



AGENDA
Regular Planning Board Meeting
November 16, 2021 - 6:30 PM
Virtual Meeting

Virtual Meeting Information- *Members of the public may view or access the meeting on Facebook Live at <https://www.facebook.com/HuntersvilleNCTownGovernment>. If you would like to speak at the upcoming meeting during public comment, please send your name and email address to Tracy Barron tbarron@huntersville.org by 3:00 pm on the day of the meeting, to be added to the speaker's list. The Town will use your email address to send you an email invitation from Ring Central. This will allow you to call in and/or access the meeting to deliver your comments (the 3-minute time limit still applies). In addition, the Town will receive written comments below by email to Tracy Barron tbarron@huntersville.org until twenty-four (24) hours prior to the meeting.*

1. Call to Order/Roll Call

2. Approval of Minutes

2.A. Consider approval of the October 26, 2021 minutes of meeting. ()

3. Public Comments - *Speakers are limited to 3 minutes. The Chairperson reserves the right to shorten the time limit for speakers when an unusually large number of persons have signed up to speak. Speakers may not give all or a portion of their time to other speakers*

4. Action Agenda

4.A. SUP21-05 Solar Installation (*Nathan Farber*)

5. Other Business

5.A. Consider approval of the 2022 Planning Board Meeting Schedule ()

6. Adjourn



Minutes
Regular Planning Board Meeting
October 26, 2021 - 6:30 PM
Virtual Meeting

1. Call to Order/Roll Call

Members Present: S. Swanick, J. Sny, J. Davis, C. Graffy, F. Gammon, C. Boyd, G. Baber, S. Hensley, and D. Partee

2. Approval of Minutes

2.A. Consider approval of the September 28, 2021 Minutes of the Meeting.

J. Sny made a Motion to Approve the September 28, 2021, minutes. C. Boyd seconded the motion. The motion passed unanimously (9-0).

2.B. Consider approval of the October 14, 2021 Special Meeting Minutes

J. Sny made a Motion to Approve the October 14, 2021, minutes. D. Partee seconded the motion. The motion passed unanimously (9-0).

3. Public Comments - Speakers are limited to 3 minutes. The Chairperson reserves the right to shorten the time limit for speakers when an unusually large number of persons have signed up to speak. Speakers may not give all or a portion of their time to other speakers

Bruce Anderson, 16125 Weatherly Way commented: "If you live in Huntersville, when you see signs of development coming, you know traffic will get worse. The Town officials say the traffic impact ordinance, the TIA, will require the developer to "propose measures that fully mitigate the transportation impact of the proposed development." The reality is that in many cases few are right. As an example, say you live near an intersection in a Rural or TR District where the level of service standard is "C" as set by staff. In fact that intersection is running smoothly at LOS A. In the current TIA the developer is given the option to return the LOS to "either the adopted standard or to within 3% of the no-build percentage." If the cost to return the LOS to within 3% of the no build percentage, that is before the development, is \$80,000 and the cost to return the LOS to the adopted standard is zero, which option do you think the developer will choose? It get's worse. Say that intersection gets worse over time and the Town recognizes that they cannot expect the improvement there to only occur with development. The Town decides to spend tax dollars to make a major improvement that costs \$150,000. The LOS goes from "C" back to "A." A year later a developer builds near the intersection and the LOS declines back to "C" at this point the developer can choose to only return the level of service to "C" the standard. The effect of that \$150,000 expenditure is lost. Please understand that the TIA does result in improvements to intersections in many cases it just does not meet the intent implied by the language.

That is, it does not result in developers fully mitigating the transportation options. The Planning Board and the Town Board are being asked if they want to eliminate the TIA and/or rely on the North Carolina Department of Transportation to ensure development pays for necessary improvements. Based on Town experience, the NCDOT will not ensure anything close to what the TIA does or should do. Citizens that care about this town and the problems caused by traffic should expect elected officials to refuse to eliminate or weaken the TIA. We should also ask that the TIA to be modified to address the concerns listed. Watch the way Commissioners vote on this issue. Ask candidates for Commissioner if they support keeping and improving the TIA. Then ask the new Town Board to improve the TIA.”

Matt Jones, 6426 Colonial Garden Drive, former chair of the TIA subcommittee along with Planning Board member J. Sny and Planning Staff members commented that they spent a considerable amount of time analyzing the issue and primarily the legal parameters surrounding it. The current TIA is not equitable, predictable, or transparent. The goal of the committee was to find a solution that was equitable, predictable, and transparent. He believed that the subcommittee did find a solution that met these criteria as well as addressed some other issues. As it stands with the current TIA it likely creates what he would call litigation risks for taxpayers that he does not believe they should be subject to. Most notably it makes no provision for Nollan Dolan which is the rational nexus of rough proportionality. It makes no provision for that and in addition you have a right-of-way acquisition problem. When you require a developer to acquire right-of-way from a third party and you give them no alternative for acquiring that right-of-way it sets up another unconstitutional problem for the Town. If we look at these three principles that constitutional limits you have principle #1: exaction must be rationally related to the impact generated by development (Nollan 1987); #2: the amount of the exaction can be no more than the amount roughly proportional to impact (Dolan 1994); #3: a proposed condition of approval even if not ultimately imposed cannot exceed the exactions allowed under Nolan Dolan. (Koontz, 2004). With that said, most TIA’s that he has seen including ours proposes conditions that are unconstitutional and that steps across a line and potentially exposes tax payors to liability. That is the reason he believes the current TIA needs to be rescinded and a new set of traffic impact ordinances needs to be put in place. What was recommended by the TIA subcommittee would suffice, would be more equitable, transparent, and predictable, and much less risky than what is currently being done.

