

**PASQUOTANK COUNTY, NORTH CAROLINA
MARCH 20, 2017**

The Pasquotank County Board of Commissioners met today in a work session on Monday, March 20, 2017 in the Community Room at the W.C. Witherspoon Memorial Library.

MEMBERS PRESENT: Cecil Perry, Chairman
Dr. William R. Sterritt, Vice-Chairman
Jeff Dixon
Lloyd E. Griffin, III
Joseph S. Winslow, Jr.
Frankie Meads
Bettie J. Parker

MEMBERS ABSENT: None

OTHERS PRESENT: Rodney Bunch, County Manager
R. Michael Cox, County Attorney
Shelley Cox, Planning Director
Lynn Scott, Clerk to the Board

The work session was called to order at 3:00 PM by Chairman Perry.

1. DISCUSSION ON PROPOSED ZONING TEXT AMENDMENT FOR SOLAR FARMS:

Planning Director Shelley Cox said in response to several concerns that have been noted regarding solar farm developments in the region, staff has drafted an amendment to the County's solar farm regulations. Changes include a required landscape buffer (in addition to large setbacks), site maintenance provisions, and changes to how decommissioning bonds will be calculated. She explained that solar farms are currently allowed with a Conditional Use Permit in Commercial, Industrial, and Agricultural zoning districts which would not be changed under the proposed amendment. She said the Planning Board reviewed the following text amendment on February 23, 2017 and recommended approval by a vote of 5-0:

ZTA 17-01

**Purpose of the Zoning Text Amendment is to amend screening, parking,
and decommissioning requirements for new solar farm facilities.**

Proposed new text is highlighted in yellow.

9.04-29 Solar Farms - Solar farms are permitted in districts as designated in the Table of Permitted Uses, subject to the following requirements:

a. Structures shall not exceed twenty-five (25) feet in height, as measured from grade at the base of the structure to its highest point;

b. All structures and security fencing must meet a one hundred (100) foot front setback measured from the edge of the rights-of-way and fifty (50) foot side and rear setbacks. In addition, a one hundred (100) foot undisturbed buffer is required from all watercourses, water bodies, or wetlands.

~~Solar farm facilities and structures shall conform to the minimum building setback requirements of the zoning district in which they are located, or thirty (30) feet, whichever is greater;~~

c. All exterior sides of the security fence shall be screened with a landscape buffer that meets one of the following criteria:

1. Existing on-site mature vegetation at a minimum height of ten (10) feet and depth of fifty (50) feet remains between the security fence and adjacent property including rights-of-way; or

2. A single row of evergreens in combination with mature vegetation,

installed at a height of five (5) feet achieving opaqueness and a minimum height of ten (10) feet in five years; or

3. A double row of off-set evergreens absent existing mature vegetation, installed at a height of five (5) feet achieving opaqueness and a minimum height of ten (10) feet in five years; or
4. A berm combined with evergreen vegetation installed at a height of five (5) feet achieving opaqueness and a minimum height of ten (10) feet in five years.

Buffering

- ~~1. Solar farms with panels located at least one hundred fifty (150) feet from an adjacent public street right-of-way, residentially zoned property, or residential use shall not require screening;~~
- ~~2. Solar farms with panels that are located less than one hundred fifty (150) feet from an adjacent public street right-of-way, residentially zoned property, or residential use shall require screening in accordance with the landscape standards found within Article 10 of the Zoning Ordinance.~~
- d. Solar farms shall be developed in accordance with an approved site plan that includes the following information:
 1. The location of the solar farm facility (including the arrangement of any existing or proposed buildings, structures, or panels);
 2. The distance from any proposed solar farm facility or structure to the surrounding property lines;
 3. Any existing or proposed signs, fencing, lighting, construction and permanent parking areas, driveways, landscaping, vegetative screening or required buffers. All parking must be located outside of right-of-way;
 4. Horizontal and vertical (elevation) to-scale drawings with dimensions of proposed solar collector structures.
- e. Solar energy components must have a UL listing and must be designed with anti-reflective coating(s).
- f. Landscape buffers, ground cover, security fences, gates, and signage must be maintained in good condition until the solar farm is dismantled and removed from the site. Grass, weeds, and other ground cover must not exceed 12 inches in height at any time.
- g. An engineered drainage plan meeting the minimum requirements of the Pasquotank County Stormwater Design Manual shall be required with the submittal of the Conditional Use Permit application. Solar farms are required to be constructed according to their approved drainage plan.
- h. Decommissioning:
 1. Solar farm owners shall have twelve (12) months to complete decommissioning of the solar facility if no electricity is generated for a continuous period of twelve (12) months. This period may be extended by the Pasquotank County Board of Commissioners, if evidence is provided that the delay is due to circumstances beyond the facility owner/operator's reasonable control.
 2. Decommissioning shall include removal of solar collectors, cabling, electrical components, and any other associated facilities down to thirty-

six (36) inches below grade.

