

PROJECT SUMMARY

1.0 PROJECT DESCRIPTION

Scotian Materials Limited is proposing a 23.2-hectare (ha) expansion of its existing quarry in Goffs, Nova Scotia (the Project). The expansion would add two phases—Phases 3 and 4—and increase the total quarry footprint from approximately 18.4 ha to 41.6 ha.

Because the expansion extends beyond the currently approved quarry boundaries, it requires registration as a Class I Undertaking under Nova Scotia's *Environmental Assessment Regulations*.

The project located on PID 00505941 in Goffs, Halifax County, Nova Scotia, approximately 2.86 km southwest of Halifax Stanfield International Airport. All truck traffic associated with the quarry will enter and exit from the north via Aerotech Drive and Highway 102 (Exit 5A). The nearest residential areas are the suburban communities of Miller Lake West (approximately 1.5 km southwest) and Fletchers Lake (approximately 2 km west). The nearest residential structure is approximately 1.1 km southwest of the Project.

Scotian Materials Limited (Scotian Materials) operates the existing construction aggregate quarry in Goffs under Industrial Approval No. 2016-095664-03. The proposed expansion is intended to extend the operational life of the quarry. The existing Industrial Approval will need to be amended prior to commencing operations within the proposed expansion area.

Goffs Quarry is an important part of Nova Scotia's natural resource sector and supplies essential materials to the construction industry. The Project will support continued direct and indirect employment for workers and suppliers, along with economic activity in the transportation and construction sectors.

2.0 POTENTIAL EFFECTS ON THE MI'KMAQ OF NOVA SCOTIA

The nearest Mi'kmaq community to the Project is the Sipekne'katik First Nation, which is located approximately 20 km north of Goffs. Sipekne'katik First Nation is a collective of five communities across central Nova Scotia: Indian Brook No. 14, New Ross No. 20, Pennal No. 19, Shubenacadie No. 13, and Wallace Hills No. 14A.

In July 2026, a notification letter describing the planned Phases 3 and 4 expansion and summarizing the environmental assessment studies was emailed to Mi'kmaq community representatives in the surrounding area, the Native Council of Nova Scotia, the Assembly of Mi'kmaw Chiefs, and the Kwi'mu'kw Maw-klusuaqn Negotiation Office (KMKNO). At the request of the Maritime Aboriginal Aquatic Resources Secretariat, acting on behalf of the Native Council

of Nova Scotia, a virtual meeting was subsequently held to discuss the Project. An environmental consultant representing the Chief and Council of Sipekne'katik First Nation also contacted GEMTEC staff by telephone and email with questions about the Project and information about the Sipekne'katik Governance Initiative.

Scotian Materials will remain available to engage with Indigenous communities throughout the environmental assessment review and Project development.

A Mi'kmaq Ecological Knowledge Study (MEKS) was commissioned in 2019 for the previous environmental assessment registration covering all four phases. The study reported no Mi'kmaq use within the quarry property or its immediate vicinity; however, it found extensive historical and current Mi'kmaq use in the broader surrounding region.

3.0 POTENTIAL ENVIRONMENTAL EFFECTS AND MITIGATION

Because the Project is an expansion of an operating quarry and is not expected to increase production, potential environmental effects are expected to be largely confined to the footprint of the proposed phases. The Project has been designed to minimize these effects, and mitigation measures will be used to avoid, reduce, or manage them. The main environmental components considered are air quality; noise and vibration; geology and groundwater; surface water hydrology and water quality; fish and fish habitat; wetlands; vegetation; birds and other wildlife; species at risk; and socioeconomic conditions.

3.1 Local Atmospheric Environment (Air Quality)

Potential effects on local air quality are primarily associated with dust in the air from vehicle movement, soil disturbance, blasting, crushing, and stockpiling.

Mitigation will include using water, dust suppressants, or dust-control devices during dry periods; maintaining vegetated buffers; enforcing site speed limits; and routinely inspecting and maintaining vehicles and equipment. Blasting and crushing will occur intermittently during daytime hours. Required distances will be maintained between these activities and nearby properties. Particulate matter monitoring will be conducted if requested by Nova Scotia Environment and Climate Change (NSECC). Blasting will be infrequent, occurring approximately four to six times annually.

3.2 Acoustic Environment (Noise and Vibration)

Potential noise and vibration effects may result from earthmoving and other heavy equipment, transporting materials to and from the Project site, blasting, and rock crushing.

Mitigation will include limiting construction, operations, blasting, and crushing to daytime hours; maintaining equipment and machinery; and using a qualified blasting contractor, required distances will be maintained between these activities and nearby properties. The Community

Liaison Committee (CLC) members will be notified before scheduled blasting, and blasting will be infrequent.

3.3 Geology

Project activities will remove topsoil and organic material, alter bedrock and existing landforms, change local topography, and create the potential for localized soil instability or slope failure.

Mitigation will include saving topsoil and organic material for future restoration, limiting excavation to approved areas, and avoiding important geological features where possible. Slopes will be designed and maintained for stability and monitored regularly during operations.

