TOWN OF SWEDEN
Zoning Board of Appeals
Minutes – April 19, 2018

A meeting of the Zoning Board of Appeals of the Town of Sweden was held at the Town Offices, 18 State Street, Brockport, New York on April 19, 2018, commencing at 7 p.m.

Members present: Frank Fisher, Kevin Johnson, Pauline Johnson, Peter Sharpe, Mary Ann Thorpe.

Also present: Nat O. Lester, III, ZBA Counsel; James D. Bell, Town Counsel; Steve Lauth, Building Inpector; Kathleen Connolly, SunCommon; Pat and Bill Leonard; Robert Lewis.

Chairperson Thorpe called the meeting to order at 7 p.m., and introduced the Board Members.

Application of William Leonard, 1651 Covell Road, Brockport, New York, for an area variance to install a 7.32kW ground mounted solar system in the front yard of the existing residence. *Town of Sweden Ordinance §174.6, Solar energy as an accessory use or structure, (B) Ground-mounted solar energy systems, (4), states, all such systems shall be installed on the side or rear portion of the subject property.* The property is owned by William M. and Patricia A. Leonard, tax account number 114.03-1-5.

1651 Covell Road

Ms. Kathleen Connolly addressed the Board. She explained SunCommon is now Green Spark Solar and she is representing M/M Leonard, customers.

The Leonards would like to install a ground mounted solar system, which is permitted in a residential zone district on the side or rear of the property. The application is for installation of a ground mounted solar system in the front yard for which an area variance is required.

The size of the array is 374 sq. ft., 40 ft. wide. The following reasons will show why the front yard is the best location to install the solar system:

1. It is the most cost effective, logistically feasible, and aesthetically pleasing location on the property.
2. It has the least impact to the character of the neighborhood in comparison to other locations available on the property.
3. Ms. Connolly referenced the site plan, which shows the location of installation at 135 ft. from the front property line and 50 ft. to the west property line, meeting the side setbacks for accessory structures.
4. This is the most screened location on the property as there is a row of pine trees that screen the array from the north and the neighbors across the road. Also, there are tree lines on the east and west sides of the property, screening neighbors on either side of the property. Lastly, there is a tree line to the south, which screens the array from the existing house on the property.

5. The other reason besides the best screening is the efficiency of the project. Ms. Connolly referenced another drawing showing a utility pole owned by the customer right next to the proposed location of the system providing the ability to interconnect the project from the utility pole to the system. Using this location would result in only having to install a 25 ft. trench, which would have minimal impact to the property and be the most cost effective to install. The longer electricity has to travel, the more losses in power will occur, requiring larger guage wire to be installed.
6. There are no issues with this location running into any infrastructure on the property; nothing underground or buildings that the array would be in conflict with.
7. Alternative options on the property were looked into, which would be installing the ground mounted system in the backyard, which would meet the Town's zoning code. Unfortunately, there are a few problems with this location, such as, screening. The trees in the backyard lose their leaves in the winter so screening would only be provided in the summer. In order to install the array, some of the beautiful trees would have to be removed to eliminate shade, but at the same time increase the cost to the customer and remove existing screening.

   Mr. Sharpe asked if this area was considered the rear pasture. Mr. Leonard stated there is the backyard and then the rear pasture. The rear pasture is wide open, clear of trees, however, it is also approximately 250 ft. from the house.

   Ms. Connolly explained that in the backyard there is some existing infrastructure that would have to be run through in order to interconnect the electric of the system. A trench would have to be installed through the existing water lines causing additional risk, complexity and cost to the project. A very long wire run, 250 ft. long, would be required, which adds cost and inefficiencies to the project.
8. As far as support of the project, Mr. Victor Derefinko, who lives across the street from the project, stopped by the house to say he has no objection to the variance. Unfortunately, he could not attend the meeting.

Mr. Kevin Johnson stated that the long distance wire run could be compensated by using a larger wire. Ms. Connolly agreed, but stated there would still be added cost and complexity due to the trenching through water lines. He also asked if there was a leachfield. Mr. Leonard commented one is located in the front yard, but not near the solar system.

Mrs. Pauline Johnson asked what the dimensions of the system are. Ms. Connolly stated 40 ft. long by 9.5 ft. wide, and under 10 ft. high. Mrs. Johnson showed a picture of a similar system, and Ms. Connolly confirmed it would be approximately 7 ft. longer. Mrs. Johnson stated that would be a large system.

Chairperson Thorpe asked if there was anyone from the public wishing to speak regarding this application.

Robert Lewis, 6662 Lake Road – Mr. Lewis stated he is not a neighbor, but read the legal notice in the paper. He has a somewhat larger system installed on his property, which is the last house on Lake Road in Monroe County. He stated he is favor of all solar energy. He visited the applicant's property today and it seemed to be a rural area with a lot of land for which he didn't see any reason not to support this project. He agrees that the proposed system would be well screened from the neighbors.

Mrs. Pauline Johnson asked about the location of Mr. Lewis' property. He explained it is about two blocks from the applicant and his solar system is located in back of his house where an old barn had been torn down. His system is different in that a longer trench was installed from the barn to the house, approximately 50 to 60 ft., to the panels in the middle of the basement. He explained there are months where more power is created than used; National Grid keeps track of it and banks it until it is needed in the winter months. For about eight or nine months he will receive a $17 bill each month. Mr. Leonard doesn't think his system will be as powerful as Mr. Lewis' system.

