the District the opportunity to manage neighbourhood disturbances of these construction activities (DWV) 
		2) When an Owner proposes to remove rock through means of Blasting , the Owner shall first apply to the Director of Building and Planning for a Blasting Permit by providing each of the following:	List of information required to facilitate communication and transparency. 
		a) The permit fee as set out in the <i>Planning and Development Fees and Charges Bylaw No. 4845, 2023</i> as amended from time to time.;	Permit fees in accordance with fees bylaw. Noting potential for permit extension fee. 
24	(2) No person shall Blast, carry on Blasting operations, or use any explosive agent or obtain a Blasting permit unless he holds a valid Blasting Certificate issued by the Workers Compensation Board of British Columbia.	b) A copy of a valid Blasting certificate issued to the Blaster by WorkSafe BC for all persons completing the Blast ;	Confirmation of technical blasting qualifications on file. (DVW)   
24	(3) An applicant for a Blasting permit shall provide proof of comprehensive general liability insurance coverage for Blasting operations with a minimum coverage of Two Million Dollars (\$2,000,000.00) inclusive per occurrence.	c) A certificate of insurance as proof of comprehensive general liability coverage for Blasting or Rock breaking . This insurance shall be public liability and property damage insurance in a form satisfactory to the Municipal Solicitor, with Five Million Dollars (\$5,000,000) coverage inclusive for loss or damage in respect of injury or death of any person or person and/or damage to property from any one accident or occurrence. There shall be no third-party deductible for bodily injury or property damage loss and no space warranty clause. The District and the company employing the holder of the Blasting certificate shall be named insureds. Notification will be given by the insurer to the Director of Building and Planning by registered mail not less than 30 days prior to material change, cancellation or termination of the insurance.	Required regulation in building bylaw but increases value to \$5million. Note requirements: ▪ Naming of owner and District as insured ▪ No third party deductible ▪ 30-day notice of insurance change   

24	(4) An applicant for a Blasting permit shall execute a contractual Letter of Undertaking releasing, indemnifying and saving harmless the Municipality from and against any and all losses, claims, demands, suits, actions, recoveries and judgements of every kind brought or recovered against the Municipality arising out of or in any way connected with the work done under the Blasting permit.	d) A contractual Letter of Undertaking from the Owner releasing, indemnifying, and saving harmless the Municipality from and against any and all losses, claims, demands, suits, actions, recoveries, and judgements of every kind brought or recovered against the Municipality arising out of or in any way connected with the work done under the permit, in a form satisfactory to the Director;	Requirement transfers from current building bylaw (DVW)  
		e) A context map of the area within 300 metres of where the rock removal will occur. The context must visually indicate the location of all designated and registered heritage buildings;	Provides neighbourhood context of the blast site including any potential affected properties, highlighting those with heritage value.   
		f) (removed)	
24(5)	No person shall Blast, carry on Blasting or operate or use an explosive agent in dangerous proximity to any person, building or property, or the works of any underground utility liable to suffer injury from Blasting unless and until precautions have been taken to prevent injury to any person, building, property or utility.	g) A Control Measures / Blasting Plan , prepared by the Blaster in accordance with requirements set forth by WorkSafe BC.	This is the technical plan that specifies the methods to be used to ensure safety of people and property. The clause provides increased clarity and direction to achieve the current blasting regulation that references “precautions” (current Sec 24(5)) Staff are not qualified to judge the competence of the plan so will rely on WorkSafe BC’s and federal oversight.  
		h) Confirmation for which properties Pre-Blast Surveys have been completed;	This information provides the District with insight regarding the extent of the Pre-Blast Survey conducted for insurance purposes by the blaster.  
		i) (removed)	

		j) An arborist report that describes the plan to protect trees, including that Blasting and Rock breaking: i) near tree roots will only be performed using explosives of low phytotoxicity and techniques that minimize tree damage, like expanding foam and hydraulic rock breakers; ii) will only use small low-concussion charges, and multiple small charges designed to pre-shear the rock face, to reduce fracturing, ground vibration, and minimize the impact on the surrounding environment; iii) materials, including blast rock and other construction materials and debris, are stored away from critical tree root zone.	The District arborist often adds these conditions to Blasting permit so they are included in the bylaw for consistency, communication, and transparency. Blasting Permits are a type of Building Permit and the Tree Protection Bylaw may apply if tree removal regulated under that bylaw is being proposed. The examples are recommendations from local professional tree service providers. 
		k) (removed)	
		l) Information of any proposed road and sidewalk closures, detours, or other temporary accessibility changes;	This information is information required by Public Works that can be communicated as part of the rock removal permit notification process.   
		3) When an Owner proposes to remove rock through means of Rock breaking, the Owner shall first apply to the Director of Building and Planning for a Rock breaking Permit by fulfilling each of the requirements outlined in 24(2), except for 24(2)(b) Blasting Certificate, 24(2)(g) and 24(2)(i) respecting Control Measures / Blasting Plan, and 24(2)(h) report on the results of a Pre-Blast Survey.	List of information required to facilitate communication and transparency. Rock breaking does not require the technical detail of Blasting. (DWV) 
		4) For Blasting or Rock breaking on land owned by the municipality or another government, the persons seeking permission to Blast or Rock break shall sign all forms, complete all requirements, and bear all responsibilities, liabilities, and costs under the Bylaw and otherwise, as if they were the Owner.	Provides clarification about how the bylaw applies to public lands (DVW)   