4. Action Agenda

4.A. Consider a recommendation on Petition #SUP21-04, a request by Karla Knotts on behalf of Knotts Development Resources of Parcel ID #'s 01517101 and 01517102, to remove a Special Use Permit to allow a Banquet Facility(Nathan Farber) (*Nathan Farber*)

N. Farber, Planner I entered the Staff Report into the record, a copy of which is attached hereto as Exhibit A and incorporated herein by reference. Staff reviewed the previous SUP approval for this site and indicated that the property owner is no longer going to develop the banquet facility. At this time the Planning Department has not received any commercial plans for a banquet facility. The property owner is requesting a removal of the SUP to allow the property to be developed in accordance with the Rural zoning district.

S. Swanick asked why it is necessary to remove the SUP designation. Staff confirmed that removal is required to adjust the development plans.

D. Partee made a Motion to Approve SUP 21-04, Saddlebrook Event Venue – Removal and in accordance with Article 11.4.10 of the Town Zoning Ordinance, the Planning Board recommends approval and finds that the special use permit amendment request in compliance with the following requirements; 1) does not adversely affect adjacent property owners or the

general welfare of the community, 2) all legal notification requirements have been met, 3) removing the 2018 special use permit will allow the property to be used and developed in accordance with the underlying zoning district, rural, requirements, and 4) any future use must comply with all of the lot size, yard and other standards which the zoning ordinance applies in all uses permitted in the rural zoning district. J. Davis seconded the motion. The motion passed unanimously (9-0).

4.B. **Consider a recommendation on Petition #SUP21-03, a request by Art Van Wingerden on behalf of Metrolina Greenhouses, Inc. for a Special Use Permit for a dormitory for Bona Fide Farm for 14846, 14568, and 14654 Huntersville-Concord Road (Tax parcel #s 02122102, 02122108, 02122105, and 02122104). (Lauren Speight)**

L. Speight, Planner II entered the Staff Report into the record, a copy of which is attached hereto as Exhibit B and incorporated herein by reference. Staff reviewed the applicants request which is following the recent text amendment related to dormitories. The applicant is now requesting the special use permit for the dormitories. Staff recommends approval with the outlined outstanding items addressed as noted.

S. Swanick asked for confirmation that the outstanding items are largely clerical and not substantive. Staff confirmed that is correct.

C. Boyd asked for confirmation of the placement of the buildings and the distance of the buildings to the property to the north and the flood plain. Staff confirmed that the proposed location has adjusted due to the flood plain and the current placement is over 800 feet away from the nearest residential structure and stated that they have confirmed with Rusty Rozzelle that the placement is not within the flood plain or the flood plain buffer.

F. Gammon asked Staff to explain why there is no Charlotte Willingness to Serve letter submitted by the applicant. Staff responded that a Willingness to Serve letter is required at the time of the construction documents but not with a special use permit application.

F. Gammon made a Motion to Approve SUP21-03 – dormitories for a bona fide farm for Metrolina Greenhouses, we the Planning Board find that the request meets all required conditions and specifications, is reasonable and does not impose an injurious effect on adjoining properties and find that the character of the neighborhood or the health, safety and general welfare of the community will be minimized. The decision is supported by the following findings: the proposed dormitories meet the requirements of and are consistent with the Huntersville zoning ordinance articles 9.6 2.1 through 9.6 2.9. Further the Planning Board adopts the finding of fact of the staff report and recommends approval for special use permit 21-03 with the following conditions: 1) that all legal notification requirements have been met, 2) approval by the Town land development engineer of a)stormwater and storm drainage lands and b)site grading plan. 3)Obtain certification from the North Carolina Department of Labor that the proposed dormitories have completed inspection and that these requirements of the migrant housing act/temporary labor camp standards have been certified to meet the applicable H-2A program requirements and provide proof of that certification to the staff upon request. 4) Add tax parcel # 02122102 to the application and evidence labeled attachment C. 5)Correct the site plan to show the correct total acreage, currently shown as 444.515 acres however correct acreage is 46 acres +/- G. Baber seconded the motion. The motion passed unanimously (9-0).

4.C. **Consider a recommendation on Petition #TA21-08, a request by the Town of Huntersville**

Planning Department to amend Article 8.25.4: S.W.I.M Stream Buffers, Buffer Delineation; Articles 8.17.12(a)(2) and 8.17.12(b)(1): Water Quality, Performance Criteria, Performance Criteria for Low Density Projects, Performance Criteria for High Density Projects; and, Article 12.2.3: Definitions, Watershed Definitions of the Huntersville Zoning Ordinance. (Lauren Speight)

L. Speight, Planner II entered the Staff Report into the record, a copy of which is attached hereto as Exhibit C and incorporated herein by reference. Staff reviewed the current requirements and proposed amendments to further indicate that land development permits delineate by a certified professional using the methodology of the U.S. Army Corps of Engineers and/or N.C. Division of Water Quality.

