Adirondack Park Agency  
PO Box 99  
1133 NY Route 86  
Ray Brook, NY 12977-0099

Re: Project Permit: 2021-0075; Tom Sunderlin/White Lake Granite Quarry  
Town of Forestport, Oneida County  
Land Use Area; Moderate Intensity Use and Rural Use  
Tax Map No.: 8.000-1-8

Dear EPS Burth,

Thank you for providing comments received from the public included with your letter dated June 8, 2021. It is the applicants wish that all information regarding plans to operate the proposed 26.6-acre mine with 5.2 acres to be utilized for extraction of granite dimension stone be disseminated to the concerned public in an effort to dispel misconceptions circulated throughout the community. To that end, an open house meeting to be held at the project site is planned for Thursday June 17 from 5:30 to 6:30pm. The applicant, Mr. Tom Sunderlin, myself and others familiar with the project will be present to answer questions and guide visitors around the site. We look forward to discussing concerns of the community directly. As a follow-up to the pre-application meeting held this spring, staff from APA and NYSDEC are encouraged to attend, if possible. Your input, and that from the public is greatly appreciated and shall be received openly.

Please find the following summarized response in this letter for the White Lake Granite Quarry project site. Public comments and responses of the applicant are presented in summary for the convenience of the reviewer.

1. Concerns of impacts to water resources including potential contamination of surface and ground water, potential impacts to the quantity of ground water, storm water runoff and internal drainage.

Information and analysis of potential impacts to water resources is provided in Section 4.4 of the Mined Land Use Plan dated April 2021 (MLUP) and Item #1 response to the NYSDEC Notice of Incomplete Application (NOIA).

The proposed White Lake Granite Quarry is designed to function as an internally drained operation where all surface water runoff is contained within the affected area where it will flow vertically into the “excessively drained” Adams Series soils present at the project site. The method of internal drainage is a widely accepted best management practice with regards to the avoidance of potential discharge of storm water.
The proposed excavation will not extend into the water table, thus pumping of ground water to maintain a dry working area will not be necessary. The depth to the water table provided in the plans is based on the elevations of White Lake outlet and nearby wetlands. The method is applicable in an unconfined aquifer hydrogeologic regime, such as is present at the project site. Water entering the site from direct precipitation, localized run-on etc. will infiltrate into the permeable subsurface and function as recharge to the aquifer.

Less than 10 gpm of water is proposed to be used while the wire saw is in operation. Water used for sawing is to be pumped from an existing well at the site and recycled within a closed-circuit system where clean stone saw cuttings are settled out and clarified water is returned to the saw for re-use. Cuttings from the saw are comprised of mineral fragments (fine sand) of native granite which are to be contained within the affected area and subsequently be used to achieve final grade of reclamation (described in Section 5.2.1 of the MLUP). Some water may be lost to evaporation during sawing activities however the vast majority of water used will internally drain into the subsurface resulting in no measurable impact to the quantity of ground water. Chemical coolants and/or oil for sawing are not necessary or proposed.

Fuel, oil, coolant and other potential contaminants are necessary for the operation of mobile equipment at the proposed project site. A list of equipment is provided in Section 4.2.1.2 of the MLUP. Protocols to be utilized at the project site with regard to the handling of potential contaminants are described in Section 4.4.1 of the MLUP. Measures proposed in the Section represent widely accepted industry best-management methods used to mitigate potential contamination of water resources.

In summary, the proposed action will not result in negative impacts to surface or ground water resources. Several measures including, but not limited to, internal drainage of the affected area and enhanced setbacks (undisturbed vegetated buffers) will be utilized to mitigate the potential for impacts to all water resources at the project site. Protections of water resources, among other environmental concerns, are enforced under Conditions of the APA Project Permit and NYSDEC MLR Permit.