3. Disturbed earth shall be graded and re-seeded, unless the landowner requests in writing that the access roads or other land surface areas are not to be restored.
4. Conditional Use Permit applications for solar farms must include decommissioning plans that describe the anticipated life of the facility, the estimated decommissioning costs in current dollars, the method for ensuring that funds will be available for decommissioning and restoration, and the anticipated manner in which the solar farm project will be decommissioned and the site restored.
5. Prior to the issuance of a building permit, the owner of a solar farm shall provide a bond or irrevocable letter of credit in favor of the County in an amount equal to one and a quarter times the estimated decommissioning cost ~~the estimated removal cost~~ including the removal cost of the solar collectors, cabling, electrical components, fencing, and any other associated facilities, ~~less the salvage value of the equipment prior to construction~~. Should the solar farm owner elect to use a letter of credit, it shall be issued by a federally chartered bank with a branch office in northeastern North Carolina. The bond or letter of credit shall remain in full force and effect until any necessary site restoration is completed to restore the site to a condition comparable to that which existed prior to the issuance of the Conditional Use Permit.
6. The decommissioning plan and related bond shall be updated by the owner of the solar facility every five years from the date of the Conditional Use Permit approval.

Ms. Cox stated that Pasquotank County currently has three solar farms, including the Foreman Bundy Road Solar Project, which is 20 MW, the Barnhill Solar Project, which is 5 MW, and the Morgan's Corner Solar Farm, which is 20 MW. She said she has received feedback that some people are concerned because of Currituck County enacting a moratorium and some other neighboring counties developing stronger regulations that Pasquotank County would be seen as the low fruit on the tree for large solar farms to locate.

Ms. Cox stated that currently there is a 150' front setback for solar projects from the street right-of-way. She provided a map of the Morgan's Corner Solar Farm and said that the farm observed the 150' setback. Under the proposed regulation, the setback can be reduced down to 100', but a landscape buffer will be required. This will help eliminate seeing the chain linked fencing surround the farm, which is often a concern of nearby neighbors. She said by introducing the landscape buffer requirement it will provide a green screen between the street right-of-way and where the solar project begins. Existing side setbacks are 25' and the proposed amendment is 50'. The existing rear setbacks are 30' and the proposed setback will be 50'. She noted that this is not a whole lot of area, but it will get them a little bit further off the property lines. Finally, she added we do not currently have a minimum wetland buffer requirement and she is recommending a 100' buffer to make sure that when the project is being constructed there is not sediment going into the swamp nearby and therefore protecting the wetlands that are adjacent to the project.

Commissioner Dixon asked if we should require landscape buffers on the sides, especially if there are residents located beside the project. Ms. Cox said she did not propose a side landscape buffer, but if the Board thinks we need one she can add it. Mr. Dixon said if side landscape buffers are required he would support the minimum side setback remaining at 25'. Chairman Perry said he would also support the side setback remaining at 25'.

Vice-Chairman Sterritt asked who will enforce the code and make sure that the required evergreen vegetation meets the requirements. Ms. Cox said the Planning Department is responsible for enforcing the zoning ordinance and making sure that the buffer meets the requirements.

Commissioner Meads said he feels the existing 150' front setback is adequate and the Board should stick with it. He said the setback on the sides should depend on what is beside it. If it is residential or business, it should be 50', but if it is next to a forest, 25' would be sufficient. He said he thinks we can shrink the wetland setback.

Commissioner Parker asked for clarification on the front setback and buffer requirements. Ms. Cox stated that the landscape buffer is included in the 100' setback. Commissioner Parker asked if the rear setback is less because it will always be toward a wooded area. Ms. Cox said in past projects the rear has backed up to farm fields, woodlands, or wetlands. Usually residential uses are closer to the roads. She said there is always the possibility that someone will have a house in the back. Commissioner Parker suggested the projects be positioned so the back is toward an area that is not residential.

