

STATE ENVIRONMENTAL QUALITY REVIEW ACT

**FINDINGS STATEMENT**

FACTS AND CONCLUSIONS for  
**Troy Sand and Gravel, Inc.**  
**Nassau Quarry**

Town of Nassau      Rensselaer County  
DEC# 4-3830-00099/00001

prepared by  
The New York State Department of Environmental Conservation  
Division of Environmental Permits - Region IV Office

**May 21, 2007**

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The following **FACTS** and **CONCLUSIONS** in the Environmental Impact Statement have been relied upon to support the Department's decision to issued a Mined Land Reclamation Permit, Water Quality Certification, State Pollutant Discharge Elimination System (SPDES) Permit, and Air Facility Registration, to Troy Sand and Gravel, Inc., to mine rock from the proposed Nassau Quarry on NYS Route 66 in Nassau.

The mine site is located on the east side of NYS Route 66, south of the intersection of Radley Road, in the Town of Nassau, Rensselaer County.

**PROJECT DESCRIPTION:**

The applicant, Troy Sand and Gravel, Inc., proposes to operate a hard rock quarry within a life of mine area of 89 acres of a 214 acre parcel, to be operated in 6 phases. The proposal includes blasting, the operation of portable crushing equipment, and the implementation of a stormwater management plan.

**PROJECT HISTORY and FINAL ENVIRONMENTAL IMPACT STATEMENT (FEIS)**

The application for Mined Land Reclamation permit was received on December 4, 2003. A Positive Declaration was issued on April 23, 2004, and a comment period for the scoping document closed on September 17, 2004. After scoping concluded, the applicant desired to add a "retail sales" component to the application that was not previously discussed, and therefore, scoping was reopened to allow comment on that portion of the application. The second scoping session ended on March 25, 2005. The Draft Environmental Impact statement was accepted on June 7, 2006, and the public comment period was extended through August 21, 2006. The Final Environmental Impact Statement (FEIS) was determined to be complete and was accepted by the SEQR Lead Agency, the New York State Department of Environmental Conservation (Region 4), on April 16, 2007. Public notice of the FEIS acceptance commenced on April 16, 2007, and expired on May 11, 2007.

**FACTS AND CONCLUSIONS IN THE EIS RELIED UPON TO SUPPORT THE DECISION**

**Fugitive Dust Control**

The potential impacts associated with dust that is generated from mining operations are always a concern. Dust can be generated from the blasting of the mineral, mining of the mineral, processing of the mineral, loading of the mineral on to trucks, truck traffic in the mine site, and from trucks entering and

exiting the mine site.

The applicant will be required to adhere to the performance standard of “no visible dust beyond the property line”. The Fugitive Dust Plan prepared by the applicant (See Fugitive Dust Control Plan included in the DEIS - Appendix L), proposes numerous mitigation measures to prevent dust from escaping beyond the life of mine area, such as:

- 1) Water will be sprayed on the haulroads from an on-site truck equipped with a water tank/sprayer.
- 2) As often as needed, the applicant will sweep the haulroad to ensure that materials are not tracked out onto Route 66, and that dust does not result from haulroad traffic.
- 3) Haul roads will be paved up to the location of the initial processing plant location, crushed gravel to minimize dust, speed limits will be enforced, and loads must be covered prior to leaving the site.
- 4) Shot rock will be wet down during loading and processing as needed to control dust.

The proposed mine site is located in a sparsely populated area, however, residences do exist around the mine, with the nearest residence being over 1600' from the site. The proposed blasting operations will contribute to fugitive dust at the site. However, the mining operation will be located in a hole, surrounded by existing topography and a minimum 200' wooded buffer between the life of mine and property line. The topography, distance and vegetation allow ample distance and barrier for dust to settle before reaching the property line, minimizing the amount of dust that can be transported off-site. Nearest residences to the mine are over 1000' from the edge of the life of mine, and therefore, dust resulting from blasting would have ample distance in which to settle before reaching receptors. Permittee will strip all overburden, remove all drill cuttings from blast area and water blast area if necessary to prevent fugitive dust. In addition, the following dust control measures are included in the permit:

- A) No visible dust or mud shall be tracked out onto any public road or highway from the mining site. If dust or mud is tracked out onto a public highway the permittee shall remove (sweep) such material as often as necessary to keep the highways free of dust or mud; The surface of any paved road that intersects with the entrance/exit to the mine, shall be kept free of any spilled and/or tracked materials which can cause dust, slippery conditions or any other condition that is unhealthy or unsafe. The haul road shall be swept as often as necessary to ensure that materials are not tracked onto NYS Rte 66.
- B) No visible dust emissions generated from the mining operation, shall be allowed to occur beyond the Troy Sand and Gravel, Inc. property lines. Water or other approved dust palliatives must be applied to haulageways and other parts of the mine, as often as necessary, to prevent visible dust from leaving the mine property
- C) All necessary means to control fugitive dust emissions shall be employed as necessary to minimize such emissions.

