

March 29, 2021

Ms. Maxanne Resnick
Executive Director
Woodstock Land Conservancy
P.O. Box 864
Woodstock, NY 12498

RE: Professional Consulting Services –Review and Comment - The 850 Route 28 Project, Town of Kingston, NY.

File: 2338.001.001

Dear Ms. Resnick:

Barton & Loguidice, D.P.C. (B&L) is pleased to provide additional technical comments on constructability and sustainability of concrete and mining operations for the 850 Route 28 Project in the Town of Kingston, NY, to better inform the Planning Board in their considerations of this complex project.

Various documents submitted by the Applicant refers to a projected daily water use of 2900 gallons per day. We have provided a number of questions referring to the use of the water and what is perceived to be the operations proposed at the site. It is not clear from the materials submitted to the Town exactly what the applicant is proposing (or going) to do, but it appears that the water usage will be much greater than understood – raising the question whether the aquifer can meet the demand.

1. The use of 2,900 gallons per day (GPD) seems inadequate for the intended use of the site. The plant is to be used for pre-casting concrete and 2,900 GPD would equate to approximately 76 cubic yards (CY) of concrete poured daily. This is based on a typical concrete mix requiring an average of 38 gallons per CY or to produce an average water to cement ratio of 0.32. The well drawdown addendum report by Miller Hydrogeologic Incorporated, dated February 3, 2020, notes that the same amount of water (2,900 GPD) will be provided by 3 wells in lieu of a single existing well. However, the 2,900 GPD of water supplied to the batching plant (should one be used, and there is confusing information from applicant and its consultants on this point) would need to be supplied by one well. The 2,900 GPD would not provide enough water to produce the types of products noted in the applicant's traffic study letter dated November 8, 2018, by Creighton Manning. The applicant needs to elaborate on the actual business use of the site and realistic expected sources and quantities of water use required for the facility.
2. If the material mined is to be used as aggregate for precast concrete, and is not being trucked off-site, the material would account for one third of the volume in a CY of concrete. In order to utilize this rock, approximately 700+ CY of concrete would need to be cast daily during the projected 4 years of operation. In order to produce this quantity of concrete, the actual water usage, just for concrete mix, would be 26,900 gallons of water per day. This assumption does not include the

use of water to wash concrete handling and mixing equipment, normal employee use, possible steam curing operations, etc. Also, the applicant notes on their website that the facility will cast the concrete products on-site but the plans do not show the location of the batching facility, and no studies of its impacts have been done. The applicant needs to provide further information regarding the expected use of the mined material and where this casting water will come from.

3. Additionally, to control dust from entering the nearby wetlands, the haul roads will need to be sprayed with water constantly. Even the smallest of water trucks holds 2,000 gallons and it is reasonably expected that at least one truck will be used each day if hauling blasted material, concrete batching supplies, and finished products. As part of the SWPPP application (assuming the disturbance is greater than 1 acre), the applicant should provide a detailed facility dust control plan including the location of stored rainwater to be used for dust control as noted on the applicant's website.



Load King 2,000 Gallon Water Tanker

4. The applicant notes on their website that materials to be manufactured are to be used for NYSDOT infrastructure projects. Should the applicant intend to use the materials mined from the site, the applicant will need to store the entirety of the 162,000 CY at the facility. The current set of plans does not delineate a location for an on-site concrete batch plant; nor do the plans note a location to store the mined material prior to processing. The applicant notes on their website that no cement or steel production will occur on-site but does not state if "concrete" production is not planned for the project site. The applicant needs to provide the possible sources for the concrete mix production or provide the location of the on-site concrete batch plant and provide which well will be used for the batching operations.
5. Concrete casting and, more specifically, concrete batching operations produce a significant amount of silica dust pollution. Since there is a suggestion that the batching operations will be completed with a mobile batch plant, the batching operations will be outside the proposed buildings. The applicant needs to provide information on the mitigation of the possible silica dust pollution and provide information on the location of the batching operation. The current set of plans available do not show the location of the batch plant. If this use is planned for a later date and the applicant intends to revise their application after approval of the current use, this would be a significant change to the use of the site and would imply a segmentation of review. The applicant needs to provide the planning board with the actual intended use of the site to match the information available on the applicant's website (which indicates that the property will be used as a casting facility with a concrete batch plant on-site).

