



Subject: *Blasting Bylaw*
To: CAO for Planning Advisory Committee, June 20, 2023
Date Prepared: June 8, 2023
Related Motions: C23(21), PAC23(19) April and C23(118)
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Approved by: John Woodford, Director of Planning & Development

Summary

At the January meeting of Council staff were directed to bring back a report to introduce a Blasting Bylaw in East Hants. Staff have prepared a Draft Blasting Bylaw. The bylaw, although similar to the HRM Blasting Bylaw, has been prepared so that responsibility to checking compliance with the bylaw rests with the applicant/blaster/qualified monitor. Comments were sought from the municipal solicitor on the draft bylaw and changes were made as a result of those comments.

Financial Impact Statement

There are no immediate financial impacts resulting from this report.

Recommendation

That Planning Advisory Committee recommend that Council give first reading to Bylaw P-1300, Blasting Bylaw.

Recommended Motion

Move that the Planning Advisory Committee recommend that Council give first reading to Bylaw P-1300, Blasting Bylaw.

Background

At their meeting in January 2023 Council passed the following motion.

“Moved that Council direct staff to bring back a report to introduce a Blasting Bylaw in East Hants”

Under the Activities Designation Regulations ‘a quarry where a ground disturbance or excavation is made for the purpose of removing aggregate with the use of explosives’ is designated as an activity. These activities require an approval from the Nova Scotia Government. The use of explosives related to the construction industry, and not related to a quarry, does not require an approval from the provincial government.

There are Blasting Safety Regulations which are made under Section 82 of the Occupational Health and Safety Act. These regulations would be relevant to blasting which is covered by the draft Blasting Bylaw. The draft Blasting Bylaw does not replicate the provincial regulations, except for indicating that a Blaster is required for blasting.

Halifax Regional Municipality (HRM) have a Blasting Bylaw which would be enabled under the Halifax Charter so planning staff have confirmed with the municipal solicitor that Council does have the jurisdiction to create a blasting bylaw under the powers in the Municipal Government Act.

Options for clearing rock on development sites

Planning staff have spoken to the municipal building officials regarding what options are available to developers when they need to clear rock to enable them to construct buildings and roads, etc. They have suggested that an excavator with a rock breaker attachment is mostly used on development sites as it is more economical than blasting. In East Hants quartzite or slate bedrock is most prominent and can generally be broken up with an excavator, with a jack hammer attachment. This can be done on a smaller area or on a larger scale. Rock breakers were used on the majority of a YMCA Development in Halifax which was a couple city blocks in size so rock breakers aren’t limited to, or the chosen option, for only smaller areas. Where granite is prevalent, blasting may be required as it is a harder rock and rock breakers may not be able to get through this type of rock.

At their April 2023 meeting, Council directed staff to consult with the stakeholder community on the draft Blasting Bylaw. A discussion on the comments received is included further in this staff report.

Since the April meeting staff have also made some other amendments to the bylaw to: a requirement for a PIM, the requirement for which would be determined by staff has been taken out; additions to the violations section as suggested by the municipal solicitor.

Other Jurisdictions

Planning staff undertook a jurisdictional scan of other municipalities in Nova Scotia to identify any blasting bylaws.

Halifax Regional Municipality

HRM has had a Blasting Bylaw for several years. Their Bylaw came into effect in November 2003. They have Engineering Technologists on staff who administer the bylaw. Their role is identified as the “inspector” in the bylaw. These staff have some experience with blasting but they are not certified blasters at this time. There is an active role for the “Inspector” in the administration of the bylaw.

In 2022, HRM issued 52 blasting permits.

The following is a summary list of the HRM. A copy of the HRM Blasting Bylaw has been provided to PAC within this staff report for full details of what is included in their bylaw.

- Blasting permit required;
- Hours of Blasting;
- Limits on noise and vibration;
- A Pre-Blast Survey is carried out on identified nearby properties prior to blasting;
- A notice is delivered to identified property owners prior to the commencement of blasting. This will not be provided prior to each blast;
- Blasting is under the care and control of a Blaster;
- Drilling dust control;
- Blast Monitoring is to be carried out by an independent person;
- Submission of Records;
- Administration sections;
- Rights and Remedies;
- Appendix A - requirements for the monitoring and reporting of sound and vibration from the blasts;
- Appendix B - Certificate of Compliance for Blast Monitoring Reports.

Staff were unable to identify any other municipal blasting bylaws in Nova Scotia.

Draft Bylaw

Planning staff have drafted a Blasting Bylaw using the HRM Blasting Bylaw as a template. East Hants don't have the same resources to administer or enforce the bylaw as HRM does. HRM has 'inspectors' who have knowledge and some experience of blasting and these inspectors actively administer the bylaw. For example, the inspectors in HRM can allow for an increase in the area where a pre-blast survey is required or can identify where a public meeting will be required. There is also a section regarding a security deposit being required in some circumstances. If the municipality has grounds to believe that the blast monitoring and reporting are not meeting the standards, the municipality can use the security deposit to perform such monitoring. These decisions by the inspector would be informed by their knowledge and experience of blasting. East Hants staff don't have the same knowledge and understanding of blasting to make the same informed decisions.