### **Truck Traffic**

Potential truck traffic impacts from mining are always a concern especially in those areas where residential areas co-exist with industrial areas.

Initially, the facility proposes an average of 2-3 round trips per hour, with an anticipated 29-34 round trips per day. The proposed truck traffic was evaluated based on the existing traffic levels on NYS Route 66, a state highway, as well as several State and County roads in the vicinity of the mine. The mine will produce on average 160,000 tons per year of minerals to be transported from the mine, which is based on the current sales of high friction stone at the applicant's West Sand Lake facility. This rate would result in an initial average vehicle volume of 2-3 round trip truck trips (4-6 one way) per hour, which includes

round trips to the West Sand Lake facility, as well as potential retail sales. As recommended in the traffic study, a supplementary traffic study will be required and submitted to the Department if sales rates increase by greater than 10%. Worse case (or maximum) projections, according to the traffic study in Appendix H of the DEIS, would result in no more than 29 round trips (58 one way trips) per day at the facility.

A traffic study was conducted by Transportation Concepts, LLP, dated May 11, 2005, and revised on March 27, 2006, in accordance with the NYS DOT Guidance for Preparing Traffic Studies (1993), which considered accident rates and Level of Service (LOS) for the project vicinity. It was determined that there was no significant accident history or pattern in the project vicinity relative to truck traffic. Current traffic levels on Route 66 are 134 trips per hour during the AM peak, and 148 trips per hour during the PM peak. The addition of the proposed Nassau Quarry traffic would increase truck traffic in the area of the mine by 0.2 - 2.1% along the anticipated haul routes. In addition, the study concluded that the proposed truck traffic would not impact the Level of Service for highways in the vicinity of the mine.

The NYS DOT was consulted, and reviewed the traffic study and conclusions relative to sight distance, safety, stopping distances and level of service. The NYS DOT confirmed that the project meets design values for the operating speed of the highway, and that their agency has no objection to the project, provided that roadside clearing of vegetation at the entrance be maintained for sight distance purposes. DOT found that denying the application would not improve the safety or level of service on Route 66, and that the approval of the proposal would not hinder the existing traffic flows or patterns.

The NYS DOT recommended project changes to the proposed haul road exiting onto Route 66 to ensure traffic safety. Specifically, the applicant initially proposed two haul roads entering and exiting onto NYS Route 66. The NYS DOT determined that one haulroad, as shown on the approved plans and located at 7488 NY Route 66, would minimize safety concerns and present the best possible configuration for entrance and exit from the site. The final haul road plan has been approved by the NYS DOT relative to safety, access road width/configuration and line of sight, and is designed to ensure that trucks are not queued out onto Route 66 waiting to enter the mine site.

### **Noise/Operating Hours**

Noise is generated from mining operations (including stripping, rock removal, processing, blasting and truck traffic entering and exiting the mine).

A noise study was prepared by Bagdon Environmental, dated April, 2006, which analyzed projected noise levels from drilling, blasting, truck operations, and processing/crushing operations. (See Noise Study included in the DEIS - Appendix G). Both full day and shorter term actual ambient readings were taken around the mine site, and drilling was conducted on the site in April, 2004, to gather site-specific readings for drilling equipment. The study concluded that the baseline ambient noise levels at the closest residence were 54-55 dBA at the Bradway and Gundrum residences, and 37-39 dBA at the Quinn and Spallane residences including local highway traffic.

Noise predictions for the proposed Nassau Quarry were calculated in accordance with DEC guidance "Assessing and Mitigating Noise Impacts". The nearest receptor to the proposed quarry is over 1600' away from the operation, and is separated by berms, buffers and physical terrain. Based on the vegetation (treed site) and the topography, the mining site will be below the vegetated buffers and berms, and eventually extending downward below the tree line, and into the hole created by mining, thereby minimizing noise impacts outside the property line. Noise attenuation was calculated due to vegetation, distance and berms/barriers created within the mine site as mining progresses. A reduction of 6 dBA for every doubling of distance from the source was considered, in accordance with NYS DEC Noise Guidance.

