

MEMORANDUM

TO: Town of Hoosick Zoning Board of Appeals

CC: Andrew W. Gilchrist, Zoning Board of Appeals Attorney, Gilchrist Tingley, P.C.
Sage Ezell, Senior Project Developer, CS Energy

FROM: Kevin J. Schwenzfeier, Senior Planner, Laberge Group (TDE)

DATE: June 14, 2023

RE: Hawthorn Solar, LLC Special Use Permit and Area Variance Application Review

BACKGROUND

On May 1, 2023, CS Energy submitted a Preliminary Special Use Permit and Area Variance application package for the Hawthorn Solar, LLC project: a 20-MW AC solar electric generation facility (defined as a Tier 3 Solar Energy System). The project would be dispersed across 130 acres of land along Pine Valley Road and Fords Road within the Agricultural/Residential Zoning District on lands owned by Dale Ford (36.-1-9.2) and Timothy & Brittany Marbot (36.-1-10.1, 36.-1-11.1, & 46.-1-10.11).

The proposed project will consist of galvanized steel posts, driven or screwed into the ground, galvanized steel racking, solar photovoltaic modules, inverters, transformers, gravel access roads, concrete equipment pads, and appurtenant equipment, conductors, and security fencing. The project will involve minimal tree clearing and incorporate additional landscaping measures to provide for adequate screening from public and neighbor views.

As a condition of the project's award from NYSEERDA, it must abide by enhanced guidelines for solar project construction published in the New York State Department of Agriculture and Markets in 2019. The project will abide by or exceed these guidelines for the construction, operation, and decommissioning of the project to ensure that the land can be returned to agricultural use at the end of the project's useful life.

The project will be interconnecting directly to a 115kV electrical transmission line that is adjacent to the western board of the project site, owned and operated by National Grid. Hawthorn Solar will sell electricity directly into the wholesale market via the transmission system.

COMMENTS

As a part of the Zoning Board of Appeal's determination of the completeness of the application materials for the purpose of opening a public hearing on the application, the following comments are offered.

SWPPP SECTION 1.

1. Section 1.II.A. As noted in this section, the reclamation of disturbed areas as construction progresses is highly recommended. Reclaimed areas should be field delineated by orange construction safety fence or similar to prohibit vehicle traffic while other areas are in development.
2. Section 1.II.G. This section should be revised and documentation must be included in the SWPPP regarding historic properties and archeologically sensitive areas relative to the proposed construction (Construction General Permit Part I.F.8).
3. Section 1.III.A. Include the “Ag & Markets Requirements” and specifications for agricultural soil stockpile areas.
4. Section 1.III.A.1.e. This section “topsoiling” should be confirmed to be in compliance with the soil restoration per NYS Stormwater Management Design Manual Table 5.3 for Heavy traffic areas and per the NYS DEC Deep-ripping and decompaction April 2008 manual or revised accordingly. The section may be more appropriately entitled Deep Ripping and Decompaction. This final best management practice should be implemented to mitigate the impacts of repeated construction traffic compaction of soils in between arrays and other construction phase-traveled ways.
5. Section 1.III.3.
 - a. Include as one of the first activities, the delineation of the limits of disturbance for each project section and development phase.
 - b. This section should include the project phasing and indicate the maximum disturbed area in each phase along with an exhibit showing the projects’ phases.
 - c. As a best management practice, the plans and SWPPP should require that each phase must be completed and accepted as satisfactorily stabilized and constructed per the approved plans and SWPPP by the Town prior to the commencement of any other phase of development.
 - d. Revise Section 1.III.3.f to include permit wording to require soils stabilization “In areas where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased.” Part II.D.3.b.
6. Section V.A.1.a. Permanent seeding and planting should be indicated as a temporary practice to be applied prior to the implementation of deep-ripping and decompaction and permanent revegetation.
7. Section V.A.1. Add a section on final stabilization that includes restoration of gravel roads to include the specified top materials per the details, clean out of roadside ditches, repair of any erosion areas, and the application of additional permanent erosion controls that may be needed upon completion of the construction, deep-ripping and decompaction and permanent revegetation and removal of any sediment from stormwater management systems.
8. Section 1.V. This section should be expanded to include the removal criteria for each temporary erosion and sediment control practice to be utilized.
9. Section 1.VI.5. Revise this section to require that all areas that have experienced construction traffic within the solar farm, regardless of whether or not they have been graded, are to be considered as “heavy traffic areas” and thus all areas that have experienced construction disturbance are required to receive “full soil restoration (decompaction and compost enhancement)”.