3.4 Groundwater

Quarry excavation may lower groundwater levels and cause localized changes to groundwater flow near the quarry.

Mitigation measures will include gradually removing groundwater only as needed and continuing to monitor groundwater levels and quality in existing and newly installed wells. Monitoring results will be compared with baseline conditions to identify changes that may be related to quarry operations. If impacts to nearby wells are confirmed to be project-related, appropriate measures, such as well mitigation or an alternative water supply, should be implemented as needed. Groundwater monitoring will also continue after quarry closure, as needed, to confirm groundwater recovery and identify any remaining impacts.

3.5 Surface Water Resources and Fish and Fish Habitat

Potential effects on surface water, fish, and fish habitat may result from runoff and soil accumulation during construction and operation, as well as changes in water quantity or flow in watercourses within or downstream of the Project site. However, these effects are anticipated to be minimal.

Mitigation will include standard erosion and soil runoff controls, prompt completion of work near watercourses, and regular inspections for erosion, overland flow, and soil accumulation, especially during and after heavy rainfall. 30-m protective buffer zone will be maintained around watercourses, and water levels will be monitored for changes in flow.

3.6 Vegetation Communities

Project activities may directly and indirectly affect vegetation communities, including lichens, through clearing and grubbing, excavation and grading, and disturbance of soil and root systems. Vegetation clearing within the footprints of phases 3 and 4 is considered unavoidable; however, it is worth noting that the majority of high-quality terrestrial habitat—mature shade-tolerant hardwood—is within the stream corridor separating Phases 3 and 4, which will be retained within the quarry property. Most of Phase 4, and large portions of phase 3 consist of

young shade-intolerant hardwood and softwood regeneration, which is not considered sensitive or scarce habitat within the local or regional area.

Mitigation will include limiting vegetation clearing to areas required for the Project, using phased clearing and progressive restoration, and minimizing soil disturbance near retained vegetation.

3.7 Wetlands

Potential effects on wetlands include direct loss of some wetlands, and disturbance from clearing, grubbing, and grading.

Mitigation will include maintaining erosion and sediment controls, limiting clearing and grading to required areas, directing felled trees away from wetlands, and preserving natural drainage. All applicable permits and regulatory requirements will be followed. Retained wetlands will be monitored after construction to confirm that their function and water flow are maintained, and wetland compensation will be provided as required.

3.8 Birds

Vegetation clearing may remove some forest and wetland habitat and may temporarily disturb birds. Noise from construction and operations may also affect birds, and stockpile areas may attract ground-nesting birds.

Mitigation will include completing vegetation clearing outside the migratory bird breeding season. If clearing cannot be avoided during this period, a qualified professional will conduct a pre-clearing survey for active nests. Clearing will not proceed in areas where active nests are found until the nests are no longer active. Vegetation removal will be limited to the areas required for the Project. Conducting construction and other activities will be restricted to daytime hours to reduce disturbance from noise and lighting.

3.9 Wildlife (Non-Avian)

Potential effects on terrestrial wildlife include disturbance from operational noise, dust, and air emissions.

Mitigation will include maintaining equipment to minimize exhaust emissions, limiting vegetation clearing to areas required for safe operations, and restoring disturbed areas. Active nests and dens will be checked before construction during sensitive breeding and rearing periods, and high-noise activities will be scheduled during daylight hours.

3.10 Species at Risk

Potential effects on species at risk include disturbance or potential loss of common nighthawk breeding habitat resulting from noise, vibration, and lighting.

Mitigation will include avoiding vegetation clearing, tree removal, and grubbing during the migratory bird breeding season; limiting clearing to the minimum area required for safe and efficient operations; and retaining snags and mature trees where safe. High-noise activities will occur during daylight hours, and nighttime lighting will be minimized to reduce disturbance to species that are most active at dawn and dusk.

3.11 Socioeconomic Conditions

Potential socioeconomic effects are primarily associated with dust and noise, and related impacts on nearby residents. Generally, these effects are not anticipated to increase beyond current levels; however, there is a low potential for increased dust due to the incremental increase in exposed soil within the quarry footprint.

Mitigation will include limiting high-noise activities to daytime hours, maintaining equipment to reduce unnecessary noise and vibration, applying water or other dust controls to exposed surfaces during dry conditions, and maintaining vegetated buffers to reduce windblown dust.

4.0 POTENTIAL CLIMATE CHANGE EFFECTS AND MITIGATION

The Project may have minor climate-related effects from greenhouse gas (GHG) emissions produced by vehicles and equipment and from the removal of forest and wetland areas that naturally store carbon.

Vehicle and equipment emissions will occur during Project construction and operation. To minimize GHG emissions, idling will be limited, and vehicles and equipment will be maintained in good working condition and operated efficiently. Applicable emission standards will be followed, and travel distances will be minimized. Overall GHG emissions from construction and operation are expected to be minimal. Annual emissions from operations are not anticipated to increase significantly, as there is no planned increase in the amount of equipment on site or overall production. Furthermore, there is a planned transition from diesel power generators used currently to more sustainable grid-tied power supply.