C. Boyd asked for clarification regarding the continued use of Mecklenburg County GIS. Staff confirmed that Mecklenburg County GIS can still be used for discovering if there are S.W.I.M. buffers on a property and the Zoning Ordinance already requires a site plan have a site survey conducted to determine if there are any streams or buffers on the property, this amendment is further clarifying.

S. Hensley confirmed that this is not a new requirement and that the proposed amendment clarifies what methodology is used to provide what is already required. Staff confirmed that is correct.

S. Hensley made a Motion to Approve TA21-08 to amend Article 8.25 S.W.I.M Stream Buffers, Buffer Delineation; Articles 8.17.12(a)(2) and 8.17.12(b)(1): Water Quality, Performance Criteria, Performance Criteria for Low Density Projects, Performance Criteria for High Density Projects; and, Article 12.2.3: Definitions, Watershed Definitions of the Huntersville Zoning Ordinance to clarify which and how buffers must be shown on the land development plans for review, and approval by the Town of Huntersville; the Planning Board recommends approval as the amendment is consistent with policies EOS-1 and EOS-5 of the Huntersville 2040 Community Plan. It is reasonable and in the public interest to amend the zoning ordinance because it clarifies which and how buffers must be shown on land development plans submitted for review and approval by the Town of Huntersville. It provides landowners and applicants an alternative to GIS information when targeting extreme locations which provides better accuracy for development plans. It further helps prevent unintended disturbances of S.W.I.M. buffers throughout the Town of Huntersville which will aid in the protection of our drinking water source. C. Boyd seconded the motion. The motion passed unanimously (9-0).

4.D. Consider a recommendation on Petition #TA21-12, a request by the Huntersville Engineering Department to amend Article 14 of the Huntersville Zoning Ordinance regarding traffic impact analysis.

Stephen Trott, Director of Engineering, Town of Huntersville provided a review of the proposed amendments, a copy of which is attached hereto as Exhibit D and incorporated herein by reference. Staff reviewed what a TIA can help us to find which includes a way to quantify the traffic impacts of a new development and compare traffic for different development proposals. A TIA is looking to find if improvements are needed to impacted intersections and if so, what improvements are needed. Staff has proposed changes to the current TIA process as follows: Option 1: raise the threshold to complete a TIA to 150 peak hours or 1,500 daily trips; allow the Town Engineer to waive a Town TIA if NCDOT is requiring a TIA; and raise the threshold for

intersections to be studied to 40 trips on an approach or 70 for an intersection. Option 2: Remove the Town TIA requirement and defer it back to the State.

Staff provided a review of TIA's conducted and how an adjustment to 150 peak hours or 1,500 daily trips and when NCDOT required a TIA. Staff also stated that currently the threshold for intersection is 30 trips on an approach or 50 for an intersection for it to be studied, not mitigated. What staff is seeing is that proposed developments where the threshold is near the current numbers are resulting in no mitigation but requiring staff time to study. Therefore, staff proposed raising the threshold to increase the likelihood that when an intersection is studied it will result in mitigation.

F. Gammon asked what the legal authority is for permitting the Town to require a TIA and if there are legal ramifications to the Town's position. Staff responded that the items in the Town Charter that give the Town the ability to evaluate impact of traffic. J. Glass, Staff Attorney commented that the TIA is legal and there are scenarios that need to be reviewed project by project.

S. Swanick asked if the TIA subcommittee provided different recommendations, then what are being presented. J. Simoneau replied that the Huntersville Ordinance Advisory Board formed a subcommittee to review TIA who then met with the UNC School of Government to review. The idea was that if everyone paid their fair share then it could be equitable but that was getting towards an impact fee which is not legal in North Carolina. Ultimately the TIA subcommittee provided recommendations and no action has been taken on those at this time.

J. Sny, member of the TIA subcommittee reviewed some of the concerns that the subcommittee addressed regarding an intersection level of service may not decrease to a point of mitigation until the second or third developer has affected it, then leaving the burden on the next developer in line which is not their fair and equitable share, it is the result of all the previous development before them as well. More directly the relationship between the number of residences being added and how that translates directly to additional traffic was considered as well.

J. Davis asked how a standard for an intersection is identified, if it is updated when it is inspected and studied, and if staff has considered addressing the standards to update those requirements. Staff responded and stated that Article 14 of the zoning ordinance has an adopted standard related to the adjacent zoning. Those standards have been the same since they were adopted in 2007. If the standard is changed then the question becomes will the Town act to improve those roads when there is no development or will they simply allow those roads to fall below an acceptable level of service and wait until there is development associated with that intersection.

S. Swanick asked how often the intersections are studied to identify their current level of service. Staff stated that the process is to capture the movement at a moment of time and apply projections and forecasting, this could lead to a different result each time you study it so you can increase the number of studies you conduct but it would lock you in to new information each time. J. Simoneau responded that the level of service for an intersection was established at acceptable levels when the Ordinance was adopted and then a developer would have to complete an impact analysis (TIA) for a certain radius of a proposed project to determine if the level of service would be impacted such that mitigation would be required.