10. Erosion and sediment control plans as well as all other plans should indicate the limits of disturbance.

SWPPP SECTION 2.

11. Sheet C-301. The following comments are applicable to the remainder of the erosion and sediment control plans.
 - a. Each plan sheet should indicate the limits of disturbance and areas that will not be disturbed.
 - b. Provide the location of temporary haul roads for the staging and delivery of solar equipment to various sections and phases of the proposed development. Indicate any temporary grading and erosion and sediment controls that must be applied including permanent soil restoration.
 - c. An access road to the transformer shown on C-301 should be indicated and noted as either temporary or permanent.
 - d. A concrete truck washout should be indicated adjacent to the transformer pad/concrete pour areas.
 - e. Sediment traps:
 - i. The sediment trap number should be indicated for the area indicated as "...may be used as temporary sediment trap..."
 - ii. Trap information shall be provided on the plans for each trap in a summary table format on the plans. 1. Trap number, 2. Type of trap, 3. Drainage area, 4. Storage required, 5. Storage provided (if applicable), 6. Outlet length or pipe sizes, 7. Storage depth below outlet or cleanout elevation 8. Embankment height and elevation (if applicable).
 - f. Alternative soil stock pipe areas should be proposed to avoid placement on slopes.
 - g. The silt fence should be extended parallel to the land contour.
 - h. Where silt fence is proposed to not be installed along the contour, stone checks should be proposed to slow the concentrated runoff to below erosive velocities and a designed sediment trap should be provided at the terminus of the installation where the concentrated flow is required to be diffused to sheet flow.
 - i. The spacing of stone checks should be indicated on the plans based on the ditch slope and the stone check construction details.
 - j. Provide temporary measures for soil disturbance associated with underground utility installation.
 - k. Indicate the location and sign number with a construction detail reference for each permanent stormwater management practice.
 - l. Provide an erosion and sediment control plan for the sub-station.
 - m. Provide a note on all sheets that all areas are required to receive decompaction and deep ripping soil restoration. This note should specify that the areas between as well as under arrays are included.

12. The remainder of the erosion and sediment control plans should be revised to address applicable comments as previously noted.

SWPPP SECTION 6. STORMWATER MANAGEMENT REPORT

13. Section 1.0. Revise this section to conform with report revisions required per the other comments in this section.
14. Section 2.0. Provide a slope area map per Section 6.0 comment and include approximate proportions of the proposed site with these slopes.
15. Section 2.1.
 - a. Soils testing information should be considered as initial feasibility testing only. The designs are invalid without additional testing performed in the exact area of each proposed stormwater management practice. Testing should conform to the NYS Stormwater Management Design Manual.
 - b. Designs should be revised upon the completion of soil testing.
16. Sections 3 and 5. The stormwater analysis should utilize a Type III rainfall distribution with the 100-yr rainfall amount revised to 6.55". Other rainfall amounts are acceptable.
17. Section 5.0.
 - a. Provide summary tables for all erosion and sediment control and post-construction stormwater management practices (such as flow diffusers, flow spreaders, sediment traps, swales, diversion ditches, roadside swales, vegetated swales, filter strips, use of riparian buffers, infiltration practices, ponds, etc.) should be provided meeting the criteria of the Construction General Permit Part III.B.2.c.iv.
 - b. Provide unique identifiers for items in the summary tables that correspond to identifiers provided on the plans.
 - c. This section mentions the use of practices to ensure or re-establish stormwater runoff sheet flow conditions but the erosion and sediment control and other plans do not indicate any practices. Plans should indicate type, extent, and location.
 - d. Plans reviewed in regard to this section also indicate slopes that would develop rill erosion as a result of runoff from arrays flowing more perpendicular to the slope than parallel thus requiring permanent erosion protection and treatment by a stormwater management practice.
18. Section 5.1. Infiltration Basins
 - a. Supporting calculations should be provided and construction details to demonstrate that the WQv and pretreatment is obtained with a maximum velocity of 1 fps.
 - b. Presented analysis/design should follow the New York State Stormwater Management Design Manual Section 5.3, see pages 5-54, 5-55, 5-56.
 - c. Analysis maps should be provided for each stormwater management practice.
 - d. The associated infiltration basin construction detail on sheet C-502 should be completed with elevations, reference to other details such as sediment depth gage, and a note added that the bottom of the lowest portion of the basin shall be a minimum of 36" above the