2. Concerns of impacts to wetlands.

Regulated wetlands are present in the vicinity of the site and on the subject parcel. The protection of wetlands was discussed with APA during pre-application correspondence and further addressed in the response to the NIPA dated April 21, 2021. Wetland setbacks are shown on the Mine Plan Map and Reclamation Plan Map revised 4/2021.

The protection of wetlands will be conducted using the preferred means of avoidance. No activity shall be conducted within a minimum 100-foot undisturbed buffer/setback. Wetland boundaries were delineated by APA Staff, surveyed and depicted on the plans on file.

3. Concerns of impacts from noise pollution.

Information regarding potential impacts to nearby receptors was provided in Section 4.2 of the MLUP. The proposed plan for mitigation of potential impacts from noise incorporates a number of specific methods for maximum attenuation of sound. They include enhanced setback widths (undisturbed buffers), utilization of existing topographic barriers, maintaining the maximum screening from existing forested areas, reduced seasonal hours of operations, minimizing the affected area, among others.
A Noise Impact Assessment was conducted for the proposed action in accordance with the NYSDEC Program Policy: Assessing and Mitigating Noise Impact (2001). As required, the NIA evaluated potential impacts from noise emanating from the project site modeled against the existing, or ambient conditions. The NIA determined that noise levels generated at the project site under the loudest possible circumstances of all equipment operating simultaneously from a location nearest the closest receptors will result in no increase. The conclusion of no net increase in sound levels is supported by the following considerations.

A. The proposed location of extractive and support operations is separated from receptors by a significant topographic barrier. All proposed activities will occur on the east side of a densely forested ridge with receptors situated west of the feature. Barriers are highly effective at noise attenuation which can be quantified using the model (Beranek, 1992) provided in the MLUP. Refer to Section 4.2.1.3 of the MLUP for a discussion of the attenuation of sound.

B. Property line setbacks consisting of undisturbed forested buffers to be established between the nearest receptors located westerly and the project site range from a minimum of 200 feet to over 500 feet. The minimum setback under 6NYCRR 422.2(c)(3)(iii) is 25 feet of undisturbed buffer. The minimum straight-line distance to the nearest receptor is 570 feet with the intervening space containing the above-mentioned topographic barrier and forest. All other receptors are located further from the project site resulting in increased attenuation of sound over distance. The maximized distance of separation and resulting increased sound attenuation at receptors is a function of the utilization of enhanced setbacks in the proposed plan, a practice encouraged by the regulating community.

C. The nearest receptors (i.e., those with the greatest potential for impacts) are located in close proximity (50 to 100 feet) to NY Route 28. Others are located on the opposite side of the highway. All receptors are located significantly closer to the highway than the project site. Thus, the dominant factor with respect to ambient sound level conditions is the highway. The NYSDOT AADT (average annual daily trips) on NY Route 28 measured in the vicinity is 2,510 (2019 data). Traffic volume is overwhelmingly concentrated during the proposed hours of operations for the project site. Given their location to the highway and separation from the project site at a much greater distance and with topographic and forested buffers intervening, receptors will not hear the operation. Setbacks are discussed in Section 3.2.1 of the MLUP and depicted on the Mine and Reclamation Plan Maps.

4. Concerns with potential impacts from traffic safety at the intersection of Stone Quarry Rd and NY Route 28.

The issue of traffic safety with respect to the traveling public as well as project site personnel is an important concern for all. The proposed action includes utilization of Stone Quarry Rd for ingress and egress, as depicted on the plans on file. It should be noted that the intersection of NY Route 28 and Stone Quarry Rd, a municipal road, has been in existence to many decades. Stone
Quarry Rd is and has been historically utilized by log trucks over the years such that it is demonstrably adequate and safe. The utilization of an existing access road for the project is both practical and safe, especially under the proposed minimal volume of truck traffic related to the project.

Specifics regarding the projected volume of truck traffic related to the proposed action were requested in APA NIPA dated April 20, 2021. Maximum allowable truck traffic resulting from the operation, even as it is fully developed, will be 20 per day or less. The proposed maximum volume of truck traffic represents a less than 1% increase over existing levels on NY Route 28. The vast majority of days truck traffic will be less than five and often zero. This due to the nature of the proposed low-intensity dimension stone mining.

