Planning Board Minutes
January 5, 2017

Planning Board Members Present: Brad Bennett, Julie Pellett, Karl W. Smith, Daniel Compton, Matt Rogers, Fran Overmoyer, Fred Fink

Absent:

Others Present: Kimberly Rayburn (Secretary), Grant Cushing (Brownfield Group, LLC), Daniel E. Bennett (Graystone Construction Management Services) Glen Thornton (Thornton Engineering)

Bennett opened the meeting at 7:30 pm

I. Discussion on Solar

Grant Cushing is the President of the Brownfield Group, they are in land development across the state and repurpose property. They work with landowners to better utilize their property for such projects as solar including landfills, he has been in environmental consulting for years. Daniel Bennett is involved in the design engineering and installation of large scale solar projects. Daniel brought some pictures and a proposed design of a solar system on a horse farm in Canandaigua, NY. Brad Bennett asked Daniel to walk the Board through the steps of the installation of a system. Daniel stated that a typical large scale solar system creates 2 megawatts of power, that is the maximum allowable interconnection per the New York State Public Commission. The system has to connect to 3 phase power, but just because 3 phase is available it does not mean that those lines have enough capacity to handle a 2 MW system. Everything flows back to the substation and then to the large transmission lines etc. NYSEG & RG&E are typically around this area, the voltage is 12.5 KV 12, 500 volts, but there are some areas that are less than that, the lines themselves will dictate how much capacity they can take. The grid and the capacity of the grid self regulates how many solar systems and how many megawatts can be allowed in an area. The first step is to identify a piece of land or landowner that wants to lease their land, then they make sure there is 3 phase power available and there is an adequate amount of acreage. A 2 MW system works out to be ten (10) acres of coverage of land area. The next step is to fill out applications and apply to the utility companies to see if there is enough capacity on the line, they will then tell you if it is feasible, sometimes they will tell you that there is only 1 MW that can be used and the plan will be dumped. The next step after that the developer will apply for a CESIR and pay a lot of money down for engineering and the utility company will tell the applicant how much it will cost for upgrades to the system in order to make the project feasible. So again, a developer is regulated by the utility company as to where a system or multiple systems can be supported. Once you get past that step they will get an agreement with a landowner then will sign a lease for twenty-five (25) years with a ten-year extension because an operational life of a system is at least twenty-five (25) years but they may be able to refit a system and get another ten (10) to twenty (20) years out of it.

Rogers asked if it is better to lease or buy the land for solar, Daniel stated that long term it works out better for the developer to own the land. A lot of the property owners that want to lease have for example 36 acres but have 10 acres of scrub land that they could get lease money for to help pay taxes etc.

Once the lease is established after the first two steps with the utility company then it is time to get full design and drawings and get municipal approval.

Daniel discussed the need for regulations, however he noted that you do not want to be too restrictive and prevent solar from coming in. He stated that there is a property tax income associated with these projects, Brad Bennett asked if these are considered a commercial installation, Daniel stated they are, as you are selling the electricity off site so it is considered a commercial use. Brad Bennett asked him about percentage of lot coverage, Daniel stated that the area physically covered by modules is between 132,000 and 140,000 square feet which equals out to be 3.3 acres of coverage, on a ten acre parcel the coverage would be about thirty-three (33) percent of coverage. Daniel states that you measure coverage by impervious surface. The systems are slanted and there are typically twelve (12) feet of panels, eighteen (18) feet of green space between the panels then another twelve (12) feet of panels and so on so in reality you have 2/5 of coverage and 3/5 of opening, the exact foot print will be a little bit denser than the 33 %, Brad asked about the buffering and Daniel stated that the buffering is open space it's not considered coverage and is generally outside of the ten (10) acres and within the setback. Cushing stated that the ground is not an impervious service so you don't want to count it in the coverage the panels have a drip edge to help the ground absorb the water. Overmoyer stated that the area underneath can absorb the run off to some extent. Cushing stated that when they do a storm water plan the amount is minimal because the only additional impervious surface is where the racking is put in, and the poles. After the system is up vehicle traffic would be minimal once or twice a month for mowing and maintenance. They like to use some type of vegetation that is slow growing, the Town of Canandaigua has a maintenance requirement that you cannot have over 38 inches in height of vegetation. Daniel stated that they like to use red osier dogwoods because they do not get to tall and in the winter, you cannot see through them easily, the buffering should be reviewed depending on the site location and the uniqueness of the location and its surroundings. Some towns like buffering and others like more of a park like setting, some of the Colleges have them on the property with no fencing so the students can walk through them, and some want buffering preventing students from getting to close to them.

