



Cabarrus County Government

Cabarrus County Planning and Zoning Commission Meeting
February 12, 2019 @ 6:30 P.M.
Board of Commissioners Meeting Room
Cabarrus County Governmental Center

Agenda

1. Roll Call
2. Approval of December 11, 2018, Planning and Zoning Commission Meeting Minutes
3. Approval of Findings of Fact CUSE2018-00005 Verizon Wireless
4. Old Business – Board of Adjustment Function:
 - A. Petition RZON2018-00004 – Request for Rezoning from Office Institutional (OI) District to Limited Industrial (LI) District. Applicant/Owner is Dan Wilcox. The property is located at 1334 NC Highway 24/27 W (PIN 5524-25-8940).
 - A. Petition CUSE2018-00004 – Proposed amendment to CUSE2017-00001, Conditional Use Permit for Public Service Facility (Solar Farm). Applicant is NC 102 Project, LLC, (FKA McBride Place Energy, LLC). Located at Joyner Rd and Mt. Pleasant Rd South, (PIN: 5557-40-5055 and 5556-25-9058).
5. Directors Report
6. Legal Update
7. Adjourn

Planning and Zoning Commission Minutes

December 11, 2018

Mr. Chris Pinto, Chair, called the meeting to order at 7:06 p.m. Members present, in addition to the Chair, were Mr. Jeffrey Corley, Mr. Adam Dagenhart, Ms. Holly Grimsley, Mr. James Litaker, Mr. Andrew Nance, Mr. Charles Paxton, Mr. Brent Rockett, Mr. Stephen Wise and Mr. Jerry Wood, Jr. Attending from the Planning and Zoning Division were, Ms. Susie Morris, Planning and Zoning Manager, Mr. Joshua Jurius Planner, Mr. Phillip Collins, Sr. Planner, Mr. Wayne Krimminger, Zoning Enforcement Officer, Ms. Arlena Roberts, Clerk to the Board and Mr. Richard Koch, County Attorney.

The Oath of Office was administered to reappointed member, Ms. Holly Grimsley.

Roll Call

Mr. James Litaker **MOTIONED, SECONDED** by Mr. Jerry Wood to **Approve** the November 13, 2018, meeting minutes. The Vote was unanimous.

The Chair said anyone wishing to speak on any of the Board of Adjustment cases, or to testify during the public hearings, must be sworn in. The Chair administered the Oath.

The Chair read the suggested rules of procedures for the Board of Adjustment cases.

1. The Cabarrus County planning staff person(s) shall first present the staff report and answer questions from the Commission. There will be no time limit on this presentation.
2. The Applicant may make a presentation to the Board (optional) and will then answer questions from the Commission. There will be a 30 minute time limit on the presentation if the Applicant chooses to make a formal presentation. There will be no time limit on questions from the Board following the presentation.
3. When the Board is ready to proceed, the proponents (those speaking generally in favor of the case) will have a total of 15 minutes to speak and/or present documents in support of their position. The 15-minute time limit does not include questions directed to the proponents by the Commission.
4. After the proponents finish, the opponents (those speaking generally against the case) will have a total of 15 minutes to speak and/or present documents in support of their position. The 15-minute time limit does not include questions directed to the opponents by the Commission.

5. Each side will then have 3 minutes for rebuttal, with the proponents going first. Again, questions directed to the speaker will not count against the time limit. This will conclude the public hearing portion of the meeting and the Commission will proceed to deliberation.
6. Each side is strongly encouraged to use a spokesperson to present the positions commonly held by each. Each side is also strongly encouraged to organize their speakers and presentations to ensure that all persons wanting to speak will have time to do so.
7. If a speaker has questions of a person on the other side, such questions shall be addressed to the Commission members to be redirected to the person to be asked. There will be no direct questioning of one speaker by another except through the Commission.
8. Public demonstrations of support for a speaker's comments should be limited to clapping. Any other type of audible support shall be out of order and subject the offender to being removed from the building. Anyone speaking out of order shall likewise be subject to removal.
9. These rules are designed to have a full and fair hearing that is orderly and expeditious and avoid unnecessarily repetitious presentations.

Mr. Jeff Corley, **MOTIONED, SECONDED** by Mr. Brent Rockett to **APPROVE** the Rules of Procedures. The vote was unanimous.

New Business –Board of Adjustment Function:

The Chair introduced Petition CUSE2018-00005-Request for Conditional Use Permit for Wireless Telecommunications Facility. Applicant is Benjamin Herrick on behalf of Verizon Wireless, located at 11590 Flowes Store Road (PIN:5525-92-4009).

The Chair asked the Board members if anyone had any conflicts with this case. There were no comments.

Mr. Josh Jurius, Planner, addressed the Board presenting the staff report. He would first like to open with a correction to the staff report. He inadvertently sent the wrong signature page out in the packet. We have a hard copy of both the applicant and the owner signatures, received in our office on November 13, 2018.

We received some additional feedback after the staff report was sent out that concerns our Emergency Communications System. The Sheriff's Office has requested that the applicant provide a Microwave Interference Study to determine if the proposed tower would have any impact on the Emergency Communications Systems in that area.

Staff would like to request that the Board add an additional condition of approval to the end of the existing conditions:

The Applicant shall provide a Microwave Interference Study and those findings are to be reported to the County staff and to the Sheriff's Office.

This could potentially change the site. Whether that be the height of the tower or the layout of the site. It is staff's interpretation, that if it is only the height of the tower that changes, if the tower can be moved forward at a shorter height than what is presented tonight, we do not necessarily need to bring it back to the Board. However, if there are some proposed layout changes where they are moving it completely on site to a different location, or any other changes such as that, it may require Board approval before they can continue.

The applicant is proposing to construct a 195-foot monopole Wireless Telecommunications Tower with a four-foot lightning rod (total of 199 feet). The proposed location will be toward the rear of the property as shown in the site plan.

The subject property is currently occupied by a single-family detached dwelling.

The current zoning is Countryside Residential for the subject parcel and all adjacent properties are Countryside Residential.

The access to the tower and to the compound will be utilizing the existing driveway that accesses Flowes Store Road. They will continue off that to access the rear of the property. There should not be any additional driveways going on to Flowes Store Road.

The applicant has submitted the fall zone radius structural letter stating what the tower should be able to hold. It is planned to be a co-location opportunity.

The applicant is applying on behalf of Verizon Wireless but we do have documentation saying they would work with other companies to use this site as a co-location site to avoid multiple single use towers to consolidate to hopefully one multiple carrier tower.

He said included in the staff report are all of the comments staff received. The only changes were the additional comments from the Sheriff's office, received after the staff report was sent out, requesting the applicant provide a microwave study.

The Chair said it is 199 feet; does it have to have light?

Mr. Jurius said it is his understanding, that if it is below 200 feet it does not have to be a lit tower.

The Chair said does it have one fall or is it split into three; how is the fall radius?

Mr. Jurius said it is a monopole tower and the documentation the applicant submitted states that the fall should stay within the height of the tower. It does not specify how many pieces it should break into; it does say that it should not fall outside of the actual height of the tower.

Mr. Benjamin Herrick, 721 Leinster Road, Rochester Hills, MI; addressed the Board on behalf of Verizon Wireless. With Mr. Herrick tonight, is Mr. Muhammad Bilal Shaikh, a Radio Frequency Engineer. If needed, he can testify as to the need for additional wireless service in the area.

Mr. Herrick said they are here to ask for a Conditional Use Permit to construct a Wireless Telecommunications Facility.

He would first like to commend Mr. Collins and Mr. Jurius. They did an excellent job throughout the whole process, from start to finish. We had our first meeting with them in August and they were phenomenal, professional and courteous the entire time. He just wanted to say that for the record.

Mr. Jurius mentioned that there would not be additional driveway approaches and that is correct. We have a NCDOT permit for the additional use, using the same driveway. He said stormwater, soil and erosion, would not be affected. We are less than an acre. Correspondence referencing that in the packet.

Mr. Herrick believes the Fire Marshal has signed off on the turnaround (turnaround for fire trucks) in the compound. There are no lights on the tower or proposed for the tower; anything under 200 feet is not required to be lit. There will be a turn on/off light at the equipment for people working on the site after dark.

He would like to address the concerns by the Sheriff's Office. There is a County tower southeast of this proposed tower. The County tower is used for emergency communications with a microwave hop. Microwaves and cellular normally, do not interfere electronically with each other, but what the Sheriff is concerned about is the physical interference. The microwaves have to see each other in order to work properly. He has two that are going two ways. Our tower is proposed to be sort of in the middle.

They are not anticipating any trouble and are comfortable with the condition of satisfying the Sheriff on the emergency communications. There are companies that will help us with a formal study (a microwave path study). What they are worried about is direct interference with the line of sight between the microwaves. It is not an electronic interference issue; it is a physical interference issue. He is comfortable that they will be able to satisfy the Sheriff's Office on that.

Mr. Herrick said they meet all of the setbacks. He feels like they meet the intent and the spirit of the Ordinance and they have gone back and forth with Planning Staff on making some changes that they wanted to make; that is why there is a revised site plan in there. We have shown everything the staff has asked us to show and ask for the Board's support tonight.

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Ms. Holly Grimsley asked Mr. Herrick if he had any idea what he would do if there was microwave interference.

Mr. Herrick said they would work that out before coming back. He said if it can be done with them lowering the tower that would be their first option. Moving the tower would be their absolute last resort. He is confident that there will not be any interference.

The Chair opened the Public Hearing for CUSE2018-00005 and asked if there was any one speaking in favor of the request. There being no one to speak in favor of the request, he asked if there was anyone speaking in opposition of the request, seeing none, the Chair closed the Public Hearing.

The Chair the Board will need to discuss the benefits of this tower for the Midland area and so forth.

Mr. Paxton said that anybody that has a cell phone and uses Verizon would be greatly appreciative to have more reception in that area. It appears to Mr. Paxton that it is in the public interest.

Mr. Jeffrey Corley said this project it is not detrimental to the public health, safety or the general welfare of the community. It provides the opportunity for additional services as well.

There being no further comments, Mr. Charles Paxton **MOTIONED, SECONDED** by Mr. Jeffrey Corley, to **APPROVE** the CUSE2018-00005- Request for Conditional Use Permit for Wireless Telecommunications Facility with the conditions recommended by staff and pending the condition to provide a microwave study recommended by the Sheriff's office. The vote was unanimous.

It was the consensus of the Board to have Mr. Richard Koch to prepare the Findings of Fact (see attached Findings of Fact and Conditions of approval).

**EXHIBIT 1
FINDINGS OF FACT
Conditional Use Permit Application
Faulk & Foster Real Estate
CUSE 2018-00005**

1. The use as proposed is not detrimental to the public health, safety or general welfare.

The uncontroverted evidence shows a need for enhanced cellular telephone service in this area. This is of use to the residents of the area, travelers along Highway 24 between I-485 and US 601 and to first responders to emergencies. The tower will be constructed by certified engineers and contractors and will meet ANSI standards. The Board also adopts as findings the assertions of the applicant in this section of its project narrative and statement of compliance.

2. The use as proposed is appropriately located with respect to transportation facilities, water supply, fire and police protection, waste disposal, etc.

All such facilities, most of which are not required for this unmanned cell tower, are located nearby. The Board also adopts as findings the assertions of the applicant in this section of its project narrative and statement of compliance.

3. The use as proposed will not violate neighborhood character nor adversely affect surrounding land uses.

The proposed location for the cell tower is located at the rear of a heavily wooded tract, reducing any physical obtrusiveness to surrounding landowners. All of the surrounding tracts have residential zoning classifications. The tower will not have lights. The Board also adopts as findings the assertions of the applicant in this section of its project narrative and statement of compliance.

4. The use as proposed will comply with the general plans for the physical development of the County as embodied in the Zoning Ordinance or in the area development plans that have been adopted.

The use as proposed will serve part of the southern area of the County, where the County contemplates future growth and is consistent with the County's plans for development in that area. The Board also adopts as findings the assertions of the applicant in this section of its project narrative and statement of compliance.

**EXHIBIT 2
CONDITIONS
APPLICATION CUSE 2018-00005**

1. Site plan review and approval is required subsequent to Board of Adjustment approval to ensure compliance with all applicable development requirements and conditions.
2. The granting order, stating the restrictions and applicable conditions of the approval, shall be recorded with the deed of the property.
3. The applicant shall procure any and all applicable federal, state, and local permits prior to zoning permitting.
4. Any proposed future expansion of property, as well as modifications or changes to approved site plan, must receive Board of Adjustment approval in the form of an amendment to the Conditional Use Permit.
5. The applicant shall provide copies of all state, local and federal permits for the permanent project file prior to zoning permitting.
6. Applicant shall provide a Removal Bond pursuant to Section 8-3.36, Section 11, Removal of Abandoned Antennae and Towers, prior to zoning permit approval.
7. All equipment cabinets shall comply with the requirements of Section 8-3.36, Section 9.
8. Applicant shall provide final document for lease area, including final survey documents, prior to zoning site plan review.
9. Access roads must be a minimum width of 20 feet wide and have an unobstructed vertical clearance of not less than 13 feet, 6 inches. Fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus at 75,000 pounds and shall be surfaced so as to provide all weather driving capabilities. Fuel source for generator undetermined. Propane tanks and/or diesel fuel tanks shall be appropriately labeled.
10. Landscaping proposed within the gravel parking/turnaround area must not be farther than 10 feet from the fence as to not restrict the width of the turnaround area.
11. The Applicant shall provide a Microwave Interference Study and those findings are to be reported to the County staff and to the Sheriff's Office.

The Chair introduced CUSE2018-00006 – Conditional use Permit to file Public Service Facility Master Plan for RRRWTP for WSACC. He said there has been a request to Table.

Mr. Phillip Collins, Sr. Planner stated that due to a lack of information, staff request that CUSE2019-00006 Conditional Use Permit be **TABLED**.

There being no further comments. Mr. James Litaker **MOTIONED, SECONDED** by Ms. Holly Grimsley to **TABLE** CUSE2018-00006 Conditional Use Permit. The vote was unanimous.