seasonal high groundwater and impermeable soil layer as documented by on-site soil testing.

19. Section 5.2. Pocket Ponds

- a. This section description of pocket ponds is not represented on the plans. Plans indicate ponds without the required forebay of four to six feet. Plans should provide the required forebays and label these areas on the plan.
- b. Provide vegetative swale sizing.
- c. This section does not meet the requirement that pocket ponds are required to provide 50% minimum WQv in the permanent pool and 50% maximum in the extended detention.
- d. Plans should indicate an outlet for a pocket pond where proposed.
- e. The outlet for ponds should also include a design for a flow diffuser, Flow Spreader, and or a design swale with appropriate lining.
- f. The associated pond construction detail on sheet C-501 should be completed to include outlet protection, sediment depth marker, etc.

20. Section 5.3. Infiltration Trenches.

- a. Provide a construction detail for the infiltration trench construction. It should include all the required elements and employ all the guidance in accordance with the New York State Stormwater Management Design Manual.
- b. Infiltration trenches should indicate stone checks along the flow path over the trench to ensure the even application of runoff to the entire length and to prevent progressive failure of infiltration capacity due to concentrated loading at the terminus of the trench.

21. Section 5.4.1 Water Quality (WQv).

- a. Water Quality Volume (WQv) calculations should be revised to include the entire tributary area to the design point/treatment practice to be utilized for the catchment & sub-catchments as these are being treated as design points in the presented analysis/designs.
- b. As previously noted, indicate soil types and HSGs on the plans that confirm allowable RRV percentages noted.

22. Vegetated filter strips (a.k.a., grassed filter strips, filter strips, and grassed filters)

- a. Any flow directed to these areas shall be in the form of sheet flow. Provide diffused flow using a level spreader.
- b. Provide a construction detail and plan notes to prohibit construction equipment in the area to be utilized. Indicated the use of construction fencing to be installed prior to construction activity with equipment.
- c. Provide soil amendments based upon soil type.
- d. Specifically indicate soil restoration for any areas that may be impacted.
- e. Provide a gravel diaphragm at the top of the filter and a permeable berm at the toe of the filter.
- f. If areas receive concentrated flow an engineered level spreader shall be provided.

- g. The maximum slope for the first 10 feet shall be less than 2% and the maximum overall slope shall be less than 8%.
 - h. Note the practice is not applicable on slopes 15% or greater and minimum widths area 50 feet (Slopes 0 to 8%), 75 feet (8% to 12%), and 100 feet (12% to 15%).
 - i. Indicate contributing lengths. Note maximum is 150 feet for pervious contributing areas and 75 feet for impervious.
 - j. Designs shall meet other requirements per the New York State Stormwater Management Design Manual.
23. Provide designs for permanent swales/ditches that are sized for the stormwater flows and include the determination for appropriate linings for anticipated flow velocities.
24. Section 6.0. The solar panels that are installed on slopes in excess of 10% are not specifically addressed by the report's cited NYS DEC guidance memorandum nor by the MDE guidance.
- a. A slope analysis map should be presented for further review that shows areas with slopes: 0 to 5%; greater than 5% to 10%; and areas of steep slope as defined by the Construction General Permit Appendix A, "Steep Slopes. The map should include an overlay of the proposed improvements for further review.
 - b. Since array areas installed on slopes in excess of 10% do not meet any guidance criteria, the areas shall be considered an impervious surface.
 - c. Likewise, a significant number of the solar panel arrays are not "...generally installed along the contour so rainwater sheet flows down the slope..." and these panel areas shall be considered an impervious surface.
 - d. As such, the stormwater analysis should be revised, and proposed post-construction practices should be applied in accordance with Chapter 4 of the NYS Stormwater Management Design Manual. Additional review will be required.
 - e. The last paragraph should be revised as most solar panel array areas will be considered impervious surfaces.
 - f. The project environmental assessment form should be revised to reflect the above.
25. Section 7.0 should be revised upon completion of the revised stormwater analysis and application of management practices.
26. Figure 2 Pre-Development Drainage Map and Figure 3 Post-Development Drainage Map:
- a. Maps should include the USDA Web Soil Survey soil types and boundaries on the maps.
 - b. Maps should indicate design points such as those used for pre and post-peak flow analysis, stormwater management practice designs, water quality, etc. Additional catchment areas should be shown on the maps that correspond to the design points.
 - c. The post-development map should indicate the proposed stormwater management practices, finish grading impervious surfaces, and various labels that correlate to the report. The map should indicate Stormwater Management Area (SMA) #1, #2-14, #15-16
27. Several subsections are missing from this SWPPP section and include the following as indicated in the SWPPP Table of Contents: SHPO Correspondence, USFWS, IPaC, FEMA Flood Mapping, USDA Web Soil Survey, and Wetland Delineation Report.