Overmoyer stated that from a lot coverage point of view, with or without the drip edge they say that 30 to 35% coverage is required, he wanted to know if that was the kind of ratio we should require, and asked about maintenance between the arrays, you would need eight to twelve feet to get equipment in and out. Daniel wanted us to look into the near future as technology is always changing and if the arrays change design then so will the coverage. Canandaigua ended up with a coverage limit of fifty (50) percent to allow denser possibilities regardless of the grade. Rogers asked if they had done any projects larger than 50 %, Daniel stated that today they would not want to as you would end up with shading, but if they come out with single access tracking then they could end up with smaller rows that are closer together that could tilt and follow the sun. So, picking a number that is not too restrictive makes the most sense. Cushing agreed that the technology changes and you don't want to put in regulations that may need to be changed as soon as they put in place, and each location may require different amounts of coverage. Cyprus Creek is one of the large players in solar and would like to see more than 50% coverage. Daniel stated that as far as height goes 36 inches or 3 (3) foot average clearance below the panels is ideal, with a 25-degree optimal slope on the unit it gets the height up to about nine (9) feet tall. The maximum height is something to think about, the Town of Canandaigua settled on a ten (10) foot height maximum with today's technology, but with new technology and the tracking systems that are coming out some Towns have settled on fifteen (15) foot to allow for new better systems. Cushing stated that they designed one recently that was twelve (12) feet in height. The system that Daniel is using as an example is a mono pole system, some of them have two (2) foundations because if you cannot get good soil capacity then you use two (2). The poles are every ten (10) foot. Brad Bennett asked if the foundations are driven or set in concrete, Daniel stated that they are driven unless they hit rocks or boulders they may have to drill, they would use an Auger and put concrete in the holes but economically they are driven. The foundation is usually a 6 x 8 wide flange, eight (8) ft. into the ground and sticking up about 6.5 feet above ground, and typically the poles are fourteen (14) ft. tall. Cushing stated that they also install on landfills and Bennett stated that the one he saw the foundation was a concrete slab about 2 x 8 in size. Smith asked if it was poured onsite, Cushing said they were, but they also have prefabricated as well.

Daniel stated that they try to pick a site that does not require a lot of grading, the racking system can handle as much as a twenty (20) degree slope, they don't typically like to have that much of a slope but prefer anything up to ten (10) degrees. As far as disturbing the land they will be disturbing about ¾ or less of an acre of land, they have to dig trenches for the electrical but they will be under the one acre and are not required to have a SWPP report which stands for storm water prevention plan. Brad Bennett stated that as far as he understood almost everything is enclosed, Daniel stated that the Utility Co is tying into the 3 phase then it goes to a pole with a meter then off that there will be a recloser which is another 3 phase connector with a relay from the their it goes to a 3 phase disconnect then it goes into the site as far as possible on poles, after that it will go underground as they have pad mounted transformers because they are too large to be put on a pole, everything underground will be in conduit, the array wires are PV rated for sun resistance, the wiring is tied to one of the members, a brief discussion was held on wiring. Electrical code states they have to be non-accessible, which can be conduit, a wrapping around the wiring or a fence around the system. The wires can be covered with a plastic mesh; therefore, you do not need a fence. All wiring has to meet NEC regulations and has to be inspected by an Electrical Inspector. Cushing stated that as far as fencing goes sometimes the Insurance Company requires a fence and we have no choice, other times they do not. Daniel stated that he has seen some systems that have an eight (8) foot wire fence with barbwire at the top and it looks horrible, it's not fitting in with the community landscape. The investors, the Insurance Companies and the individual location as far as its surroundings all come into play when deciding on fencing so it should be based on each application and location.