J. Davis asked J. Sny if the level of service was discussed in the subcommittee meetings. J. Sny confirmed that they did review the level of service and they did look at the possibility of

adjusting the method. She then commented that it is her understanding that under House Bill 772 the Town still has the authority to impact traffic and given that the standards were formed in 2007 and have not been updated it would appear that the Town would benefit from reviewing these standards for improvement.

S. Swanick stated that since M. Jones was the Chair of the TIA subcommittee he would like the Board to be able to ask him questions. J. Davis asked why his recommendation is to get rid of the TIA when we have the authority to have one and while it may need to be fixed if we get rid of it we risk not getting it back. M. Jones responded that his primary reason for recommending that we get rid of it is that it is unconstitutional via requiring right-of-way acquisition and stepping across rough proportionality tests. When you tell an applicant that they have to build a turn-lane half a mile away and not just their incremental impact on the turn lane that is half a mile away, that steps across a line. Anything not right at the driveway that they are required to pay 100% for creates a problem. There is language adopted in the 160D amendments that allow for exactly what is proposed in the TIA subcommittee, a fee in lieu. There are two things permitted under the authorized in the statutes that allow fees in lieu in the subdivision statutes under 160D.804.C. Level of service was also discussed and the subcommittee proposed a solution that would pick up the majority of impact via the fee in lieu structure which was discussed with Professor Adam Lovelady at the UNC School of Government which he believed to be viable.

J. Glass, Staff Attorney commented that the impact fees and level of service is not written in a way to make it equitable. It is written in a way to require a fee when a level of service falls to a certain level.

G. Baber asked if Staff could provide a brief review of how the changes proposed would differ from what is currently required, how the letter correlation to level of service applies, if that relates to funding for improvements, and how mitigation is determined. Staff explained that the peak hour or daily trips counts relates to trips anticipated to be generated on average by a development. There is nationally accepted data that the Town uses to identify what the trends are to establish what the trip generation rates or traffic counts would be to use based on size and type of development proposed. The Town uses this data to estimate a traffic impact. The threshold for intersections to be studied are based on assumptions of where the trips will likely head from a proposed development and then apply the standards for generating a trip count to identify if that causes a turn-lane or intersection to fall below the acceptable level of service or identify additional road improvements that may be necessary. Article 14.4.1 of the zoning ordinance establishes the Town's measurement system, the Intersection Capacity Utilization (ICU) which is a percentage with zero being no traffic and 100% being congestion level expected for a period of 60 minutes or more. The letter system is a relatable system for discussion with A being the best at zero traffic. Another point is that 'bad' is subjective and each person you speak to may have a different opinion. The ICU percentage number is determined with the proposed development and without the proposed development. If the difference in the two numbers or the resulting number falls below the acceptable level of service, then mitigation is required.

S. Hensley asked Staff if the level of service is a static number or if that number is updated when an analysis is completed and if other municipalities require a TIA. Staff confirmed that the level of service is updated at the time an analysis is completed, when things are rezoned the level of service may also change. Staff stated that there are varying results when looking at other municipalities, some have a TIA requirement and others do not. Within those that have a requirement there are also differing standards for measurement that are applied.

C. Boyd commented that he is concerned about there being only two options presented today to either lower the bar or remove the bar altogether. S. Swanick commented that these are the two being presented for consideration but it is the role of the Planning Board to select what they will recommend.

C. Boyd asked J. Glass for his opinion regarding the concerns expressed on the legality of the TIA. J. Glass responded that the TIA itself is legal and there are exactions related to the TIA that must be considered on a project by project basis to ensure it is being enforced legally and accurately.

C. Boyd asked J. Sny which one of these options was identified as more equitable. J. Sny commented that neither of these options achieve the equity that was desired by the subcommittee.

F. Gammon asked S. Trott if not requiring a Town TIA would adversely affect the people of Huntersville in any way. Staff reviewed the list of projects that have had a TIA completed and identified that there are projects where mitigation was identified by the Town TIA where an NCDOT TIA was not required.

J. Sny asked S. Trott if the peak hour and total threshold were recently amended and if his position has shifted from previous discussions related to the TIA. Staff confirmed that when the ordinance was adopted the peak was 50 or 500 in a day and after looking at the data they found that everything below the 100 or 1000 did not require any mitigation. With the addition of more data points his position is that the TIA is a tool that is not perfect but is available for use.

J. Davis made a Motion to Approve TA21-12 TIA Modification, the Planning Board recommends as outlined in the staff report to 1) raise the threshold to require a Town TIA to 150 peak hours or 1,500 daily trips; 2) Town Engineer may waive Town TIA if NCDOT is requiring a TIA and 3) Raise the threshold for intersections to be studied to 40 trips on an approach or 70 for an intersection. S. Swanick seconded the motion.

J. Davis stated that she selected supporting this option because she cannot support getting rid of the TIA when traffic is the number one concern of our citizens. Eliminating the one tool that we use to gauge intersections seems counter productive even if it is an imperfect tool. She stressed that in her opinion the TIA subcommittee should either continue on or a new one should be formed so that continued effort can be placed towards establishing a better standard. She would like to see continued effort to keeping the standard legal and workable for the Town.