The study analyzed the predicted noise levels of the mining operation, based on a worse case scenario, and using a conservative assumption of all equipment operating at peak capacity. The study concluded that based on the phased mining plan, elevations of equipment, assuming attenuation as outlined above, the noise levels did not exceed baseline ambient conditions at receptor locations around the mine site as shown on Table 1 of the study (Receptor Locations). This study will be incorporated into the permit by reference to require that the applicant adhere to the projected performance standards.

Noise analysis included distance attenuation and vegetation, as well as mitigation measures based on potential impacts associated with each phase of mining, and potential haul road and traffic noise sources. It was determined that potential noise impacts as outlined in Table 20 of the noise analysis (Page 16) were within acceptable ranges and did not exceed the noise guidance threshold of 5 dBA, found in the Department's guidance "Assessing and Mitigating Noise Impacts, dated 2/2/01, which is characterized by the noise guidance document as "unnoticed to tolerable". Mitigation measures include construction of an earthen berm at the downslope edge of the initial processing plant area and perimeter berms each phase as shown on Table 22 of the noise analysis. Radar activated backup alarms are required in the permit, as specified in the DEIS Section 4.2.2.3.2 - Page 99, and will mitigate noise impacts from vehicles.

The most effective noise mitigation measures are associated with the operation of mining, reclamation and associated activities within the life of mine and reasonable operating hours that minimize the disturbance to residential areas around the mine. The permit limits mining and mining related activities (including the drilling of blast holes and any equipment operation) to Monday through Friday, 6:30 A.M. to 6:30 P.M., and Saturdays from 7:30 A.M. to 4:30 P.M. The permit limits operations between 6 A.M.-7 P.M. Monday-Friday and 7 A.M.-5 P.M. on Saturdays. Activity at 6 A.M. is to be limited to warm up of on-site equipment and no loading of material occurring prior to 7 A.M. Blasting is limited to Monday through Friday from 10:00 A.M. to 5:00 P.M. with no blasting on weekends or federal holidays.

Permit conditions will require that a gate be constructed on the access road, adjacent to Route 66, to restrict access during off-hours. No trucks will be allowed to enter the mine prior to 7:00 A.M., and no trucks will be allowed to queue on Route 66 waiting to enter the mine. Discriminating backup alarms must be utilized during daylight hours, and strobes must be utilized when mining continues after daylight hours (but not later than 7:00 P.M.).

Blasting generates noise. Blasting lasts for only ½ of a second and is heard as a muffled noise. This noise is largely in the frequency range inaudible to the human ear, but can produce ground vibrations. Of more critical importance is the shock wave and vibration which can cause structural damage if it is excessive. The permit sets maximum peak particle velocity which, coupled with knowledge of the bedrock geology and blasting history, limits the maximum explosive charges used. Seismic monitoring of each blast is required to ensure compliance. As a safety measure, no flyrock is permitted past the property line, and if it does occur, an immediate cessation of blasting is required, and can only resume after written permission of the Department. In addition, the permit requires the permittee to notify area residents by a direct mailing prior to all blasts.

By incorporating the FEIS by reference into the permit, Troy Sand and Gravel, Inc. is bound to the measures discussed in this document which were presented to demonstrate that noise impacts have been avoided, as well as minimized and mitigated to the maximum extent practicable. This means conducting mining operations within the parameters discussed in the FEIS and the Mined Land Use Plan, the use of mufflers on equipment and trucks, and the continued maintenance of vegetated buffer areas around the mine site.

Therefore, noise resulting from this project is not anticipated to present a significant impact to local

receptors.

### **Visual Impacts**

Visual impacts were identified as a potential issue. A Visual Impact Analysis was conducted by CLA Site, Landscape Architecture, Engineering and Planning dated November, 2005, which is located in the DEIS at Appendix J. In accordance with the NYS DEC policy, Assessing and Mitigating Visual Impacts, scenic and aesthetic resources were studied within a five mile radius of the proposed quarry, and are listed in the DEIS at 3.2.5.1. The study analyzed local public use areas, and produced photo simulations for the four receptor locations around the mine that were determined to be representative of worst-case conditions of visual exposure within the study area. As part of the visual assessment, properties and structures potentially eligible for listing were inventoried and photo-documented in Appendix K of the DEIS (Archaeological study).

