



**Knox Solar
Site Plan Review Application, 12/29/20 Update**

Thomas Wolfe
Planning Board Chairman
Knox Town Hall
2192 Berne-Altamont Road
Knox, NY 12107

Dear Chairman Wolfe:

Please find attached two copies of the responses to public hearing comments for the Site Plan Review Application for the Knox PV, LLC Solar project located at 1716 Thompsons Lake Road in East Berne and updates to the application. Only new or revised pages to the application are included with this letter. The updates attached to this letter include:

- Updated Visual Assessment that addresses the Bunzey & Tse residences
- Updated FEAF Additional Information (Part 3)

Yours sincerely,

Jonathan Rappe
Authorized Signatory of Knox PV, LLC's sole member,
RIC Development, LLC



SUMMARY OF COMMENTS AND RESPONSES FROM THE PUBLIC HEARING

Request for Additional Visual Assessment

Please see the attached amendment to the visual assessment. The first page is taken from the GIS Visual Assessment that was prepared for SHPO and now shows the location of the two homes in relation to the Zone of Theoretical Visibility (green shaded area). Both homes fall on the edge of the green shaded area, but it is important to note the GIS assessment took into account only topography. Next, line of site diagrams was prepared taking into consideration vegetation (trees). The existing vegetation makes a difference regarding viewshed.

41 Old Stage Rd – this figure shows the project site would not be visible due to trees in between the site and the home.

1787 Thompsons Lake Rd, a 50' average tree height assumption was made to prepare the line of site diagram. From the diagram, there may be a very slight line of sight visibility at the far eastern side of the array. The solar array would be a maximum of 12 feet high and with the trees, it is unlikely that panels on the ground would be visible.

Both of these sites are at the edge of the potential visibility area based on topography and with the existing trees/vegetation and new landscaping features, the panels will be difficult to see from these sites.

Drainage & Stormwater (Novello, Zimmer)

It is our understanding that preexisting drainage issues have been observed during storm events from off-site sources and through the series of off-site ponds, on-site wetlands, and the culvert under Thompsons Lake Road to the Chapmans and other properties. The solar project does not change current drainage patterns nor storm water flow from the site.

- Drainage from most the solar site drains to existing swales along the east side of Thompsons Lake Road, then south along the road towards a lake on Singer Road
- The northwest corner of the site currently drains through a storm pipe under Thompsons Lake Road to the small pond on the west side of the road, then continues south. It should be noted that the proposed project shows most of the development (clearing/solar panels) in the middle of the site, with minimal impact at the northwest corner.

The storm water pollution prevention plan (SWPPP) contains calculations and explanations regarding the stormwater runoff at the site. Per the calculations, the finished ground surface beneath the solar panels/within the proposed perimeter fence will be seeded with a low growing grass that will be mowed at least two-times each year. This change in finished ground cover, from woods to meadow, results in a slight reduction of stormwater discharge (at peak times) from the site. The SWPPP also includes plans for temporary (such as silt fencing) and permanent erosion and sediment control



measures that will be installed as part of the solar project to prevent downstream erosion from occurring.

Construction noise, dirt, dust (Novello)

Dirt & Dust – Appendix C of the SWPPP (attached) contains standards and specifications for dust control during construction. Practices to be employed during construction include minimizing disturbed areas to the extent practicable, watering, mulching, and stabilization. These practices are included in the notes on Drawing C102 – Sediment and Erosion Control Plan. A temporary stabilized construction entrance will be installed to prevent carryover of dirt to the roads from vehicles. Details of the stabilized construction entrance design are shown on Drawing C501. Adherence to the standards contained in the SWPPP will be adopted as requirements into the conditions of the SPDES General Stormwater Permit for Construction. Additional measures, such as power washing vehicles' wheels may be implemented as necessary.