With regards to the involvement of the NYSDOT. The intersection of Stone Quarry Rd and NY Route 28 is an approved existing access to NY Route 28, a Highway Access Permit is not applicable.

5. Concerns regarding proposed blasting extraction methods.

The proposed combination of granite block extraction methods of wire sawing, line drilling, expandable grouts and micro-blasting are generally discussed in Section 3.2.1 of the MLUP and further detailed in the response to Item #4 of the DEC NOIA. The response to APA NIPA Item #5 provides information on safety requirements and regulations that govern all blasting operations in NY State. Specific limits of blasting operations are also discussed in Item #5 of the NIPA where the applicant agreed to reduced blasting hours and shortened hours of operation in general, as requested.

Concerns with respect to the proposed controlled micro-blasting methods most likely stem from a comparison to production blasting in aggregate quarries, such as the Hanson Forestport Quarry. Aside from the fact that both methods require an explosive agent, no other similarities exist. Production blasting is focused on achieving maximum breakage of the target unit whereas controlled micro-blasting is the surgical removal of the unit while protecting it from unwanted stress and/or damage.

Controlled micro-blasting involves a maximum charge of less than 100 lbs., usually significantly less. Production blasting in an aggregate quarry involves at least 15,000 lbs. of explosive agent (ANFO) for a small shot, however up to 70,000 lbs. is typical. Seismic energy generated from controlled micro-blasting is proportionally less than production blasting. Production blasting may generate ground vibrations and air overpressure effects that can be felt for hundreds or thousands of feet from the blast locus. By comparison, micro-blasting will generate virtually no measurable ground vibrations when monitored in close proximity to the blast locus. However, out of an abundance of caution the NYSDEC will require seismograph monitoring in accordance with statewide policy to ensure impacts from blasting will not occur.

Specific to the proposed controlled micro-blasting extraction method for the White Lake Granite Quarry project, it should be acknowledged that the maximum energy involved is focused only on the surgical separation of a granite block from the bedrock mass. Controlled micro-blasting is effective at block removal while protecting the valuable resource from shatter, fracturing and other unwanted stresses. Granite blocks exposed to damaging stresses from blasting have a
negative value on the operation, thus avoiding damage from blasting is critical. With that, only the minimum amount of explosive agent is used in each event.

The controlled micro-blasting method involves drilling a single row of two-inch diameter uncharged holes along at a spacing of roughly six to nine inches, generally four times the hole diameter. This formula is used to maximize the effectiveness of the method while minimizing damage to the block. The line of holes provides a plane of weakness along which the blast may exploit using limited energy to separate the target granite block unit while protecting the host rock. Hole depth is determined according to the thickness of the target unit which is generally less than 10 feet.

Detonation cord is used in lieu of ANFO or other blasting agent because the energy requirements are significantly reduced using the method and the product is safe and easy to handle. A single strand of 20 gram/meter detonation cord is placed in each hole. Strands are connected along the surface using starter cord and holes are filled with water. Water serves as a buffer which focuses the energy of the blast laterally, similarly to stemming. The blast is triggered electronically using millisecond delays which aids in reducing blasting costs with the added efficiency and energy control.

The method of controlled micro-blasting proposed at the White Lake Granite Quarry project site will not result in damage to wells, the aquifer, infrastructure or other negative impact due to limits of the energy involved. The NYSDEC and APA will Condition the permits to require seismograph monitoring, hours when blasting may be conducted and limits on the number of blast events per day of operation. The method is safe and applicable to the proposed dimension stone mining project.