S. Swanick stated that he seconded the motion because he feels that the discussion this evening was not relative to the presentation. Potential legal issues have been raised which are valid concerns. The subcommittee potentially investigating level of service and ways to improve and strengthen this without going to impact fees is not included in this discussion. These appear to be administrative improvements to aid staff but there seems to be a strong reason to give this more attention to address the real problem. While we know that there are NCDOT improvements slated it is not going to fix all the traffic issues. He echoed J. Davis comments that he would like to see the Town Board reappoint a subcommittee to work on this topic.

J. Sny commented that while the legal issues mentioned came from the subcommittee that it may also identify how the TIA ordinance is not doing its job. When he looks at both of these options he sees this as providing minor administrative assistance but there is no talk of replace.

He would like it to be repealed and replaced and maybe the Planning Board should consider that motion versus the currently proposed motion given the likelihood that at least one of the Town Board Commissioners will be newly seated and the learning curve to understand the TIA issues is steep and this issue may continue to be pushed out versus addressed.

S. Swanick replied that he would be surprised at repeal without replace and while repeal may force the hand towards replace how long will that take?

S. Hensley stated he will support the motion because he does not think there is a perfect solution because if there was we would simply copy the municipality that has identified that. If we repeal the TIA the road improvements will have to come completely from the General Fund which is general tax dollars so is there a way to offload some of those improvements and costs and as imperfect as the TIA is it accomplishes some of that for now. As for the legal concerns he defers to the Legal Department to monitor that.

G. Baber stated that he will most likely not support the motion. There is not a perfect solution but the two options presented seem worse than what we currently have so denial would keep it as it is which does not fix the problem but also does not make it worse. The chart reflected some mitigation would be lost and while sympathetic to the time and cost of staff to complete the work he does not have those numbers and he does not want to make the situation worse when pretty much every complaint residents have with him is regarding traffic concerns.

C. Boyd stated he will support keeping the TIA and he likes the bar where it is now, and he feels that the majority of the Town would prefer to add another staff person to keep the TIA efforts going versus reducing the TIA efforts. Traffic is our number one issue and taking a step back does not seem to be going in the right direction. S. Swanick clarified the options available to the Planning Board based on the concerns expressed.

D. Partee stated that he will vote in favor of the motion because the Town has professional staff and this is their job, to present to us the best options to benefit the citizens and to review the options presented with the Legal department. His confidence is in the staff and he will vote for the motion presented.

C. Graffy commented that she has been listening to the questions and concerns and she does recall having a text amendment presented where the options were not more clearly laid out to accept or reject the amendment. She expressed she may want to make a substitute motion to allow the amendments proposed and to add on to that the need to continue to study the TIA. Maybe since this is all a moving target and not static the study has continued for years but she is not comfortable with the two options currently presented. S. Swanick asked for confirmation that she supports the three amendments but would want to add a request to reevaluate the findings of the subcommittee and/or reinstate or reform a subcommittee to continue research. C. Graffy confirmed that is the amendment she is proposing. S. Swanick confirmed he would like an amendment to the motion to state such. J. Davis accepted the amendment. S. Swanick accepted the amendment.

S. Hensley asked Staff to assign a value to the items that required mitigation which in his opinion shows the value of the TIA. Staff estimated the value of items mitigated that are above the red line on the chart where NCDOT required to be in the millions.

F. Gammon commented that he agrees with Jeff and Greg and that this option is more than a band-aid. The first option puts the TIA on life support until a new method can be identified. He

thought that the goal of the TIA subcommittee was to find a new methodology and he is not opposed to the motion proposed because the discussion will continue until a real solution can be identified; however, it is possible that the more votes against this will cause the Town Board to take a deeper look at it and the concerns expressed.

G. Baber made a Substitute Motion to Deny TA21-12 TIA Modification, the Planning Board recommends denial of both options A and B based on the amendment being inconsistent with policies T-2 and T-3 of the Huntersville 2040 Community Plan. It is reasonable and in the public interest to not amend the Zoning Ordinance because it will create less mitigation which is used to handle increased development in the Town. C. Boyd seconded the motion.

G. Baber stated that both options seem to be in the wrong direction so given no other choice he recommends keeping things the same in addition to the concerns he expressed of it being in conflict with policies T-2 and T-3.

C. Boyd commented that he is concerned about losing C. Graffy's amendment because what we have now is also not perfect and there is more discussion to be had.

J. Davis stated that she could not support the substitute motion because there was a subcommittee and recommendations have been presented by staff. Despite the TIA not being perfect these recommendations are going to assist staff and keep the TIA in process. The proposed amendments will help staff.

F. Gammon stated that he supports J. Davis position on this. Being stuck in the mud and spinning in the same place is not a beneficial option. Both of the options presented do something but as stated before he would like the Town to continue discussions or a subcommittee to find a way to come up with a better process if possible.