Mrs. Pauline Johnson asked why not put the solar system on the roof. Ms. Connolly explained for solar energy, the direction the panels are facing and the tilt of the panels is important. The panels should face the sun as long as possible, and have the sun hit the modules perpendicularly so that it is absorbed and produces the amount of desired electricity. Unfortunately, the existing barn roof does not face south. Mrs. Johnson asked about the garage roof, which seems to be at the same pitch as the proposed location. Mr. Leonard stated the pitch of the garage is considerably lower. In addition, there are pine trees that shade the garage.

Mrs. Pauline Johnson asked what if the pine trees fall down or have to be cut down, the screening would be gone. Mr. Leonard stated the trees have been there for 20 years and there are no plans to cut down the trees. Should they fall, trees would have to be replanted. He also noted that if it were roof mounted, the garage roof is not large enough, and if the house had to be re-roofed, it would require removal of the solar panels, re-roofing the house and then re-installling the panels, which would be a huge expense. There are trees situated around the house which provide shade.

Mr. Lewis stated he is not in favor of roof mounted systems because attaching a system opens up many other issues, such as, the risk of the roof leaking, complexity of installing, and finding a roofer skilled to work with solar systems should the roof need to be repaired or replaced.

Counsel Lester asked regarding the essential character of the neighborhood, what is the neighborhood like as far as solar systems. Ms. Connolly commented there is a comparable solar system installed on Euler Road. That system is installed on the side of the house, which meets zoning, but is more visible. Counsel Lester stated then there is only one other solar system in the neighborhood. Ms. Connolly stated yes for solar specifically.

Counsel Lester also asked if there is any chance an installed solar would devalue the neighbors' properties or have a negative impact on the neighborhood. Was an appraisal done? Ms. Connolly did not have an appraisal, but explained how the opposite had occurred whereby a property in the Rochester area was sold for more because the installed solar system increased the value of the property.

Mr. Lauth questioned the fact that Mr. Leonard and Ms. Connolly said that the array would have to be 250 ft. away from the house if installed in the backyard, as well as a gravel driveway installed due to the softness of the ground.

Mr. Sharpe confirmed with Mr. Leonard that if the proposed location is used, the electric wire would have to connect to the utility pole, which National Grid services. No trenching would have to be done because the wire is already underground.

Counsel Lester asked for the added cost to install the solar system in the backyard where it meets code.

Mr. Leonard explained an estimate would include installing a 300 ft. driveway to get to the backyard, which would not be financially feasible to do. In addition, the solar system, at 250 ft. in the backyard, would then be visible to them every day. Lastly, installing the system in the backyard would utilize approximately 800 ft. of cable, resulting in line loss.

Counsel Lester asked would the neighbors be able to do the same if they installed a solar system, utilizing the utility pole. Mr. Leonard wasn't sure, but doesn't think the neighbors' front yards are deep enough to do the same.

Mr. Lauth added typically for ground mounted systems the electric could connect to the house and not have to go the utility pole. Ms. Connolly stated that depends on the size of the system. Mr. Lauth stated that 7.32 kW is not a large system. Connecting to the house was not a viable option per the engineer for this system.

Counsel Lester confirmed with Mr. Leonard that the solar system could be installed in the backyard or side yard to meet code if the additional costs weren't an issue. Mr. Leonard stated there is no room on the side because there is an existing barn.

Counsel Lester clarified that the Town Board creates the laws and ordinances as to where solar systems should be located. The Zoning Board of Appeals determines if the Town's preference can be met per a set of specific criteria. From Mr. Leonard's perspective as an engineer it isn't feasible to install the system in the backyard, especially due to line loss and then added costs.

Mrs. Pauline Johnson asked the Clerk if anyone else had contacted the Town regarding the project. The Clerk stated no. Mrs. Johnson asked if Mr. Derefinko had submitted a letter in support of the system. Mr. Leonard stated he did not; he had a prior commitment and couldn't attend tonight's meeting.

Chairperson Thorpe asked if there were any other questions. There were none.

Mr. Leonard would like to add one final comment that their house currently uses electric baseboard heat only and that all the utilities use electric. Consequently, future costs are going to be quite high. They currently use a wood stove, but envision that changing as they get older, less wood and more electric usage. In order to mitigate some of the costs, installing a solar system seems to be the best solution.

Mr. Leonard thanked the Board for their time and listening to all the information presented.

Chairperson Thorpe closed the public hearing. The Board has 62 days to make a decision.

Mr. Lewis invited the Board to visit his property to look at the existing solar system should more information be needed or questions arise.

Moved by Mrs. Pauline Johnson, seconded by Mr. Fisher, to adjourn the meeting at 7:50 p.m. until Thursday, May 24, 2018, at 6:30 p.m.

Chairperson Mary Ann Thorpe – Aye
Member Frank Fisher – Aye
Member Kevin Johnson – Aye
Member Pauline Johnson – Aye
Member Peter Sharpe – Aye

Respectfully submitted,
Phyllis Brudz
Zoning Board of Appeals Clerk