6. Concerns regarding the safety of blasting operations.

With regard to safety requirements, blasting operations conducted throughout NY State are regulated under 6 NYCRR 422.2 with specific Conditions of the MLR Permit written to address safety and environmental concerns unique to each project site. All proposed blasting is required to be supervised by a NY Licensed Blaster accredited by the NY Department of Labor Standard Occupational Classification #47-5301. Standards of conduct for blasting operations in NY are defined under the regulation 12 NYCRR 61-4.8. All aspects of blasting operations are to be conducted in accordance with the law which is designed to ensure the safety of those conducting blasting as well as the surrounding community. All blasting operations proposed at the White Lake Quarry will be supervised by a NY Licensed Blaster in accordance with the law. Records of each event shall be kept for inspection by NYSDEC and/or APA staff as required.

The federal Mine Safety and Health Administration (MSHA) also regulates blasting with regards to conducting operations for the safety of miners and others. MSHA “Best Practices” are a requirement for all blasting activities. Federal MSHA inspectors will be required to inspect the project site, usually unannounced, to conduct safety inspections of all aspects of the operation, including blasting.

Proposed limits of blasting operations at the project site shall only occur within the 5.2+/-acre excavation area depicted on the Mine and Reclamation Plan Maps (dated February 15; last revised April 2021). It should be noted that blasting is proposed to be utilized only when necessary, as an
alternative to expandable grouts, mechanized removal and other means. Please refer to Section 3.2.1 of the MLUP and Item #5 above where methods of extraction are described.

Blasting activities, when necessary, are proposed to occur during the seasonal operating period of mid to late April to early November. The hours during which blasting is proposed will be between the hours of 9am-3pm with no more than two events to occur in a single day. Blast monitoring will be conducted as required in the MLR Permit using a properly calibrated seismograph placed at a location designed to measure ground vibration and air overpressure at or near the property line of the project site.

7. Concerns with potential impacts to wildlife.

All proposed projects requiring a permit to operate in NY require an assessment of potential impacts to the environment, community and wildlife. As a matter of routine, the NY Natural Heritage Program/Environmental Resource Mapper database of significant natural communities, rare plants & animals, wetlands, among others is consulted to determine if sensitive wildlife are present in the vicinity of a proposed project site. Wetlands were identified on the database, measures to protect wetlands include 100-ft. undisturbed setbacks and the containment of surface water run-off, as described in Item #1 above.

It should be noted that the project site is an existing pre-1975 quarry with a proposed 5.2+/--acre excavation area. The size and scope of the proposed operation is purposefully designed to minimize the footprint and include lands previously affected by mining. The proposed reclamation plan has been prepared in compliance with current regulations to will ensure complete restoration of the site post-mining.

All mining operations in NY are required under 6NYCRR Part 423 to maintain a financial security bond in the amount determined by the NYSDEC to cover the cost of reclamation should the permittee be unable. Release of the bond only after the NYSDEC determines final reclamation is satisfactory.

8. Concerns regarding enforcement of permit conditions.

All NYSDEC mined land reclamation permits issued in NY are conditioned to enforce aspects for mining and reclamation plans unique to each operation. Typically, staff conduct annual inspections specifically to make certain the mine is operated in compliance with plans and the permit conditions. Inspection reports are made available to the public online through the NYSDEC.

The APA also conditions permits such that all aspects of the approved plans are carried out in compliance with Section 809 of the APA Act. Non-compliance is enforced by civil penalties and/or legal action. Staff may conduct inspections to ensure compliance at any time.

All mining and support operations at the project site shall be conducted in compliance with all local state and federal laws and regulations. The operator should expect site inspections to occur at least annually to ensure compliance.

9. Socio-economic concerns and impacts to property values
The potential impact to the socio-economic fabric of the White Lake area, and the Adirondack Park in general, should be a concern to all stakeholders. A functioning economy requires employment which is the foundation to attainment of a quality-of-life standard to which all citizens are entitled. The proposed project will provide direct and indirect employment for high wage positions while supplying a unique and valuable product. Increased employment will result in greater tax revenue received by the state and federal government.