The Chair introduced Petition CUSE2018-00004-Request for proposed amendment to Conditional Use Permit for Public Service Facility (Solar Farm) located at Joyner Road and Mt. Pleasant Road South. Applicant is NC102 Project, LLC, (FKA McBride Place Energy, LLC) PIN#:5557-40-4055 and 5556-25-9058.

The Chair asked if there were any Board members that have any conflicts of interest or any information related to the case that needs to be disclosed at the this time.

The Chair disclosed that he has been by the site, at least once a week, for the past year. He goes that way quite regularly going towards Harrisburg. He has been looking at it for about a year now.

Mr. Adam Dagenhart disclosed that he drives by the solar farm everyday going to work.

The Chair called on Ms. Susie Morris, Planning and Zoning Manager, to present the staff report.

Ms. Susie Morris, Planning and Zoning Manager, addressed the Board presenting the staff report. This is a Conditional Use Permit amendment. The applicant is NC 102 Project, LLC. It is formerly known, when it was in front of the Board the first time, as McBride Place Energy.

She said there are two different parcel owners now. When this project originally came before the Board, it was multiple parcels. Those have been combined, so we now have two primary owners. The first is Five M's, LLC and the second is Bost Farm and Timber, LLC.

The area in acreage is 673.131 acres. There are two reasons for this request. The first one is that there are some technical corrections that were needed to the original plans in the documents that were provided to the Board of Adjustment in 2017. The second is to provide a revised application, site plan and landscape plan for the Board of Adjustment to consider as a means to remedy multiple violations on the subject property. Because of those violations, some of the original standards, the original conditions of the conditional use permit that was issued in 2017, can no longer be met.

The site is approximately 673.13 acres in size and currently developed with a solar farm. This is one of the technical corrections from the 627.55 acres that was originally provided in the

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application materials as the acreage for the project. The current land use is a public service facility, also the solar farm. This is where solar farms fit into our Ordinance.

Adjacent use, pretty much north, east and south is residential, agricultural and wooded. To the south, there is an auto repair and car sales along Highway 601 and to the west is institutional and civic. A Union Lodge is located there, so there are some institutional and commercial uses kind of mixed in to this area.

As far as permitted uses, any uses permitted in the CR and AO districts would be permitted. The existing zoning is partially CR and partially AO, which you can see on the zoning map (showed the zoning map). This part is what we will call the Bost tract or the north of Joyner Road tract. She showed the Five M's tract and this is also a part of the Bost property, but the Bost property is actually cut into two different sections. Signs were posted and newspaper ads were placed and letters were also sent out in accordance with the Ordinance and with the Statutes.

Ms. Morris said you will see that we tried to split this into sections for the Board to look at it. She knows that it was a lot of information, but we tried to deal with each thing that we need to walk through separately in the staff report.

The Board can see, as far as the agency review comments, there are multiple outstanding comments that need to be addressed. We, as staff are here this evening, we have all worked on this project. We have completed plan review on this project. Mr. Phil Collins is here, Mr. Wayne Krimminger, who is mentioned in the staff report is here. He and I have been to the site and he is the Zoning Officer that issued the Notice of Violations. Mr. Josh Jurius helped with plan review and the County Engineer, Mr. Wes Webb is also here this evening to answer any questions that the Board might have.

Ms. Morris said as far as history for the site, again, we need the technical correction for the overall acreage. That is based on the Cabarrus County tax records. The application states the site will be comprised of approximately 25 inverters, 26 transformers and 25 arrays. The site configuration did change a little bit from the original configuration and that was due to the technology that was being used. Canadian Solar can speak to that in their presentation, but that is also a technical correction. It was still within the boundary of the project, but it does look a little bit different when you start getting to the south side of project.

The application states that the output will be delivered to Union Power. It also states that the project has been under construction for approximately nine months and it was constructed; the majority of the project is that south of Joyner Road. That is also where the substations are located. The applicant submitted documentation from NCDOT. None of those permits were changed and they have installed driveways like they needed to, and they also put up their addresses and the Knox Boxes like they were supposed to do.

Then the last part of the history or other information, there are two sets of overhead lines proposed on the current plans. Those lines run along this property line. This is where, for those

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of you who were here when this was first considered, where the landscape easement was going to be, outside of the project. Then there are also some overhead lines here. They did two bores so one of the changes was there was a fence that was going to go across the stream. They did an under-stream bore, so that fence is no longer proposed there. Then also at the rear of the Stewart's property is where the second bore was done. As far as the specific standards for, the review standards for a public use facility, we will kind of go through this and then go through the conditions of your original approval so that you have an idea of where we are on all of those.

So based on the specific review standards, the first one is that the plans and elevations for all proposed structures be submitted. The applicant states that there are two substation control buildings, but no pictures or elevations of those were provided. But, it is a typical substation like you would see to generate power alongside the road. A landscape plan showing existing and proposed trees, shrubs, and ground cover and all of the landscape material. The applicant has provided a new landscape plan. The original landscape plan, however, proposed to use existing vegetation as part of those required buffers, the stream buffers and the wetland buffers. During construction activities, several encroachments occurred to those areas that were to be retained and that vegetation was also supposed to be supplemented as needed. So again, that is one of the reasons that we are here this evening. Those trees are no longer there so they need to present a new plan to the Board about how they intend to satisfy the ordinance, as well as meet the intent of that original permit.

One of the things that Staff noted was that we did provide information in your packet for you to try to show you this. There are places on both plans, the original plan and the proposed plan, that show landscaping where the other plan did not. One of these places is along this western boundary. That initially was supposed to be supplemented and the applicant now contends that it no longer needs to be supplemented. So there are some differences that they will need to walk through with the Board as to how they are planning to meet the intent of the ordinance and the minimums of the ordinance.

The second thing with the landscape plan is they are proposing to use plants that are not on the approved plant list. We gave you the direct responses that we received from the applicant so you have that information. The landscape plan does not provide for the mix of shrubs or trees required by the ordinance. You have the response from the applicant there as well.

So, as currently presented, Staff cannot use the landscape plan to perform a site compliance inspection as existing trees, shrubs etc., to be used towards required plantings have not been clearly identified on the plan. The plan does not meet the standards of the ordinance established in the landscape standards.

As far as the emergency plan that is required, they did submit an updated emergency plan so, that has been taken care of. The next standard is the maximum permitted noise levels. If the Board can remember, during the first hearing, there was a lot of discussion about that. So, the original application stated that the sound levels were not going to be above 35 dBA. When they did the new study to reflect where the trees had been removed, there were some areas where it

was at 40. You will see on your site plan that the applicant is proposing a noise wall and that wall does vary between 13 and 24 feet on the site. It is close to Mt. Pleasant Road, South, but around those substations. She is sure that they probably have their noise study person here to better explain to you how that will work. But, they are proposing to abate that with that sound wall.

The facility's lighting shall be shielded. They did provide a lighting study, a photometric plan, and a typical of the proposed lighting. Based on the information that they submitted, by the time that you were at the property line, there was an average of 0.0 foot candles, so that does comply with the regulations in our lighting standards.

The next one is when a building is involved. Again, there are no actual buildings, but there are the two substation structures. The next one talks about the level two buffer, so we are going to skip that one because it is actually a level one because it is a solar farm. Then it talks about the outside storage areas and the application states there will be no outside storage areas. You know, they had originally proposed maybe to have a small storage building, but it is her understanding that they don't need that anymore.

And then, in addition to those performance standards, there are some additional standards that go along with the solar farm projects. It says the height of the system shall not exceed ten feet measured from the highest natural grade below each solar panel. They did provide information to us, and the application also states, that the racking and panels are expected to be between seven and nine feet, with most being roughly at eight feet. So, that would comply with the ordinance.

There were some questions that we had about the trackers. We were not sure what they would be at extension, but they are saying that they are mostly at eight, but some of those may be a nine at full extension.

The map analysis showing the radius of five nautical miles, they did provide that map. There is one local airstrip that is within five miles and that is on the map that you have. They also submitted a revised glare study that evaluated the potential for the project, so you have that study and then you also have our engineer's comments. The engineer does have concerns related to that glare study.

The next one is a copy of the executed decommissioning plan. There have been some changes and transfers of the lease on the property, so originally it was McBride Solar. It is now NC 102 Project and they have provided a new decommissioning plan to us that will be recorded. That is a proposed condition, for the new one to be recorded if this is approved.

Number 11 is in the event the facility abuts residential property or a street right-of-way, a level one buffer must be implemented. Again, a new landscape plan was submitted for the Board of Adjustment to consider as a means to remedy the multiple buffer encroachments. Submittal materials from 2017 stated that existing vegetation would stay and remain and then be supplemented. The current site plan shows multiple encroachments of the racking and fencing in

the required 100-foot buffer and the 100-foot setback. For that particular plan to be approved, they would have to have a variance. So for anything that is in the 100-foot, they would need to either get a variance or they would need to remove that from that 100 foot buffer.

And then the last one is that there were wetlands on the site so the applicant did provide information related to that.

So going through the original conditions of approval and the current status, that site plan review and approval was required subsequent to Board of Adjustment approval. They did submit a site plan, and the application was reviewed by staff prior to zoning permitting. There was compliance with the landscape ordinance and the existing vegetation, so we never got to the point where they actually gave us, you know, this is where we are using existing, this is where we need to supplement. We never got to that point because of the violations on the site. We would have been asking for that from Mr. McBride as that process moved along. The granting order was recorded by the Planning and Zoning Commission Clerk, so that was handled.

Number 3 was that the applicant shall procure any and all applicable federal, state, and local permits prior to zoning/permitting. A zoning permit was required and secured for the overall site. Building and trade permits were secured for the larger portion of the project south of Joyner Road. Building and trade permits were not secured for the part of the project north of Joyner Road prior to construction of this part of the project. And, again, this is kind of the dividing line, so this is the north part, this is the south part from Joyner.

The noise wall referenced on the revised site plan will require building permits; they will need a building permit for that. The original NCDEQ permits were provided for soil and erosion and phase two storm water; however, they were amended several times with the State and copies were not provided to the County.

Driveway permits were secured and, again, they are currently in compliance with the existing permits that they have.

Number four was that any proposed future expansion of the property, as well as modifications or changes including site plans, must receive Board of Adjustment approval in the form of an amendment. That is why they are here before you this evening. The changes on the site are significant enough with the removal of the trees that they do need to do an amendment and the Board needs to take a look at it.

Again, copies were initially provided of those permits, but then they were not. We were not kept in the loop on the soil and erosion and stormwater plans. We have already kind of talked about the landscape, which was, you know, that they -- number six was that the applicant is proposing that existing landscaping would be used to meet the buffer requirements. In the event the buffer does not meet the intent of the ordinance, the applicant agrees to install the buffer as required by the ordinance.

Deed restrictions, we could not find that when we searched the Register of Deeds database, so that will need to be provided and that carries over; that is an original condition. The site must meet all conditions set forth in the soil and erosion control permit. NCDEQ has been monitoring the site. They did receive one noncompliance report but there have not been any actual notice of violations issued from the State for the property. For the storm water, they are required to maintain below 24 percent on the impervious and that has not changed from the original approval.

Again, the decommissioning plan, they did provide a new plan so that is proposed as a condition, that that would need to be recorded. Combining the parcels together, they took care of both of those. The landscape easement document, that does not exist anymore because the landscape easement was actually combined with the property here, so the property line that you see is the actual property line. If you remember on the first one, the property line was located at 100 feet interior to that site, because that landscape buffer was on the exterior.

The stream of wetlands buffers, as required, shall be delineated in the field prior to the start of any land clearing. There have been multiple encroachments into the required stream and wetland buffers and that was available to you in the Kleinfelder study. The addresses are clearly marked. The chain link fence, that is no longer needed as a condition because that was removed from the crossing. The driveway permits, again the applicant will just need to comply and then close out anything they need to do with DOT.

So kind of going through the history of the violations, again, there was a conditional use permit that was granted for this project May 9, 2017, and there were several conditions. In February of 2018, the County Manager's Office received a complaint related to clearing near the project property line. On February 21st, Senior Zoning Enforcement Officer Krimminger conducted an inspection for the Stewart property and verified that there was a violation. So, if you remember, at the meeting, this is the Stewart property, the original plan was showing that the landscape or the buffer around that property was going to be taken down and the Stewarts requested that the Board ask the applicant to maintain that existing vegetation and then to just supplement. So it was confirmed that there was a violation, a Notice of Violation was issued to Five M's, as the property owner, in March of 2018, for the encroachments into this buffer area. So out of the Notice of Violations that you have, this particular buffer is being handled on its own. So the information that you have following about the bond that DEPCOM put into place, that is specifically for this section of the project.

Upon receipt of the NOV's, McBride Place Energy representatives requested a series of meetings so we met with them to try to get everybody up to speed on what those conditions of approval were and what the site was supposed to look like. At that time, we also asked for access to the site. On March 15th, Mr. Al Jansen with Canadian Solar, he was unable to be at the first meeting, so we met with him and got him up to speed on everything and then we also asked at that time for access to the site. One of the challenges though was that the site was not clearly marked, so we did go out on March 16th with DEPCOM representatives, and we took a look at the site and at that time it was determined that there were more buffer encroachments than just the Stewarts'

property. So we have been working on moving forward with how to rectify the violations since that time.

On March 27th, DEPCOM posted a bond and that bond is for this buffer right here (showed the Stewart's buffer). Then between March 15th and May 10th, we continued to work with Mr. Al Jansen and he was able to get the site to where everything was marked for us, or mostly marked, because some of the stakes were missing when we went out there, so we had a better idea of what the site looked like and what the noncompliance looked like. But, we still didn't have a full understanding. So as a result of that site inspection, we issued two new violations.

There are actually three total violations for the site, one that is specific to this buffer requirement for the Stewarts, and then the other two are related to the Five M's property.

So on the Five M's property, there are buffer encroachments on the exterior of the site as well as into the required stream buffers and the wetland buffer. There is also an encroachment into the floodplain. The floodplain was graded.

For the Bost property, it is mainly encroachments into the 150-foot buffer and then also where it looks like racking or the arrays are in that 100-foot buffer too. You had copies of all of that information in your packets.