Removing forest and wetland areas will reduce their capacity to store carbon. The Project layout minimizes disturbance, particularly to wetlands. Wetland and forest compensation will be implemented in accordance with approved requirements, and temporarily disturbed areas will be restored using native vegetation.

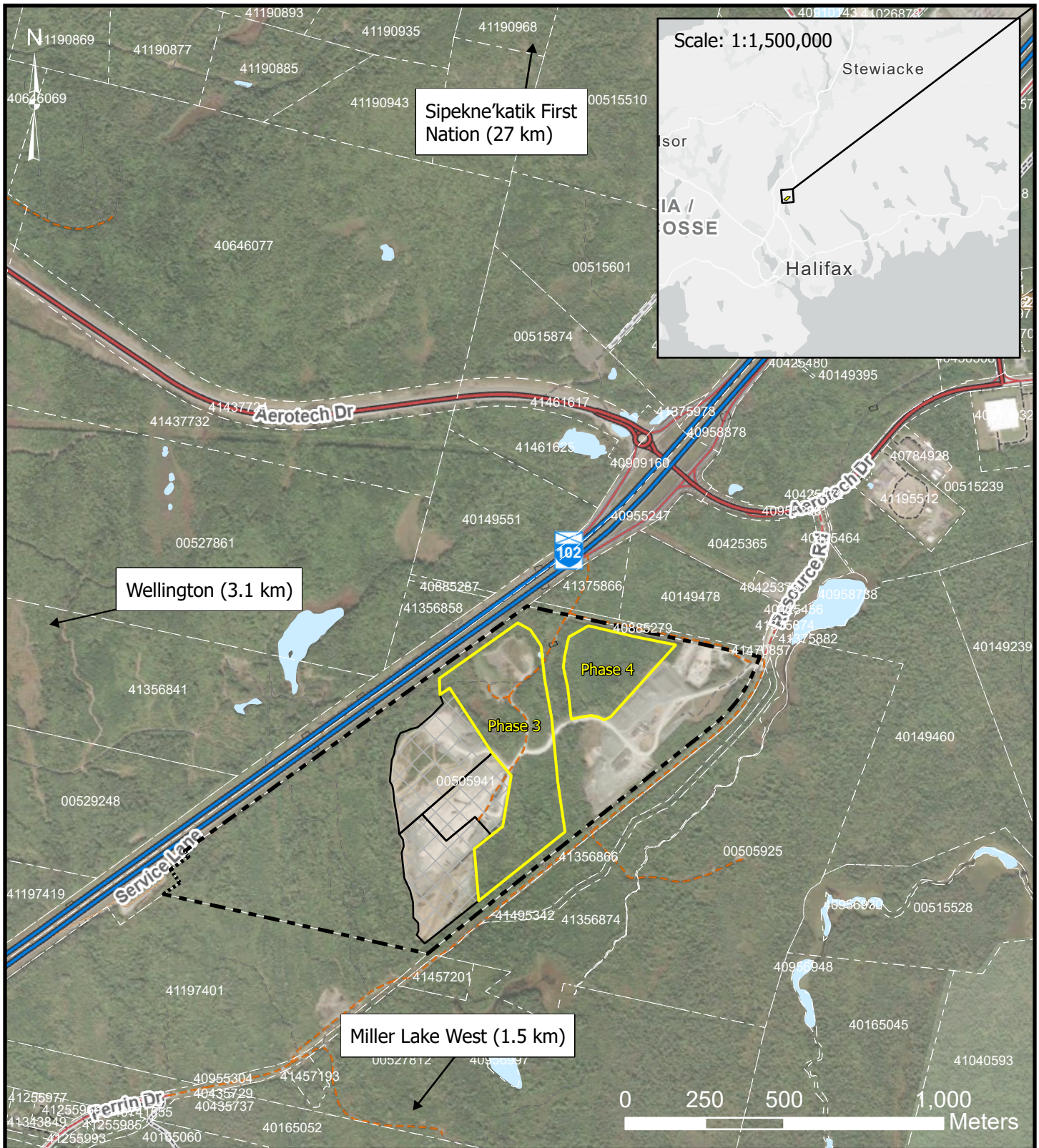
experience • knowledge • integrity



civil	civil
geotechnical	géotechnique
environmental	environnement
structural	structures
field services	surveillance de chantier
materials testing	service de laboratoire des matériaux

expérience • connaissance • intégrité





Legend:

Existing Phases

Quarry Property

Project Development Area (PDA)

Note:

1. Coordinate system: NAD83 CRS UTM Zone 20.
2. Aerial Imagery Retrieved from: ESRI World Imagery

Project: Goffs Quarry
Phase 3 & 4 Expansion
Goffs, Nova Scotia

Drawing: Project Location

Client: Scotian Materials Ltd.

Drawn by: JC
Checked by: SG
Date: October 2026

Project Number: 103269.002

Drawing Number: Figure 1

Revision No. 4



GEMTEC
CONSULTING ENGINEERS
AND SCIENTISTS