28. The stormwater analysis models were not reviewed as the review of design assumption indicates that models are required to be revised.

SWPPP ASSOCIATED SITE PLAN REVIEW.

29. Provide a development site phasing plan that also includes the note that each phase must be completed and accepted as satisfactorily stabilized and constructed per the approved plans and SWPPP by the Town prior to the commencement of any other phase of development.

30. Sheet C-401:

- a. Expand the width of the vegetated filter strip to capture and treat runoff from the impervious surface. As previously noted, the complete design and additional components that must be provided for the filter should be shown on the plans.
- b. The vegetated swale call out should point to the swale. The swale should be provided with a terminus flow spreader.
- c. Culvert inlet and outlet riprap protection should be indicated by size/type and configuration.
- d. At the end run of swales to stormwater treatment systems provide erosion protection.
- e. Indicate all stormwater treatment systems components required (e.g., signs, overflow weirs, observation ports/wells, sediment depth markers, pretreatment, etc.)
- f. In the area of the point of interconnection (the substation), specify the area surface to be maintained within the enclosure, and provide the proposed grading plan and erosion and sediment controls for the area.
- g. Label the timber bridge crossing.
- h. Indicate the flow spreader locations to be utilized under the solar arrays.

31. Sheet C-402:

- a. The vegetated filter strip and riparian buffer areas should be labeled and as previously noted should be shown with all the required design elements.
- b. Culvert inlet and outlet riprap protection should be indicated by size/type and configuration.
- c. Provide a flow spreader at the outlet of the culverts.
- d. Indicate swale or roadside ditch type and linings based upon designs to provide treatment and or prevent erosion.
- e. Indicate all stormwater treatment systems components required (e.g., signs, overflow weirs, observation ports/wells, sediment depth markers, pretreatment, etc.)
- f. Label the timber bridge crossing.
- g. Indicate the flow spreader locations to be utilized under the solar arrays.

32. Sheet C-403:

- a. Indicate swale or roadside ditch type and linings based upon designs to provide treatment and or prevent erosion.

- b. Indicate the flow spreader locations to be utilized under the solar arrays.
- c. Indicate all stormwater treatment systems components required (e.g., signs, overflow weirs, observation ports/wells, sediment depth markers, pretreatment, etc.)

33. Sheet C-404:

- a. The vegetated filter strip and riparian buffer areas should be labeled and as previously noted should be shown with all the required design elements.
- b. Indicate swale or roadside ditch type and linings based upon designs to provide treatment and or prevent erosion.
- c. At the end run of swales to stormwater treatment systems provide erosion protection.
- d. Indicate all stormwater treatment systems components required (e.g., signs, overflow weirs, observation ports/wells, sediment depth markers, pretreatment, etc.)
- e. Indicate the flow spreader locations to be utilized under the solar arrays.