24	(10) Where a Blasting permit is for an excavation required for the construction of a building, no Blasting permit shall be issued unless the applicant has first obtained a building permit for the proposed building	5) Where a Blasting or Rock breaking permit is for an excavation required for the construction of a building or structure, no Blasting or Rock breaking permit shall be issued unless the applicant has first obtained a building permit for the proposed building or structure.	Ensures the site plans are completed and filed with a building permit to justify the need for blasting or rock breaking.   
		6) A brief summary of the Blasting Plan will be posted on the site prior to issuance of a permit, readable from the outside the property line, at least one week prior to the planned rock removal. Information will include the planned date and anticipated duration of rock removal, the intended depth of rock removal, and the estimated volume of rock to be removed. The method of marking should not be removed by inclement weather;	This provision supplements the OHS blasting regulation 21.88(2) that requires the project notice be posted at the site. Site marking provides additional information to neighbours and confirms owner's intention for department staff inspection and response to enquiries (DVW)   
		7) (removed)	 
LIMITATIONS			
		8) On land zoned Residential Use (R-1 through to R-5 and CD zones for ground oriented housing) in the zoning bylaw, Blasting and Rock breaking are prohibited except: a) For the construction of one or more of a primary dwelling, garage, coach house, access driveways, or parking area as shown on plans for which a building permit has been issued and is in good standing, and for such purposes the allowable rock volume to be broken, blasted and removed, shall not exceed: i) a total volume of 400m ³ on lots less than 885m ² , and ii) a total volume of 600m ³ on lots over and equal to 885m ² ; For certainty, the totals above are the cumulative amount of rock that is permitted to be broken, blasted and removed for the construction of any and all primary dwellings, garages, coach houses, access driveways and parking areas on a lot. If the District has records of a volume of rock that was previously removed on a lot for any of these purposes, then this volume will be deducted from the allowable volume specified under this section. If the District has no records of a volume of rock that was previously removed on a lot, then no adjustments are made to the allowable volume specified under this section.	Provides limits to rock removal in accordance with OCP Policies guiding natural landscapes and outcrops with minimal blasting Provides an opportunity for the district to manage rock removal and related topographic change over time. (DVW)   

		b) For the installation of utilities and utility connections; and	Facilitates required utility connections (DVW) 
		c) Blasting or Rock breaking certified by a geotechnical engineer as being necessary for the safe use of the site.	Provides for safety-related intervention (DVW) 
		9) Despite the provisions of Section 24 (8)(a), the Owner of the land may apply to the Director for a Blasting or Rock breaking permit to remove a volume of rock specified in the permit in order to:	Provides minor opportunities for rock removal when a broader policy objective may be achieved. (DVW)   
		a) Facilitate the construction of a swimming pool if the Director is satisfied that the Blasting or Rock breaking will reduce the visual and auditory impact of the pool and associated mechanical equipment on surrounding properties;	Supports urban design objectives (DVW)  
		b) Enable any accessory building or structure to be located on the site in a manner which in the opinion of the Director will: (1) Accommodate the design and spatial relationship of the buildings so the floor levels conform to the natural contours of the site; (2) Eliminate or reduce the use of exposed foundation walls and structural support elements, or; (3) Minimize the visible mass of all structures as viewed from adjacent roads and properties;	Supports urban design objectives (DVW)   
		c) Enable minor terrain alteration, in the opinion of the Director , to accommodate landscaping work or property amenity; but excluding in all cases, the removal of rock which substantially alters the natural grade of the site.	Enables landscaping projects (DVW)   
		10) For certainty, an Owner may not remove an aggregate volume of rock removed pursuant to one or both of Sections 24(8)(a) and 24(9) exceeding the allowable rock volume in Section 24(8)(a);	Further regulations of volume of rock removed to limit impact on natural landscape. (DVW)  
		11) (removed)	
		12) The aggregate volume limitations in 24(8)(a) do not apply to rock removal required for the construction of roads or the installation of utilities and services in accordance with approved subdivision drawings;	Exempts required infrastructure projects from aggregate volumes for new subdivision development. (DVW)  

		HOURS and CONDITIONS	
24	(6)The holder of a Blasting permit may only Blast, carry on Blasting operations, use an explosive agent, or operate drills, compressors or other equipment used to prepare land for Blasting from Monday to Friday, exclusive of statutory holidays, between the hours of 8:00 a.m. and 4:00 p.m.	13) An Owner shall ensure that Rock breaking or Blasting only occurs within the times permitted under <i>Anti-Noise Bylaw, No. 3210, 1977</i> , as amended from time to time.	Limiting the hours of nuisance while maintaining a reasonable window of time to safety complete the work. This represents status quo for Oak Bay respecting time of day – see Noise bylaw proposal, except for the additional restriction for rock hammering (hoe ramming).Note that this allows blasting for 30 minutes beyond the end of the normal workday of Public Works. (DVW)  
		14) (removed)	
		15) No person shall engage in Rock hammering except for minor Rock breaking under 10m ³	Addresses the excessive annoyance of hoe ramming. See also accompanying provision in Noise Bylaw. DVW  
		16) Onsite rock crushing or grinding is prohibited, except for in the case of a new subdivision of land.	 
24(9)	No person shall Blast, carry on Blasting operations, use an explosive agent, or operate drills, compressors or other equipment used to prepare land for Blasting unless and until steps have been taken to suppress dust which may occur as a result of the said activity.	17) No person shall remove or deposit rock in a manner that causes a dust or dirt nuisance to any neighbouring property or right of way.	Provides clear instruction to contractors to manage operations to avoid impacting neighbours (DVW) 
		PERMIT EXPIRY	

13(4)	Every permit is issued upon the condition that the permit shall expire and the rights of the owner under the permit shall terminate if: (c) the work authorized by the permit is not completed, or any inspections and occupancy permits related to the permit and required pursuant to this Bylaw are not obtained: (ii) within twelve (12) months from the date of issuance of a permit that is not in respect of the construction of a complex building and that is not a renewal permit	18) Authority for Blasting under a Blasting permit expires 20 working days for lots less than 885 m² 30 working days for lots equal to or greater than 885 m² 19) A Rock Breaking permit expires 30 working days after issuance of the permit for Rock Breaking;	Blasting expirations are intended to balance enough time to complete the required blasting but limited to avoid ongoing blasting. Rock breaking permit expiration is reasonable to limit the nuisance of noise in the vicinity. (DWV)  
		20) The Director may, at the request of the Owner, may extend the authority for rock removal under a Blasting or Rock breaking permit provided that - The Owner provides evidence of the need for an extension of time due to: - Unforeseen environmental conditions such as extreme weather or a natural disaster - Labour shortage due to loss of staff or illness - Inability to proceed due to supply chain matters causing an equipment delay or unavailability; - Only one permit extension is granted; - The extension of time is no more than the time authorized with the original permit; - The Owner pays an Extension Fee as established in the <i>Planning, Building and Development Fees and Charges, No. 4845, 2023</i>; - The Owner notifies all Affected Owners of the permit extension and updates the project information posted on the site; - The Director is satisfied that any policy of insurance provided under Section 24(2)(c) will remain in effect;	This provision allows for permit extensions, subject to an additional fee to cover administrative costs, to better manage the impacts of larger blasting or rock breaking projects or those impacted by unforeseen circumstances like weather. (DVW)    