So, again, due to the nature of the violations, they cannot really meet the original terms, the original conditions that were placed on the project in 2017. So as far as conditions of approval, you know, staff has tried to work with the applicant. They are on revision number four with us and they are -- you know, I think there are some differences of opinion as far as, you know, original intent of that approval and that screening versus what it is now and how that should be handled. So, again, they are before you this evening with a new landscape plan to try to rectify those violations and also to try to rectify the other violations for the racking and then also for the wetlands buffer and for the floodplain encroachments.

So Staff is proposing -- there are 36 proposed conditions and conditions 5, 6, 7, and 8 are carryovers from the original approval and then 1, 2, 3, and 4 are standard conditions that go on most of our conditional use permits. I think that covers, most of the highlights. I would be happy to answer any questions for you. The last time Staff was on site was actually in May so we tried to provide some exterior videos of the exterior of the site.

Since we haven't been on the site since May, we cannot really testify to the current conditions of the site or to the landscape that is on the site or not on the site, the buffers that are there or not there, and, you know, again, if that -- if there is an encroachment into those setbacks, unless that is removed, they would need a variance from you all before this particular plan could be approved. We are happy to answer any questions you may have about the comments or the conditions or the staff report. Again, Mr. Webb is here to address any questions that you have related to the engineering comments.

THE CHAIR: At this time, are there any questions for Susie?

MR. CORLEY: Susie, at the time of the last site visit in May, would you say it was very much an active construction site at that time?

MS. MORRIS: Absolutely.

MR. PAXTON: Susie, of 36 conditions, which among them are they not wanting to do or not wanting to talk about?

MS. MORRIS: I have not had any of those conversations with the applicant, so you would need to ask them that question.

MR. CORLEY: I have one question for Webb, if we could? Wes, the issues with the glare study information, can you explain that a little further, what your major concerns are there?

MR. WEBB: Yes, and actually let me step back and get my report. More so, it rotates primarily around screening and visibility. The glare studies looked at different locations and the impact during the year of when the sun would hit solar panels and there would be glare and glint issues. They made a couple of assumptions in their study, which would be normal from beginning construction assuming there are going to be certain buffers and those items. The buffer impacts have created some issues with those assumptions.

There are photos provided by the applicant and by the county that showed that you can see the panels or the houses from the sites. So there's a couple of additional areas that need to be looked at. There are some assumptions in there about buffer heights. I think they used ten feet for a vegetative ground cover. In a lot of those areas, there is not a full 10-foot width of cover (as far as the height).

Their proposed screening is encompassing for right now, of several trees within 100 feet and evergreen shrubs. But the shrub height is only going to be three to four feet when planted, so you are not going to have a 10-foot height. If they, will come back and redo the study and look at what the proposed landscaping is now, or what the results of the proposed landscaping that is needed, to screen adjacent property owners, and come back with solutions that provide the screening to people on the roads, those certain areas, or houses, and then look at the additional houses that might now be exposed, he thinks those issues can be resolved.

MS. MORRIS: I need to make a correction. There are actually 28 conditions. The numbering got off so it skipped a few numbers, so there are 28 total conditions proposed.

MR. WEBB: Any further questions?

MR. CORLEY: Thank you, Wes.

THE CHAIR: Not right now, but Susie can you tell us how the racking was measured; in relation to the buffer; the 100-foot. Was that defined by the fence?

MS. MORRIS: Yes

THE CHAIR: We are assuming the fence is in the right spot.

MS. MORRIS: Correct. When we went the first time, they were starting to mark the site with like a snow fence, so the orange plastic fence that you see in some of -- or sediment fence. It just depends on what you use it for. Some of that, they were starting to mark the entire site with that to try to keep the workers from getting into those buffers and from the machinery so that no additional encroachments happened in those buffers. So when we visited the site, either that type of fence was in place or in some places the actual chain link fence was starting to be put up. But, most of it was the plastic fence.

MR. Koch: Mr. Chairman?

THE CHAIR: Yes, sir.

MR. Koch: We need to let the applicant and the property owners, either surrounding or the property owners of these parcels ask questions of the staff.

THE CHAIR: That is fine. Are there any other questions for staff from the adjoining property owners?

MR. BENSHOFF: Mr. Pinto, my name is Albert Benschhoff, I represent the owner of the solar farm, Recurrent Energy, Incorporated, and I would like to reserve questions for the staff, particularly Mr. Webb, for when we reach the topics of the glare study and the encroachments. I have a PE here who worked on the glare study who can explain it and explain what it means. I also have as a witness a registered landscape architect in North Carolina, to explain the new planting plan and it would make more sense, I think the meeting would go smoother, if we could reserve our questions for the staff when we get to those topics.

THE CHAIR: I can see that. Any more questions for staff? Seeing no more questions at this time, we would like to call on the applicant to make his presentation.

MR. BENSHOFF: Mr. Pinto, I have a thumb drive to put in the computer. May I suggest a brief recess to let us get set up for that?

THE CHAIR: Okay. Arlena, can you stop the clock?

THE CHAIR: asked all persons wishing to speak for or against the case to stand and be sworn.

THE CHAIR: Thank you. Is everybody in? Do you want to shut the doors?

MR. BENSHOFF: Thank you, Mr. Pinto. My name is Albert Benshoff of the Brough Law Firm, PLLC, Chapel Hill, North Carolina, local office, 821 Ravine Circle, Concord, North Carolina. I represent Recurrent Energy, the owner of the solar farm. A couple of introductory things he would like to get through: I will explain each tab in the notebook as we get there. The first thing to note is inside the front cover are my standing objections to the previous excellent testimony of the staff. It was very fair, given the long history of this process. And I'm doing that to preserve the record, which is part of my job.

Also, to help preserve the record, Recurrent has provided a court reporter, Ms. Shannon Colangelo, who is recording the meeting and will prepare a transcript with all the attachments, which I've offered to the county attorney for his use, and he can read and sign. And if you wish, you may consider adopting it as your minutes and it might save the staff some work, but that's up to you.

I respectfully request the same amount of time that Susanne Todd received in May, 2017, to put on the case and explain why we think we should have an amended conditional use permit. And I've got witnesses here from all over the United States and also from Ontario, Canada that I need to put on tonight, so I -- and I've discussed it with Rich. I have discussed that I need more time to put on an adequate case so my client is afforded due process. And, Rich, I don't know if you have anything to say about that?

MR. KOCH: I have discussed it with the Chairman.

MR. BENSHOFF: Okay. So that out of the way, this is an application for an amended conditional use permit. The staff requested and Recurrent has provided a completely new application for a conditional use permit. We think what we need are two amended conditions, number 6 and number 18, but that's up to you. Because we have a new application, we need to go through the evidentiary findings that you're required to make that we're required to submit, as if it was a new application, unless the Board waives hearing that. The same evidence is presented in the written record to you and in the binder that was handed up tonight, so you could base your decision on the written record instead of the testimony.

I want to make it very clear that Recurrent does not contest any of the notices of violation. We're not here to do that. I do want to add that Recurrent has provided a \$1 million irrevocable letter of credit to the county attorney, in a letter mailed to him from the president of NC Project 102 on August 3rd, and that is to secure fixing the violations, restoring the landscaping. In addition, Recurrent has written a change order to the prime contractor, who is DEPCOM, for \$2.3 million to replace the plantings. What we need from the Board, what we suggest is the primary issue, is the standard of planting to be planted. And boiling the issue down even further, the question is what is meant by the intent of the 2017 conditional use permit issued by this Board.

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I propose to have the witnesses presented in order of interest so the landscape witness will be first, the glare witness will be second, the encroachment witnesses will be third, and we'll work through the issues that the staff presented as issues in their staff report.

I want to say just a brief word about the players, because the names have changed and it's confusing -- and, Kayla, I need some Kala help here.

KAYLA: There you go.

MR. BENSHOFF: Got it. Okay. The owners of the property, as you know are Five M's and Bost Farm and Timber and the owners were McBride -- I'm not sure which form -- McBride Place Energy, LLC, developed the property. McBride Place Energy hired DEPCOM Power as its general contractor to build the farm. McBride Place Energy sold the farm to Recurrent Energy, Incorporated, a U.S. corporation headquartered in California. Recurrent changed the name of the project to NC 102 Project, LLC. So it's the same LLC that McBride started; the name changed when the new owner took over. The general contractor is the same, there is a new civil engineering firm, landscape architects, and some other experts. So I will say Recurrent or NC 102 Project interchangeably, but it's the same entity. You've seen the map of the project and the history. I do want to point out that I believe Susie omitted -- and I want to be very clear about this -- that two NOV's were issued on November 9th and the NOV's state that they followed a site inspection, so I'm assuming that staff was on the site last month. That's what the NOV's state. We don't contest those either. We did have the neighborhood meeting on September 11th and now I'm going to move on to the landscape and buffers.

I want to restate what the CDO, the Cabarrus Development Ordinance, says is the buffer standard. Because we're in a unique situation here where we have a CUP, we have a site that's built that's over 90 percent complete, now we need a new CUP and the ordinance is geared to approving green field sites, to approving new development. You usually don't have the luxury of going back and looking at something that's been built. And this is what the ordinance says, and this is all it says. We need a level one buffer -- and a level one buffer is 100 feet wide -- and in the 100 feet are two shade or four ornamental trees every 50 feet and 15 shrubs, and they're planted in a visually pleasing fashion in such a way that would facilitate the creation of a visual screen. That doesn't address going back to retrofit a site after it's been developed and the buffers have been removed. The 2017 CUP has two conditions that we think apply, condition 6 and condition 18. As I understand it, condition 18 is being handled separately by the staff. And they basically say that the existing vegetation won't be cut down, and especially not around the Stewarts' property. And, of course, any modifications have to come to this Board for an amendment -- not a new CUP, an amendment. In -- and I think that this is important -- in the 2017 plan that you've seen, there's a table of landscape buffer yard requirements and it says the requirements are reduced by the retention of existing vegetation -- and I've typed it out here slightly larger -- existing tree and shrub count was estimated by visual observation and review of aerial photos of the site. Our landscape architect will testify that he personally inspected the site and walked the entire perimeter. The 2017 plans also say that trees and shrubs shall be planted following removal of temporary erosion and sediment control measures. The plan contemplated

there, there would be disturbance in the buffers, and then the four trees and 15 shrubs every 50 feet will be planted back. In fact, in the approved Blackwell grading plan, there were 13 sediment and erosion control ponds in the buffer. So that's part, but not all of the buffer disturbance. The Blackwell plan also said these sediment control devices shall be constructed as the first step and shall be made functional. The plan -- the grading set -- and this is --Kayla? I'll keep talking. Could you?

I wanted to show you one example of the 2017 approved Blackwell plan for the same part of the perimeter buffer. The grading set shows the sediment ponds in the buffers and the landscape set in 2017 shows the buffers as undisturbed. Well, we're not going to see the 2017 plans.

KAYLA: Is there anyone familiar with this system that can project it on the screen?

MS. MORRIS: If you click on it and it don't work, it's not on.

MR. BENSHOFF: For the record, the NOV's require planting the standard that is articulated in Table 4 of Chapter 9, the 2 trees and 15 shrubs forever 50 feet. So two NOVs say just plant that back, you're good. Four of the NOVs say bring the county staff a landscaping plan, a replanting plan, and then we'll take it from there. I'd like to call up Mr. Brandon Guy of Kimley-Horn to explain the proposed landscaping plan.

Mr. Guy's affidavit about the effect of a landscaping plan is found at tab five in the binder before you and his resume is there for you. Mr. Guy is a PLA, professional landscape architect, registered by the state of North Carolina. He has a Bachelor of Landscape Architecture from North Carolina State University, 2012. He's been a landscape architect for six years. Prior to joining Kimley-Horn in 2015, he worked for an architectural firm on multi-family and retail projects, designing public areas and providing hardscape details. He's experienced in designing buffers for solar farms. In Shawboro, North Carolina, he helped design the buffer for a 250-acre solar farm; that's in Currituck, County. He also worked on one in James City County, Virginia, a 225-acre, 35 megawatt solar powered farm. He has also worked on Hemlock Solar in Northampton County, North Carolina, five-megawatt 50-acre solar farm. And all of these, he designed the buffers and assessed the vegetation and screening necessary per the ordinance. He's also worked in the public sector for the town of Cary in Zebulon Greenways and I would like to offer Brandon Guy as an expert witness.

THE CHAIR: What was the name? I want to make sure I've got him.

MR. BENSHOFF: Did you sign -- you did sign a blue card and you were sworn in?

MR. GUY: Yes.

THE CHAIR: All right, Brandon. I need you to state your name and your address and so forth for the record.

MR. GUY: Sure. My name is Brandon Guy; my address is 5546 Middlewood Court, Durham, North Carolina 27703.

THE CHAIR: Thank you.

MR. BENSHOFF: I'm not going to stand here and cross examine Mr. Guy. To move the meeting along, I'm going to ask him to please describe what he was hired to do by Recurrent and how he went about developing the landscape plan and what the landscape plan comprises and why, in his opinion, it meets the standards of the CDO and the 2017 conditional use permit.

MR. GUY: Thank you.

THE CHAIR: Hold on. Are we allowed to question him after he's done?

MR. KOCH: Yeah, you can and the property owner, for each witness. As an expert witness, he's allowed to express an opinion of what he's testifying to, as opposed to a regular witness who cannot express an opinion. He can.

THE CHAIR: Okay.

MR. GUY: Good evening. I want to thank you for letting me be here this evening to speak with you all. To begin, just to introduce myself again, my name is Brandon Guy. I work with Kimley-Horn & Associates as a Landscape Architect. In June of this year, 2018, we were consulted by DEPCOM for our landscape architecture group. Part of this request was to gain an understanding of an already approved CUP as well as understand the Cabarrus County buffer requirements in response to an existing solar farm that's in front of you today. As part of my preparation for meeting with DEPCOM and participating in site observation, I read through the different conditions that were approved in 2017 as well as got an understanding of the Cabarrus County ordinance. In particular, to level one buffers that relate specifically to solar farms and widths and plant materials that are required. As AI has already mentioned, the understanding for the level one buffer is that it's a 100-foot buffer that will contain four understory trees or two canopy trees, as well as 15 shrubs per 50 linear feet. It's also supposed to be designed to be visually pleasing as well as for plants and buffers to propose a visual screen around the property when planted. So after preparation for the site observation and field walk, I met with Recurrent Energy as well as DEPCOM and we then proceeded to walk the site, to gain an understanding of some of the existing conditions of the buffers post-construction.