It is important to note that mining will essentially be conducted "inside" the hill, creating a bowl effect. The visible portions of the outside of the hill will remain intact with the exception of the very crest of the hill. Computer modeling was conducted using a conservative tree height of 40 feet to develop the viewshed. Using multiple analysis points around the mine, including the high point, the study presents two viewshed maps - one for the initial phase, and a second for the full build-out of the mine. The study also considered the duration of potential view, distance, percent visibility, character of the view (contrast with surrounding views), and landscaping.

The proposed plan provides for mitigation measures such as an increased setback of 200' to maintain vegetative buffers, concurrent reclamation and mining proceeds, and a phased mining operation, which all limit any potential views of the mine site. As the study concludes, during Phase 1, 98% of the potential views of the site from the study area will be completely blocked by vegetation and/or topography, and at full build-out, over 90% of the potential views of the site from the study area will be blocked by vegetation and topography. The limited potential views are within a two mile radius of the site, and are primarily to the west of the project site, and are primarily by passing motorists. Impacts to neighboring residences will be very limited. In all conditions, these limited views are determined to be short in duration, and not significantly in contrast with the existing views in the area of the mine, and therefore, it is determined that significant visual impacts will not occur.

### **Blasting**

Impacts to noise and dust resulting from blasting operations are discussed in the sections pertaining to dust and noise (above).

The issue of blasting has been raised by local residents regarding blast vibrations and the potential for structural damage. The United States Bureau of Mines (USBM) has established blasting guidelines to prevent damage to residential structures, and to limit vibrations resulting from blasts to protect against damage to structures. Specifically, the USBM sets a standard level to prevent damage to off-site structures, specifically sheetrock and plaster, which are most vulnerable to excessive vibration. The permit sets standards for blast vibration as outlined by the USBM. The nearest residences are 1600' away from the mine, limiting the potential for vibration at these residences.

The applicant has developed an Overview of Blasting and Best Management Practices (DEIS-Appendix I) which outlines the technique and methods to be used by a licensed blasting contractor for each blast. Seismographs will be located at 4 properties surrounding the mine as depicted on the Seismograph Locations Map (Appendix I) to assure the USBM standard is met at structures closest to the mine and blasting operations. In addition, permit conditions will require a fifth seismograph will be placed at the

base of the haulroad during each blast to record each blast event. Records must be maintained by the permittee on site and made available to Department staff upon request. The applicant will be required to notify local property owners in writing in advance of each blast event. The applicant has further agreed to conduct pre-blast surveys of structures within 2000' of the excavation area prior to the commencement of blasting operations. These surveys will be required to be made available to the Department upon request.

### **Air Quality**

The project has the potential for air emissions from vehicle traffic, generator use, processing equipment, rock drilling and blasting, and associated mining activities. Fugitive dust is addressed in the section pertaining to dust, above. The Title V air regulations (Part 201) state that if a facility's emissions are lower than 50% of the threshold for requiring a Title V permit, then the facility may qualify for a registration.

The engine emissions from the truck engines and the drill engine are considered trivial under 6NYCRR 201-3.3(c). Under 6NYCRR 201-6.3(d), facilities do not have to include emissions from any emission unit that is considered trivial under 6NYCRR 201-3. Truck emissions were considered for the purpose of SEQR review. Based on the site design and the number of proposed truck trips, it was determined that projected truck emissions were not significant including when added to the existing Route 66 traffic.

In addition, 201-2.1(b)(21) indicates that fugitive emissions shall not be considered in determining major stationary source status unless the facility belongs to one of the categories listed under 201-2.1(b)(21)(ii). Quarries and mining operations do not appear on the list, and therefore, fugitive dust emissions need not be calculated in the total emissions for Title V applicability. However, to ensure that fugitive dust is addressed under SEQR, the applicant has prepared a Fugitive Dust Plan (DEIS-Appendix L), and will be required to adhere to permit conditions to control dust as outlined in the Dust section above.

The applicant was required to calculate potential PM 2.5 emissions for all regulated sources which is included in Appendix L of the DEIS. If the facility operates at maximum capacity, the potential emissions would be 6.1 tons annually of PM 2.5 emissions, which by Department definition under Policy CP-33 is well below the significant impact threshold of 40 tons per year, and does not result in a significant impact. In addition, no further analysis is required if the potential to emit is below 15 tons per year, as stated in the Commissioner's Policy.