Commissioner Griffin said he has real concerns about the proposed and current setbacks. He said the solar panels might be set back 150' however the bobbed wire fence is right on the property line. If you ride by it looks like you have pretty much imprisoned the house. He is concerned about making homes undesirable. He said as county commissioners we are supposed to protect landowners' rights. He compared it to hog farms. He said his concern is where the fence and buffering will be located. Ms. Cox explained that the proposed ordinance states that all structures and security fencing must meet a 100' front setback.

Commissioner Dixon said if we crunch the developer's too much on setbacks we will have several smaller farms and he would hate to see that. He would prefer them be in one large space. Commissioner Griffin noted that the size of the panels can be changed based on the size of the land. He is glad the planning staff is taking this on and trying to protect our landowners, because we owe it to our citizens. He said we are yet to see the real estate data of what these farms do to surrounding properties. He added we should not put fences up on three sides of a landowner's property.

Chairman Perry asked if there are regulations on where hog pens can be located. Ms. Cox said hog farms are designated as bona fide farm use in North Carolina and therefore there are no regulations. Mr. Perry said the reason he asked that question is because he feels landowners should be given respect as to what they want to do with their land. If a property owner wants to sell it to a solar farm, then the owner should have the right to do what he wants with his land as long as it does not cause harm to anyone. He asked if there will be regulations on land that is way back in the woods. Commissioner Griffin said law requires there be fencing regardless of where the solar panels are erected. He asked if there is any evidence that solar farms are harmful to citizens. Commissioner Meads said there is not any. Commissioner Dixon said Chairman Perry makes a good point. He said maybe we should let the Conditional Use process take care of the requirements, because each farm will be a different scenario. He said we may want to make the side setbacks much more if there are homes beside it. He thinks we should not use a "cookie cutter" approach. He would rather let the Conditional Use permit process play its role. He agrees 100% with the landscaping requirement.

Commissioner Meads said at the Code Council meeting this past week they discussed Low E Glass, which is basically a reflective glass. He is not sure if this is what the panels contain. He said problems are beginning to show up with Low E Glass. There have been fires caused by the glass and siding on homes and plastic in cars have melted. He said we do not know what reflection will take place from the solar panels. From what he can understand, there have been no good studies. Commissioner Winslow stated that reflections were addressed in the process and they were told by the manufacturers that the purpose of a solar panel was to absorb and not to reflect. He said this has nothing to do with the type of windows placed in homes.

Commissioner Parker stated that solar panels have been around for years and from what little bit she knows, they absorb sunlight. Commissioner Meads said the panels most likely absorb ultraviolet light and there is no study on what ultraviolet lights will do to humans. He said removing the panels will present a hazardous problem. Commissioner Parker said "most likely" is a thin line. Commissioner Parker asked Ms. Cox her reasoning for reducing the front setback. Ms. Cox said because they are now requiring a landscape buffer in between the fence and the street. She said she feels the landscape buffer provides an additional screen, whereas if you have a 150' setback with no landscaping you can see the fence. Commissioner Dixon asked if the buffer is required to be placed on the edge of the street. Ms. Cox stated that the buffer will need to be in the 100' between the fence and the street. The developer's site plan would show where

the buffer will be located. She noted that the developer will not want to put the trees too close to the panels because branches can fall on them.

Chairman Perry asked if this meeting is to stop allowing solar panels in Pasquotank County. Ms. Cox said not at all. He said he received a lot of letters from citizens who believed that is what the work session was to discuss.

Commissioner Griffin said he likes Commissioner Dixon's idea of utilizing the Conditional Use process. He asked what the current Conditional Use Fee is. Ms. Cox said she will provide him with that information. He wants to make sure that the developer covers the cost. Ms. Cox said her concern is if there is a resident across the street or adjacent to it that is concerned and there are not clear standards, we may not know that the resident has concerns until it gets to the Board of Commissioners and by that time the applicant has their site plan drawn up, their drainage plan drawn up and everything has gone through the approval process, with no issues. If the Board changes the setback, it may put a burden on the applicant to have to go back and do the work. Commissioner Dixon said the existing setbacks can be used as the minimum amount and use the new setbacks as the max. Ms. Cox asked if there should be additional buffers for residences. Commissioner Winslow asked how someone can anticipate what adjacent land will be used for in the future. He said parameters needs to be set as of today for any expected future use. He said he is pro solar panels, but protective buffers should be a part of our Pasquotank County Ordinance. He applauded Commissioner Griffin for bringing this issue up, because we do not want something to be viewed by some people as unsightly. He said if we do not require buffers, it could prevent a development next to it in the future.