As part of my understanding of the original plans and the original landscaping that was proposed previously, there were two different types of buffers that existed. One was that to be planted per the county standard, point blank, as a fully re-vegetative buffer at the code requirement of four trees and 15 shrubs. The other was just indicated on the plan as a dashed line that existing trees were to remain and some plants were to be implemented in these locations.

For me, that plan was only used as a reference to how we were going to address the site, as well as how we would conform to the existing condition, number six, as well as we looked to amend condition number 18 within the 2017 conditional use.

I'm going to -- as I begin to pull up our -- I apologize. So I'll pick up with this slide to begin with. This is the first page of our proposed landscape plan for the site. As we did the site walk, we observed the buffers in these 100-foot spans, how they were existing. And during the site walk, we were advised, based on conversation that Recurrent Energy has had with the county that there would be some supplemental planting that would be required around the site to help amend some conditions. As we walked around the site, we took note of areas that may have contained the existing vegetation to meet the intent of the ordinance as it reads today. And we also proposed supplemental understory evergreen plantings that would help create a visual screen from some of the surrounding properties. In these particular locations, it was not proposed that material was -- the material was not originally proposed in these locations, but this was something that was provided based on our site walk and Recurrent's attempts for the updated landscape plan.

So as I -- I'm going to show you some of the sheets in detail so that you can have an understanding of what we created here. Separate from the originally approved plans that only showed two buffer types, one a standard 100-foot buffer with the prescribed planting measures, we created multiple different levels of buffer that looked at each given particular location around the site. These are represented within our plans through the seven different buffer types that are shown here. And I'll highlight them and get to them in more detail later. But, they range as supplemental existing evergreen buffer, ground level. The green is the proposed new planted buffer per the county, the CDO standard. The red is a supplemental understory evergreen focus buffer.

B4 is the -- this is the area within the water body zone buffer encroachment that was also driven by the Cabarrus County Soil and Water Conservation District for the proposed plantings.

B5 is the proposed wetland re-vegetation plans in the areas that were indicated to be impacted.

B6 is the proposed vegetation that has been coordinated with the Stewart property in repairing -- in attempts to repair condition number 18 for the landscaping around the site. And so I give you this -- let's go back to -- my apologies on this.

Well, we'll pick back up with the slide show. So that's just to give you an overview of the different types of buffers that were created and we'll get into different levels of screening and what is to be achieved with each of that in a moment. So in some of the -- in coordinating with the county on some of these items, we have begun to discuss areas along the plan where it's believed that there are some encroachments that were originally not proposed to be and then how we are proposing to amend those. In particular, one of the comments that existed was that the original landscape plan stated the existing vegetation would remain and be supplemented; condition 6 and 18 of the original approval, within the perimeter buffer.

So our interpretation of the original condition number six, as it reads, is that the applicant is proposing that existing landscaping will be used to meet buffer requirements. In the event the buffer does not meet the intent of the ordinance, the applicant agrees to install the buffer as required by the ordinance. So, in our interpretation of this condition, it was that in areas where we want to use existing material to meet the two tree, four tree, and 15 shrub minimum, that's how we were proposing to do so. And this also aligned with the plans that were mentioned that were previously approved for some impact into the buffer and how it was proposed to be. Existing vegetation could still meet the intent of the county development ordinance. Another one of the comments that we received was the applicant is proposing species of landscaping not found on the approved planting list.

Through working with staff, as well as, Recurrent has been working with the Stewart property/owner, where the buffer was impacted, there are rose species that were proposed for his entry planting sequence that were requested that we are proposing in that area, which the roses do not fall on the list of approved species, but it was requested by Mr. Stewart in order to help reestablish some landscaping within that area. It's also important to note that we proposed lower material in this area as it does pertain to a driveway entry to the road and sight distance will be important there for visibility.

Another comment we received was the landscaping provided along the Stewart property does not meet the ordinance, there are no shrubs provided along the northwestern and southern property lines. As part of our process, it was determined which areas were impacted through the Kleinfelder study that was mentioned previously that showed impacts to the existing buffers for the Stewart property. Part of this is that we -- in my professional opinion, that the areas that were not impacted, the existing material still holds the original intent of the county development ordinance, and the areas where we are proposing a staggered spacing of pines will help create an established forest in a more expedited situation to the max extent practical.

Another comment we got was the applicant contends their plans and compliance with the requirements of the ordinance, the staff contends the proposed site plan does not comply with the conditions of approval. This was another situation where it's been discussed that condition number six has been violated. And, again, just to repeat, our interpretation of condition 6 is that the applicant can propose to use -- I'll read it again. The applicant is proposing an existing landscaping will be used to meet the buffer requirements. In the event the buffer does not meet the intent of the ordinance, the applicant agrees to install a buffer as required by the ordinance. And that's what we intend to do on the areas where there is some encroachment into the buffer.

And on that point, the other -- the condition number 18, which was -- condition number 18 is the condition that was impacted that was violated, which was a clear separation of that requirement of existing material along the property of PIN 5556-47-8315 be retained. And as we work through this, we understood that it was requested that in that one location, that the planting material should be retained and not be disturbed, but it wasn't project specific that it was only requested in one location. The other condition 6 just specifies that existing material may be used towards the development of buffers.

So another comment that we got was in regard to Edgefield Road and the Edgefield Road Extension. And this is that the report and map was not updated to reflect encroachments into the undisturbed buffer. The area includes the buffer on the east side of Edgefield Drive, Edgefield Road, and Edgefield Road Extension. This area we are proposing understory supplemental evergreen screens, which is an understory tree, as well as shrub material that will stay green all year long to help promote a screen in this area as well as the canopy trees that are existing in this location.

The other comment we had was the report and map was not updated to reflect encroachments into the undisturbed buffer. The areas include the area on the west side of sediment basin five beyond the limits of the original driveway. Reference Kimley-Horn sheet L1.1 and I will pull it up here.

THE CHAIR: He's going to need more time. He's out of time. Time is up, sir. How much more time do you think you need, sir?

MR. BENSHOFF: I'm not trying to be evasive, Mr. Pinto, but a considerably longer time. I have six more witnesses in declining order of concern, so landscape is first, then comes glare, and then the rest.

THE CHAIR: Okay. We just want to ask any questions, if that's okay, when he's done.

MR. GUY: Apologies for the technical errors. May I proceed? Thank you. So, what I'd like to do now is show you the different types of buffers that do exist on the site. I'm going to begin with one area in particular, which was noted in the comment of whether the perimeter drive was located within 100 feet of the property. This is a good example and this shows the surveyed fence line as well as the property line to be further than 100 feet from the property line. And this image in particular shows you the condition within this buffer. This is a good example of our first type of buffer, which is understory screening. As you can see within this area, every 50 feet, you're required to have two canopy trees in this location, as well as 15 shrubs. So in this area, we are proposing to keep the canopy trees, but we're also proposing to supplement for every 50 feet -- and I'm going to speak to 100 feet as a whole because of the way the plan was designed by myself was to create a more visually pleasing landscape plan instead of 50-foot segments.

So in this location, per 100 feet, we're proposing to have 15 Nellie Stevens Holly, which are classified as understory trees within the county ordinance, which is a full to the ground evergreen tree, as well as 15 wax myrtles, which also are classified as evergreen shrubs within the ordinance.

One thing to note for what we are proposing for the Nellie Stevens Hollies is day one we're proposing they be planted at six feet. The county ordinance requires that within three to four years of growth, that shrub should reach a height of six feet. So our intent with this, to the extent it's practical, is to install one visual screening line of shrubs that are already at the ordinance max over a four-year period to help them grow so we can further obstruct the visual screening. So

that's what you saw in response to the comment and I'll read it as a whole. The report and map was not updated to reflect encroachments in the understory buffer. Areas include the buffer along adjacent to the Berry and Carrie Chriswell tract. The maps show the gravel road on the edge of the buffer. Aerial photos show clearing on the west side of the road. Exhibit EXC-110 also shows the areas as an impact. So the areas I just showed you were in the area that's noted in the comment. So there was the distance of 100 feet as well as the proposed plan.

Another landscape comment that we had was, "The plan does not propose to fully restore buffers that were to remain undisturbed. Some areas are to only be reseeded and others will receive supplemental plantings. These areas should have full restoration plantings, unless a tree survey is prepared for each area documenting that the existing tree and shrub meets the minimum standard. This comment applies and there are comments on here.

This is an excellent location. In my professional opinion, as we walk the site, of how we address the buffers in these different locations. As you can see here, what you are looking at is an area where we have, as coded, the existing vegetation to remain, which meets the county standard, with the triangle hatch and the cyan hatch in the background shows the understory evergreen screen buffer, as previously mentioned, with the different mixtures of plantings, ground to full height.

So what we are seeing here as F.1 was a situation where we located that there was areas cleared up to 50 feet and then the remaining 50 feet contain understory trees and canopy trees that meet the requirements of the county's development ordinance. So in this location, we agreed and it was, upon Recurrent's coordination with myself, that we would provide the understory plantings as noted for evergreen screening in this location.

Further down where it is not shown that we have additional plantings, this is 50 feet of depth of existing material that both meets the count of trees required per 50 feet as well as shrub material within the stand here.

Another area of concern within the comments is that an area of B3-B, which is one of the buffer areas on the site, should have a full restoration rather than supplemental or replacement understory tree plantings. This is the third buffer on the list outside the county required buffer and what this buffer shows is this is a good elevation of what we were proposing in this area. And this both includes the American Holly as an understory tree, a crepe myrtle as an ornamental tree -- and, again, please keep in mind these are designed to 100-foot width so that they're not choppy 50 foot segments. We designed them to be originally replacing in this manner so that these quantities are spread out over 100. So we've also proposed the 15 Ilex Nellie R. Stevens as well as 15 wax myrtle plants. So if you were to take per 100-foot, four understory trees, you'd need eight understory trees in this location. So we -- if you look at that, we propose five understory trees as well as 15 additional understory trees to both meet the understory tree requirement as well as to meet and exceed the shrub requirement from day one at install.

Another area they call for the encroachments into B6 area, which is the Stewart property in question, shall have additional plantings to meet the standard of a full restoration. This is what we proposed, with planting pine trees on a 10 x 10 grid. As you'll see in the response in the report, that proposing pine trees within the piedmont of North Carolina helps to reestablish the dense stand of forest along the disturbed property line.

These two pines in particular, were selected for their evergreen and their growth characteristics. These plants can be spaced close together to provide an evergreen year-round screening. In addition, these plants are crucial to the development of forest stands within the North Carolina piedmont. The pine species selected provide a habitat for broomsedge grasses and provide opportunities for the growth of hardwoods. The plantings along the property of Mr. Stewart have been incorporated per his request. Recurrent has reached out to him during this process to provide a planting plan for the disturbed area that he accepted and is comfortable with. And that includes the plantings of wax myrtle as a shrub. And lastly, as previously mentioned, the B3 buffer is similar to what I just showed you for the required supplemental buffer plantings.

Another area that was noted was the north side of Joyner Road should have the required supplemental buffer plantings under the power line. This has been observed in the field by myself as far as the existing material that remains there and we are proposing a full county development buffer that exists there with notice to caveat that understory trees shall be supplemented in the case where it's underneath the power lines on these properties.

One interesting area of note that I would like to point out, and as discussed earlier by Mr. Benschhoff, the previously approved plans showed a different set of basins within buffers, in particular on the north side of this property, the north side of Joyner Road. There is proposed to be no plantings within this buffer area here, as you can see by the previously approved plans from 2017. When the comments were received, the encroachment into area B1-B and B1-C should have required supplemental buffer plantings, per the county ordinance. My response in this location is that we are providing plantings to help meet the screening in areas where those basins have been removed; however, there weren't plantings originally proposed, but we are essentially taking the existing buffers as to how they're impacted and understanding through the site walk and amending based on new plantings. So we propose that the buffer we have shown to the max extent practical would create a visual screening in the areas that were impacted by the sediment basins.

So another landscaping plan comment, the condition of the buffer adjacent to the Christopher and Loli Finsel tract needs to be evaluated. This area was previously timbered and does not appear to have a 100-foot wooded buffer. In this particular location, we've taken the exhibit to the property line of the tract in question here and we have to mention that there is 1,000 feet of existing planted material that exists within here. In reviewing this area, it was seen that the plant quantities that would need to exist remain there and it's actually worth noting, in my professional opinion, that it would be more detrimental to the existing forest stand and the re-vegetation that is currently happening within this ecosystem to provide an entirely new buffer within this area.

One of the comments as well that we had is that there's an area of grading shown in the site plans along page C-510 extending 40 feet into the required perimeter buffer. Along our site walk, it was noted in this area in particular the proposed plans show that there's approximately 40 feet of grading that occurred within the site. For the Kleinfelder study that was performed, as well as site observations that I had made through the field walk, it is observed that there is only approximately 15 to 20-foot of disturbance within this area. In this buffer in particular, along the west side of the site, we have proposed that the existing vegetation for the remaining 80 to 90 feet of the site, which looks as shown here, will meet and exceed the requirement of the county development ordinance for existing plant material as well as for existing buffering in this location.

We've talked about Conditions 6 and 18. We've talked about the proposed -- it is worth noting on our plans, and I want to bring up one point that was mentioned earlier and address that to the Board. Was that the area located along the western portion of the site previously, was shown with a dashed buffer line that calls out that existing vegetation is to remain and be supplemented by plantings, as Mr. Benschhoff has shown previously. The way that they were doing this pre-construction was through visual observation as well as for existing photo photography from aerial imagery. In walking the site and documenting and observing what we had here, we propose that the existing material goes above and beyond to meet what is proposed to be installed; therefore, no plantings were recommended within this location. The area that turns the corner of the Vanderburg Estates, then we propose supplemental plantings as well as the county development ordinance required plantings we have showing. I want to bring that to the attention because there is a set amount of plants that are required in this location, but it's not clear whether they were proposed to go before, so that our plans are based on post-construction site observation by myself, as well as for best practices and to meet to the max extent practical, the ordinance here. And that's what you'll see along this site here.