		21) The Director may cancel or suspend the authority for rock removal under a Blasting or Rock breaking Permit if there are reasonable grounds to believe that the Owner or Blaster has done anything in violation of this Bylaw or the permit, or in violation of any agreement made pursuant to Section 24(2)(d) or (g). No person who has had their authority for rock removal under a permit cancelled or suspended shall engage in or carry-on rock removal in the District unless special written permission to do so is given by the Director;	This regulation provides the Director discretion to respond to a problematic project. The agreements reference the Owner's Letter of Understanding and the Blaster's Control Measures / Blasting Plan (DVW)  
		22) The District will not issue more than one Blasting permit for the same property within any 12-month period, exclusive of the dates of an active Blasting or Rock breaking permit.	Provides motivation for the Owner to communicate longer term development plans up front and limit multiple blasting projects over time at one location. 
		NOTIFICATION	

24	(7) No person shall Blast, carry on a Blasting, or use an explosive agent within a radius of 150 metres of any building without first notifying in writing the owners or occupants of such building, with such notice to include the anticipated duration of the Blasting program.	23) The holder of a Blasting or Rock breaking Permit shall not commence or allow Blasting, Rock breaking until such time as the holder of the Blasting Permit has given written notice to the Director and all property owners within 150-meter radius of the Blast location. The notice shall include the: a) Description of the work to be done, including the estimated volume of rock being removed; b) Dates on which the Blasting or Rock breaking will occur; c) Times when Blasting or Rock breaking will occur; d) Methods intended to safeguard persons and property, including plan of vibration and air over pressure monitoring; e) Signals and other warning methods to be used to inform those nearby of an impending Blast; f) Name, telephone number, cellular telephone number and email address of the Blaster or Owner who will provide additional information, and; g) Name, address, and telephone number of the Blaster's insurer.	This is required notification and the listed details provide improved communication and transparency for the Owner, Blaster , property owners, and District. (DWV) It supports provincial notification requirements and provides the District an opportunity to require additional communication in certain circumstances Occupational Health and Safety Regulation Part 21 defines the proximity zone for blasting as 300m from the blast site for a school, hospital or medical clinic, and 150m from the blast site for any other potentially occupied structure. Additional operational practice, with cost covered by the blasting fee. The District will: – Continue general notification to all property owners and residents within an increased 150 meters by the municipality with cost covered by the blasting fees - include blasting applications on the Development Tracker with information about who to contact for specific resident concerns, providing an additional source of information and reference for the community.
		24) The holder of a Blasting or Rock breaking permit shall provide at least 48 hours' notice of the commencement of any Blasting or Rock breaking , and at least one week's (7 days) notice shall be given of any project expected to continue for more than two (2) days.	In addition, the District will continue to provide notice to properties within 150 meter of the blast site at least one-week in advance of blasting.
24(8)	No person shall Blast, carry on Blasting operations, or use an explosive agent within a radius of 300 metres of any school building during school hours without first notifying in writing the School District, Principal or person in charge thereof, with such notice to include the anticipated duration of the Blasting program.	25) The holder of a Blasting or Rock breaking permit shall not commence or allow Blasting or Rock breaking within 300 metres of a School or Health Facility until notice as required in Sections 24(23), and 24(24) has also been given to the senior administrator of the School or Health Facility and has been provided to the Director . Further notice must be given to the senior administrator, or his or her designate, at least two (2) hours prior to each actual blast, stating the approximate time of the blast.	Provides specific notification requirements for schools and health facilities, so Blasts can be planned to avoid more sensitive school or health centre times and that the planned Blasting is well known to nearby institutions.

		26) The Owner shall notify or cause to be notified the Director , in writing, when the rock removal to be carried out under the permit has been completed.	
		SAFETY AND MONITORING	
		27) The Blaster shall ensure that a security person (equipped with and trained in the use of warning and signalling devices approved by WorkSafeBC BC) is posted at every location where vehicles or pedestrians might be affected by a Blast . Prior to any Blast , the Blaster shall ensure that the security person signals vehicles and pedestrians to prevent them from entering an area which may be affected by the Blast . The Blaster shall ensure that no Blasting occurs until all persons and vehicles vacate the area affected by the Blast .	OHS requires blaster to secure access to the site but there is no mention of nearby vehicular and pedestrian intersections and access in the vicinity.    Manages traffic and proximity access during a blast. (DVW)  
		a) (removed)	
		28) (removed)	
		29) (removed)	  
		30) (removed)	 
		31) The holder of a Blasting permit must ensure that all Provincial and Federal Blasting standards are met.	Stating what is understood for clarity 

	Anti-Noise Bylaw, No. 3210, 1977		
Sec	Current	Proposed	Rationale
4		Prohibited Conduct: (6) Blasting or Rock breaking outside the hours of 8am-4pm Monday to Friday Blasting or Rock breaking on Saturday, Sunday, or holidays Blasting or Rock breaking from December 24 - January 2, inclusive	Limited times and seasons for blasting and rock breaking balances the need for construction activity with the comfort of living in the community
4		Notwithstanding (6) above, Rock Hammering is prohibited outside the window of 12 pm – 4 pm of the allowed days for Blasting and Rock breaking.	Rock hammering is the most impactful type of rock breaking in terms of noise. For this reason, extended day long noise exposure to residents could be limited to afternoons only.

	Planning, Building and Development Fees and Charges, No. 4845, 2023		
Sec	Current	Proposed	Rationale
	Initial fee based on construction value:		Set fees do not rely on construction value estimates.