6. The removal of material for the “site preparation” is calculated as 405,000 CY of material over 4 years, of which only 162,000 is proposed to be removed to an offsite location. If they are only removing 162,000 CY of material, where are they storing the other 243,000 CY and how is it going to be transported to the storage area? The applicant needs to show on their proposed site plan the location and size of the excavated (mined) stored material.
7. In connection with the casting and concrete batching operations, the applicant needs to show how they intend to protect the wetlands and other off-site environmentally sensitive areas from sediment runoff from stored sand and gravel materials. Where, and how, does the applicant intend to store the significant amount of materials?
8. Precast concrete NYSDOT structural products, generally require the use of a curing compound (NYSDOT Spec. 711-05) to be sprayed onto the precast components to facilitate the curing of these items once they are removed from climate-controlled buildings. These curing compounds have an ecotoxicity associated with them. The applicant needs to provide the methods intended to capture and contain runoff which may contain chemical contamination from the casting and curing processes associated with precast concrete unit production.
9. Also, as concrete casting operations are the intended use of the site, this process inherently produces waste concrete that does not get used in the casting operations. In order to protect casting equipment, the waste concrete will need to be removed to a location where the waste concrete and wash water can be stored and filtered as the waste concrete cures. The applicant needs to provide information and details to show how waste concrete and concrete leachate will be stored and filtered before the leachate is allowed to leave the site.
10. Where is the owner planning to store the waste material? If it is being removed for “site preparation,” than it will need to be trucked offsite. Where is it going to be placed? Is the waste material going to be placed in a location free of any environmentally sensitive concerns? The applicant will need to provide the expected location of waste material storage and show any environmentally sensitive areas within 500 feet of the waste site.
11. NYSDEC denotes mining as: *“Mining” means the extraction of overburden and minerals from the earth; the preparation and processing of minerals, including any activities or processes used for the extraction or removal of minerals from their original location and the preparation such as washing, cleaning, crushing, stockpiling or other processing at the mine location that makes a mineral suitable for commercial, industrial, or construction use.* Does the DEC have all of the information for this project?
 - a. Also, a permit is required for the following:
 - i. More than 1,000 tons or 750 cubic yards, whichever is less, of a mineral(s) is (are) removed, or proposed to be removed, from the earth during twelve successive calendar months. This is approximately equal to 40-50 tandem-axle (10-wheeler) dump truck loads. Or

- ii. More than 100 cubic yards or more of a mineral(s) is (are) removed in or adjacent to any body of water **not** subject to NYSDEC permitting authority for their disturbance, "unprotected waters", under Protection Waters legislation (Article 15 of the Environmental Conservation Law) or the Public Lands Law.

- b. If the applicant is removing 405,000 CY over a span of 4 years, that would be an average of 101,250 CY of material annually, thus requiring a permit. Even if they were only trucking off the 162,000 CY of material for commercial use, that would be 40,500 CY of material annually. This exceeds the threshold requiring a permit.

The applicant sent an application to the NYSDEC on February 8, 2019 where the applicant has asked for an exemption from Article 23, Title 27 Mined Land Reclamation permit on the basis that the project's rock removal operations are based on the need for construction of the facility only. The response letter from the NYSDEC dated, March 15, 2019 states that the applicant is exempt with the following statement included in paragraph 2 with the included exception:

"After reviewing these materials, it is the Department's position the construction project as proposed may not be subject to the jurisdiction of the Article 23, Title 27 Mined Land Reclamation Law (MLRL). In order to aid in this determination, all permits required (state, federal, local) need to be submitted to the Department as well as a detailed description of time frames associated with the excavation and subsequent construction. In order to be exempt for the permit requirements of the MLRL, construction must be commensurate with the excavation."