The applicant has provided calculations with the Registration Application to demonstrate Registration applicability. Specifically, anticipated operation of the generator and processing plant (2000 hours per year) would limit the total annual Nox emissions below the 50 tons per year threshold for Title V. The applicant will be required to maintain records of operations to verify compliance with the applicable regulations, and verify a 2000 hour limit on operations of these sources.

### **Groundwater/Well Impacts/Contamination**

Residents around the proposed quarry are dependent upon groundwater as the primary source for their water needs. This resource must be protected. The applicant conducted an assessment of the hydrogeologic system surrounding the proposed Nassau Quarry. As part of the assessment, the applicant developed a characterization of the existing hydrogeologic conditions through literature review of regional hydrogeology, preparation of water budget and groundwater recharge analyses, inventory of surrounding residential wells and the installation of three on-site monitoring wells. The on-site monitoring wells were used to perform Hydraulic Conductivity Tests to determine the permeability of surrounding bedrock and to perform continuous groundwater monitoring within the proposed quarry. The hydraulic conductivity

results showed low permeability values which are indicative of a fractured bedrock with limited porosity.

Additional well data was obtained from residential wells located within 2000 feet of the quarry. The nearest private residence, not on public water, is approximately 1630 feet from the proposed life of mine. The proposed final quarry floor elevation will range from 970 to 980 feet amsl (above mean sea level). This will represent the maximum depth of groundwater draw down which will occur in the immediate vicinity of the quarry. There will be no active pumping of groundwater and this final drawn down elevation will be achieved through gravity draining. The impacts of ground water draw down diminishes with the increased distance from the quarry with the 2,000 foot distance considered to be well outside any potential groundwater impact zone. Additionally, all of the surrounding residential water supplies are located below the planned final quarry floor elevation and/or across recharge divides. Therefore these off-site wells are not expected to be impacted by the groundwater draw down. Additional mitigation through Special Permit Conditions will require:

- a) In the event that any off-site property owner makes a substantiated claim of a loss of quality or quantity of water supply due to a blasting event or mining activities, the permittee shall immediately notify the Department, investigate the loss claim with the cooperation of the property owner, and provide the Department with a written report.
- b) Upon review of the report, if the Department determines that blasting or mining is not a contributing cause of the alleged loss of quality or quantity of water supply, the Department will provide written notification of its findings to both the permittee and the well owner and there shall be no further obligation by the permittee under the permit, or;
- c) If the Department determines that blasting or mining is likely to be a contributing cause of the alleged loss of quality or quantity of water supply the permittee, under the direction of Department staff, the permittee shall take immediate steps to correct the problem and to restore a potable residential water supply to the affected well owner(s). The means of water supply restoration can include but is not limited to repairing the well, drilling a new well, or providing alternate water supply.
- d) The permittee shall continue to monitor the on-site monitoring wells until the time that each well is intercepted by excavation activities. Groundwater elevation levels must be made at a minimum of quarterly intervals and all monitoring data must be provided to the Department (Mined Land Reclamation Specialist) in a yearly report to be submitted prior to December 31<sup>st</sup> of each calendar year.

The applicant has prepared a Stormwater Pollution Prevention Plan (Appendix M) with planned regular inspections and record keeping to address the issues of spills, contamination, and stormwater runoff. In addition, the following measures will minimize the potential for contamination and/or impacts to groundwater.

1. Fuel will not be stored on-site. All fueling of equipment will be done with a portable fuel truck with automatic shut off valve. Fueling of equipment shall be controlled to prevent spillage. Any spillage of fuels, waste oils, other petroleum products or hazardous materials shall be reported to the Department's Spill Hotline number (1-800-457-7362) within 2 hours. The permittee shall retain the Department's Spill Response number for immediate access in the permittee's office and at the mine site.
2. Equipment will be kept in good repair and checked regularly for leaks.
3. No solid or liquid wastes will be disposed of in the mine.
4. The SPDES permit will incorporate limits on suspended solids, settleable solids and oil and grease discharging through the stormwater retention system, including regular monitoring and reporting.

**Surface Water Discharge/SPDES Permit**

Surface water drainage modifications and associated impacts were considered in the original environmental review for the quarry. All surface drainage is required to be routed around the quarry and to the greatest extent possible, maintain adequate surface water flow to provide groundwater recharge and address downstream riparian issues. The permit requires that surface flow diversion channels be constructed and revegetated in accordance with the mining plan and inspected by Department staff before excavation activities begin at the site. All surface discharges from the quarry must meet the requirements of Article 17 and the associated surface water quality standards established in regulations.