	<table><tr><td>≤ \$100K</td><td>\$100 + 1.3% project value</td></tr><tr><td>> \$100K ≤.\$500K</td><td>\$1,500 + 1.3% project value >\$100K</td></tr><tr><td>> \$500K</td><td>\$5,000 + 1.3% project value >\$500K</td></tr></table>	≤ \$100K	\$100 + 1.3% project value	> \$100K ≤.\$500K	\$1,500 + 1.3% project value >\$100K	> \$500K	\$5,000 + 1.3% project value >\$500K	<table><tr><th colspan="2">Schedule 2, Table 1</th></tr><tr><td>Blasting permit fee</td><td>\$1,250</td></tr><tr><td>Rock breaking permit fee</td><td>\$750</td></tr><tr><td></td><td></td></tr></table>	Schedule 2, Table 1		Blasting permit fee	\$1,250	Rock breaking permit fee	\$750			The cost of notifications (an estimated \$250 dollars typically) has been included in the proposed base fees.
≤ \$100K	\$100 + 1.3% project value																
> \$100K ≤.\$500K	\$1,500 + 1.3% project value >\$100K																
> \$500K	\$5,000 + 1.3% project value >\$500K																
Schedule 2, Table 1																	
Blasting permit fee	\$1,250																
Rock breaking permit fee	\$750																
	Extension fee based on original permit fee:	<table><tr><td>Blasting or Rock breaking fee for extension of time</td><td>\$250</td></tr><tr><td>Blasting or Rock breaking fee for rock removal over the maximum permitted</td><td>\$100/m3</td></tr></table>	Blasting or Rock breaking fee for extension of time	\$250	Blasting or Rock breaking fee for rock removal over the maximum permitted	\$100/m3	Extension fees motivate completion of rock removal within a reasonable time frame. Note that this will require seamless turn-around of extensions at the District.										
	Blasting or Rock breaking fee for extension of time	\$250															
	Blasting or Rock breaking fee for rock removal over the maximum permitted	\$100/m3															
<table><tr><td>≤ \$500</td><td>10% of original fee</td></tr><tr><td>> \$500</td><td>\$50</td></tr></table>	≤ \$500	10% of original fee	> \$500	\$50													
≤ \$500	10% of original fee																
> \$500	\$50																

Attachment 6 – Proposed Blasting Regulation – Changes Since March 2024

Building and Plumbing Bylaw No. 4247, 2005			
Sec.	Current	Proposed	Rationale
	DEFINITIONS		"DWV" is the District of West Vancouver Soil Removal, Deposit, Blasting and Rock Breaking Bylaw No. 5130, 2021 "ISEEW" is the Best Practices Guide for Close Proximity Blasting Operations 3rd Edition, International Society of Explosives Engineers Western Canada Chapter
1	N/A	"Affected Owner(s)" means the owners or occupiers of parcels of land to be ~~inspected surveyed~~ before a Blasting Permit is issued pursuant to Section 24 (2)(h) (Pre-Blast Inspection Survey and Post-Blast Inspection);	Differentiates between the Owner who is initiating the Blasting or Rock breaking and those properties ~~within a certain radius~~ who may be impacted (DWV)
	N/A	" Blast " or " Blasting " means the use of explosives, or chemicals, for the purpose of moving, displacing, or breaking rock or other material;	Reference to Bylaw regulations (DWV) 
	N/A	" Blaster " means the person, firm or corporation engaged by the Owner to conduct Blasting and includes an agent, contractor, or employee of the Blaster;	Reference to Bylaw regulations (DWV) 
	N/A	" Control Measures / Blasting Plan " is the Blasting plan developed for a site that specifies in what manner Blasting operations are to be undertaken;	This definition explains how the Blasting Plan is a technical document about the activity (ISEEW) 
	N/A	~~(removed) "Independent Blasting Consultant" is an Owner-retained-qualified professional engineer with specific knowledge and expertise in rock mechanics and close proximity Blast design to meet specific objectives as well as the control of vibration and air over pressure, who is independent of the Blaster;~~	The definition is different ~~aligns with~~ from the industry definition in that it specifies the consultant must be a qualified professional engineer (ISEEW and DWV)  

		~~(removed)~~ "Nesting Season" means the nesting season for a raptor, as set out in the <i>Provincial Guidelines for Raptor Conservation during Urban and Rural Land Development in British Columbia</i> (2013);	~~Recommended cross-reference by legal:~~ 
	N/A	"Pre-Blast Inspection Survey" is a detailed record ~~in written form, accompanied by typically including~~ photos/video, of the condition of private or public property, ~~sometimes required by an insurance company~~ prior to the commencement of Blasting operations; "Post-Blast Inspection" is a detailed record in written form, accompanied by photos/video, of the condition of private or public property, following the completion of Blasting operations; "Pre-Blast Survey Report" is a report submitted by the Owner or their Blasting contractor that summarizes the efforts undertaken to complete Pre-Blast Surveys for all Affected Owners' properties.	For increased clarity and improved communication in reference to Bylaw regulations. ~~It differs from the industry term with the use of inspection rather than survey to avoid confusion with other required surveys. Post-blast inspection is added.~~ (ISEEW)  
	N/A	"Rock breaking" means the removal of boulders or bedrock from land by drilling, percussive breaking (other than ~~R~~ ock ~~H~~ ammering), or splitting, but excluding Blasting ;	Reference to Bylaw regulation scope (DWV)  
	N/A	"Rock hammering" means the use of a sharp-tipped hydraulic hammer that is fitted on a piece of mobile machinery to break concrete or rock surfaces;	Reference to Bylaw regulations. Also known as hoe ramming  
4(1)	(d) Blasting.	(d) subject to section 4(2)(d), the removal of rock by Blasting and other acceptable Rock breaking .	The broader definition allows the District to regulate all Rock breaking activities.  

