

November 26, 2019

Mr. Ronald Brand
Director of Development
Town of Farmington
1000 County Road 8
Farmington, New York 14425

**RE: DELAWARE RIVER SOLAR, LLC – YELLOW MILLS RD SOLAR FACILITY
PRELIMINARY SITE PLAN & SWPPP CURSORY REVIEW
MRB PROJECT No. 0610.12001.000 – PHASE 086**

Dear Mr. Brand:

MRB has completed a cursory review of the Preliminary Site Plan and SWPPP Review Letter dated November 20, 2019, prepared by Lakeside Engineering P.C.; the Preliminary SWPPP last revised November 1, 2019, and the Preliminary Subdivision and Site Plans last revised November 1, 2019, both prepared by Schultz Associates. We offer the following cursory comments for the Planning Boards consideration.

The proposed Solar Facility will be required to comply with the provisions and standards of numerous codes and regulations. In regards to stormwater and land disturbances, the project will be required to comply with NYSDEC regulations, including obtaining coverage under the most current NYS SPDES General Permit for Stormwater Discharges from Construction Activity, GP-0-15-002 or the latest version in effect (herein referred to as Construction General Permit or CGP), and the Town of Farmington Town Code. Like the vast majority of other projects which come before planning boards, the review of this project is an iterative process which will include multiple reviews and changes to ensure that the project complies with all applicable regulations, codes, and standards.

In regards to compliance with stormwater regulations, NYSDEC issued a memorandum (enclosed with this letter) to clarify how solar facilities are to comply with the CGP, a summary of which follows:

1. When solar panels are mounted on post or rack systems, and the width of the clear space between each panel row is equal to or greater than the width of the panel row, and both the space between and under the panel rows consists of well-established vegetative cover, NYSDEC would consider these solar panel rows to provide sufficient water quality volume and runoff reduction volume to meet the performance criteria established within the NYS Stormwater Management Design Manual (herein referred to as Design Manual or SWMDM).
2. Construction of new traditional impervious surfaces, such as impervious access roads or concrete equipment pads, will require post-construction stormwater management practices design in accordance with the SWMDM.

3. Stormwater quantity controls are not necessary if the project will not alter the hydrology from pre-development to post-development conditions. The memorandum specifically refers to Appendix A of the CGP for the definition of altering the hydrology. That definition is as follows:
 - a. Alter Hydrology from Pre to Post-Development Conditions – means the post-development peak flow rate(s) has increased by more than 5% of the pre-developed condition for the design storm of interest (e.g. 10 yr and 100 yr).
4. If any of the above items are not met, the project will be required to provide post-construction stormwater management practices in order to mitigate whichever condition(s) above is/are not met.

It is also important to note that both through our own correspondences with professionals at NYSDEC, and through copies of correspondence we've been provided, it is our understanding that NYSDEC does allow for access roads to be considered a pervious surface so long as said road meets certain criteria. Section 7.5 of the Project SWPPP includes correspondence between NYSDEC and the Applicant's Design Engineer, of which pervious access roads are discussed.

It should be noted that at the current phase of the review process, only cursory reviews have been performed. With that being said, we offer the following general information and general comments, some of which are included in the above mentioned letter:

1. The pre and post-development hydrology mapping should be revised to show the subcatchment area boundaries and descriptions, as well as showing a detailed time of concentration flow path. The design engineer should also evaluate the drainage area boundaries and revise to include all upslope contributing drainage areas, as well as evaluate as to whether or not additional points of analysis are required.
2. As the treatment of runoff from the solar panels relies on a healthy vegetative cover over uncompacted soils, the site plans and SWPPP are to include the full NYS Standards and Specifications for Erosion and Sediment Control (herein referred to as Blue Book) pages for soil restoration. Soil restoration measures are to be performed prior to the final seeding of any disturbed area.
3. As part of preliminary site plan and preliminary SWPPP review, MRB will evaluate the erosion and sediment controls proposed, the site topography and hydrology, and Blue Book to ensure that all proposed practices are properly implemented, used in an approved manner, and that the plans and SWPPP include all practices that would be appropriate for this site and project.
4. Also as part of preliminary site plan and preliminary SWPPP review, MRB will review the documentation for discrepancies, unclear statements, and any other such information which could be misleading. The project documentation will

need to have clear and concise requirements to protect water quality during construction and post-construction.

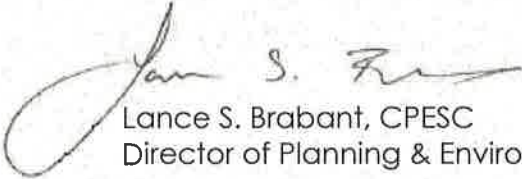
5. As part of preliminary, all stormwater management practices proposed for treating the traditional impervious surfaces will be required to be shown on the plans and detailed within the SWPPP. MRB will review these practices to ensure compliance with the SWMDM. This will also include reviewing the proposed pervious access road to ensure that it complies with all NYSDEC criteria, and to ensure that it is accurately modeled within the hydrology model.

Based on our review of the comment letter dated November 20, 2019, from Lakeside Engineering, we offer the following comments.:

1. The Lakeside Engineering letter comes to the conclusion in multiple places that the hydrology modeling is incorrect as it does not model the solar panels as impervious cover, such as rooftop runoff. As mentioned above, NYSDEC has certain criteria that, when followed, results in mitigation of any potential stormwater impacts caused by the solar panel rows. The Planning Board will be requiring the project to be fully compliant with these stormwater regulations. It should also be noted that the perimeter vegetative screening should also provide some stormwater management benefits.
2. The letter states that compaction and other disturbances will occur during construction and that said compaction will likely result in increased runoff. The SWMDM addresses this issue by requiring that soil restoration be applied in accordance with Blue Book requirements, or that the post-development hydrology modeling account for this by modeling the disturbed, compacted areas as being of a worse Hydrologic Soil Group (HSG) than present. As it is our understanding that the project intends to include soil restoration, the hydrology modeling would not need to be revised to account for compaction. The NYSDEC soil restoration requirements are to be fully complied with and included within the plans and SWPPP.
3. The letter states inadequacies in the erosion and sediment control planning for this project, such as the likeliness of the stabilized construction entrance becoming overburdened with sediment. It should be noted that it is a requirement of the CGP for the contractor to inspect and maintain all erosion and sediment control practices; and includes a duty for the owner/operator, and their contractors and subcontractors to take all reasonable steps to minimize or prevent any discharge in violation of the CGP (Part VII.E of the CGP). In addition, the Town of Farmington has the ability to monitor construction and enforce compliance with the CGP, SWPPP, Blue Book, and any other applicable standards adopted by the Town. Additionally, the letter discusses that the plans currently lack sediment control basins, rock dams, staked straw bales, or other such stormwater retention basins. An erosion and sediment control plan and the project SWPPP will be required to comply with the NYSDEC Blue Book standards and practices.

Please feel free to contact our office with any comments or questions you may have in this regard. Thank you.

Respectfully submitted,



Lance S. Brabant, CPESC
Director of Planning & Environmental Services

- C Ed Hemminger, Planning Board Chairman
- Planning Board Members
- Dan Delpriore, Code Enforcement Officer
- Jamie Kinkaid, Fire Marshal
- Don Giroux, Highway Superintendent
- Dave Degear, Water and Sewer Superintendent
- Robin MacDonald, Water & Sewer Department
- Matt Heilmann, Construction Inspector