One of the other areas that we looked at previously that was shown to be a 40-foot disturbance but is only a 10 to 15-foot disturbance is further up in the location. This is looking head on, as to what you would see. The orange line that is seen here is approximately 10 feet within the buffer, so that what exists is 90 feet of this condition here, which will meet and exceed the county requirements of the ordinance.

One other location in particular, this is along the southern portion of the Vanderburg Estates, are a couple of these that help give you an idea of the existing vegetation of this buffer. In particular, Exhibit D.1 shows the location where, while there may be existing tree material that will meet the intent of ordinance, Recurrent has proposed to install additional understory and supplemental evergreen screening here to help this buffer.

Another location is D.2. As you can see, the area at the fence to the silk fence is still outside of the buffer, so the area located doesn't begin the 100-foot buffer. The 100-foot buffer is set back within the area where this existing plant material that is proposed to remain. 2.3 is the same, shows the existing plant material of the buffer. D.4 takes a step back and looks at that stretch of buffer along the southern border at the stakes.

Lastly, this is a very important exhibit and this speaks to my field observations that I was talking to you earlier about along the Vanderburg Estates. These are two examples of at the fence line there's approximately 250 to 300 feet between the fence and the property line. In this particular location, you can see approximately 60 to 80 feet of disturbance, while the remaining is wooded as shown today. This is, in particular, why we have not proposed any additional plantings in our plans, based on what the previously approved plantings were because the existing material within this meets the county development buffer as required, as well as Condition 6, the existing vegetation shall be counted towards the buffer.

Lastly, to speak to one of the proposed conditions that is in the report in front of you, Condition 13, a landscape plan that complies with the Cabarrus County development ordinance.

The original intent of Condition 6 and 18 from CUSE2017 and that delineates all applicable buffers, including existing vegetation to be used toward buffers, calculations and required plantings must be provided within 15 days of the date of this meeting. This plan must be in correct format that staff uses for final inspections and as outlined in the ordinance. In looking at this proposed condition, the timeframe and scope of work that's provided is beyond reason, given the amount of time it would take to do the work to accurately document this.

Furthermore, Condition 6 of the ordinance stated that existing material will be used toward buffers only state that existing material will be used toward buffers. Condition 18 states that existing material must remain around the Stewart property and that's the condition that we are here to amend today. Basically, I would propose, in my professional opinion, that Condition 13 would be beyond reason to be accomplished.

MR. BENSHOFF: Could we take a look at the Stewart property details?

MR. GUY: Yes.

MR. BENSHOFF: In the case of the Stewart property, Recurrent worked with the Stewarts to develop a landscape plan and it deviates from the CDO. We offer it as an alternative to the CDO because it's what we worked out with the Stewarts. And, of course, it's up to the Board to decide what ultimately will be planted.

MR. GUY: So what we are looking at here is the plan that was proposed for the Stewart property. The plan that you're seeing in front of you is the plan that was created through coordination with Recurrent and the Stewart property. This plan -- can everybody hear me okay? Thank you. So what this plan is proposing is a staggered row of pines that surround the property in this location. To give an example, there's an enlargement here for the spacing of the pines that were provided and these he previously described as far as helping for the forestry in the North Carolina piedmont to establish forest stands. That's why the plants were proposed to be planted in the spacing provided, and the plant species provided.

Additionally, as mentioned, along the entry of the property is where the rose shrubs and the other assortment of plantings are proposed, these plants are not on the approved list of plantings for the County Development Ordinance, but were requested by the owner and are incorporated into this plan.

Furthermore -- in my professional opinion, the areas that are shown with the triangle hatch, denote the existing vegetation, meet the intent of the ordinance, and this plan, again it is worth noting, has been coordinated with Mr. Stewart and has been accepted by him in the current configuration as shown.

With that, Al? That was -- I just walked through that.

MR. BENSHOFF: This will be a good place to stop for questions.

THE CHAIR: That's fine.

MR. CORLEY: The measurements that you presented in reference to distances from the property line to that 100-foot buffer to the fencing, did your firm survey that property to determine those distances, did you pull a tape, was that information provided to you? How were those distances obtained for your use?

Mr. Guy: Thank you for the question. My firm did not survey the property, but it was basically taken on the encroachments that were provided for some of the distances within the area, in particular, as mentioned along the western portion of the property. Does that answer your question?

MR. CORLEY: I don't think so. So if you presented information that said that -- I'm thinking of the gravel road up in the one corner, that it was 101 point something, something, something feet away, how was that distance determined.

MR. GUY: It was determined -- I'm sorry.

MR. CORLEY: Who determined that, that it was 101 point something, something, something feet away?

MR. GUY: It was determined based on measurement from the provided survey that was provided by others.

R. CORLEY: So somebody else surveyed and provided you with that information?

MR. GUY: That is correct.

MR. DAGENHART: Asked if the survey was based upon preexisting conditions of a property line or during construction. A construction survey?

MR. GUY: The survey that we had, that was a post-construction survey.

MR. BENSHOFF: There's a report in your packet from Kleinfelder, who was brought in as an independent third-party to do a forensic analysis of the encroachments and prepared a report. One of the staff of Kleinfelder is here to testify. Mr. Adam Peterson from Kleinfelder is here to discuss the Kleinfelder encroachment report and also the floodplain development permit application as needed. And encroachments were the third -- I judged them to be the item of third interest, but we can move that up to second. And the Kleinfelder report was given to Kimley-Horn and given to Mr. Guy to do his plan.

MR. DAGENHART: When did you do your site assessment?

MR. GUY: It was on June 26, 2018.

MR. DAGENHART: Were you provided with the tree study from the developer?

MR. GUY: I was not, no, sir.

MR. DAGENHART: Do you have any pictures from November or December?

MR. GUY: I do not, sir.

THE CHAIR: That would rather show us what we are really dealing with there. There are a lot of leaves right now, but if they are six feet tall, you are looking through sticks. When I drive out there, that is what I see. I see a big hole in the ground off the side of Joyner. If you put in any bushes or anything down there by the fence, it is not going to screen anything. I mean, it is not. Your topo's, it is too low. Same thing with the corner of Joyner and Mt. Pleasant Road heading towards Midland on the right hand side.

MR. GUY: Correct.

THE CHAIR: You know what I am saying. You have that sediment pond there, everything goes up to hill. Bushes in front of the fence is not going to screen anything, correct?

MR. GUY: Yes.

THE CHAIR: You understand what I am saying?

MR. GUY: Yes, sir.

THE CHAIR: So I just wanted to state that. I mean, I understand about the minimum bushes and the minimum requirements and things like that, but you've got a two-inch caliper tree; it takes 30 years to get up to 30 feet. The cynic in me is saying, in some way thinking that all the trees were cut down based on a shade survey or something like that for the solar panels, and now we're going back with the bare minimums, because that's what you're asking, right?

MR. GUY: I guess to clarify --

THE CHAIR: That is what you are asking, right?

MR. GUY: For bare minimum?

THE CHAIR: Yes. Taking our ordinance and going with the bare minimum amount of bushes, and the two-inch caliper trees when you took out six, eight, 10-inch caliper trees.

MR. GUY: So our -- what we are proposing to supplement is not bare minimum, as far as size and type of plant that's required in these locations. In the area in particular that you're speaking to, we have proposed for the understory trees, so there's 15 -- per 100-foot segment, there's 15 understory trees, as well as the supplemental four understory trees that are provided, so we're going to be providing 20 -- sorry, there will be eight per 100-foot section, so if we want to back it down to say four per 100-foot section plus the seven understory, so there's 11 understory trees instead of the four that are provided. The intent with this, to the max extent practical, is to install a tree that will act as a shrub, but also be six-foot height, six-foot tall day one, so that it provides the height above what the ordinance requires for shrubs.

THE CHAIR: I saw the trailer out there. You guys were putting them on the left hand side heading toward 601.

MR. GUY: So for a day one ordinance and to also speak to the deciduous evergreen nature of a buffer. Per a new planted buffer, that trees at least 40 percent requires trees in the landscape, Buffer, must be large maturing trees measured six inch above ground. Twenty-five percent cent of the trees in this area must be evergreen. So based upon existing vegetation that remains, part of my site observation was to walk and understand. And, in particular, some of the areas that I showed where you were looking straight onto -- if I can pull this one up in particular -- when you're looking into the buffer, while there is a mix of material that is there today -- so this would be a good example of today. You have, in this location, 90 feet of this existing materials. And, yes, while some of it probably -- I don't know the exact mix because I did not do a survey, but understanding that once that plant material loses leaves, there is going to be enough understory trunks and branches and such to help create that visual screening.

In my professional opinion, this location would be greater than 25 percent of your requirement for evergreen shrub.

THE CHAIR: I can understand that in June, in the wet season, but not in November, December, January, February and March, when that's not there. That's all I'm saying.

MR. GUY: I understand.

THE CHAIR: Does anybody else have any questions?

MR. CORLEY: Mr. Benshoff, this may be more directed at you. You mentioned the encroachment discussion coming up, so I don't want to jump there. But, specifically landscaping now, the Stewart property seems to be getting a lot of attention with this plan. I have to ask what is the reason for that? Is it the severity of the encroachment and buffer, is it – it appears we've focused a lot of attention on those encroachments and perhaps taken some attention away from some of the others.

MR. BENSHOFF: In the whole site, by my calculations, 18 acres of buffer were disturbed, and in an approximately 700-acre start-up site, and the most severe removal was concentrated around the Stewarts' property, which, unfortunately, is a peninsula that sticks into the middle of the site, or the site wraps around their property. And there was a specific condition in 2017 that the trees, the pine forest around the Stewart property, was not to be disturbed and it was disturbed so Recurrent feels that it has a debt to the Stewarts to make it right, and they negotiated with the Stewarts for months to make it right. I cannot agree with you that plants were shifted from anywhere else to the Stewarts' property. We asked the landscape architect to do an independent assessment and give us a report. And the reality is Mr. Guy was hired by the general contractor, DEPCOM, to do this work, not Recurrent, so there's also that separation.

MR. CORLEY: To your knowledge, were there any other discussions or negotiations with any other neighboring property owners about the vegetation issues?

MR. BENSHOFF: There were discussions at the community meeting and there were discussions between representatives of DEPCOM and representatives of Recurrent with the neighbors. And I'll have to get -- we will move to encroachments next and if you could ask Mr. Jansen that question, because he talked with the neighbors more than anyone else.

MR. CORLEY: Thank you.

MR. DAGENHART: I have a quick question for Brandon. In your expert opinion, does the re-vegetative buffer, is it equivalent to an existing buffer that was there or could have been there? Because on your plan, you're showing 100-foot buffers, but you're not even vegetating the whole buffer; you're leaving out 20 feet.

MR. GUY: Which buffer in particular are you –

MR. DAGENHART: If I look at your cross sections on page L-20, you've got 100-foot buffer; you're probably leaving out 15 feet, maybe 20. It's not to scale -- I don't have a scale on me.

MR. GUY: Are you speaking to the plan view?

MR. DAGENHART: I'm looking at your evergreen screening cross section, or yeah, your plan view, sorry.

MR. GUY: Plan view, got it. So in these locations, the plantings were combined to help assist with helping to create the visual screen that is required in the county development ordinance. By spacing it out doesn't lend itself to a more compact screen nature. Because it will create additional gaps within spacing, so we were proposing to let the material, essentially grow over time and expand. Where in some cases where there is canopy trees and some cases where there are larger understory evergreens that need full space, so that's why some locations there are areas that are spaced upon and other locations where they were staggered such that it provided a more dense hedge in that location.

MR. DAGENHART: In your expert opinion, in some of this dense planting, is that more of a hindrance to the growth of the plantings, as opposed to spreading them out? I mean, historically, from my observation, when you plant a lot of plantings in a small dense area, the majority of them die out because they're struggling for nutrients, water.

MR. GUY: Good question. So, to respond to that, in my expert opinion, the plants are shown on the plan view at the width that they are proposed to get at maturity. So, the planting takes into account that the space that the plant will need to grow as well as to help establish that visual screen to the max extent practical in that location. Part of my assessment was to understand the nature of the plant that's proposed as well as the amount of space the plant would need to thrive so that over time they would not crowd out each other.

MR. DAGENHART: While I can understand and appreciate your expert opinion, you showed us probably 12 to 15 slides of current conditions of a 672-acre site. I don't know you from anyone else, so I can't determine -- did you show me the optimum locations or the optimum existing vegetation that's there, or did you show me worst case scenario?

MR. GUY: Good question. In some of the locations, the images I showed have been comments on what we received from planning staff, so those particular locations have gotten more attention from the comments from the staff. That's why I brought those up, just to help show some of the impacts as well as the existing vegetation that remain in those particular the locations.

MR. DAGENHART: Also keep in mind that the staff was there months before you were, so those comments could be additional requirements needed.

MR. GUY: Sure. And I also reviewed the images that were provided for areas that were open to views off site and those areas that were shown we have proposed buffers and have shown to help create screening in that location too. The images I showed were not within the report as well.

MR. DAGENHART: Can you elaborate on areas where there is existing overhead lines and how you plan to handle the buffer in those areas.

MR. GUY: Sure.

MR. DAGENHART: I would argue with Mr. Benshoff that the areas along the road frontages, except for 601, were pretty much clear cut, all the buffer was eliminated.

MR. GUY: You're saying along 601?

MR. DAGENHART: No, except for 601. Mt. Pleasant and Joyner Road, a lot of those buffers were eliminated so I kind of don't understand why the Stewart's are getting so much attention when he thinks there are additional areas that have been massacred for lack of a better term.

MR. GUY: So our assessment of these areas in particular were to establish different levels, especially underneath power lines, there is within the ordinance part that requires you to have an understory planting. And, in particular, in one of the details, we proposed crepe myrtle trees in this location. It's worth noting that we spoke to the public along this area. A lot of people see that visibility along Mt. Pleasant Road there. So what we were proposing is the understory of the evergreens, broadleaf and small evergreens, as well as the crepe myrtles, which will help comply with the overhead power requirements of understory trees in that location, thus creating visually pleasing buffer along that frontage. And, in particular too, for the ordinance, we're limited to from the property line to the edge of the buffer line to establish that material, so the different -- you know, we tried to react, to the max extent practical, to the changing grade of the surrounding road to create that buffer. So in that location, particularly having an understory tree, which helps create the 15 to 20-foot head of plant material as well as the understory evergreen trees will help buffer the site.