34. Sheet C-405:

- a. The vegetated filter strip and riparian buffer areas should be labeled and as previously noted should be shown with all the required design elements.
- b. Indicate swale or roadside ditch type and linings based upon designs to provide treatment and or prevent erosion.
- c. The swale should be provided with a terminus flow spreader.
- d. Indicate all stormwater treatment systems components required (e.g., signs, overflow weirs, observation ports/wells, sediment depth markers, pretreatment, etc.)
- e. Indicate the flow spreader locations to be utilized under the solar arrays.
- f. Label the timber bridge crossing.

35. Sheet C-406:

- a. The vegetated filter strip and riparian buffer areas should be labeled and as previously noted should be shown with all the required design elements.
- b. Indicate swale or roadside ditch type and linings based upon designs to provide treatment and or prevent erosion.
- c. The swale should be provided with a terminus flow spreader.
- d. At the end run of swales to stormwater treatment systems provide erosion protection.
- e. Indicate all stormwater treatment systems components required (e.g., signs, overflow weirs, observation ports/wells, sediment depth markers, pretreatment, etc.)
- f. Indicate the flow spreader locations to be utilized under the solar arrays.
- g. Label the timber bridge crossing.

36. Sheet C-407:

- a. The vegetated filter strip and riparian buffer areas should be labeled and as previously noted should be shown with all the required design elements.
- b. Indicate swale or roadside ditch type and linings based upon designs to provide treatment and or prevent erosion.

- c. At the end run of swales to stormwater treatment systems provide erosion protection.
- d. Indicate all stormwater treatment systems components required (e.g., signs, overflow weirs, observation ports/wells, sediment depth markers, pretreatment, etc.)
- e. Provide a flow spreader at the outlet of the culvert to the filter strip.
- f. Indicate the flow spreader locations to be utilized under the solar arrays.

37. Sheet C-408:

- a. The vegetated filter strip and riparian buffer areas should be labeled and as previously noted should be shown with all the required design elements.
- b. Indicate swale or roadside ditch type and linings based upon designs to provide treatment and or prevent erosion.
- c. The swale should be provided with a terminus flow spreader.
- d. At the end run of swales to stormwater treatment systems provide erosion protection.
- e. Indicate all stormwater treatment systems components required (e.g., signs, overflow weirs, observation ports/wells, sediment depth markers, pretreatment, etc.)
- f. Culvert inlet and outlet riprap protection should be indicated by size/type and configuration.
- g. Provide flow spreaders at the outlets of culverts and swales.
- h. Indicate the flow spreader locations to be utilized under the solar arrays.

38. Sheet C-409:

- a. The vegetated filter strip and riparian buffer areas should be labeled and as previously noted should be shown with all the required design elements.
- b. Indicate swale or roadside ditch type and linings based upon designs to provide treatment and or prevent erosion.
- c. Culvert inlet and outlet riprap protection should be indicated by size/type and configuration.
- d. At the end run of swales to stormwater treatment systems provide erosion protection.
- e. Indicate all stormwater treatment systems components required (e.g., signs, overflow weirs, observation ports/wells, sediment depth markers, pretreatment, etc.)
- f. Provide flow spreaders at the outlets of culverts.
- g. Indicate the flow spreader locations to be utilized under the solar arrays.

39. Sheet C-410:

- a. The vegetated filter strip and riparian buffer areas should be labeled and as previously noted should be shown with all the required design elements.
- b. Indicate swale or roadside ditch type and linings based upon designs to provide treatment and or prevent erosion.
- c. Culvert inlet and outlet riprap protection should be indicated by size/type and configuration.
- d. At the end run of swales to stormwater treatment systems provide erosion protection.

- e. Indicate all stormwater treatment systems components required (e.g., signs, overflow weirs, observation ports/wells, sediment depth markers, pretreatment, etc.)
- f. Provide flow spreaders at the outlets of culverts.
- g. Indicate the flow spreader locations to be utilized under the solar arrays.

40. Sheet C-411:

- a. Indicate swale or roadside ditch type and linings based upon designs to provide treatment and or prevent erosion.
- b. Indicate all stormwater treatment systems components required (e.g., signs, overflow weirs, observation ports/wells, sediment depth markers, pretreatment, etc.)
- c. Indicate the flow spreader locations to be utilized under the solar arrays.