**Wetlands/401 Water Quality Certification**

A federal wetland was identified on the project site and delineated by the applicant's wetland consultant, Roy Slack. An existing pond with wetland characteristics is located outside the limits of the life of mine, and will be avoided completely by the mining activity.

Three wetland areas that were identified on the project site within the quarry area were previously determined to be isolated and not within State or Federal jurisdiction.

One wetland area and a stream under the jurisdiction of the U.S. Army Corps of Engineers was identified on the project site. No mining activities are planned within these Federal wetland areas until roughly forty (40) years into the mining operation.

Federal wetlands exist adjacent to NYS Route 66 which will be impacted by construction of the access road. The total amount of discharge of dredged or fill material into this wetland as a result of access road construction is less than one-tenth acre.

Impacts to these wetlands, both non-jurisdictional and Federal jurisdictional wetlands, were considered within the DEIS, FEIS, and SEQRA review. Specifically, the Ecological Study conducted by Roy Slack (August, 2005) indicates that the Federal wetland located within the life of mine is small, located in a NYS DEC low depression in the landscape that collects stormwater and is only seasonally inundated. Initial contact with Natural Heritage staff indicated the possibility of endangered plant species on site; however, field investigations confirmed that no endangered or significant plant or habitats were identified on the project site. Environmental impacts resulting from the removal of this wetland are considered minimal. DEC finds the wetland impacts aren't significant and a 401 Water Quality Certification (WQC) can be issued. Additionally, the impact to the wetland adjacent to NYS Route 66 which will be impacted by the access road construction is minimal and covers less than one-tenth acre, and no significant adverse environmental impact is anticipated.

The remaining federal wetland will not be impacted until roughly 40 years into the mining operation. The US Army Corps of Engineers routinely defers reviews of wetland impacts which will not occur for several years into the future, and requires that a determination must be made prior to impacting the wetland, some 40 years after the commencement of mining. Environmental impacts resulting from the removal of this wetland are considered minimal, minimizing the need to consider alternative locations that avoid the wetland disturbance. Without a 404 permit requirement by the US Army Corps of Engineers, no 401 Water Quality Certification is triggered at this time. However, DEC does find the wetland impacts to not be significant and would approve a 401 Water Quality Certification, if it were required at this time. It is the Department's position that the project and wetland/WQC portion of the project meets the standards for issuance, and therefore, is approving the life of mine and 401 WQC at this time.

**Vegetation and Wildlife**

The property consists of a 214 acre parcel of primarily wooded habitat containing varied species of plants and animals. In a letter dated September 25, 2003, the NYS DEC Natural Heritage program indicated that there were no known occurrences of endangered species on the project site. Department staff still requested a field survey to further assess potential impacts. A detailed field survey was conducted on the project site by Roy S. Slack, dated August, 2005. (See DEIS Appendix D). The field survey and report were reviewed by both the US Fish and Wildlife Service and NYS DEC Natural Heritage Programs. In response to comments received during the public comment period for the DEIS on this project, the applicant's consultant conducted a Rare Species Inventory on September 27, 2006, to further address potential habitat concerns such as three-seeded mercury and runningpine. The report indicates that *acalypha rhomboidea* (three-seeded mercury) and *D. digitatum* (runningpine) were located on the site but that neither species is listed on the State or federal rare plant registers. The applicant also solicited permission from property owners around the project site to gain access to surrounding properties to search for rare or endangered plant and animal species. No rare or endangered species were identified in or around the project site, and therefore, impacts to these resources are not anticipated.

The site is located in the vicinity of the Rensselaer Plateau, which is identified in the NYS DEC 2002 Draft Open Space Conservation Plan as an important area for protection due to its diversity and bird breeding features. Further, the Audubon has designated the Rensselaer Forest Tract as an important bird breeding area, which lies to the east of the proposed mine site. Protection of the Rensselaer Plateau as an unfragmented forested habitat is an important goal to the Department for the protection of the existing habitat. However, the mine site is located outside (west) of the Rensselaer Plateau and the project proposes to leave over half of the parcel undeveloped, by mining 89 acres out of the 214 acres. Existing residences, roadways and other development occur between the Plateau and the mine site, and therefore, significant impacts to the Rensselaer Plateau and bird breeding possibilities are not anticipated.