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4(2)	N/A	(d) Blasting or Rock breaking in any of the following circumstances: (i) Rock breaking that involves the removal of less than 10 cubic metres of rock; (ii) The rock to be removed consists entirely of boulders separate from bedrock; (iii) If the rock removal is specifically authorized by a statute or regulation other than the Community Charter or Local Government Act; or (iv) If the work is, in the Director's opinion, required on an urgent basis to lessen or eliminate an imminent threat to life, safety, property damage or public transportation routes and communication systems.	Exemptions avoid unnecessary steps in the right circumstances They are reasonable consideration (DWV)
5(4)	No person shall carry out Blasting unless a building official has issued a permit for the work.	No person shall carry out Blasting or Rock breaking unless a building official has issued a permit for the work.	Typical bylaw clause to confirm permit requirement
24	BLASTING	BLASTING AND ROCK BREAKING The following regulations apply to Blasting and Rock breaking with the purpose of regulating the removal <u>of rock</u> from, and deposit of rock on, lands within the Municipality, to regulate and prohibit the use of explosive agents for Blasting, to require the holding of a permit for such purposes, and to fix a fee <u>and security</u> for such permit.	Provides an introduction to Section 24 of the Building Bylaw to make clear that Blasting and Rock breaking are regulated subject to this section
24	(1) No person shall Blast, carry on Blasting operations, or use any explosive agent without first obtaining a permit and paying the fees set out in Schedule "A" of this Bylaw.	PERMIT REQUIREMENTS 1) No person shall remove or cause to be removed rock unless the person has obtained a Blasting or Rock breaking permit for such removal under this bylaw, and every such removal shall conform in all respects to the regulations and requirements of this bylaw and the terms and conditions of the permit;	Permit required for Blasting or Rock breaking provides the District the opportunity to manage neighbourhood disturbances of these construction activities (DWV)
		2) When an Owner proposes to remove rock through means of Blasting , the Owner shall first apply to the Director of Building and Planning for a Blasting Permit by providing each of the following:	List of information required to facilitate communication and transparency.
		a) The permit fee <u>and security deposit</u> as set out in the <i>Planning and Development Fees and Charges Bylaw No. 4845, 2023</i> as amended from time to time. <u>The damage deposit shall be security for the completion of all requirements under this Bylaw and may be used at any time by the District to secure completion of any of these requirements;</u>	Permit fees in accordance with fees bylaw. Noting potential for permit extension fee. <u>Some minimal assurance of compliance with the regulation.. (DWV)</u>

24	(2) No person shall Blast, carry on Blasting operations, or use any explosive agent or obtain a Blasting permit unless he holds a valid Blasting Certificate issued by the Workers Compensation Board of British Columbia.	b) A copy of a valid Blasting certificate issued to the Blaster by WorkSafe BC for all persons completing the Blast ;	Confirmation of technical blasting qualifications on file. (DVW)  
24	(3) An applicant for a Blasting permit shall provide proof of comprehensive general liability insurance coverage for Blasting operations with a minimum coverage of Two Million Dollars (\$2,000,000.00) inclusive per occurrence.	c) A certificate of insurance <u>as proof of comprehensive general liability coverage to insure damage to persons or property that may be injured by the for Blasting or Rock breaking</u> . This insurance shall be public liability and property damage insurance in a form satisfactory to the Municipal Solicitor, with Five Million Dollars (\$5,000,000) coverage inclusive for loss or damage in respect of injury or death of any person or person and/or damage to property from any one accident or occurrence. There shall be no third-party deductible for bodily injury or property damage loss and no space warranty clause. The District and the company employing the holder of the Blasting certificate shall be named insureds. Notification will be given by the insurer to the Director of Building and Planning by registered mail not less than 30 days prior to material change, cancellation or termination of the insurance.	Required regulation in building bylaw but increases value to \$5million. <u>Note requirements:</u> ▪ <u>Naming of owner and District as insured</u> ▪ <u>No third party deductible</u> ▪ <u>30-day notice of insurance change</u>   
24	(4) An applicant for a Blasting permit shall execute a contractual Letter of Undertaking releasing, indemnifying and saving harmless the Municipality from and against any and all losses, claims, demands, suits, actions, recoveries and judgements of every kind brought or recovered against the Municipality arising out of or in any way connected with the work done under the Blasting permit.	d) A contractual Letter of Undertaking from the Owner releasing, indemnifying, and saving harmless the Municipality from and against any and all losses, claims, demands, suits, actions, recoveries, and judgements of every kind brought or recovered against the Municipality arising out of or in any way connected with the work done under the permit, in a form satisfactory to the Director;	Requirement transfers from current building bylaw (DVW)  

		e) A context map of the area within 300 metres of where the rock removal will occur. <u>The context must visually indicate the location of all designated and registered heritage buildings;</u>	Provides neighbourhood context of the bBlast site including any potential affected properties. <u>highlighting those with heritage value.</u>   
		f) ~~(removed)~~ A comprehensive topographic survey of the parcel (or the portion thereof) where the rock removal is to be carried out, prepared by a B.C.L.S. or a professional engineer; The topographic survey shall have the dimensioned exterior walls of the principal building and garage, and edge of driveway, overlaid as shown on the building permit plans. The Owner shall ensure that the survey is completed after removal of organics and other overburden so that the bedrock proposed to be removed is exposed;	This requirement is the first part of enabling: (1) the calculation of rock removed, and (2) a record of the resulting landscape that may affect drainage, natural areas, and aesthetics. (DVW)   
24(5)	No person shall Blast, carry on Blasting or operate or use an explosive agent in dangerous proximity to any person, building or property, or the works of any underground utility liable to suffer injury from Blasting unless and until precautions have been taken to prevent injury to any person, building, property or utility.	g) A Control Measures / Blasting Plan , prepared by the Blaster and ~~accepted in writing by an Independent Blasting Consultant~~ , which shall consist of a sketch of the Blasting pattern and include the sequence of detonation and the maximum weight of explosives to be detonated per delay, and shall specify measures designed to minimize potential injury to any person and avoid, control, or minimize the impact of the Blasting in accordance with requirements set forth by WorkSafe BC .	This is the technical plan that specifies the methods to be used to ensure safety of people and property. The clause provides increased clarity and direction to achieve the current Blasting regulation that references "precautions" (current Sec 24(5)) Staff are not qualified to judge the competence of the plan so <u>will rely on WorkSafe BC's and federal oversight, and requirement that the plan is subject to review and endorsement by an qualified engineer (Independent Blasting Consultant by definition in the bylaw) (DVW and ISEEW)</u>  
		h) ~~Confirmation for which properties Pre-Blast Surveys have been completed~~ A copy of the Pre-Blast Inspection Report ;	This information provides the District with insight regarding the extent of the Pre-Blast ~~Inspection Survey~~ conducted for insurance purposes by the blaster.  
		i) ~~(removed)~~ A letter to the District from a qualified Independent Blasting Consultant confirming they have reviewed and approved the Control Measures / Blasting Plan and acknowledging that the District is relying on their approval in issuing the permit.	An additional step for the ~~Independent Blasting Consultant to communicate directly with the District respecting compliance with WorkSafeBC's~~ referenced above, the owner retained qualified engineer provides professional assurance to the District that the plan is acceptable.     