Noise – The construction will be completed in approximately 3 months. Equipment used for construction is commonly used for other types of construction including; excavators, forklifts, chippers bulldozers, and trucks. Two activities that have the potential to produce noise during construction are wood chipping and post-driving and are discussed further below.

The construction phase for the project can be broken down into four phases: civil work, mechanical work, electrical work, and commissioning.

Civil / Site Preparation Work (appx. 4 weeks)

- Initial site work begins with vegetation clearing, grading of the project area, and the construction of access roads. Vegetative clearing would be conducted in a four-week period between November 1 and March 31. The noise producing activity during this phase would come from a wood chipper/grinder. Stumps and non-marketable wood would be chipped to be used for mulch. The chipper operation would be limited between 8:00 am and 5:00 pm and not on Sundays.

Mechanical Work (appx. 4.5 weeks)

- Following the initial civil work, post driving will be carried out to install the posts for the racking. Post driving is typically completed using a small truck-mounted power vibratory hammer. The post-driving operation would be limited between 8:00 am and 5:00 pm and not on Sundays.
- Next, construction personnel will install racking and modules by hand and through limited use of equipment (e.g., fork-lift, skid steer, truck).
- A crane will be required to lay inverters, transformers, pads, and poles for the “gen-tie” line. This can be completed in 2-3 days.

Electrical Work (appx. 3.5 weeks)

- Initial electrical work involves the use of an excavator for underground trenching and a forklift to distribute wire drums.
- The remaining part of the Electrical works is manual wiring and cable terminations, as well as electrical equipment setup and testing. None of these activities would involve excessive noise.



Fertilizer & seed mix. Will lime be applied? How will site be seeded?

Fertilizer - Appendix C of the SWPPP contains standards and specifications for permanent construction area planting.

For this project, the finished ground surface beneath the solar array and the abutting area within the perimeter fence will be seeded with a low growing (height) grass/meadow seed mix to create a non-grazed meadow that will be mowed two-times each year.

Drawing C401 - Landscaping Plan contains a list of the low-growth fescue species to be planted and a listing of the pollinator-friendly plantings to be used in the northwest side of the project area.

Adherence to the standards contained in the SWPPP will be adopted as requirements into the conditions of the SPDES General Stormwater Permit for construction. According to the SPDES General Stormwater Permit for Construction a Qualified Inspector will conduct weekly site inspections to verify the conditions of the SWPPP are being implemented. When the site has reached final stabilization (80% uniform vegetative cover) the Qualified Inspector will conduct a final site inspection and file a Notice of Termination to terminate permit coverage.

Hazardous materials & decommissioning (Gauge)

Knox PVC has submitted a decommissioning Plan to the Planning Board for review and approval. According to the proposed Decommissioning Plan, the project owner shall restore the property to a condition mutually agreed upon with the Town of Knox, pursuant to which will include the following:

1. Removal of all operator-owned equipment, concrete, conduits, structures, fencing, and foundations.
2. Removal of any solid and hazardous waste (none known at this time) caused by the Facility in accordance with local, state and federal waste disposal regulations.
3. Removal of all graveled areas and access roads unless the landowner requests in writing for any to remain.

There are no materials at the operating site that would be considered hazardous waste as defined by NYSDEC in 6NYCRR Part 371. Solid wastes disposed from the site at any time during construction operation, and decommissioning will be recycled or disposed in accordance with the solid waste regulations in effect at the time.

Value of Project to town. (Gauge)

The proposed project is defined as a large-scale solar array system under Article II Section 20 of the Knox Zoning Ordinance. Large scale solar is a permitted Business Use in this zoning district.

The solar farm will provide renewable energy to power approximately 2,200 homes. Individuals within the National Grid distribution zone may voluntarily subscribe to purchase power from the solar farm at a savings of approximately 10% from their current supplier.