Cushing stated that in the Town of Livingston they are pushing for allowing the systems on Agricultural land because it's been farmed so long they want to allow the ground to rest, and other places stipulate that after the twenty-five (25) years the property must go back to Ag land. Some other municipalities put in a stipulation not to offset valuable farm/Ag land, but without a clear definition of what that is it can be controversial as farmers should also be allowed to use their land for what they want to use it for. Again, where the system can go is self-regulated on what the power companies can accept. There will be a big influx for 4 or 5 years then they will have to move on to another state as the State will be at full capacity, and that's without filling up the countryside. Brad Bennett asked if they have looked into the possibilities of how many systems can be put in the Town of East Bloomfield, Cushing stated that the PSC Public Service Corporation is going through an evaluation pressing utilities to come up with these answers and it's not done yet. Daniel stated that the substation in Canandaigua is at capacity right now, there are only two main substations in the areas they are allowing the systems, therefore they have eliminated the rest of the Town. He also stated that a substation may be able to accommodate a few systems, but that there are not that many of them in the area. Daniel stated that he would like to come to the Board as soon as possible with a proposed system on Townline Road and he already knows what the substation will accommodate, he is just waiting for the Town to get their regulations in place. Overmoyer stated that we have been discussing maximums of eighty (80) acres and or sixteen (16) Megawatts and asked if we were on track with those numbers, Daniel stated that he thinks the acreage is tough as you could have developers trying to lock up a bunch of acres, and try to get projects in the que at the utility. This could prevent really good developers with really good areas that could get excluded because the other guy has the land locked up, but his project may or may not go through. Cushing stated that its always a give and take with the Utility, he has heard that some substations have been upgraded to be able to hold more capacity after a project has been installed or started so that can be another issue. Daniel stated that the municipality could cap it at a certain amount in the future instead of starting with a cap as well. Compton stated that they need to address these systems on a first come first serve basis, A discussion was held on the process again to decide when the developer could come in front of the Planning Board for approval. Cushing stated that with the different levels of approval process with the utilities you have to be careful on your approval process of an application. Rogers asked if a system could be built here but the power goes to a substation in another town, Smith stated that for instance on Townline road a developer could move into Victor and lock another developer out and we would not have anything to do with it. Daniel stated absolutely more than one Town could share a substation. The utility does not care what Town a substation is in.

Overmoyer asked if a timeline between the application and the start of the project would be appropriate, Cushing stated he does not feel that is a good idea as there are different types of projects, Daniel works mostly on community solar projects and they are different than single off take projects where for instance the County or Constellation brands becomes the power user, these regulations keep changing all the time and if you start putting too many restrictions on timing it may take an extra six (6) months on one of these projects and if you get an Attorney or some company that takes their time on the paperwork you don't want to kick them out of the que. These could be ten (10) megawatt systems and they could take two (2) or three (3) years to complete.

Cushing stated that you may have a developer trying to obtain approvals from the town before they have their approvals from the utility, however they don't feel a developer should have to wait until the end to obtain Town approval slowing down the process even more as it could take up to two (2) years to get a project going prior to coming to the Town for approval. Cushing stated that as long as your making progress towards completion the project could get Town approval. Brad Bennett stated that the utility is the one really saying if a project will happen or not, the Town is looking at it from a zoning aspect and making sure the project is done per the regulations set in place.

Daniel again went over the process, and between Daniel, Cushing and the Board they came up with how it should work: trying to get the right solar system in the right place by the right developer could be a challenge. Daniel does Community Solar and it gives the residents access to solar that they may not otherwise have.