The reduction in non-endangered wildlife habitat is unavoidable, however, it is also considered to be minimal. As the mining area progresses, wildlife using this habitat will be displaced. The mining area expands slowly, thereby allowing wildlife to relocate as the mining area progresses. Impacts to wildlife are not anticipated to be significant.

**Mined Land Reclamation Permit**

All aspects of the approved Mined Land Use Plan conform with regulatory standards governing the Mined Land Reclamation program. All regulatory standards found in 6 NYCRR Parts 420-426 have been met for the issuance of the Mined Land Reclamation Permit.

**Cultural Resources**

The site is located in an area of potential archaeological or historic significance. Consultation was made with the NYS Office of Parks, Recreation and Historic Preservation (NYS OPRHP) regarding the potential for impacts to these resources. The NYS OPRHP required a Phase 1 Cultural Resources Survey report to document resources in and around the proposed mine site. The applicant extended the study and conducted a survey of eligible properties in a two mile radius of the mine site. The Phase 1 report was completed by Stephen J. Oberon of Columbia Heritage, Ltd., including a review of historic records, field reconnaissance, photo documentation (See DEIS, Appendix K). Building remains were located on the property, as well as 29 buildings in the neighborhood which met the minimum age requirements, and all were photo-documented in the report submitted to the NYS OPRHP.

The building remains located on the Nassau Quarry parcel were determined to be the A.E. Cole Farmstead Site (A08306.000078), which is an historic farm complex with remaining stone foundations. In a letter dated May 11, 2006, the NYS OPRHP determined that if the Farmstead site is excluded from

the life of mine boundary and further protected by a 50' buffer area, then the project would result in no impacts on historic properties eligible for inclusion in the State and National Registers of Historic Places. The mining plan was, therefore, modified to exclude the farmstead and 50' buffer area, and a permit condition will be added to the permit requiring no encroachment into this protected area.

The Department finds the provisions of the State Historic Preservation act have been adhered to and that no significant impact to cultural resources will result from this project.

### **Archaeological Resources**

A Phase 1A Site Assessment and Phase 1B Site Identification Survey was conducted by Stephen J. Oberon of Columbia Heritage, Ltd., however, no indication was found that artifacts, burial grounds or early occupation existed. Review by the NYS Office of Parks, Recreation and Historic Preservation resulted in a determination of "no impact" to these resources.

### **Dewey Loeffel Landfill**

The issue of potential impacts to the Dewey Loeffel Landfill ("the Landfill") was evaluated during the review of this project. The Landfill is an existing hazardous waste remediation site, which is located approximately 2.5 miles from the proposed quarry. The Hydrogeologic Impact Assessment (DEIS-Appendix F) evaluated the potential effects on the Landfill from blasting activities, and concluded that a conservative ground vibration calculation would result in potential ground vibration at the Landfill of 0.0068 inches/second, which is undetectable, even with modern equipment (seismograph). In consultation with our Division of Hazardous Waste Remediation and the DEC staff responsible for overseeing the remediation project, it was determined that impacts to the Landfill from the proposed operation were extremely unlikely.

### **Community Character, Services**

This mine will be a heavy industrial facility which represents a change in the immediate area which is currently rural, wooded and sparsely populated with residences. The Department's review of potential environmental impacts (See other sections of this document for discussion of issues relative to community character such as noise, traffic, and visual) has found they will be avoided or minimized below significant impact levels particularly since there are few residents in this area (less than 10 within 2,000 feet) and the nearest residence is over 1,600 feet away from the life of mine, and no public recreation, park or conservation areas are located nearby. The Department acknowledges that the Town of Nassau passed a new local law on July 20, 2006 (during the MLR permit application public comment period) which prohibited commercial excavation within the Town of Nassau. Prior to that date, zoning regulations by the Town of Nassau allowed mining with site plan approval and a special use permit or variance. This change was not accompanied by a Comprehensive Plan nor were comments submitted which provided the basis for the change that would change the outcome of the Department's environmental impact analysis of and Findings on the mine and its potential impact upon the community character of this area of Town of Nassau or town services. There exists within the Town of Nassau several permitted sand and gravel operations currently but these are located several miles away and in conjunction with this mine will have limited or no cumulative impacts on community character. Two other quarry applications were received in 2004 and 2006, however, both applications have been inactive for over a year. Neither applicant has pursued the permit process beyond the Department's issuance of their positive declarations.

Further, the Department has no basis to consider cumulative impacts on community character in conjunction with prospective mining projects that have not progressed beyond the most initial of steps in the Department's permit review process.