C. Boyd stated that the substitute motion would catch the two items that were mitigated and that would no longer be mitigated under the proposed amendments which seems to be the more aggressive option to protect the TIA. He understands that raising the bar may be beneficial for an administrative reason but it will not alleviate the problem. S. Swanick commented that he agrees this will not alleviate the problem but it can alleviate staff and make them more effective and allow us to potentially get better results out of the items below the line and hopefully lead the way to a better solution.

G. Baber accepted the amendment made by C. Graffy a request to reevaluate the findings of the subcommittee and/or reinstate or reform a subcommittee to continue research to the substitute motion. C. Boyd accepted the amendment.

The amended substitute motion failed (2-7) with S. Swanick, J. Sny, J. Davis, C. Graffy, S. Hensley, F. Gammon, D. Partee opposed

The amended motion passed (6-3) with J. Sny, G. Baber and F. Gammon opposed.

5. Other Business

J. Sny made a Motion to Adjourn. S. Hensley seconded the motion. The motion passed unanimously (9-0).

6. Adjourn

**Town of Huntersville
Planning Board
November 16, 2021**

To: Town Board

From: Nathan Farber, Planner I

Date: November 16, 2021

Subject: SUP21-05

EXPLAIN REQUEST:

ACTION RECOMMENDED:

FINANCIAL IMPLICATIONS:

ATTACHMENTS:

1. Attachment A: General Application, Project Site Plan, Solar Panel Info., Adjacent Properties
2. SUP21-05 Staff Analysis



General Application

INCOMPLETE SUBMISSIONS WILL NOT BE ACCEPTED. PLEASE CHECK ALL ITEMS CAREFULLY.

1. Application Type

Please indicate the type of application you are submitting. In addition to the application, the submission process for each application type can be found at <https://www.huntersville.org/528/Permits-Process>

- ☐ Change of Use
- ☐ Commercial Site Plan
- ☐ Conditional Rezoning
- ☐ General Rezoning
- ☐ Master Signage Program
- ☒ Special Use Permit
- ☐ Revision to
Original Project # _____
- ☐ Other _____

- SUBDIVISION CATEGORIES: Per the Huntersville Subdivision Ordinance
- ☐ Sketch Plan
 - ☐ Preliminary Plan
 - ☐ Final Plat (Includes Minor Subdivision)
 - ☐ Exempt Subdivision
 - ☐ Final Plat Revision
 - ☐ Farmhouse Cluster

2. Project Data

Date of Application 10/08/2021

Name of Project Sharon Kennedy Solar Installation Phase # (if subdivision) _____

Project Address 10545 Mount Holly Huntersville Rd. Huntersville, NC 28708

Parcel Identification Number(s) (PIN) 01703222

Current Zoning District Huntersville Proposed District (for rezoning only) _____

Property Size (acres) 2.160 Street Frontage (feet) _____

Current Land Use Residential Property

Proposed Land Use(s) Residential property with solar panels

Is the project within Huntersville's corporate limits?

Yes X No _____ If no, does the applicant intend to voluntarily annex? _____

3. Description of Request

Explain the nature of this request. If a separate sheet is necessary, please attach to this application.

Engineer Stamped Drawing attached

4. Site Plan Submittals

Consult the particular type of *Review Process* for the application type selected above. These can be found at <https://www.huntersville.org/528/Permits-Process>.

5. Outside Agency Information

Other agencies may have applications and fees associated with the land development process. The *Review Process* list includes plan documents needed for most town and county reviewing agencies. For major subdivisions, commercial site plans, and rezoning petitions please enclose a copy of the Charlotte-Mecklenburg Utility *Willingness to Serve* letter for the subject property.

6. Applicant

Printed Name 365 Solar Energy LLC Phone 833-365-7657
☐ Corporation ☒ Limited Liability Company ☐ Trust ☐ Partnership ☐ Other: _____

☒ By signature below, I hereby acknowledge, as/on behalf of (circle one) the applicant my understanding this application will be considered in a quasi-judicial proceeding and that neither I, nor anyone on my behalf, may contact the Board of Commissioners except through sworn testimony at the public hearing. (Applicable for Special Use Permits and Subdivisions)

Signature Chris Wilson Printed Name: Chris Wilson

Title Director of Customer Relations Email cwilson@365solarenergy.com

Address of Applicant 608 Rountree Rd. Charlotte, NC 28217

7. Property Owner (If different than applicant)

*Printed Name Sharon Elizabeth Kennedy Phone 925-381-9182
☐ Corporation ☐ Limited Liability Company ☐ Trust ☐ ☒ Other: Homeowner

☐ By signature below, I hereby acknowledge, as/on behalf of (circle one) the owner my understanding this application will be considered in a quasi-judicial proceeding and that neither I, nor anyone on my behalf, may contact the Board of Commissioners except through sworn testimony at the public hearing. (Applicable for Special Use Permits and Subdivisions)

Signature Sharon Kennedy Printed Name Sharon Kennedy

Title Home Owner Email baatsk@yahoo.com

Address of Property Owner 10545 Mount Holly Huntersville Rd. Huntersville, NC 28078

* Property owner hereby grants permission to the Town of Huntersville personnel to enter the subject property for any purpose required in processing this application.