A solar project does not use water or sewer and does not require additional town services or infrastructure. The Town of Knox will continue to receive property taxes from this parcel. In addition, Knox PV LLC will enter into a PILOT agreement with the Town of Knox, Albany County and Berne-Knox-Westerlo Central School District. Without the PILOT agreement, the improvements from the solar project would be exempt from taxation by NYS Real Property Law 487. A PILOT agreement is currently being discussed with the town.

Community character & aesthetics of area (Gaige, Novello)

Large scale solar is a permitted use and is allowed with site plan approval in this zoning district. The application is consistent with the Town of Know Large Scale Solar Array Required Information Checklist. In accordance with SEQR guidelines, the following issues were analyzed in accordance with impacts on Community Character and Aesthetics:

The project was reviewed by SHPO for impacts on areas of historical importance. A no-impacts letter was received from SHPO on 10/13/20.

The project does not impact any Federal, State or locally designated scenic or aesthetic resources.

The project does not have an impact on any affordable housing.

A solar project does not use water or sewer and does not require additional town services or infrastructure. The project site would not interfere with the enjoyment of a designated public resource.

It should also be noted that once the project has been constructed there will be little to no vehicular traffic (approximately one trip per month). The solar farm will not produce any noise beyond the property boundaries, does not have lights, and does not have air emissions. In accordance with the Town Zoning Ordinance, the application includes plans for installing and maintaining a visual buffer between the solar array project and the adjoining lands.

After the approximately 30-year operational life, the solar facility will be decommissioned, dismantled, and removed. A decommissioning plan was provided, and a bond will be established to guarantee returning the lot to preconstruction conditions.

The application includes visualizations from the surrounding roadways and the project will only be potentially seen from a couple of locations. In those locations (in accordance with the Town's law and the Planning Board's request), the application includes a landscaping plan to help screen the project from these two residences. Knox Solar will provide guarantees on the landscaping to ensure the plantings survival.

Property value (Gaige, Cunningham)

This is typically not an issue that Planning Board's deal with and is not a criterion for site plan approval, but with that said, there are several different professional studies and comments on this issue mentioned below:

Scenic Hudson prepared a solar energy FAQ. According to Scenic Hudson



“Because there are relatively few large- and utility-scale solar projects in New York, there is little research on the issue of their impact on adjacent property. As a comparison, research on whether wind power projects impacted residential property values in the US found that no conclusive evidence of the existence of any widespread property value impacts that might be present in communities surrounding wind energy facilities. Specifically, neither the view of the wind facilities nor the distance of the home to those facilities is found to have any consistent, measurable, and statistically significant effect on home sales prices. Because a solar farm is safe, does not create any emissions, and is quiet, they do not result in any impacts that could impact property values.”⁽¹⁾

According to the Massachusetts Department of Energy Q&A for Ground Mounted Solar Photovoltaic Systems *“No research was found specific to ground-mounted solar PV and property values. Residential property value research on roof-mounted solar PV and wind turbines illustrates no evidence of devaluation of homes in the area. Municipalities that adopt zoning for solar facilities may want to consider encouraging project developers to include screening vegetation along site borders to minimize visual impacts on surrounding neighborhoods”*.⁽²⁾

A recent article in the Altamont Enterprise referenced two studies on property value impacts. A study from the University of Texas concluded *“that while a majority of survey respondents estimated a value impact of zero, some estimated a negative impact associated with close distances between the home and the facility, and larger facility size”*.⁽³⁾

A study from the University of Rhode Island concludes that solar projects negatively impacted home values in non-rural areas but the global benefits of solar energy in terms of abated carbon emissions are outweighed by the local disamenities in Massachusetts and Rhode Island.⁽⁴⁾

- (1) [How To Solar Now: A Solar Energy Toolkit For Your Community - Scenic Hudson](#)
- (2) [solar-QA-revised report 6 1 15 \(mass.gov\)](#)
- (3) [Property-Value Impacts Near Utility-Scale Solar Installations \(lbl.gov\)](#)
- (4) [PropertyValueImpactsOfSolar-1-1.pdf \(uri.edu\)](#)