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		j) An arborist report that describes the plan to protect trees, including that Blasting and Rock breaking: i) near tree roots will only be performed using explosives of low phytotoxicity and techniques that minimize tree damage, like expanding foam and hydraulic rock breakers; ii) will only use small low-concussion charges, and multiple small charges designed to pre-shear the rock face, to reduce fracturing, ground vibration, and minimize the impact on the surrounding environment; iii) materials, including blast rock and other construction materials and debris, are stored away from critical tree root zone.	The District arborist often adds these conditions to Blasting permit so they are included in the bylaw for consistency, communication, and transparency. <u>Blasting Permits are a type of Building Permit and the Tree Protection Bylaw may apply if tree removal regulated under that bylaw is being proposed.</u> The examples are recommendations from local professional tree service providers. 
		k) ~~(removed) A QEP recommendation about timing and measures required to comply with provincial regulations and guidelines during Nesting Season, for Blasting or Rock breaking, between March 30 and August 16;~~	<u>Raptor Conservation Guidelines</u> <u>"Blasting is of particular concern, especially during courtship and egg-laying periods. If blasting must occur at this time, a minimum 1,000 m (1 km) buffer from the nest site should be maintained."</u> (p.35 Sec 8.4) <u>Environment Canada Nesting Calendar for Region A1</u> <u>This requirement provides required information to enable the Director to withhold a permit in nesting season within the buffer area of a nest of a protected wildlife species, if required. This is in accordance with BC's Wildlife Act Section 34, federal Migratory Birds Regulations Section 6, and the federal Migratory Birds Convention Act Section 5.1(1)(2)</u> 
		l) Information of any proposed road and sidewalk closures, detours, or other temporary accessibility changes;	This information is information required by Public Works that can be communicated as part of the rock removal permit notification process.  
		3) When an Owner proposes to remove rock through means of Rock breaking, the Owner shall first apply to the Director of Building and Planning for a Rock breaking Permit by fulfilling each of the requirements outlined in 24(2), except for 24(2)(b) Blasting Certificate, 24(2)(g) and 24(2)(i) respecting Control Measures / Blasting Plan, and 24(2)(h) report on the results of a Pre-Blast Inspection Survey.	List of information required to facilitate communication and transparency. Rock breaking does not require the technical detail of Blasting. (DWV) 

		4) For Blasting or Rock breaking on land owned by the municipality or another government, the persons seeking permission to Blast or Rock break shall sign all forms, complete all requirements, and bear all responsibilities, liabilities, and costs under the Bylaw and otherwise, as if they were the Owner.	Provides clarification about how the bylaw applies to public lands (DVW)   
24	(10) Where a Blasting permit is for an excavation required for the construction of a building, no Blasting permit shall be issued unless the applicant has first obtained a building permit for the proposed building	5) Where a Blasting or Rock breaking permit is for an excavation required for the construction of a building or structure, no Blasting or Rock breaking permit shall be issued unless the applicant has first obtained a building permit for the proposed building or structure.	Ensures the site plans are completed and filed with a building permit to justify the need for blasting or rock breaking.   
		6) ~~The rock removal areas-A brief summary of the Blasting Plan will be clearly marked posted~~ on the site prior to issuance of a permit, readable from the outside the property line, ~~and posted~~ at least one week prior to the planned rock removal. Information will include the planned date and ~~anticipated~~ duration of rock removal, the intended depth of rock removal, and the ~~estimated~~ volume of rock to be removed. The method of marking should not be removed by inclement weather;	This provision supplements the OHS blasting regulation 21.88(2) that requires the project notice be posted at the ~~blast~~ site. Site marking provides additional information to neighbours ~~and-~~ ~~And-~~ confirms owner's intention for department staff inspection and response to enquiries (DVW)    
		7) ~~(removed) An Owner shall provide a post rock removal topographic survey in accordance with the requirements for a topographic survey in 24(2)(f) once any Blasting and/or Rock breaking;~~	~~The post rock removal topographic survey will provide measures to calculate the net rock removal from the site and the rock base of the resultant landscape for future site and infrastructure planning purposes. (DVW)~~    
LIMITATIONS			

	8) On land zoned Residential Use (R-1S or ~~through to R-5 and CD zones for ground oriented housing~~RD) in the zoning bylaw, Blasting and Rock breaking are prohibited except: a) For the construction of one or more of a primary dwelling, garage, coach house, access driveways, or parking area as shown on plans for which a building permit has been issued and is in good standing, and for such purposes the allowable rock volume to be broken, blasted and removed, shall not exceed: i) a total volume of 400m³ on lots less than 885m², and ii) a total volume of 600m³ on lots over and equal to 885m²; For certainty, the totals above are the cumulative amount of rock that is permitted to be broken, blasted and removed for the construction of any and all primary dwellings, garages, coach houses, access driveways and parking areas on a lot. If the District has records of a volume of rock that was previously removed on a lot for any of these purposes, then this volume will be deducted from the allowable volume specified under this section. If the District has no records of a volume of rock that was previously removed on a lot, then no adjustments are made to the allowable volume specified under this section.	Provides limits to rock removal in accordance with OCP Policies guiding natural landscapes and outcrops with minimal blasting Provides an opportunity for the district to manage rock removal and related topographic change over time. (DVW)   
	b) For the installation of utilities and utility connections; and	Facilitates required utility connections (DVW) 
	c) Blasting or Rock breaking certified by a geotechnical engineer as being necessary for the safe use of the site.	Provides for safety-related intervention (DVW) 
	9) Despite the provisions of Section 24 (8)(a)-for ~~RS and RD zones~~, the Owner of the land may apply to the Director for a Blasting or Rock breaking permit to remove a volume of rock specified in the permit in order to:	Provides minor opportunities for rock removal when a broader policy objective may be achieved. (DVW)   
	a) Facilitate the construction of a swimming pool if the Director is satisfied that the Blasting or Rock breaking will reduce the visual and auditory impact of the pool and associated mechanical equipment on surrounding properties;	Supports urban design objectives (DVW)  