Every owner of each parcel included in this application, or the owner (s) duly authorized agent, must sign this application. If signed by an agent on behalf of the Owner, this application **MUST** be accompanied by a notarized Limited Power of Attorney signed by the property owner (s), specifically authorizing the agent to act on the owner (s) behalf in signing this application. Failure of each owner, or their duly authorized agent, to sign, or failure to include the authority of the agent signed by the property owner, will result in an **INVALID APPLICATION**. If additional space is needed for signatures, attach the **Town of Huntersville Signature Addendum Form**.

8. Development/Design Firm Contact Information

365 Solar Energy LLC.	Chris Wilson	704-413-3152	cwilson@365solarenergy.com
Development Firm	Name of Contact	Phone	Email
Wyssling Consultants	Parker Schram	704-942-7427	pschram@energyscaperenewables.com
Design Firm	Name of Contact	Phone	Email

Contact Information

Town of Huntersville	Phone:	704-875-7000
Planning Department	Fax:	704-992-5528
PO Box 664	Physical Address:	105 Gilead Road, Third Floor
Huntersville, NC 28070	Website:	https://www.huntersville.org/228/Planning-Department

A petition requesting a special use permit must be accompanied by a site plan, drawn to scale, and any necessary supporting text, which shall include all data specified in paragraphs (a) through (m) below that are applicable to the project. Where the type of use or scale of proposal makes providing any of the following items unnecessary or impractical, the Planning Director may waive individual items.

A boundary survey and vicinity map showing the property's total acreage, zoning classification(s), general location in relation to major streets, railroads, and/or waterways, date, and north arrow;

Property size, zoning classification in Engineer Stamped Drawing, A screenshot of Polaris GIS has been provided to show general location including major streets and waterways. Screenshot is taken with the top of the photo being true north.

Existing topography and the general nature of the proposed topography at four foot contour intervals or less; **General Topography included in GIS and Stamped Drawing.**

All existing easements, reservations, rights-of-way, and any other restrictions on the use of the land; **No existing easements, only roadway is the driveway to home which has no right of way.**

Number and general location of proposed structures;

Sharon Kennedy Solar Installation

365 Solar Energy LLC. Adrienne Clyne

704-253-0934 aclyne@354solarenergy.com

01703222

10545 Mount Holly Huntersville Rd. Huntersville, NC 28708

10545 Mount Holly Huntersville Rd. Huntersville, NC 28708

Sharon Elizabeth Kennedy

Last Updated September 2021

Page 2 of 2

Special Use Permit

Checklist

Proposed use of all land and structures, including the number of residential units or the total square footage of any nonresidential development; **Included in Engineer Stamped Drawing.**

All yards, buffers, screening, and landscaping required by these regulations; **N/A**

Any proposed screening, buffers, and landscaping over and above that required by these regulations, as well as proposed treatment of any existing natural features; **N/A**

All existing and proposed points of access to public streets; the location of proposed new streets; **Only existing point of access is the driveway included in stamped drawing.**

Delineation of areas within the regulatory flood plain as shown on the Official Floodway Maps for Mecklenburg County; **N/A**

Proposed number and location of signs; **Included in Engineer Stamped Drawing**

Proposed phasing, if any, and approximate completion time for the project; **As we are ready to install, as soon as we receive approval, install will take place**

The location of existing and proposed storm drainage patterns and facilities intended to serve the proposed development, for evaluation by the town's consulting engineer; **N/A**

Traffic, parking, and circulation plans, showing the proposed location and arrangement of parking spaces and ingress and egress to adjacent streets, existing and proposed; **Any adjacent streets are included in the GIS screenshot**

A listing of adjoining properties including tax parcel numbers and the name and address of each owner, provided in digital form if possible. **Adjoining Properties, Screenshots included in PDF attachment**

In the course of evaluating the proposed use, the Planning Director, Planning Board or Town Board of Commissioners may request additional information from the petitioner. Such requests shall stay consideration of the special use permit by the Planning Board or Town Board.

Information requested may include the following:

The location of significant trees on the petitioned property; **Included in Stamped Drawing**

Scale of buildings relative to adjoining properties, including sight lines; **Included in screenshot of GIS**

Height of structures; **N/A as no new structures are being developed**

Exterior features of proposed development; **Included in Engineer Stamped Drawing**

Any other information needed to demonstrate compliance with these regulations.

The site plan, building elevations, perspectives, sections, and any supporting text shall constitute part of the special use permit application for all purposes under these regulations.



Scott E. Wyssling, PE, PP, CME

Scott E. Wyssling, PE
76 North Meadowbrook Drive
Alpine, UT 84004
office (201) 874-3483
swyssling@wysslingconsulting.com

August 4, 2021

Parker Schram
365 Solar
3524 Bost Street
Charlotte, NC 28208

Re: Engineering Services
Kennedy Residence
10545 Mount Holly-Huntersville Road, Huntersville, NC
6.930 kW System

Dear Mr. Schram,

Pursuant to your request, we have reviewed the following information regarding solar panel installation on the roof of the above referenced home:

1. Site Visit/Verification Form prepared by a 365 Solar representative identifying specific site information including size and spacing of rafters for the existing roof structure.
2. Photographs of the interior and exterior of the roof system identifying existing structural members and their conditions.

