



TOWN OF CAIRO PLANNING BOARD
PO Box 728, Cairo, NY 12413
Chairman-Joseph Hasenkopf
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**Meeting Minutes –
April 4, 2019**

Members Present: Joseph Hasenkopf, Allen Veverka, Ed Forrester, Beth Hansen, and Kevin Hicks

Absent: Stacey Poulsen

Pledge of Allegiance

Approval of March 7, 2019 Meeting Minutes

The Planning Board members reviewed the meeting minutes for the March 7, 2019 meeting. A motion to approve the minutes was made by Kevin, seconded by Elizabeth, all were in favor and the minutes were approved.

Public Hearings:

1) 2019-0102 – Red Star Café & Bakery – Guiragossian – 526 Main Street (Tax Map#101.05-3-23)

Mr. Guiragossian spoke to the public with regard to his plan to open a café and bakery. He indicated he was interested in bringing more coffee options and a place to basically go and have a bite to eat and a cup of coffee. No questions were raised by the public and the applicant was asked to take a seat and was informed he would be called up again to discuss his plan with the PB members.

2) 2019-0201 – Grace Baptist Church – 107 Warren Stein Road -2-lot Subdivision

Dale Quick was in attendance and spoke to the public regarding his plan for a 2-lot subdivision of church property. Mr. Quick indicated that currently the parsonage and the church are on one property and they seek to subdivide the property separating the residence from the church thereby providing better marketability in case of a future need to sell one parcel or the other but that there were no plans at this point to do so. No questions from the public were posed and the applicant was instructed to take a seat and informed he would be called up to discuss his plan with the PB members.

3) 2018-0101 - Grandview Solar - 743-775 Main Street –2 MW Solar Farm

Sazzy Gourley presented and introduced himself as the project developer for the Grandview Solar Project and started off by giving some background on Cypress Creek. Cypress Creek is one of the nation's largest solar provider with 2.2 gigawatts over 12 states. Cypress Creek has been active now for 3 years in New York with 8 projects developed in the state thus far and 15 to 20 expected in the next year. He explained the company believes that expanding access to clean energy that is affordable and locally produced helps to grow good communities with sustainable energy. Mr. Gourley explained that this second public hearing is specifically about the addition of the battery storage part of the site plan and he will provide more specifics about the battery. The Grandview Solar project will be located at 743 Main Street and will be a 2 MW solar farm; the energy generated at this site can power approximately 150 homes annually, equivalent of taking off 150 off the grid each year. He described the site access road as coming off Main Street and curving around to reduce visibility. In addition, there are setbacks around the project to make sure it is fully screened. The setback is 105 feet from the front, 83 feet from the side and over 1100 feet in the rear. Mr. Gourley described the array design of the panels themselves as being in two sections to avoid wetland impacts. The power generated from the solar farm will be distributed through the Central Hudson grid as a community solar project, which means the power generated in on this site in Cairo stays in Cairo and the residents of the town will be able to subscribe to get their energy directly from this site.

Mr. Gourley addressed what adding the battery storage to this plan meant in terms of the initial site plan. On the two equipment pads they will be adding a battery to each but that there was no other change in the proposed development use and no change in the limit of disturbance but rather just an additional piece of equipment on the equipment pad, resulting in a slightly larger pad. He went on to say that batteries are quickly becoming the standard to solar farms across the country because it enables the farm to store energy and distribute it to customers when the sun is not shining. Thereby in practice this means that when you come home from work in the evening and the sun is not out, and you turn on your light, with the battery storage on the site your energy will be used directly from the site as clean energy.

At that point Mr. Gourley introduced Mr. Trip Hyde, a professional engineer specializing in battery system technology, who was there to share an overview of the system itself and touch on some of the potential environmental and safety concerns discussed with the Planning Board at last month's meeting. Mr. Hyde introduced himself as a professional engineer in New York and that he was working with Cypress Creek as a resource to explain to everyone the way the battery storage works in conjunction with solar projects and on its own and hoped to address some of the questions they had received from the board. Mr. Hyde provided an overview of some of the components of the battery storage system using a slide show presentation and demonstrated how they appear in a smaller scale system as well as on a larger format system. He said he would talk about standards and the code that surround how these are manufactured as well as installed and also the safety systems built into the battery system itself. He explained that this is an indoor battery system housed inside a shipping container which is pretty miniscule compared to the size of project that would go on-site - stating essentially the battery racks would be similar to a tall gym locker with battery modules that slide into them from top to bottom. Along at the top is a protection device which will disconnect if there are over or under temperatures or voltages and will provide a warning in those events. He demonstrated on the slides the inverter equipment which changes DC into AC or alternating current; and how it is stored in batteries in direct current form from alternating current back into direct current. He stated you need the inverter to bi-directional so that energy can be taken from and then put back into them