THE CHAIR: Any other questions for Brandon?

MR. LITAKER: I've got one. Maybe you can answer it, counselor. I'm glad we've got people here that know all the details. Can you give me the reason your client blatantly violated these -- had these code violations? Why? What happened? Was it stupidity? Was it blatantly disregarding what we have here in the county? Then my whole opinion can change very quickly, you know? But, why, what happened?

MR. BENSHOFF: I have two witnesses to speak to that Mr. Litaker.

MR. LITAKER: Dr. Litaker, please.

MR. BENSHOFF: Dr. Litaker, yes, sir. I was reading your nametag phonetically, pardon me. It was a combination of error, based on the approved grading plan, and inattention to detail, poor communication between the contractors, and probably just plain dumb, as you said, dumb grading and clearing practices. And if you would like to hear from the prime contractor whose

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sub did the clearing, I'll be happy to bring up a representative from DEPCOM to give you a better answer than I can.

MR. LITAKER: I don't know. I think it may be out of place to just say I'm sorry, I'm doing what the county says to do, fix it, instead of wasting our time all night tonight listening to this, personally.

MR. BENSHOFF: Yes, sir. The issue -- and I'm not hiding it -- the issue is what I said when I first started, is that we do not understand the intent of the ordinance requirement for landscape planting. We will plant back the table nine requirement, we will plant the buffer as a supplement, the full buffer as a supplement to the existing buffer. We will plant whatever the Board directs us to do, but we need an interpretation of intent of the ordinance and intent of the conditional use permit, because we have just entered into a circular discussion with the county staff.

Now, there's a -- we are now in the planting season. There's a change order on the books to start planting. We would not like to miss this winter's planting season. We would like to get it done. We need a clarification from the Board about what to plant. When you say plant what the ordinance says, we offered to do that, but that does not meet the "intent of the CUP".

MR. DAGENHART: Because the intent that this board approved with that CUP was to take the existing vegetation that was mature and had been there for 30 to 50 years and to supplement it with vegetation. DEPCOM or nobody else ever provided that information to the county or the staff. This board approved this plan based upon this, plus this if needed, not just this. That's what you're coming back asking for. Well, what happened to what was originally there? In my mind, the minimum is not adequate, unless you can change my mind here tonight.

THE CHAIR: I also have to say do not put it back on the onus of this Board when you guys have -- this has been going on for over a year. Don't come to us and say, well, we've got to get it done, this is planting season. If you had had it done the right way the first time, we wouldn't be sitting here talking, in my opinion. That's my personal opinion. I don't know what anybody else feels. Don't throw it back in our faces, I'd appreciate that, because it's not really our fault. You said that. I mean, does anybody else have any questions for Brandon? I guess we'll get to the next --

MR. KOCH: How about anybody else in the audience?

THE CHAIR: Oh, questions from the -- okay. Any questions from the audience for Brandon? Okay. If you had a card, seeing none. Do you want to call your next witness or take a little break? It's up to you because we're getting to be about an hour away from being run out of here. We'll leave it up to you.

MR. BENSHOFF: I suggest a short break.

THE CHAIR: Okay. Give us a quick 10 minutes maybe or less? Five, ten, quick enough to go to the bathroom?

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MR. BENSHOFF: Five?

THE CHAIR called a recess, from 9:21 to 9:31 p.m.

THE CHAIR said we are ready to get started.

MR. BENSHOFF: Members of the Board, Mr. Pinto, I've been asked if you would consider reopening the question period about landscaping. There are at least two people that wish to make a brief statement or ask questions about the landscaping.

THE CHAIR: Okay. We can open it back up.

MR. BENSHOFF: Zac?

MR. MORETZ: Ladies and gentlemen of the board, I'm Zac Moretz, I'm a local attorney. I represent the Stewarts and there was some questions about the Stewart property.

THE CHAIR: We need your address and everything.

MR. MORETZ: The address is 300 McGill Avenue NW, Concord.

THE CHAIR: Thank you.

MR. MORETZ: I just want to say that the Stewarts have reached an agreement with Canadian Solar for the plantings that you saw there. There is some additional detail that's been agreed upon between the two of them but it is basically what is set forth on your map there and we are happy with the arrangement and have no objection to the proposed plan that's before you.

THE CHAIR: Okay. Thank you.

MR. BENSHOFF: Mr. Rynar?

THE CHAIR: Does anybody need --

MR. DAGENHART: Wait a minute. Quick question for Zac. That is just in relationship to the landscaping and none of the other potential issues, i.e. noise, glare.

MR. MORETZ: Well, they're in support of the entire proposal that's before you, at least as it effects their property.

THE CHAIR: Thank you.

MR. MORETZ: Thank you.

THE CHAIR: Okay, sir. Next presenter?

MR. RYNAR: Good evening. My name is Robert Rynar, 200 Orchard Street, Bridgewater, New Jersey. I've been asked to come up and address some of the comments about the encroachments. I am representing DEPCOM Power, who is the general contractor to the project. I'm the chief engineer for DEPCOM Power, I'm an officer of the company, as well as the founder. This project was a highly complicated project. As you can see from the drawings and from some of the testimony you've heard today, there was many geographical features that the project had to deal with, wetlands, floodplains, numerous abutments with different neighbors, overhead utilities, underground utilities; there's over seven miles roughly of perimeter around this project, which essentially is the buffer that we're talking about here.

There is no dispute, absolutely none, from this project team that there were encroachments in the landscape buffer. We apologize for those encroachments and for the circumstances that that created. It was never the intent of the project team to clear areas that this board and the conditions of the use felt that should not be cleared. If I was to point to each and every one of the instances, there's not one specific explanation for every one of the incursions, but they can be characterized in a few different ways. As you heard testimony earlier, there were portions on the originally approved plans where there were storm water measures planned and approved to be inside the buffer, with the appropriate re-vegetation measures as well. This was -- clearly, as a contractor, being handed an approved site plan that we didn't prepare, gave us cause to think that that was an okay thing to do. There remains disagreement about whether that is the case or not. There were miscommunications, misunderstandings amongst the parties, which is partially why we're here tonight, as to what the rules of engagement were for the buffers. As you heard from Mr. Guy from Kimley-Horn, our interpretation of condition number 6 was that the existing buffer was to be used to meet the requirement, not necessarily to be undisturbed. Condition 18 around the Stewart property was very specific in that regard. I cannot stand here tonight as a professional licensed engineer and look anyone in the eye and say for a 102-megawatt D.C. project, covering 673 acres that expended hundreds of thousands of man hours, that no mistakes were made. Can't say that. Happy to stand here and say that during the course of the about one year that we've engaged on this project, that we've employed a tremendous amount of local labor, we've enhanced the economy in the area to support that project, we have donated over \$1 million of our own money to local charities and deserving members of your community. This is a core value of our company that we hold very dear.

We have been tirelessly working with our partner, Recurrent Energy, and indirectly with staff, to come up with a workable plan that can satisfy this Board. We have brought -- by raise of hands, please -- consultants and other DEPCOM folks. We are committed to getting to a point where this Board is satisfied with the actions to bring the project to a successful conclusion. As the operations and maintenance contractor, we will be living and working in your community for many years to come. We expect to be an upstanding member of your community, continuing to contribute those great benefits. I regret that we have to be here tonight to have these conversations, but, as I said earlier, and I hope you can appreciate this, this is a very, very complicated thing that all of these folks worked very, very, very, long and hard to bring

renewable clean energy to your community. So thank you for your time. Any questions for me, I suppose?

THE CHAIR: Does anyone have any questions? Okay. Thank you.

MR. RYNAR: Thank you.

MR. BENSHOFF: Mr. Dagenhart, to clarify one question that you asked, I asked Mr. Guy to address the staff comments that come first in Appendix A of the staff report. So, I assumed they were the latest in chronological time. We did not pick those examples. They were picked by the staff.

Adam Peterson will speak to you now. He has a BS in ecology and an MS in Ecology from the University of Georgia. He is a Senior Ecologist and Project Manager with Kleinfelder. He's worked in their offices in Tampa, Austin, and Atlanta. He has worked as a project manager for over 500 environmental compliance projects with Mosaic Fertilizer in Florida. That's a phosphate mining operation. Projects included wetland delineations, mitigation monitoring, endangered species relocation, land use map, reducing vegetation management, and so on. He has worked for the Polk County, Florida sand mine of Falken Construction Materials, coordinating environmental permitting and technical efforts for a 700-acre sand mine. He has worked for Piedmont Natural Gas in Roanoke Rapids, North Carolina, on wetlands delineation a jurisdictionally determination. He has worked for HPS Enterprises phosphate mine in Bradford and Union Counties, Florida. Project manager and lead wetland delineator for a proposed 10,000-acre green field mining development project in north Florida, and so on and so forth. I submit him to you as an expert witness on environmental permitting, wetlands, wetland mapping; and he will also explain the Kleinfelder encroachment study.

I have a second encroachment witness after Mr. Peterson. His resume is not in the binder I handed up, but I will provide it to the Clerk for the record.

Mr. Peterson, please tell the Board what Kleinfelder was hired to do in regards to determining the encroachments made by others, and who hired you, and what the results of that study were. And I understand that you have the signed and sealed floodplain development permit application drawings that staff has requested several times and we would like to submit those, the original sealed documents, into the record this evening. And I'll hand these to the clerk.

THE CHAIR: Before we let him be presented as an expert witness, does anybody have any questions for the witness? Seeing none, is there a motion to admit as expert witness?

Mr. Adam Dagenhart **MOTIONED, SECONDED** by Mr. Jerry Wood, Jr. to except Adam Peterson as an expert witness on environmental permitting, wetlands and wetland mapping. The vote was unanimous.

THE CHAIR: Please state your name and your address.

MR. PETERSON: Good evening. My name is Adam Peterson, representing KleinFelder. My address is 5775 Glenridge Drive, Building B, Suite 390, Atlanta, Georgia. I just want to discuss Kleinfelder's work involved in this project. We became acquainted with it in late June, 2018. We were hired by Recurrent Energy to do two tasks and those two tasks were, number one, to do an independent field flagging of all the required buffers and boundaries, namely those were the property buffer, those were also the stream buffers, the wetland buffer, and also the floodplain boundary.

So that was our first task, to go out to independently walk the entire perimeter, take a 100-foot offset off of the boundary and to field flag that. Our second task was, after we had done that, was to go back and independently carve out, delineate, any potential encroachments. So I'll go ahead and just describe in detail about what we did with both those tasks.

The first task was conducted in June of 2018. We saw the site, we used GPS technology which is sub-metered, so roughly three feet, worst case scenario roughly a foot, and that was to walk the lines, with the intent that someone would follow behind us and be able to clearly see where is the 100-foot property boundary mark, where is the 140-foot Bost Creek buffer mark, where is the 40-foot intermittent tributary to Bost Creek mark, where is the 30 foot wetland buffer and where is the floodplain boundary. So we did that. It's in the report I think you have. We field-flagged the property buffer with orange flagging for example every 20, 30, 50 feet. The Bost Creek buffer is blue flagging, the wetland is of course in green flagging, etcetera, etcetera. So after we had done that, and, again, we did that, walked the entire perimeter, walked all the buffers there you guys can see on the site plans. Then we went ahead and delineated out any encroachments and characterized those and we took photos. You have the report. We characterized what were the encroachments, totaled them up, and then we submitted a report to Recurrent for their use. And that's what we did.

It's my understanding that the intent of that report was then to get a baseline on what the situation was and also to help guide the revegetation plans. We had additional tasks too. There were some encroachments to the floodplain. We prepared a flood plain development permit application. That is what we just submitted. He will be happy to answer any more questions or go into more detail.

THE CHAIR: Anyone have question.

MR. PAXTON: This word intent keeps coming up every now and then. Anywhere along the way, did you explain to your client the intent of the ordinance or did you just describe these are your issues?

MR. PETERSON: I'm sorry. Yeah, I misspoke. It's -- my understanding would have been the correct term. I can't speak to any of the others, but we were pretty much tasked with a cut and dry situation, flag out the buffers and then delineate any encroachments, and produce a map and report.

MR. PAXTON: So you just described their problems?

MR. PETERSON: Absolutely, yes, sir.

MR. PAXTON: Who or whom followed up with the intent of the ordinance?

MR. PETERSON: That's not in my understanding. We were basically answering the questions, basically to come in there, independently, in June of 2018 and do an analysis of where the encroachments were and also to field flag buffers/boundaries so that someone else could come and inspect and check that out. So, I apologize for the miswording.

MR. DAGENHART: To your knowledge, when or if was your report submitted to the county for their review, excluding this packet tonight?

MR. BENSHOFF: I can answer that, Mr. Dagenhart. I submitted a draft to the county staff in July, in interest of full disclosure, and I realized later that that was a draft, which created some consternation on the staff's part, and my client was not happy that the draft was released. But, it was July 2018. It's been updated. The study has been updated since then. It essentially wasn't finished. I had a draft and I thought it was supposed to go.

Could we have a map of the encroachments please? The encroachment report is not a requirement of the ordinance. It's not a requirement of the CUP process. It was offered in the interest of full disclosure to give us, Recurrent, a baseline for what to fix.

Could you zoom in on anywhere and explain the key of the map please?

MR. PETERSON: Absolutely. So I think we can take it step by step. See the site property boundary, the 100-foot vegetative buffer? Run through some examples. So anywhere you see orange, so I'll come over here to the southern area right here, you've got the orange, which is an encroachment into the 100-foot property offset. So this yellow line there coming, that is the 100-foot offset and this is where we came behind and delineated out encroachments.

MR. BENSHOFF: What is the green area and the --

MR. PETERSON: Yeah. So this is the wetland, down here at the bottom. So there is one wetland on site and that was a 30-foot buffer and you can see in the purple areas, those were the encroachments we found. This is a unique polygon right there, but we got lumped into the property boundary, and that was a lay down yard that was cleared; that was not on the site plan, so we included that as an encroachment.