The White Lake Granite Quarry will produce dimension stone for use in many architectural applications, including building stone, interiors, monuments, landscaping materials, among others. The high value of the product is attributable, in part, to its pinkish/red coloration derived from feldspar and clear quartz mineralogy. The rock is texturally desirable due to its massive equigranular appearance. Adding to its value is the fact that it will be locally produced in the Adirondack Park by neighbors and citizens of the area.

Property values are affected primarily by location and market forces of supply and demand. The quality of the school system, property tax rates and specific features of a property such as water and/or road frontage, access to public utilities are also important considerations when determining property values.

The presence of a mining operation has no apparent impact on the value of a particular parcel as is evident in the concentration of residential development in close proximity to mines is occurring throughout NY and the US. Development adjacent large-scale industrial mines in the north country has occurred in Plattsburgh, Ogdensburg, Watertown, among others. Given the very small size and scope of the proposed White Lake Granite Quarry, its remote location screened by forested topography, highly controlled methods of extraction and limited vehicular traffic impacts, impacts to property values should not be expected to change. Said otherwise, the site will not be seen or heard by neighbors such that perceived negative impacts will not occur, as such, property values will not be affected.

10. Concerns regarding sensitive historic and/or cultural resources.

The NY State Historical Preservation Office (SHPO) was consulted, as required under 6NYCRR Part 617, to determine if potential impacts to historical or cultural resources may occur from the proposed project. The precise location of the project site, including the Mine and Reclamation Plans were provided to aid on the determination. SHPO concluded that “…no properties, including archaeological and/or historic resources, listed in or eligible for the NY State and National Registers of Historic Places will be impacted by this project.”

11. Concern that the Full Environmental Assessment Form (FEAF) was incomplete or is in conflict with submission documents.

An FEAF was completed and submitted with the MLUP in April 2021. The form was reviewed by staff and accepted. To those unfamiliar with the new form, it may appear that unchecked boxes indicate incompleteness, this is not the case. The FEAF is designed such that questions that do not apply to the project are to be left blank. As you may know, a number of the questions are automatically selected based on the location of the project site defined in the EAF Mapper application.
The completed FEAF on file contains answers to questions which are consistent with all aspects of the project plans described in the MLUP and Addenda in as much detail is afforded on the form. Specifically in response to a concern regarding the average depth to the water table; the answer given is 50 feet. This is based on the fact that the water table, expressed at the surface in White Lake Outlet, is at places 0 feet and deeper in the higher elevations. Said otherwise, the depth to the water table will vary based on the ground surface elevation. All excavation is to occur at least five to ten feet above the water table, an aspect of the operation that will be conditioned in the permits. Please refer to Section 4.4 and our response in Item #1 for further discussion.

12. Concern that the project encroaches onto an adjoining property.

The proposed project boundaries depicted on the Mine and Reclamation Plans submitted are based on a property boundary survey. The survey map was included as Attachment D of the APA General Information Form included with the MLUP.

Setbacks from the property lines range from 50 feet along the eastern boundary with the railroad to an average of over 200 feet to the west. All proposed activities will occur within the boundaries shown on the plans on lands owned by the applicant.

13. Concerns that the proposed land use is incompatible with the APA Land Use Classification.

The project site is located amid the “Moderate Intensity” and “Rural Use” areas defined on the APA Land Use and Development Plan. Mining is a permitted use within both classifications. It is within the applicants right to permit and operate the proposed project on the subject parcel provided all aspects are conducted as conditioned in the permits.

The applicant appreciates input from staff and the public. We look forward to an open dialog in an effort for public understanding of the specifics of the proposed project.

Please feel free to contact me with questions. Thank you very much.

Sincerely,

David A. Shank, PG
Strategic Mining Solutions, LLC

ec. Christopher Lucidi, NYSDEC Mined Land Reclamation
Andrew Abbott, NYSDEC Mined Land Reclamation
Tom Sunderlin, Applicant/Owner