thereby storing direct current in the batteries. Therefore, in this case it would be 100% clean energy – when they discharge it is essentially solar energy coming out of batteries. He illustrated the other piece of equipment was AC interconnection equipment and the monitoring and control device, as being an outdoor system that will be better represented on site on the Grandview project. The shipping container in this case has an inverter system or PCS is external; that's going to be the case for this system container will contain an inverter, what we call the PCS is external the other things are to note are the dual AC units on the outside off the battery container that are used to keep the batteries cool when charging or discharging. The AC interconnection equipment will connect to the Central Hudson grid so that the batteries can be discharged onto the grid. The batteries are paired with the solar system; the PCS and the conversion system will take the energy from the solar panels up into the batteries and distribute it back to the Central Hudson grid. He produced some schematics of what the system will look like that is going into the Grandview project. It is a bird's eye view of the shipping container that contains most of the equipment; the battery racks; fire suppression systems for each side; of the container. Another schematic was an elevation view looking at it if the front cover was removed. Looking at vertical batterie racks this is what it will actually look like just 4 big doors. One thing that is important to understand about the equipment is there are a whole litany of standards that the equipment has to be built to from the tiniest little battery cell inside the next smallest module all the way out to the piece of equipment themselves. This system will meet all International and NYS Building Codes along with California Fire Code that is very comprehensive and meet the highest standards.

The Grandview project storage system has a litany of safety and suppression layers to protect the batteries and prevent thermal run away caused by a number of different factors such as a manufacturing defect, some sort of shock to the system, vibrations, punctures, overcharging and discharging. The monitoring is managed by rack level. If there is a problem a warning is issued to the monitoring system and issued externally to Cypress's 24/7 24-hour monitoring facility who will address the issue at hand. He went on to explain there would be two AC units for climate control which keep the batteries within a certain range of temperatures, thereby if you lose one you have another AC unit to keep things cool. This will also issue a warning to Cypress and all operations of the affected battery would cease. In the off chance that there is a fire, they have several more safety practices to make sure it doesn't turn into a major fire and that is an internal fire suppression system. Several alarms go off, externally and fire suppression system ensures that the fire does not spread; the internal system measures for smoke or heat which would then trigger several alarms to go off. The fire suppression is emitted to make sure that the fire does not spread from one cell or module that may be overheating.

Mr. Hyde indicated the local fire department had been trained by Cypress and has signed off on the Emergency Response Plan. The good news about battery fires is that they are basically the same as plastic fires so fire departments are already trained in how to handle this type of fire with the breathing apparatus and the potential fumes with these types of fires. The final step after clean agent has been emitted is to simply cool outside with water and allow the system to run its course. This concluded the overview of the battery system components and system processes and the floor was opened to the public for questions.

One concern raised by the public was whether the local fire department had the necessary tools and access to the site in the event of a fire. Cypress Creek indicated that the fire department had been trained and had signed off on the ERP.

Another question raised was the issue of hunting in the area and whether the battery container could withstand stray bullets. Cypress Creek reassured him that it was fire rated concrete and would not be an issue for bullets.

One individual asked why the battery was necessary. It was explained the way it operated the solar system is large enough to supply energy as well as powering the batteries; so, when the sun isn't shining at night it makes economic sense in this region for the developer to eke out more energy and makes sense to store clean energy when the sun isn't shining;

A neighbor had a question regarding the fencing, and it was explained that the fencing would be around the arrays not the perimeter of the property. Pesticide use was discussed and it was stated that herbicides would be used until the wild pollinators are established. And finally, it was asked if the wetlands on the parcel would ever be developed and the answer was that they are not able to develop around the wetlands and they are off limits to any future development.

Another question asked was whether the site would be near the limits or whether they produce more electricity? CC representative indicated that the limit is 5 MW but this site will remain 2.

No other questions were asked from the public and CC was dismissed.

Business:

1) 2019-0102 – Red Star Café' & Bakery – Guiragossian – 526 Main Street (Tax Map#101.05-3-23)

Mr. Guiragossian came to meet with the Planning Board members and review his site plan. He presented a representation of his sign and is getting his architectural drawing done. There were no questions from the PB. A motion to close the public hearing was made by Liz seconded by Kevin, all were in favor and the public hearing was closed. A motion to approve the project was made by Allen, seconded by Kevin, all were in favor and the project was approved.