		b) Enable any accessory building or structure to be located on the site in a manner which in the opinion of the Director will: (1) Accommodate the design and spatial relationship of the buildings so the floor levels conform to the natural contours of the site; (2) Eliminate or reduce the use of exposed foundation walls and structural support elements, or; (3) Minimize the visible mass of all structures as viewed from adjacent roads and properties;	Supports urban design objectives (DVW)   
		c) Enable minor terrain alteration, in the opinion of the Director, to accommodate landscaping work or property amenity; but excluding in all cases, the removal of rock which substantially alters the natural grade of the site.	Enables landscaping projects (DVW)   
		10) For certainty, an Owner may not remove an aggregate volume of rock removed pursuant to one or both of Sections 24(8)(a) and 24(9) exceeding the allowable rock volume in Section 24(8)(a);	Further regulations of volume of rock removed to limit impact on natural landscape. (DVW)  
		11) (removed)	
		12) The aggregate volume limitations in 24(8)(a) do not apply to rock removal required for the construction of roads or the installation of utilities and services in accordance with approved subdivision drawings;	Exempts required infrastructure projects from aggregate volumes for new subdivision development. (DVW)  
HOURS and CONDITIONS			
24	(6)The holder of a Blasting permit may only Blast, carry on Blasting operations, use an explosive agent, or operate drills, compressors or other equipment used to prepare land for Blasting from Monday to Friday, exclusive of statutory holidays, between the hours of 8:00 a.m. and 4:00 p.m.	13) An Owner shall ensure that Rock breaking or Blasting only occurs within the times permitted under <i>Anti-Noise Bylaw, No. 3210, 1977</i>, as amended from time to time.	Limiting the hours of nuisance while maintaining a reasonable window of time to safety complete the work. This represents status quo for Oak Bay respecting time of day – see Noise bylaw proposal, <u>except for the additional restriction for rock hammering (hoe ramming).</u> Note that this allows blasting for 30 minutes beyond the end of the normal workday of Public Works. (DVW)  

		14) ~~(removed) The Director may withhold issuing a Rock breaking or Blasting permit until the end of the Nesting Season, if the Director is satisfied that the subject property is within the buffer area of a nest of a protected wildlife species, as defined by the <i>Provincial Guidelines for Raptor Conservation during Urban and Rural Land Development in British Columbia (2013)</i> or may specify as a condition of a Permit that the Rock breaking or Blasting must not occur except on or after a date specified in the permit.~~	Protection of wildlife as regulated in the Wildlife Act (DVW) 
		15) No person shall engage in Rock hammering except for minor Rock breaking under 10m ³	Addresses the excessive annoyance of hoe ramming. See also accompanying provision in Noise Bylaw. DVW 
		16) Onsite rock crushing or grinding is prohibited, except for in the case of a new subdivision of land.	 
24(9)	No person shall Blast, carry on Blasting operations, use an explosive agent, or operate drills, compressors or other equipment used to prepare land for Blasting unless and until steps have been taken to suppress dust which may occur as a result of the said activity.	17) No person shall remove or deposit rock in a manner that causes a dust or dirt nuisance to any neighbouring property or right of way.	Provides clear instruction to contractors to manage operations to avoid impacting neighbours (DVW) 
		PERMIT EXPIRY	

13(4) Every permit is issued upon the condition that the permit shall expire and the rights of the owner under the permit shall terminate if: (c) the work authorized by the permit is not completed, or any inspections and occupancy permits related to the permit and required pursuant to this Bylaw are not obtained: (ii) within twelve (12) months from the date of issuance of a permit that is not in respect of the construction of a complex building and that is not a renewal permit	18) Authority for Blasting under a Blasting permit expires a) ~~210~~ working days for lots less than 885 m2 b) ~~3045~~ working days for lots equal to or greater than 885 m2 19) A Rock Breaking permit expires ~~3045~~ working days after issuance of the permit for Rock Breaking:	Blasting expirations are intended to balance enough time to complete the required blasting but limited to avoid ongoing blasting. Rock breaking permit expiration is reasonable to limit the nuisance of noise in the vicinity. (DWV)  
	20) The Director may, at the request of the Owner, may extend the authority for rock removal under a Blasting or Rock breaking permit provided that a) The Owner provides evidence of the need for an extension of time due to: i) Unforeseen environmental conditions such as extreme weather or a natural disaster ii) Labour shortage due to loss of staff or illness iii) Inability to proceed due to supply chain matters causing an equipment delay or unavailability; b) Only one permit extension is granted; c) The extension of time is no more than the time authorized with the original permit; d) The Owner pays an Extension Fee as established in the <i>Planning, Building and Development Fees and Charges, No. 4845, 2023</i>; e) The Owner notifies all Affected Owners of the permit extension and updates the project information posted on the site; f) The Director is satisfied that any policy of insurance ~~or security~~ provided under Section 24(2)(c) will remain in effect;	This provision allows for permit extensions, subject to an additional fee to cover administrative costs, to better manage the impacts of larger blasting or rock breaking projects or those impacted by unforeseen circumstances like weather. (DVW)  

		21) The Director may cancel or suspend the authority for rock removal under a Blasting or Rock breaking Permit if there are reasonable grounds to believe that the Owner or Blaster has done anything in violation of this Bylaw or the permit, or in violation of any agreement made pursuant to Section 24(2)(d) or (g). No person who has had their authority for rock removal under a permit cancelled or suspended shall engage in or carry-on rock removal in the District unless special written permission to do so is given by the Director;	This regulation provides the Director discretion to respond to a problematic project. The agreements reference the Owner's Letter of Understanding and the Blaster's Control Measures / Blasting Plan (DVW)  
		22) The District will not issue more than one Blasting permit for the same property within any 12-month period, exclusive of the dates of an active Blasting or Rock breaking permit.	Provides motivation for the Owner to communicate longer term development plans up front and limit multiple blasting projects over time at one location. 
		NOTIFICATION	