Commissioner Dixon said he doesn't remember anyone complaining about the previous solar farms. Mr. Bunch reminded him that the large solar project on Foreman Bunch Road was initially planned for Mount Herman Church Road. There was a lot of input from residents and they ended up finding enough land elsewhere.

Commissioner Winslow asked where the 10' vegetation rule come from. Ms. Cox said it was in the State model ordinance. She said before any communities adopted solar regulations, the State came out with a model ordinance and it was included. She noted that fence requirements are usually 10' as well.

Ms. Cox stated that Item d. (3) was amended to add that all parking must be located outside of the right-of-way. She explained that in the past when the farms were under construction many of the workers parked on the side of the road in the right-of-way, creating a traffic hazard. She said there is sufficient room on the site for workers to park. She said Item f. is a landscape provision which states that landscape buffers, ground cover, security fences, gates, and signage must be maintained in good condition until the solar farm is dismantled and removed from the site. Grass, weeds and other ground cover must not exceed 12" in height at any time. She said there have been complaints regarding the height of grass at one of the existing farms. She said Item g. is something that is already required; it is just a reminder because it seems that the drainage plans have been one of the biggest issues with these developments. She said it is a reminder to the applicant that they are required to provide an engineer drainage plan and they have to adhere to it. She said the Morgan's Corner Solar Farm got their drainage plan approved and went out there and constructed it. When it came time for their final inspection, they realized they had put some culverts in where they were not supposed to and they had to remove them. Commissioner Winslow asked if we do an annual assessment of the soil in these projects. He said it is a big issue because it is unknown what effects the deterioration of the panel causes to the soil. He feels annual testing would help eliminate concerns of individuals. Ms. Cox answered they do not. Ms. Cox said the challenging thing is identifying exactly what we would be requiring testing for. Chairman Perry said the scientific perfection of solar farms has concluded that solar farms are safe. He said we need to recognize the fact that people that own solar farms pretty much know the final outcome. He stated that we need to give our citizens every opportunity to grow and be successful and protect them also.

Commissioner Winslow said there was an article some months ago about agriculture in North Carolina and someone made the comment that in the future solar farms sites would not be used for farming because they would degrade the soil due to the leaching of materials. He does not believe that this will happen and he does not think that it will be an issue, but others believe that and maybe through some type of testing those people can be reassured that the land can be used

in the future for farming. He reiterated that he feels we should add language requiring soil testing.

Vice-Chairman Sterritt asked what a watercourse is. Ms. Cox said CAMA defines watercourse as anything you can basically get a canoe in.

Ms. Cox said the way our ordinance is written currently a decommissioning study and a decommissioning bond are required that shows what the salvage value of the project is versus the decommissioning cost. If the salvage value exceeds the cost of decommissioning, they are not required to provide a bond to Pasquotank County. She said two of our current projects showed that their salvage value exceeded the cost of decommissioning and they were not required to provide a bond. However, on the third project with a different company, their decommissioning study showed that it was a \$600,000 difference between the salvage value versus the cost of decommissioning so they posted a substantial bond. She said two different companies provided two totally different pictures as far as what salvage value is. The cost of decommissioning is constant with both of the comparable projects. The difference came in the salvage value. One of the companies said the salvage value was \$300 million and the other company said the salvage value was significantly less.

Commissioner Dixon requested that we table this item to another time to allow sufficient time to discuss this issue. He said he has several questions regarding decommissioning. He said staff has performed a lot of work and we only have five minutes before our next meeting. Mr. Bunch said he will schedule another session soon.

Commissioner Griffin said he would like to place a moratorium on accepting applications for solar panel projects until we resolve this matter. Commissioner Meads said he would like to second that idea. Ms. Cox explained that we must advertise and there are public hearing requirements that go along with moratorium. Commissioner Griffin said we need to move forward with calling for a public hearing because we want this in place before another applicant comes in. Ms. Cox stated that if an application comes in, whatever ordinance is adopted at the time is what is used. He asked that this item be included on tonight's agenda for a vote. Commissioner Dixon said by the time we have a public hearing, it will be a month out.

Commissioner Dixon requested staff research property values and what we are generating in property taxes from the solar farms. Chairman Perry thanked staff for their hard work.

The work session was adjourned at 3:58 PM

CHAIRMAN

CLERK TO THE BOARD