Here is Bost Creek. So, Bost Creek, as y'all know, it's got a 120-foot buffer from top of bank on each side and then an additional 20-foot offset. So what we see here is this shaded area. You've got Bost Creek coming down. On each side, you have a 140-foot buffer. For example, on the

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southwest side, these purple areas, these are encroachments into the Bost Creek buffer which we identified; and on the north side, you see also. So coming up, this is an intermittent tributary to Bost Creek, which had a 30-foot buffer plus a 10-foot offset, for a total of 40 feet and we found an encroachment there. So as you – kind of going up the west side, as you see the orange, so, these are all delineated encroachments into the offset that we found in June.

MR. DAGENHART: To your knowledge -- when you did this report, was there any additional grading outside these areas, to your knowledge?

MR. PETERSON: To my knowledge, I don't know. We did treat it, whether it be vegetation clearing, whether it be sediment basins -- you can see on our report, we treated it as all -- anything that was encroaching into a non-disturb buffer, we treated it as such and is shown on this map. As we come down the eastern boundary, this down Mt. Pleasant Road and around the property, we talked about -- so, as you can see, this was kind of an initial step, you know, that mirrors some of the re-vegetation plans that were discussed, but I just want to be clear that's -- you know, that what we were tasked with was gathering facts, go out, you know, walk the entire buffer, all the boundaries, and then delineate out any encroachments we found.

MS. GRIMSLEY: You've got a very clear site plan here. What did you use -- what was the original site plan that was given to DEPCOM? How were those two married together to figure out who had the correct site plan? And I'm a contractor, so I get this is a very complex --

MR. PETERSON: Understood. And this was so the first time I had ever seen a map of any of this was in June of 2018 and Recurrent Energy had contracted us and gave us the site plan with the buffers that were in coordination with the county, as far as what are the stream buffers, what are the property buffers. So, as far as anything before that time, I can't speak to any prior site plans.

MS. GRIMSLEY: So how did you determine -- that's a lot of encroachment areas. How did you determine -- what information did you use that would have been different from theirs or the same as theirs?

MR. PETERSON: Entirely visual. Well, let me say two things. This was a forensic encroachment study because it happened after the fact. So our first step was to visually check it out. And we physically walked that entire perimeter, that entire -- so I'll just go to an example. This would be an example here. So after we came through -- the red line is the overall property boundary and then you can see this orange line and that's the -- so the first thing we did is came around and flagged this with orange flagging. And then we came back behind and where we could see encroachments -- and some of that is subjective, but we did the best we can based on our professional opinion. We looked that there was a sediment basin, if there had been any clearing, if there's a silk fence inside the property buffer, we called that an encroachment; so we also took our GPS and we marked that out. Some of this, too, was looking at available historic aerial imagery after the fact. I was a co-author on the report, so we took our data and then we also compared historical aerial imagery, which is great in Google Earth now. You can use the

time frame sequence and see, you know, what disturbances or maybe clearings have been a long time ago, based on the past couple of years relative to this project. So, to the best of our professional ability, we tried to establish what were encroachments to these various boundaries based on that. But, that's -- yeah. I hope I answered your question. If not, let me know.

MS. GRIMSLEY: You did. I guess I'm just kind of curious that your site plan shows very clearly what the issues were. Did DEPCOM -- and I know this is probably out of your scope of work, but where was the -- where did it go from there? Did they agree? The length of time that this has taken to get addressed is definitely an issue.

MR. PETERSON: Yeah, I'll definitely have to defer and let someone else speak to that, but these were the facts we presented.

MR. CORLEY: Mr. Benshoff, this may be you again. Sorry to keep running you up here. So the county ultimately, through their plan approval process, approved a construction site plan; is that?

MR. BENSHOFF: Yes.

MR. CORLEY: And the State of North Carolina would have approved a construction site plan for erosion control purposes to obtain an erosion control permit for this site?

MR. BENSHOFF: Yes.

MR. CORLEY: So were those two plans the same? More specifically, did the plan that the county approved, did that plan change after that county approval took place, with respect to clearing limits? We've talked about technology changes already. I understand that a lot of those took place and I understand that, but as far as things that affected buffer encroachments and clearing limits, did those plans change after the county approved those construction plans?

MR. BENSHOFF: I need to -- I don't want to misstate the facts and I need to get a representative from Recurrent or DEPCOM up here. But, my understanding is what I call the 2017 Blackwell plans were approved and a new site plan has been offered with this application drawn by Kimley-Horn, but that's not approved yet. Don, Al? Can you?

MR. CORLEY: And maybe to simplify my question a little more, the county approval of a plan and then the plan the contractor is working from, I'm trying to get a feel on whether that was part of our problem here as well, specifically the erosion control encroachments. Did the county's plan that they approved include those encroachments clearly shown on those construction plans?

MR. JANSEN: My name is Al Jansen, 305 Lampton Light, Port Lampton, Ontario, and I'm a construction manager with Canadian Solar/Recurrent Energy.

Mr. Corley, to respond to your question, so in 2017 you approved a set of Blackwell drawings, which represented a site plan. Subsequent to that, there were applications made to the NCDEQ for further erosion control permits, sediment control permits, so on, as late as March of 2018. So the actual plan sets were the same; there were some revisions made. The actual disturbance boundaries or disturbances limits did not change in that time.

MR. CORLEY: And so obviously on those plans, those encroachments specifically, the sediment basins were obviously shown, I would assume. Did the extent of those encroachments change during that review in a state to where those plans potentially became inconsistent with the county approved plans?

MR. JANSEN: They're -- not having the plans in front of me, I'm going to say there's that potential, yes.

THE CHAIR: Any other questions? No? We have 30 minutes to wrap up your presentation.

MR. BENSHOFF: What I'd like to do is have Mr. Jansen address an as-built survey that was delivered to him on December 3, 2018, so it's not in evidence yet. It shows the location of all the arrays and the buffer and, of course, the property line. And then I'll have the glare -- I'll give the glare expert ten minutes and the noise expert ten minutes, because they're from out of state, and I'll make some concluding remarks. That's my game plan.

THE CHAIR: Okay.

MR. BENSHOFF: I am not qualifying Mr. Jansen as an expert witness. Could you explain what this is to the Board and then could you -- could we get it on the monitor, please?

MR. JANSEN: So, to the Board, this is an ALTA survey, done by a professional licensed surveyor for the state of North Carolina, as an as-built of the project itself.

MR. BENSHOFF: And I'd like to submit this into evidence. This is the only copy I have tonight.

MS. GRIMSLEY: I'm sorry. When was that done? What was the date?

MR. JANSEN: It was actually originally published April 23rd of 2018; the revision date is November 19, 2018.

Mr. Benshoff asked me to address the ALTA survey itself, but before getting into that, I'd just like to mention that there was an exhibit that began its life as the exhibit we call EXLA-1 and that was an exhibit that began its life back in April of 2018, by DEPCOM itself. They were charged, the field engineer staff, at site, to go out and start identifying the encroachments. As that document came to life into April, May timeframe, it was actually submitted to the county staff for information purposes.

Here we have the as-built survey itself that we just put into evidence. As we go through the project, we can start from the north and work through. There's areas where the staff reports and the engineering reports talk about equipment arrays within the buffer itself. Everything that you see on the survey itself shows that, yes, we do have some equivalence of fence lines that may be very tight to the buffer lines, but they're all outside – there is actually no equipment within the buffer line itself. It does demonstrate the sediment basins within the buffer areas. We recognized that previously. As we go through the project, again at the -- some of the buffer encroachment drawings show it much better -- but, we do identify some areas right down here where we actually do have some road construction within the buffer itself and the fence line. So that will be removed. It has not been removed to date, but that's part of the punch list item with the project and we will have that resolved.

So the ALTA survey itself demonstrates, again, that the actual construction of all the farm, the equipment, is all within the property, within the allowed construction limits of the project.

MR. DAGENHART: I have two quick questions. One, are any of the articulating arrays on the border as it relates to the 100 foot buffer? I know we talked about it but we don't really know where they are.

MR. JANSEN: So the articulating arrays would be the single tracker and are within this area right here. You can see on the screen right now, those are really not -- they're an allowable distance from the fence.

MR. DAGENHART: My second question is: I believe fire had a comment that you had to maintain a 10-foot loop road around the perimeter of the site for emergency access. Is that not a - I think that was a stipulation of their condition.

THE CHAIR: Off the fence?

MR. DAGENHART: Off the fence.

MR. JANSEN: I can't speak to that. I do not recall that stipulation anywhere.

MR. DAGENHART: I have physically seen, myself, passing by, that you've got some arrays that are probably hanging over the fence line, so I'm curious to see how you're going to remedy those. Are you going to take arrays out, because you can't move the fence?

MR. JANSEN: At this point, we've had the State there, the state inspectors, the electrical inspectors. Everything has been passed by them on their advice.

MR. DAGENHART: But, you still have to meet fire code.

MR. JANSEN: So with that, the fire circuit route through – my understanding is the roadways we built with the turnarounds were to be sufficient.

MR. DAGENHART: I would like for fire to look at that exhibit to let them determine that.

THE CHAIR: How many moving arrays are there on Mt. Pleasant Road?

MR. JANSEN: So the moving arrays along Mt. Pleasant Road --

THE CHAIR: down by Joyner there, on the other side of the retention pond in the corner. They have the white boxes on them. How many would you say are over there?

MR. JANSEN: So if you're talking Mt. Pleasant Road and Joyner?

THE CHAIR: A little further down, right there.

MR. JANSEN: That's right there. Those are all fixed tilt.

THE CHAIR: No, they are not.

MR. JANSEN: Right in this area, those are actually they're all fixed

THE CHAIR: Along Joyner is not. The white ones move.

MR. JANSEN: That is down this area right here, sir. Along there.

THE CHAIR: Down in there?

MR. JANSEN: Yes, just north of the Stewart property and there's an access gate off of Mt. Pleasant. So anything south of that access road and that access gate are articulating and anything north of that is fixed tilt.

THE CHAIR: Fixed? Okay. I will go out and look at it again. Any other questions? Seeing none, I think you're okay.

MR. BENSHOFF: I would like to present our glare expert, Robert Healy. Mr. Healy's affidavit and his resume are attached in Tab 6 of your binder. Mr. Healy has a Bachelor of Science in electrical engineering from Kansas State University, 1990; MBA with concentrations of finance and strategy from the University of Chicago Business School in 1996. In 1996, he became a registered professional engineer in the state of Illinois. He has 20 years of experience in engineering and project management. For 10 years of those, he worked at Burns & McDonnell where he is a Regional Global Practice Manager. Much of his work for Burns & McDonnell has been in the area of evaluating and supporting the development of renewable energy projects. I

submit that his 14-page resume attached at Tab 6, which lists scores of renewable energy projects where he led various teams in evaluating the environmental effects of renewable and green energy projects and I offer Robert Healy, P.E., to you as an expert witness.

THE CHAIR: Are there any questions for the expert witness to confirm that he is an expert?

MR. CORLEY: I assume Mr. Healy is licensed in North Carolina as well?

MR. BENSHOFF: Mr. Healy is not licensed in North Carolina. Mr. Thad Wingo signed and sealed the glare city and the noise study provided by Burns & McDonnell. There has been some question about whether the signed and sealed are copies, are very high quality copies, or whether they're originals. Mr. Wingo has original signed and sealed copies that I want to put into the record tonight to take care of the question of about whether we submitted properly verified studies.

MR. CORLEY: I would ask our county attorney for some guidance on accepting a licensed engineer who is not licensed in this state to perform that testimony. I'd ask for some guidance on that.

MR. KOCH: In order to qualify as an expert in North Carolina, you don't necessarily have to be licensed in your profession in this state. You probably have to be licensed somewhere to establish the requirements in your resume to be able to testify as to what you want to testify to. You would not have to necessarily, be qualified in this state.

Mr. Jeff Corley **MOTIONED, SECONDED** by Mr. Chris Pinto, to admit Mr. Robert Healy as an expert glare witness. The vote was unanimous.

THE CHAIR: State your name and address for the record.

MR. WINGO: Thad Wingo, 2329 Hartford Avenue, Fort Mill, South Carolina 29708.

MR. BENSHOFF: Are you a licensed North Carolina professional engineer?

MR. WINGO: I am, for 15 years.

MR. BENSHOFF: Did you sign and seal the Burns & McDonnell glare study and the sound study?

MR. WINGO: Yes.

MR. BENSHOFF: Thank you. I'll submit these into evidence. Mr. Healy, keep it short, five minutes or less.

MR. HEALY: I will try. Good evening. My name is Robert Healy, address is 1850 North Central Avenue, Suite 800, Phoenix, Arizona 85004. I represent Burns & McDonnell, who conducted the glare study.

All right. So, first, just to give you an example of what we're talking about today, what is glint and glare. On the screen here, you will see this is a reflection off of a lake of the sunlight. That is glare. So you can see on the perimeter of the glare is small, let's call it glare as well, so if the water ripples, you would see glint. That's what we're talking about today. We're talking basically about the reflection of the sun off of a reflective surface. So the purpose of our study was to determine if there could be any adverse effects to neighbors or the traveling public, adverse effects being defined as the potential for permanent eye damage, as defined in the solar glare ocular hazard plot, as provided on the screen here. This is utilized by Sandia National Laboratories solar glare hazard analysis tool, which is basically the software package that we used to conduct the analysis. And you can see on the screen the red areas of in the plot would represent the potential for permanent eye damage; the yellow area is indicative of potential for an after image; green would indicate that there is a low potential of after image. And after image is defined, when you're looking at glare or reflection off of a lake and you blink your eyes and you get the red dot and you blink again and it goes away, that is the kind of temporary after image that we are talking about.

So how was the study performed? We utilized the glare hazard analysis tool that Sandia created. They created it for FAA analysis for the pilots, to see if there was any glare hazard from solar plants, mainly for pilots. It's an FAA approved tool. It is what is standard in the industry. It's done to make sure that no glare causing permanent retinal damage would be reflected back from solar plants and affect pilots. As you may know, there are many solar fields near airports and that was the intent, to prove that they were safe.