24	(7) No person shall Blast, carry on a Blasting, or use an explosive agent within a radius of ~~150~~ 90 metres of any building without first notifying in writing the owners or occupants of such building, with such notice to include the anticipated duration of the Blasting program.	23) The holder of a Blasting or Rock breaking Permit shall not commence or allow Blasting, Rock breaking until such time as the holder of the Blasting Permit has given written notice to the Director and all property owners within 150-meter radius of the ~~blast~~ Blast location. The notice shall include the: a) Description of the work to be done, including the ~~estimated~~ volume of rock being removed; b) Dates on which the Blasting or Rock breaking will occur; c) Times when Blasting or Rock breaking will occur; d) Methods intended to safeguard persons and property, including plan of vibration and air over pressure monitoring; e) Signals and other warning methods to be used to inform those nearby of an impending Blast; f) Name, telephone number, cellular telephone number and email address of the Blaster or Owner who will provide additional information, and; g) Name, address, and telephone number of the Blaster's insurer.	This is required notification and the listed details provide improved communication and transparency for the Owner, Blaster, property owners, and District. (DWV) It supports provincial notification requirements and provides the District an opportunity to require additional communication in certain circumstances Occupational Health and Safety Regulation Part 21 defines the proximity zone for blasting as 300m from the blast site for a school, hospital or medical clinic, and 150m from the blast site for any other potentially occupied structure. Additional operational practice, with cost covered by the blasting fee. The District will: - Continue general notification to all property owners and residents within an increased 150 meters by the municipality with cost covered by the blasting fees - include blasting applications on the Development Tracker with information about who to contact for specific resident concerns <u>providing an additional source of information and reference for the community.</u>
		24) The holder of a Blasting or Rock breaking permit shall provide at least 48 hours' notice ~~shall be given~~ of the commencement of any Blasting or Rock breaking , and at least one week's (7 days) notice shall be given of any project expected to continue for more than two (2) days.	In addition, the District will continue to provide notice to properties within 150 meter of the blast site at least one-week in advance of blasting.
24(8)	No person shall Blast, carry on Blasting operations, or use an explosive agent within a radius of 300 metres of any school building during school hours without first notifying in writing the School District, Principal or person in charge thereof, with such notice to include the anticipated duration of the Blasting program.	25) The holder of a Blasting or Rock breaking permit shall not commence or allow Blasting or Rock breaking within 300 metres of a School or Health Facility until notice as required in Sections 24(23), and 24(24) has also been given to the senior administrator of the School or Health Facility and has been provided to the Director . Further notice must be given to the senior administrator, or his or her designate, at least two (2) hours prior to each actual blast, stating the approximate time of the blast.	Provides specific notification requirements for schools and health facilities, so Blasts can be planned to avoid more sensitive school or health centre times and that the planned Blasting is well known to nearby institutions.

		26) The Owner shall notify or cause to be notified the Director and each Affected Owner , in writing, when the rock removal to be carried out under the permit has been completed.	Notice of blasting completion triggers a 60-day period for affected to communicate concerns to the Blaster's (or contractor's, in the case of Rock-breaking) insurance company.
		SAFETY AND MONITORING	
		27) The Blaster shall ensure that a security person (equipped with and trained in the use of warning and signalling devices approved by WorkSafeBC BC) is posted at every location where vehicles or pedestrians might be affected by a Blast . Prior to any Blast , the Blaster shall ensure that the security person signals vehicles and pedestrians to prevent them from entering an area which may be affected by the Blast . The Blaster shall ensure that no Blasting occurs until all persons and vehicles vacate the area affected by the Blast .	OHS requires blaster to secure access to the site but there is no mention of nearby vehicular and pedestrian intersections and access in the vicinity. Manages traffic and proximity access during a blast. (DVW)
		28) ~~(removed)~~ The Owner will, at the Owner's cost, retain an Independent Blasting Consultant to act on the Owner's behalf to: a) complete the requirements of Section 24 that relate to the Independent Blasting Consultant ; b)a) monitor the Blasting to ensure that the Blasting complies with the Control Measures / Blasting Plan , the Blasting Permit , and the requirements of this bylaw.	An owner-retained qualified engineer supports technical reviews required by the Director This will be an additional expense to the Owner and a disincentive to undertake blasting and an incentive to find site development options that respect the natural topography of the land. (DVW)
		29)28) ~~(removed)~~ During the course of Blasting , the Blaster shall forward to the Independent Blasting Consultant all Blast records and the Independent Blasting Consultant shall review the Blast records and confirm to the Director , if requested, that Blasting is being carried out in accordance with the Control Measures / Blasting Plan , and shall immediately report any problems, unusual circumstances, or inconsistencies to the Director.	An owner-retained P.Eng has a professional responsibility to communicate with the District. (DVW)
		30)29) ~~(removed)~~ The Independent Blasting Consultant shall immediately notify the Director if they have direct or indirect knowledge of a contravention of the Control Measures / Blasting Plan , the Blasting Permit , or the provisions of this Bylaw.	Designates responsibility to a qualified P.Eng to notify the District of any issues. (DVW)
		31)30) ~~(removed)~~ Upon completion of the Blasting and upon submission of a post- Blast topographic survey confirming the quantity of rock removed, satisfactory the Director, the Municipality shall return the security deposit to the applicant.	A security deposit also provides some incentive for completion and submission of a post-topographic survey (see 24(7)) (DVW)
		32)31) The holder of a Blasting permit must ensure that all Provincial and Federal Blasting standards are met.	Stating what is understood for clarity

Anti-Noise Bylaw, No. 3210, 1977			
Sec	Current	Proposed	Rationale
4		Prohibited Conduct: (6) Blasting or Rock breaking outside the hours of 8am-4pm Monday to Friday Blasting or Rock breaking on Saturday, Sunday, or holidays Blasting or Rock breaking from December 24 - January 2, inclusive	Limited times and seasons for blasting and rock breaking balances the need for construction activity with the comfort of living in the community
4		Notwithstanding (6) above, ~~R~~ ock Hammering is prohibited outside the window of 12 pm – 4 pm of the allowed days for Blasting and Rock breaking.	Rock hammering is the most impactful type of rock breaking in terms of noise. For this reason, extended day long noise exposure to residents could be limited to afternoons only.

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	Planning, Building and Development Fees and Charges, No. 4845, 2023				
Sec	Current		Proposed		Rationale
	Initial fee based on construction value:		Schedule 2, Table 1		Set fees do not rely on construction value estimates.
	≤ \$100K	\$100 + 1.3% project value	Blasting permit fee	\$1,250	The cost of notifications (an estimated \$250 dollars typically) has been included in the proposed base fees.
	> \$100K	\$1,500	Rock breaking permit fee	\$750	
	≤ \$.500K	+ 1.3% project value >\$100K	Blasting & Rock breaking security deposit	\$2,500	
	> \$500K	\$5,000 + 1.3% project value >\$500K			
	Extension fee based on original permit fee:		Blasting or Rock breaking fee for extension of time	\$250	Extension fees motivate completion of rock removal within a reasonable time frame.
	≤ \$500	10% of original fee	Blasting or Rock breaking fee for rock removal over the maximum permitted	\$100/m3	Note that this will require seamless turn-around of extensions at the District.
	> \$500	\$50			