It should be noted that on November 20, 2006 Troy Sand & Gravel filed an Article 78 petition in State Supreme Court seeking to overturn this local law and its applicability to their proposed Nassau Quarry. It should also be noted that Department policy (MLR 92-2) requires that the statement of the applicant that mining is not prohibited at the proposed mine site is to be relied upon exclusively over any other statements including those from the municipality in determining if an application meets the complete application requirements in 23-2711(b). A complete application is processed to final decision in accordance with Uniform Procedures (6NYCRR621).

The Department's final decision on this proposal would not override the municipality's local land use or zoning ordinances, and the applicant would be required to obtain any required local, state and federal approval prior to undertaking the activity.

### **Record of Compliance**

The applicant's record of compliance was noted as a potential issue during the public comment period. A review of the applicant's permit history revealed that five consent orders have been issued to the applicant since 1993. The applicant has operated 20+/- mine sites in New York State. The five cases were resolved in an Order on Consent whereby the applicant paid a civil penalty and undertook the required remedial action to remedy the violations. The sites were reinspected for compliance, and no additional enforcement actions resulted from failure to comply with the Schedule of Compliance. Therefore, it is the Department's position that the applicant's record of compliance does not suggest a willful disregard for regulations and permit requirements, and further, the record does not support an opinion that the applicant will not ultimately comply with permit requirements and conditions.

### **Public/Adjudicatory Hearing**

During the public comment period and legislative hearing following acceptance of the DEIS, several public comments were received. All comments were evaluated for substantive and significant issues in accordance with the provisions of 6NYCRR 621.8(b). There were six letters that discussed the possibility of adjudication regarding land use/zoning, visual, noise, and community character. In accordance with the regulations (621.8[d]), requests for adjudication must include the basis for the opposition and identification of the specific grounds which could lead the department to deny or impose significant conditions on the permit. In addition, residents submitted letters citing to concerns, questions, and issues relative to the application.

However, no evidence or showing of data or experts was presented to claim that the project is not approvable or does not meet regulatory standards. A thorough review of the potential for impacts, and specifically the likelihood of impacts to residential areas and local residents, indicates that environmental impacts of the proposed action have been avoided or minimized below the levels of environmental impact significance. Therefore, it is determined that none of the issues raised would either 1) result in permit denial, or 2) result in major modification or imposition of significant conditions to the permit so that under the provisions of 6NYCRR 621.8(b) no substantive or significant issues have been raised warranting an adjudicatory public hearing, and that statutory or regulatory criteria and standards (6NYCRR420-425, Article 23 ECL, 6NYCRR617, Article 8 ECL) have been met. It should be noted that by Department policy (TGM 92-2): " If a project has received a positive declaration requiring an EIS or a hearing is required, Departmental staff will not propose or recommend that the question of local jurisdiction or prohibition of the mining activity be an issue for adjudication.

Therefore, based on the above, under provisions of 6NYCRR 621.8(b) no substantive or significant issues have been raised warranting an adjudicatory public hearing, and that statutory or regulatory criteria and standards have been met.

**Certification of Findings to Approve**

Having considered the Draft and Final EIS, and having considered the preceding written facts and conclusions relied upon to meet the requirements of 6 NYCRR 617.9, this Statement of Findings certifies that:

1. The requirements of 6 NYCRR Part 617 and Article 8; 6 NYCRR Parts 420-426 and Article 23; have been met.
2. Consistent with the social, economic and other essential considerations from among the reasonable alternatives hereto, the action approved is one which minimizes or avoids adverse environmental effects to the maximum extent practicable, including the effects disclosed in the environmental impact statement; and
3. Consistent with social, economic and other essential considerations, to the maximum extent practicable, adverse environmental effects revealed in the environmental impact statement process will be minimized or avoided by incorporating as conditions to the permit those mitigative measures which were identified as practicable.
4. Consistent with the applicable policies of Article 42 of the Executive Law, as implemented by 19 NYCRR 600.5, this action will achieve a balance between the protection of the environment and the need to accommodate social and economic considerations.

***NYS Department of Environmental Conservation***

Region 4, Division of Environmental Permits

1130 North Westcott Road

Schenectady, NY 12306

/S/ \_\_\_\_\_

Signature

William J. Clarke \_\_\_\_\_

Name (print)

Regional Permit Administrator \_\_\_\_\_

Title

\_\_\_\_\_

Date