So, how was the study performed? We identified around the property several observation points, along roads. Then we used the tool to determine the glare potential at each of those observation points, and what the impact might be. We checked each observation point then for line of sight using a GIS software program called ArcGIS. It is basically used to determine, using elevation data, whether there's actual line of sight to that -- from that where the glare may occur to the observation point. And then we summarized the results for each observation point. And, you can see on the screen we can see there are several observation points that were visible and had yellow glare potential at those sights. And that was done on a desktop analysis. We use satellite imagery in the -- from Google Earth to -- we looked at the foliage in the areas, we drew boundaries around that foliage and then made an assumption that said if there's foliage here let's assume that the foliage is about 10 feet high and it does -- if it's greater than 100-foot in depth, then it will block the line of sight. And that was kind of the standard we utilized in the GIS tool. And the GIS tool, that's -- you can't simulate a screen. So, the tool itself kind of rendered it to that kind of analysis. And that was what our assumptions were.

So, as an example, we were looking at observation point number three and you can see the output from the SGHAT software. It looks across the entire year and across every minute of the

day and you can see that there's a potential for glare there in the months of May to September-ish really late in the evening. So, again, just like on the lake, the sun is setting low on the horizon, it's going to reflect off of the panels and potentially have some glare in that area.

So in knowing that, we did the line of sight analysis. Again we used the ArcGIS tool, we used the satellite imagery, which is the best we had available to try to identify if there was going to be some foliage in the way that would block and/or mitigate the glare. We made some assumptions and then we asked the client to go out and field verify those -- which is the supplement to the report -- to go out and field verify if there was actually line of sight here.

And those notes were provided in a supplement, which we're showing here. You can see the line of sight, which the tool takes into account the elevations and the contours, and there's some potential glare from various points on what we call the MPE-5 array and you can see how the contour is taking effect at about 1500 to 2500 feet. There are a couple of points that may cause glare to that observation point. And then notes going from the field verification stating that, oh, in this area there is going to be some mitigation and there is going to be some vegetative growth here, so they will reduce the impact of any potential glare in that area.

And that is how the study was conducted and what the results were, which are presented in the report.

MR. DAGENHART: So I have a question about the slide you just showed. I find it interesting that you did not do an observation point on Mt. Pleasant Road around the intersection of Joyner Road facing southwest, particularly for MPE-5 and 3. Is there any reason why?

MR. HEALY: Sorry. So Joyner --

MR. DAGENHART: In other words, if someone is travelling south on Mt. Pleasant Road, you did not really take into account MP-3 or MP-5 in these slides here; is that a correct assumption? I don't see line of sight.

MR. HEALY: Oh. I think I just did an example for you using observation point 3, but all the observation points looked at all of the arrays to see if there would be any glare hazard. MP-3, you're not going to get -- I don't think we showed any glare hazard from there. I'll check the results. The single access tracking arrays, because they articulate with the sun, they're not -- you know, early morning or late evening, they're not pointed at the roadways.

MR. DAGENHART: Those are MP-3'S?

MR. HEALY: MP-3 and MP-1 are the single axis tracking, the articulating, so they don't lend themselves to much glare, especially from ground level because of the way they track in the sunlight.

MR. DAGENHART: Is there such thing as lunar glare.

MR. HEALY: I do not know.

MR. DAGENHART: I'm just curious because going through there this time of the year at 8:30 at night going home, there's some glare. I just don't know if it registers on --

MR. HEALY: In my professional opinion, I don't think there's enough intensity from a lunar glare to cause any harm to the eye.

MR. DAGENHART: Maybe not to the eye, but in your professional opinion, could it be a distraction for a driver, that they might think it's an oncoming car?

MR. HEALY: I can't really comment on that because when you're driving, there's lots of conditions that could be going on at any one time. I can't comment on that.

THE CHAIR: Did you say 100 percent coverage or 100 foot of coverage, when that survey was done in your model?

MR. HEALY: In our model, if there was 100 feet of foliage, the assumption was, you could not see through that, there would be no line of sight.

THE CHAIR: So what was done on the corner of Mt. Pleasant and Joyner?

MR. HEALY: Specific to that, if there was no foliage showing on the map here, we did not show it in the model.

THE CHAIR: When did you get the map of foliage?

MR. HEALY: We used the Google Earth data dated March, 2018.

MR. DAGENHART: That's an assumption of 10 feet height of 100-foot linear vegetation?

MR. HEALY: Yes.

MR. DAGENHART: Because I do not believe the landscape plan shows 10-foot existing for proposed vegetation.

MR. HEALY: We just looked at the existing here in the tool, from that data.

THE CHAIR: Back there that area is in topo low. I guess it takes that into consideration, right?

MR. HEALY: I'm sorry?

THE CHAIR: It is in the topo low, the corner of Joyner, everything flows down, so I am assuming you used the topo low part, right?

MR. HEALY: Yeah. So when doing analysis, you can see the contours are taken into account from between the observation point and where the potential glare could occur on the arrays. You can see the map on the other side showing out into the arrays, kind of a line of sight that was looked at.

THE CHAIR: Are there any other questions?

MR. HEALY: It should be noted that there was no glare shown that would cause permanent retinal damage, so that was kind of our threshold for what --

MR. LITAKER: Do you actually look; I know you look for retinal damage, but you can get flash where you are momentarily blinded for three to five seconds. Do you take into account for that, look for that?

MR. HEALY: That's what I think the yellow glare is, that temporary image that takes into account. And that's what shows up in that graph area.

MR. PAXTON: One of the conditions on the staff report talks about the glint and glare study shall be modified to analyze the effectiveness of the proposed method of mitigating impacts. Is that what you've done or what do you say about that condition there?

MR. HEALY: I think that's what showed up in the field verification, where we got that information from Recurrent Energy identifying -- or DEPCOM, identifying that, oh, in this area where you observed glint and glare, specifically observation 3 here, they identified that they had a mitigation plan that would help to block some of that. It would not block it all, but I believe it was enough kind of screening to diminish any additional impacts.

THE CHAIR: Any other questions? Seeing none, we're going to have to make a motion to table this meeting, or the rest of it, to the next time. Is there a motion to table this meeting to a further date?

MR. KOCH: Why don't we see how close they are to being finished?

THE CHAIR: We have five minutes.

MS. MORRIS: We need to have everybody out by quarter till.

THE CHAIR: You have one more.

MR. BENSHOFF: If you don't mind, I'd like to squeeze in our sound expert.

THE CHAIR: You have five minutes.

MR. KOCH: Al, would that be all.

MR. BENSHOFF: No.

MR. KOCH: It's not?

MR. DAGENHART: But, he's out of state so that's why he's trying to get him through.

MR. BENSHOFF: I think he's from Kansas City and that would take care of the witnesses we had to fly in tonight.

THE CHAIR: Okay. That's fine.

MR. BENSHOFF: This is Chris Howell. He has a Bachelor of Science in mechanical engineering from Kansas State in 1999. He has 18 years of experience in engineering, 16 years of those with Burns & McDonnell, where he is a project manager. He primarily evaluates noise from electrical utility generation, transmission, and distribution systems, substations and other infrastructure. He's performed acoustical studies in all 50 states and many countries outside of the U.S. He is an elected member of the Institute of Noise Control Engineering. His resume and affidavit are at Tab 7 in the binder. He has conducted noise produced by electrical substations and other sources of noise for Duke Energy Corporation, 2016 to the present; Dominion Virginia Power, 2010 to 2016; Power South Energy Co-op, 2018 to present; Littleford Power from 2016 to present, and other utilities throughout the northeastern United States. I offer him to you as an expert witness in sound mitigation.

THE CHAIR: Any question?

Mr. Adam Dagenhart **MOTIONED, SECONDED** by Ms. Holly Grimsley to accept Mr. Chris Howell as an expert witness on sound mitigation. The vote was unanimous.

MR. BENSHOFF: In the interest of time, I'll just ask leading questions. Recurrent has offered to ensure that there will be no more than 35 decibels at the property line. Mr. Howell did a study and he can tell you that between the noise wall that's provided and the distance of the equipment from the property line, that it is at 35-dBA and -- is that correct?

MR. HOWELL: Yes. The initial study showed -- sorry?

THE CHAIR: Could you say your name and address?

MR. HOWELL: Sorry. Chris Howell, Burns & McDonnell. My address is 9400 Ward Parkway, Kansas City, Missouri 64114. Yes, the initial study showed that potential sound level at the

Stewart residence, one small section of their property up towards the substation itself could exceed 35 decibels, getting up to basically 40 decibels right there. However, putting a noise wall there would allow the facility to operate under 35 decibels at every point of the property.

MR. BENSHOFF: And how loud is this room in decibels tonight?

MR. HOWELL: In general, this room has been about 40 to 45, when everyone is quiet and it gets up to 55 when people are talking.

MR. BENSHOFF: Can you characterize 35 decibels for us lay people, please?

MR. HOWELL: It's very quiet. I wouldn't expect anything to be audible above generally 35 for the most part.

THE CHAIR: Okay. Any other questions for him? Seeing none --

MR. BENSHOFF: I have a couple of clean-up things. I ask that you accept the binder presented to you into evidence. Besides the tabs that I have described, at Tab 1, there's a statement of justification in support of the application. At Tab 2, there is a copy of the \$1 million irrevocable letter of credit. At Tab 3, there is the owners' change order for \$2.3 million for plantings. At Tab 9 there are the photographs of the substation. And next time Mr. Jansen can testify that he took the photographs to date.

THE CHAIR: Okay. Thank you for your presentation. Motion to adjourn?

MR. KOCH: Are you leaving the public hearing open?

THE CHAIR: We never opened it.

MS. MORRIS: Mr. Chairman, we do have permission, if you want to, to take in some of the public comments, but we do need to leave by 10:45. At that time, everybody will need to exit through the elevator to the parking deck because the building is currently locked down. Make sure you take everything with you because you will not be able to get back into the building, cellphones, papers, all of that stuff. We have to be out by 11, no later.

MR. BENSHOFF: I request that the public hearing be continued until your next meeting.

THE CHAIR: People have come all this way; they can speak for 15 minutes. Let's open the public hearing. If somebody came a long way or cannot make it next time or there is a miscommunication, let's get some of them. We have 15 minutes. Everybody's got three minutes. Is there -- Kayla?

MR. DAGENHART: I think we should wait until he finishes his presentation.

THE CHAIR: Have you finished your presentation?

MR. BENSHOFF: I have not. I would request that the meeting be held open.

THE CHAIR: What do you have left for your presentation? We pretty much covered it, haven't we?

MR. BENSHOFF: I have a witness to testify about the adequacy of the public utilities at the site and I have an appraisal report by Damon Bidencope, an appraiser who appraised the property in 2017 for the previous owner, which is at Tab 4 in the binder. Those are the only formal witnesses that I have.

THE CHAIR: Do you have something written you can submit as evidence and not have the witness testify? I'm just worried about time because we have to be out too.

MR. BENSHOFF: I can submit the appraisal report. I do not have a prepared statement of Mr. Wingo about the adequacies of the facilities. That's a specific finding you have to make it's a water, sewer, schools, emergency services. The impact is the same as in the 2017 application.

THE CHAIR: So you can do that written, submit it that way?

MR. BENSHOFF: Yes, if you'll hold it open to accept an affidavit of Mr. Wingo.

THE CHAIR: Mr. Koch?

MR. KOCH: Yeah.

THE CHAIR: We will accept that in writing, that way your presentation will be finished.

MR. BENSHOFF: And I have two other things. I have a statement about the proposed 28 or 38 conditions proposed by staff that I would like to provide to the Board for your consideration before you adopt the conditions. Most of them, we accept. Several of them, Recurrent strongly objects to. And I have a statement that Mr. Koch asked me to make where we agreed to preserve constitutional issues in case of an appeal.

By law, this board cannot hear questions of constitutional law; but, because of the case law in North Carolina, if the issues aren't raised in this tribunal, they can't be raised later. So all Mr. Koch and I have agreed to do is preserve those issues, that we agree that they can go up in the unlikely event there's an appeal.

MR. KOCH: That is correct and that is something that has to be preserved at this level. But it's not something the Board can really deal with because it's a legal issue. So we're just taking it off the table for having to be decided here. And it may not be decided at all later on, but because of

the way the law is, we have to at least raise it here in order to raise it later on. That's what he's talking about.

MR. BENSHOFF: If I may approach, here's a memo about the conditions proposed by the staff, we'd ask you to consider before making a final decision.

MR. DAGENHART: I don't think we're close to making a decision tonight.

MR. BENSHOFF: I understand that. But, if the hearing is closed, I'm trying to put everything in while I'm here and I'm done.

THE CHAIR: Yeah, that is okay.

MR. KOCH: If you want him to finish today, he's got to put all his evidence in today. That's what he's doing.

THE CHAIR: We want him to finish today, we want everything in today so next time we come back we do a public hearing and go from there.

MR. BENSHOFF: Just for the record, I move that everything presented to the Board tonight, in paper or in digital form, which has been provided to the clerk, be accepted into evidence by this Board.

THE CHAIR: Okay. So are you happy?

MR. BENSHOFF: Yes, sir.

THE CHAIR: Okay. So we now have – I think we need a motion to adjourn. We're out of time.

MR. DAGENHART: Motion to continue.

MR. LAUTENSCHLAGER: Mr. Chairman, are we leaving the hearing open and it will be reset?

THE CHAIR: Yes, we are going to leave it open, table it, so everybody is able to question everybody else. Yes. We're just out of time. Sorry.

Mr. Adam Dagenhart **MOTIONED, SECONDED** by Mr. Brent Rockett to continue the meeting for another day.

MR. KOCH: What date are you continuing to?

MR. DAGENHART: Continue to the second Tuesday of January of 2019.

MS. MORRIS: January 8th, I believe.

THE CHAIR asked if there were any other cases that day.

Ms. Morris is not sure at this time. The deadline was today, and we do have that one case that was not on the agenda and we anticipate it will be back in January.

THE CHAIR: it would be safe to say the second Tuesday in January.

Ms. Morris said yes, January 8th is the second Tuesday.

Mr. Adam Dagenhart **MOTIONED, SECONDED** by Mr. Brent Rockett to continue the meeting until January 8, 2019. The vote was unanimous. The meeting adjourned at 10:39 p.m.

APPROVED BY:

Mr. Chris Pinto, Chair

SUBMITTED BY:

Arlena B. Roberts

ATTEST BY:

Susie Morris, Planning and Zoning Manager