1. Apply for Prescreen to determine if the project feasible. The developer applies to the utility company and you're in what is called a que, in the que there are hundreds of properties and a developer can put in more than one just to get them in the que to get them reserved, however they are starting to say if you do not pay the fees and move forward then you lose your spot in line.
2. The developer then must then pay for and apply for the CESIR report which is an engineering report from the utility, the utility company will give the developer an estimated cost to tie into the system, if the amount works with the developer then the they will give a lot more money to hold their spot. The developer will now spend a bunch of money to have the engineering done so they can apply for Town approval, the utility has sixty (60) days to reply to a CESIR but the developer has already gotten a feasible answer from the prescreening so the developer does not want to wait the 60 days to get the Town approval because they are already pretty sure the project will go through.
3. The Lease between the property owner and the developer gets signed but does not get executed until they get their approval from the utility and from the Town, in the case where they will buy land then that's a higher risk, in this case the sale would be contingent on approvals. No one will spend money on a project unless they have their approvals. The Town reviews the application/proposal for the project
4. Then the developer needs to give the utility company a large sum of money so they can move forward.

Smith asked if the Town put a limit on megawatts or if the Town was at its capacity per the utility would that put a burden on small homeowner type solar? Daniels said there is usually a little fluctuation but not a lot so yes it could have some sort of impact.

Smith wanted to discuss decommissioning, Daniel stated that if the system needed to be removed early it's in life cycle for some reason the equipment recycle and salvage value of the components are worth much more than the cost to remove them. Putting the ground back to its original state may cost more, but should be fairly easy. Even when the system is older the components are worth money and should be worth more than the removal cost they will not just sit there forever as they are made up of mostly recyclable components. Overmoyer asked if a bond should be required for decommissioning, Cushing stated that it should be a non-issue because in addition to the values of the materials on the property, the landowner will not allow it in their lease and lastly the finance companies require that you decommission as they do not want to get stuck with the liability.

He also stated that the Town should put in their regulations that they can put a lean on the property if it's not brought back to its original state. And in the regulations, there is a time frame for removal after the system is no longer in use. Daniel stated that developers do not want to put money up front for a bond, also, he feels it's kind of crazy to ask a developer to put up a 200,000 bond to be carried for the next twenty-five (25) years when it's not a real number and never updated. Cushing stated that the developer does not own the system, the finance Company does so you have to be careful if you were to request a bond even if it's only 20% that may end up being two hundred thousand to a million dollars, when doing a bond through a surety, sometimes you cannot get a surety for some reason such as a recession, then you can't build a system. Compton stated that at the end of the lifespan of the system the cost of removal should be somewhere around $50,000 for a 2 MW ten-acre system, so a bond for 50,000 is more palatable, the Board needs to protect the residence of the Town so it is something to think about. Cushing stated that if you are going to require a bond you should make it a small one and make it on a project by project basis, the Town of Canandaigua did not put in a percentage they just stated that a bond will be required.

Cushing wanted to discuss that the NYS tax exemption, as a County you have the choice to honor a tax exemption, Ontario County chose not to honor the tax exemption which puts a project like the one discussed at a $30,000 a year tax burden so Ontario County is not a great place to do solar, Monroe County and Livingston chose to opt in so it's a better place for solar. The law is fifteen years old and was tied together with the wind projects which is unfortunate. The incentives from NYSERDA were better a few years ago, so paying the tax burden wasn't as difficult. Daniel stated that community solar is good for the environment and for the residents as it can give the residents ten (10) to twenty (20) percent less than their utility rate.

Daniel asked what the regulations will be for setbacks, he stated that anything over thirty (30) feet may be too restrictive. Brad Bennett stated that they will be the same for an accessory structure within the district that the project is located.

Daniels suggested that the Board contact the Town of Canandaigua to obtain a copy of their solar law**,** The Board feels they are on the right track after molding the Town of Seneca's and the NYS Model Law together and after tonight's meeting that they can finish the Special Use Permit without looking at yet another Towns law. Cushing agreed.

Rayburn informed the Board that the ZBA left the review open for Hawkins until he can confirm with his Attorney some easement questions, she has not yet received the final application for W.B. Creekside.

III. Minutes of December 1, 2016

Compton made a motion and Roger seconded the motion to approve the minutes of December 1, 2016 as written, all board members present voted Aye, Vote was carried unanimously.

VII. Meeting Adjourned

Smith made a motion and Pellett seconded the motion to close the meeting @ 10:00 pm.
All Board members present voted Aye, Vote was carried unanimously.

Respectfully submitted,

Kimberly Rayburn
Planning & Zoning Board Secretary