41. Sheet C-501:

- a. Indicate the minimum length of stabilized construction access as 100-ft. minimum due to the presence of HSG C and D soils.
- b. Include the specification 312500 referenced in the detail for the erosion control blanket construction detail on the plans.
- c. Revise the construction detail for the 12" filter sock detail so as to be in accordance with the requirements of the New York State Standards and Specifications for Erosion and Sediment Control (see figure 5.2 of the standards.)
- d. The vegetated swale detail should be noted as applicable for swales less than 4%.
- e. Additional swale construction details should be provided for other swales with greater slopes with designed and appropriate lining to prevent erosion.
- f. The temporary gravel access drive section should note to see the plans for the appropriate/applicable swale construction detail to be utilized to prevent swale/ditch erosion.
- g. Complete the sequence of construction notes and include additional items from the written SWPPP review comments.
- h. Provide project phase descriptions and notes.
- i. Overland flow dispersion devices:
 - i. Type A & B should include specifications for when installation is to be performed and how the device will be protected and restored if installation is initially done prior to the cessation of earth disturbances and final soil restoration.
 - ii. Type C should be revised to be in accordance with the requirements of the New York State Standards and Specifications for Erosion and Sediment Control (see Figure 5.2 of the standards.)
- j. Pocket Pond:
 - i. Provide the required forebay at the pond inflow point that is 4 to 6 feet deep, providing a minimum of 50% of the required WQv in the permanent pool and a maximum of 50% in the extended detention pool.
 - ii. Indicate inlet stabilization to maintain non-erosive velocities.

- iii. Provide pond outfall protection and flow spreader or designed stabilized channel.
 - iv. Confirm that ponds are not proposed in gravelly sands or fractured rock.
 - v. Add a note and specify the liner to be provided for ponds proposed to be constructed in gravelly soils or fractured rock.
 - vi. Include a protected inlet pond drain that can completely drain the pond in 24 hours.
 - vii. Include gate valves on both the pond drain and the WQv-ED outlet.
 - viii. Indicate the required posting of warning signs prohibiting swimming and skating and warning of possible contamination or pollution of pond water, and indicating the maximum depth of the pond.
 - ix. Larger scale grading plans for all proposed pocket ponds should be provided to ensure that they are capable of being constructed in accordance with the detail and requirement of the New York State Stormwater Management Design Manual.
 - k. Confirm the specified rip-rap size is sufficient for all applications or provide additional detail for other applications requiring larger size riprap. As previously noted, the width and length of the erosion protection are required to be specified on the plans at each application.
 - l. Stormwater management practice signs:
 - i. Provide construction details for the stormwater management practices (filter strip, riparian buffer, vegetated swale, infiltration trench/basin, pocket pond) signage required in accordance with the New York State Stormwater Management Design Manual Section 3.5.
 - ii. Indicate each sign location on the plans.
42. Sheet C-502:
- a. The gravel access drive section should note to see the plans for the appropriate/applicable swale construction detail to be utilized to prevent swale/ditch erosion.
 - b. Infiltration practices:
 - i. Provide a construction detail for the infiltration trench.
 - ii. Indicate the requirement that the bottom of the infiltration facility shall be separated by at least three feet vertically from the seasonally high-water table or bedrock layer.
 - iii. Provide the soil testing logs for each location to document whether the infiltration practice is feasible.
 - iv. Note the required action for an unforeseen condition when groundwater or an impermeable soil layer is encountered during construction.
 - v. Provide overflow in the construction details.
43. The need for a Stormwater Management Facilities Maintenance Agreement is subject to coordination with the Town of Hoosick Town Board.

OWNERSHIP OPTION TO LEASE

44. The Option to Lease Agreement for the Marbot properties (36.-1-10.1, 36.-1-11.1, & 46.-1-10.11) has expired as of May 2, 2023. A new agreement will be needed and shall be submitted to the Zoning Board of Appeals to prove applicant site control as is required for a complete application for a Special Use Permit.