2) 2019-0201 – Grace Baptist Church – 107 Warren Stein Road -2-lot Subdivision

Applicant seeks a 2-lot subdivision. Dale Quick came forward with the updated survey which shows the well and the septic. Also wanted parcel sizes are now on there; Mr. Quick doesn't show on map but there's a natural culvert so we just picked that for the line when we did the survey initially. The Chairman asked if there were any questions or comments. Ed asked if they needed to go before the ZBA and they stated they had been approved.

A motion to close the public hearing was made by Allen, seconded by Kevin, all were in favor and the public hearing was closed. A motion to approve the project was made by Allen, seconded by Liz, all were in favor and the subdivision was approved. Chairman indicated they have 30 days to file it with the County. The applicant paid the \$200 site plan fee.

3) 2018-0101 - Grandview Solar - 743-775 Main Street –2 MW Solar Farm, (Tax Map#

Mr. Gourley and his associates met with the PB members and presented an agenda to facilitate things slightly better along with a complete set of the final application along with the site plans.

The issue of the right-of-way, easements being missing on the site plan which are mentioned in the deed for the property. These right-of-way easements must be shown on the site plan in order to be approved.

The decommissioning bond was confirmed at \$300,000. The issue of the battery storage and potential environmental harm due to leakage was discussed and the Chairman voiced his concerns. Mr. Gourley explained there was no battery acid but rather a gel which would not be able to penetrate into the surrounding land. The batteries are lithium similar to what's in your cell phone, if punched a gel forms no actual liquid will flow; it will burn but will not melt or flow out of there in any way. Chairman said he had no other questions about battery but asked to have something signed or stamped by an engineer certifying made of permeable fluid can't get into the ground and contaminate any groundwater.

There was an issue discussed regarding the additional sound coming from the A/C units and it was determined it would be barely audible from Main Street.

The issue of tree mitigation was discussed and the Planning Board and Cypress Creek had agreed upon planting 25 Colorado Golden trees, at the cost of \$15,000 as acceptable and includes the plantings, replacement and delivery; they will come up with some kind of plan and plant when CC has the construction permits in hand.

The drip edge issue was revisited and the CC proposal in lieu of the drip edge was accepted subject to their proposal to have \$300,000 bond in place until site stabilization. A vote was taken on the drip edge proposal and the majority voted affirmatively on the plan. Kevin reiterated that he has been asking for some scientific proof that a drip edge is necessary to prevent erosion.

A final review of the SEQRA was performed. Chairman asked how long from approval to the start of construction? Mr. Gourley indicated it is slated as 2020. Chairman indicated that one of the things that was previously agreed to was that they would not start construction until 8:00 in the a.m. as a neighbor was concerned that the heavy equipment would disturb her husband. It was discussed that both Cairo and Round Top fire departments were listed on the SEQRA form so it is assumed CC will provide training for both of them and the representative agreed. Subject to the sound reading on the A/C units, a vote for a negative declaration on SEQRA was taken and all were in favor and a negative declaration was made.

The PILOT was touched upon and the Chairman instructed CC that the Town Board will work with them to put the PILOT in place and that it must be in place before construction is complete. In addition, the Town has the right to do a final inspection before CC goes live, and is contingent on DEC and the Army Corp of Engineers approvals needed. The Chairman indicated both bonds have to be issued before any building permits are issued and that everything will be outlined in the approval letter.

It was asked if a vote could be taken on a conditional approval at this meeting and CC would provide the remaining items afterwards. A motion to approve project conditional on satisfying these conditions was made by Kevin, seconded by Liz, all were in favor and conditional approval was given. The Chairman asked for 3 copies of the maps for the Planning Board files.

4) 2019-0301 – McNally – 868 Rt. 67, Leeds, Change of Use – (Tax Map #85.00-4-33)

Mary McNally met with the Planning Board to discuss her plans for adding an additional unit to her existing home to accommodate an elderly 89-year old woman who has difficulty climbing stairs. Chairman asked if there were any questions or comments and there were none. Chairman told the applicant approval would require a public hearing to explain what she was looking to do. The fees for \$200 for site plan and \$30 for the public hearing were paid by the applicant and the public hearing was set for May 2, 2019.

Other Business

Michael Martin and Alex Kendolf were in attendance to get advice from the Planning board for a plan to build and operate an agricultural grow for medical marijuana. The proposal was for two 3000 square foot Morton Buildings, one for growing and one for extracting covering about 90 acres. The Planning Board stated they had no initial issues with the proposed concept.

A motion to adjourn the meeting was made by Kevin and seconded by Allen, all were in favor and the meeting was adjourned.

Respectfully submitted,

Diane Newkirk

Diane M. Newkirk
Planning Board Clerk/Secretary