The letter also states:

"These permit applications, however, cannot be determined complete until Town of Kingston Planning Board reaches a determination of significance pursuant to the State Environmental Quality Review Act."

The statement from the DEC implies that the applicant has not notified the NYSDEC of the planned use of the mined material as noted in the plans and as described in paragraph 11b of this letter. The applicant needs to inform the NYSDEC regarding the planned use of the excavated materials. The applicant also needs to advise the Town of Kingston Planning Board about the intended operations of the site and excavated/mined materials.

- 12. The applicant notes they have received preliminary approval from the NYSDOT for access and widening of NYS Route 28 at the project site. Traffic counts for the project, as noted in the applicant's letter dated November 8, 2018 from Creighton Manning, notes that concrete mix raw materials will be delivered and batched on-site through a mobile batch plant. The letter also notes the type of finished products to be produced as PCI NEXT beams, NEBT girders, and pre-stressed Hollow core slab units. These types of materials are generally over-sized loads which are generally not allowed to travel on state roads outside of "normal daylight hours." The traffic study does not take into account the permit limitations on oversized load travel times as it notes the finished products will leave the facility for delivery between noon and 4:00 AM. This implies that a percentage of finished products will be leaving the facility after "normal daylight hours." The



applicant should update the traffic study to take into account the oversized load permit requirements and, if they haven't already, provide NYSDOT with this information.

If you have any questions at all concerning this proposal, please do not hesitate to contact me at our Albany Office at (518) 218-1801 or by cell phone at (518) 423-1062.

Sincerely,

BARTON & LOGUIDICE, D.P.C.

Two handwritten signatures in blue ink are displayed side-by-side. The signature on the left is for Daniel J. Gosselin, and the signature on the right is for Thomas C. Baird.

Daniel J. Gosselin, P.E.
Senior Project Engineer
TCB/DJG

Thomas C. Baird, P.E.
Associate

Attachment: Daniel J. Gosselin, P.E. Relevant Experience

Daniel John Gosselin, P.E.

Barton & Loguidice, D.P.C. **Construction Manager**

2 Years

- Manage all Federal-Aid Construction Inspection services for municipal clients.
- Precast inspector for the Harlem Valley Rail Trail, Phase IV project which included the plant inspection of the stone-strong and structural boardwalk panels cast at LHV Precast.
- Senior Prestressed inspector for the Old Albany Post Bridge Replacement project including the plant inspection for the prestressed Concrete Box Units cast at Husted Concrete in Utica, NY.

Schoder Rivers Associates, P.C. **Civil Engineer**

2.5 Years

- Senior Prestressed inspector for the Trout Brook Road over Trout Brook Bridge Replacement project including the plant inspection for the NEXT Beam Prestressed Concrete Units cast at Carrara Concrete Products in Middlebury, VT.
- Senior Prestressed inspector for the Trout Brook Road over Minerva Creek Bridge Replacement project including the plant inspection for the NEXT Beam Prestressed Concrete Units cast at Carrara Concrete Products in Middlebury, VT.
- Construction field inspector for the Hulls Falls Road slope stability project including the inspection for the cast-in-place concrete retaining wall units.

The Fort Miller Co. Inc. **Project Engineer**

4 years

- Managed all phases of the production of precast products. Developed specifications, performed take-offs, prepared bids and designed many different types of concrete products.
- Completed training for contractors, precasters, and agencies on precast product development, construction, design, and installation.
- Ensured quality of work done by off-site precasters and contractors for state agencies met company and industry standards.
- Maintained product and company reputations by complying with State and Federal specifications and regulations.
- Oversaw commencement of production for six different precasters, ensuring the quality of the products that were produced and verifying the quality control procedures that were put in place.
- Served as an on-site engineer for the installation and production of precast structures and highway products.