Planning staff have drafted the bylaw with the intent that the applicant and the qualified monitor are required to confirm their adherence to the bylaw. The bylaw is technical in nature and East Hants don't have staff able to undertake an inspector role. The following sections have been included in the East Hants draft blasting bylaw.

- Blasting permit required;
- Hours of Blasting;
- Limits on noise and vibration;
- A Pre-Blast Survey is carried out on identified nearby properties prior to blasting;
- A notice is delivered to identified property owners prior to the commencement of blasting. This will not be provided prior to each blast;
- Blasting is under the care and control of a Blaster;
- Drilling dust control;
- Blast Monitoring is to be carried out by an independent person;
- Submission of Records;
- Administration sections;
- Rights and Remedies;

- Appendix A - requirements for the monitoring and reporting of sound and vibration from the blasts;
- Appendix B - Certificate of Compliance for Blast Monitoring Reports.

Planning staff however still feel there is merit in having a blasting bylaw. There are some elements of the bylaw which don't require specific blasting knowledge and experience to enforce such as the hours of blasting.

Most of the responsibility for compliance with the draft bylaw is put on the applicant/blaster/qualified monitor. There will still be obligations on the Municipality but those are intended, e.g. to ensure the application is complete and contains all required information, but most of the liability is put on others.

The Municipal Solicitor has commented that any certification made by a person held out to have expertise in the thing being certified or represented, e.g. a qualified monitor, can be relied upon by the Municipality and if that later turns out to be negligent the Municipality cannot be held liable.

Section 504(4) of the MGA states:

504(4) If a municipality or a village receives a certification or representation by an engineer, architect, surveyor or other person held out to have expertise respecting the thing being certified or represented, the municipality or the village and its officers and employees are not liable for any loss or damage caused by the negligence of the person so certifying or representing.

Consultation with Stakeholders

Staff reached out to the stakeholder community with a copy of the draft bylaw and a request to provide any comments that they may have. Included in the stakeholder community were blasters/blasting companies, qualified monitors, and developers.

Correspondence has been received from one stakeholder. This stakeholder has experience of hiring blasters. A copy of the response has been provided to PAC for information. Comments received are summarized below:

- Suggests the forestry industry should be exempt from the bylaw as long as they are not blasting within a specific distance from residences. Also suggests that blasting for power and telephone poles be exempt;
- Bylaw appears onerous and will restrict new construction and drive up costs;
- Asks if there is a way to streamline the bylaw;
- Suggests a permit not be required for forestry road blasting more than 305 metres (1,000 feet) from a residence;
- In HRM blasting permits can take 8 weeks to receive. Pre-blast survey requirements will add to this timeline;
- Suggests that the municipality is using a sledgehammer to kill a fly;
- Suggests a contractor certification program be considered;
- Stakeholder has not received a complaint relating to their blasting.

No other comments have been received. Letters were mailed out to the stakeholder community on or just after May 3rd. At the time of writing this staff report five weeks have passed. Staff suggest that sufficient time to comment has passed and therefore PAC should consider the draft bylaw as presented this month.

Suggested Amendments to Bylaw

Staff have reviewed the comments provided by the stakeholder and have drafted the following amendment to the bylaw:

- For blasting more than 2,000 metres (6,562 feet) distance from a building outside the Blasting Area (as defined by the bylaw), the blasting shall be exempt from the requirements of the Blasting Bylaw. This is further than suggested by the stakeholder but staff believe that the 300 metres suggested was insufficient.

Policy Considerations

STRATEGIC ALIGNMENT

The 2021-2024 East Hants Strategic Plan identifies ‘Strong Community’ as one of the four areas of strategic focus. Regulations to protect properties and people from the impacts of blasting helps to create a strong resilient community.

LEGISLATIVE AUTHORITY

The legislative authority to create planning policies and regulations relating to Bylaws is set out in the Municipal Government Act (MGA), Section 172(1).

FINANCIAL CONSIDERATIONS

A Blasting Bylaw will add additional responsibilities to municipal staff, however this will be handled by existing staff.

Alternatives

Alternatives that that staff have identified are:

- PAC and Council may decide not to support the adoption of a Blasting Bylaw.
- PAC and Council may support a simpler bylaw with minimal requirements. This will require less administration by municipal staff. A simpler bylaw could include;
 - Hours of Blasting;
 - A Pre-Blast Survey is carried out on identified nearby properties prior to blasting;
 - A notice is delivered to identified property owners prior to the commencement of blasting. This will not be provided prior to each blast;
 - Blasting is under the care and control of a Blaster;
 - Drilling dust control;
 - Rights and Remedies appropriate to a simpler bylaw;

A simpler bylaw with these requirements would enable property owners in the nearby area of the blasting site to have information which may assist them in having a baseline in which to understand what impact the blasting is having on their property. For property owners this may be challenging however to take action following potential damage to a property without information on the vibration created by the blasting.

- Following comments from the stakeholder staff have included an exemption to the bylaw for blasting more than 2,000 metres from a building. PAC and Council may wish to make this distance larger, smaller or remove the exemption altogether.

Attachments

- Appendix A - Draft Blasting Bylaw
- Appendix B - copy of HRM Blasting Bylaw
- Appendix C - copy of comments received from stakeholder