DECOMMISSIONING PLAN AND AGREEMENT REVIEW

45. Schedule 1: Decommissioning Security Amounts
- a. The one (1) year after commercial operation security amount of \$41,859 is too low.
 - b. Year one (1) should begin at a level equal to the full cost of decommissioning in 2023 dollars: \$650,613.10.
 - c. The timeline of escalation should be changed to “annually adjusted to Consumer Price Index as maintained by the Bureau of Labor Statistics over 25 years”.
46. Material Removal Process: Include that all underground equipment shall be dismantled and recycled or disposed of.
47. The form of the Decommissioning Agreement and decommissioning security is subject to coordination with the Town of Hoosick Town Board.

SITE PLAN COMMENTS

48. An Engineer’s stamp and signature are missing from the Site Plans.
49. On Sheet C-100 include West Hoosick Fire Department, as this project is within their jurisdiction.
50. On Sheet C-101 in the 19th paragraph change “Pittstown” to “Hoosick”.

VISUAL IMPACT ANALYSIS & LANDSCAPING PLAN REVIEW

51. Screening – Rather than a single row of one type of species, a variety of vegetation types and species, in staggered rows is needed in order to best screen the project from neighboring and public vantage points.
52. A visual simulation is requested for each of the screening areas in order to demonstrate the treatment’s effectiveness.

OPERATION AND MAINTENANCE PLAN REVIEW

53. An expansion of the O&M Plan is necessary. A complete Operation and Maintenance Plan should consist of the following elements (Note: It is understood that not all elements are available at this time.):
- a. Overview
 - b. Terminology
 - c. System and Site Description
 - d. Safety Guidelines

- e. System Operations
- f. Warranties and Product Certifications
- g. Data Acquisition System (DAS)
- h. Supervisory Control and Data Acquisition (SCADA)
- i. System Specifications
- j. As-Built Construction Drawings
- k. Vendor Documentation
- l. Preventative Maintenance
- m. Commissioning Reports

FULL ENVIRONMENTAL ASSESSMENT FORM PART ASSESSMENT.

54. The applicant has indicated they intend to “explore” opportunities to co-utilize the site with other agricultural uses. A plan to do so should be submitted for review.
55. While the applicant has provided a discussion of impacts and how they have been mitigated regarding agriculture, prime soils, and stormwater runoff in Exhibit 2, they should also provide a discussion of the impacts and how they are mitigated for the following items identified as potentially significant impacts through the FEAF Part 2 Assessment Form.
- a. **Impact on Land** – The proposed action will involve construction, or physical alteration of, the land surface of the proposed site.
 - i. The proposed action involves construction on land where depth to water table is less than 3 feet.
 - ii. The proposed action involves construction on slopes of 15% or greater.
 - iii. The proposed action may involve construction that continues for more than one year or in multiple phases.
 - b. **Impacts to Surface Waters** – The proposed action will affect one or more wetlands or other surface water bodies.
 - i. The proposed action will create new water bodies.
 - ii. The proposed action will involve construction within or adjoining a freshwater wetland.
 - iii. The proposed action will involve the application of herbicides in or around any water body.
 - c. **Impact on Plants and Animals** – The proposed action will result in a loss of flora or fauna.
 - i. The proposed action may substantially interfere with nesting/breeding, foraging, or over-wintering habitat for the predominant species that occupy or use the project site.
 - ii. The proposed action requires the conversion of more than 10 acres of forest, grassland, or any other regionally or locally important habitat.
 - iii. Proposed action will involve the use of herbicides or pesticides.

- d. **Impact on Agricultural Resources** – The proposed action may impact agricultural resources.
 - i. The proposed action will impact soil classified within soil groups 1 through 4 of the NYS Land Classification System.
 - ii. The proposed action will result in the excavation or compaction of the soil profile of active agricultural land.
 - iii. The proposed action may result, directly or indirectly in increased development potential or pressure on farmland.
- e. **Impact on Energy** – the proposed action may cause an increase in the use of any form of energy.
 - i. The proposed action will require a new substation.
 - ii. The proposed action will require the creation of an energy supply system to serve an industrial use.
- f. **Impact on Noise, Odor, and Light** – The proposed action will result in an increase in noise above ambient levels to drive in posts during the period of construction.
- g. **Consistency with Community Character** – The proposed project is inconsistent with the existing community character.
 - i. The proposed action is inconsistent with the character of the existing natural landscape.