Based on the above information we have evaluated the structural capacity of the existing roof system to support the additional loads imposed by the solar panels and have the following comments related to our review and evaluation:

Description of Residence:

The existing residence is typical wood framing construction with the roof system consisting of truss system with all chords constructed of 2 x 4 dimensional lumber at 24" on center. The attic space is unfinished and photos indicate that there was free access to visually inspect the size and condition of the roof rafters. All wood material utilized for the roof system is assumed to be Doug-Fir #2 or better with standard construction components. The existing roofing material consists of composite asphalt shingles. Photos of the dwelling also indicate that there is a permanent foundation.

A. Loading Criteria Used

- 110 MPH wind loading based on ASCE 7-16 Exposure Category "C" at a slope of 35 degrees
- 7 PSF = Dead Load roofing/framing Live Load = 20 PSF Snow Load = 10 PSF
- 3 PSF = Dead Load solar panels/mounting hardware

Total Dead Load = 10 PSF

The above values are within acceptable limits of recognized industry standards for similar structures in accordance with the North Carolina Residential Code (2018). Analysis performed of the existing roof structure utilizing the above loading criteria indicates that the existing rafters will support the additional panel loading without damage, if installed correctly.

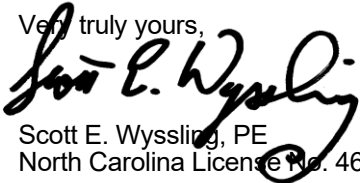
B. Solar Panel Anchorage

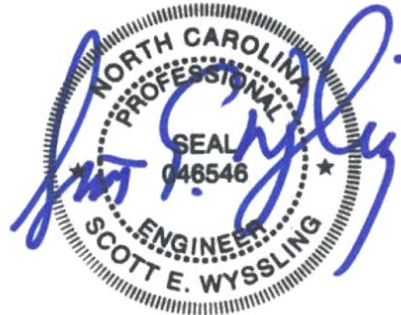
1. The solar panels shall be mounted in accordance with the most recent "*Ironridge Installation Manual*", which can be found on the Ironridge website (<http://ironridge.com/>). If during solar panel installation, the roof framing members appear unstable or deflect non-uniformly, our office should be notified before proceeding with the installation.
2. Maximum allowable pullout per lag screw is 235 lbs/inch of penetration as identified in the National Design Standards (NDS) of timber construction specifications for Doug-Fir (North Lumber) *assumed*. Based on our evaluation, the pullout value, utilizing a penetration depth of 2 ½", is less than what is allowable per connection and therefore is adequate. Based on the variable factors for the existing roof framing and installation tolerances, using a thread depth of 2 ½" with a minimum size of 5/16" lag screw per attachment point for panel anchor mounts should be adequate with a sufficient factor of safety.
3. Considering the roof slopes, the size, spacing, condition of roof, the panel supports shall be placed no greater than 48" o/c.
4. Panel supports connections shall be staggered to distribute load to adjacent trusses.

Based on the above evaluation, it is the opinion of this office that with appropriate panel anchors being utilized the roof system will adequately support the additional loading imposed by the solar panels. This evaluation is in conformance with the North Carolina Residential Code (2018), current industry and standards, and based on information supplied to us at the time of this report.

Should you have any questions regarding the above or if you require further information do not hesitate to contact me.

Very truly yours,


Scott E. Wyssling, PE
North Carolina License No. 46546



North Carolina Firm License No. 46546

PROJECT DESCRIPTION:

21 x SILFAB SOLAR: SIL-330 BL 330W MONO MODULES
ROOF MOUNTED SOLAR PHOTOVOLTAIC MODULES
DC SYSTEM SIZE: 6.930kW DC
AC SYSTEM SIZE: 7.600kW AC

EQUIPMENT SUMMARY

- 21 SILFAB SOLAR: SIL-330 BL 330W MODULES
- 21 GENERAC SNAPRS801
- 03 GENERAC PV LINK S2502 POWER OPTIMIZERS
- 01 GENERAC PWRCELL: APKE00014 7600W INVERTER
- 01 GENERAC PWRCELL 6kW (12kWh) BATTERY

ROOF ARRAY AREA #1:- 384.30 SQ FT.

AUTHORITIES HAVING JURISDICTION

BUILDING: MECKLENBURG COUNTY
ZONING: MECKLENBURG COUNTY
UTILITY: DUKE ENERGY

APPLICABLE CODES & STANDARDS

NCBC 2018
NEC 2017

DESIGN SPECIFICATIONS

OCCUPANCY: II
CONSTRUCTION: SINGLE-FAMILY
ZONING: RESIDENTIAL
GROUND SNOW LOAD: SEE STRUCTURAL LETTER
WIND EXPOSURE: SEE STRUCTURAL LETTER
WIND SPEED: SEE STRUCTURAL LETTER

- IFC SETBACKS ARE REQUIRED TO BE DISCUSSED WITH THE AHJ PRIOR TO CONSTRUCTION



2

HOUSE PHOTO

PV-1

SCALE: NTS



3

VICINITY MAP

PV-1

SCALE: NTS

SHEET INDEX

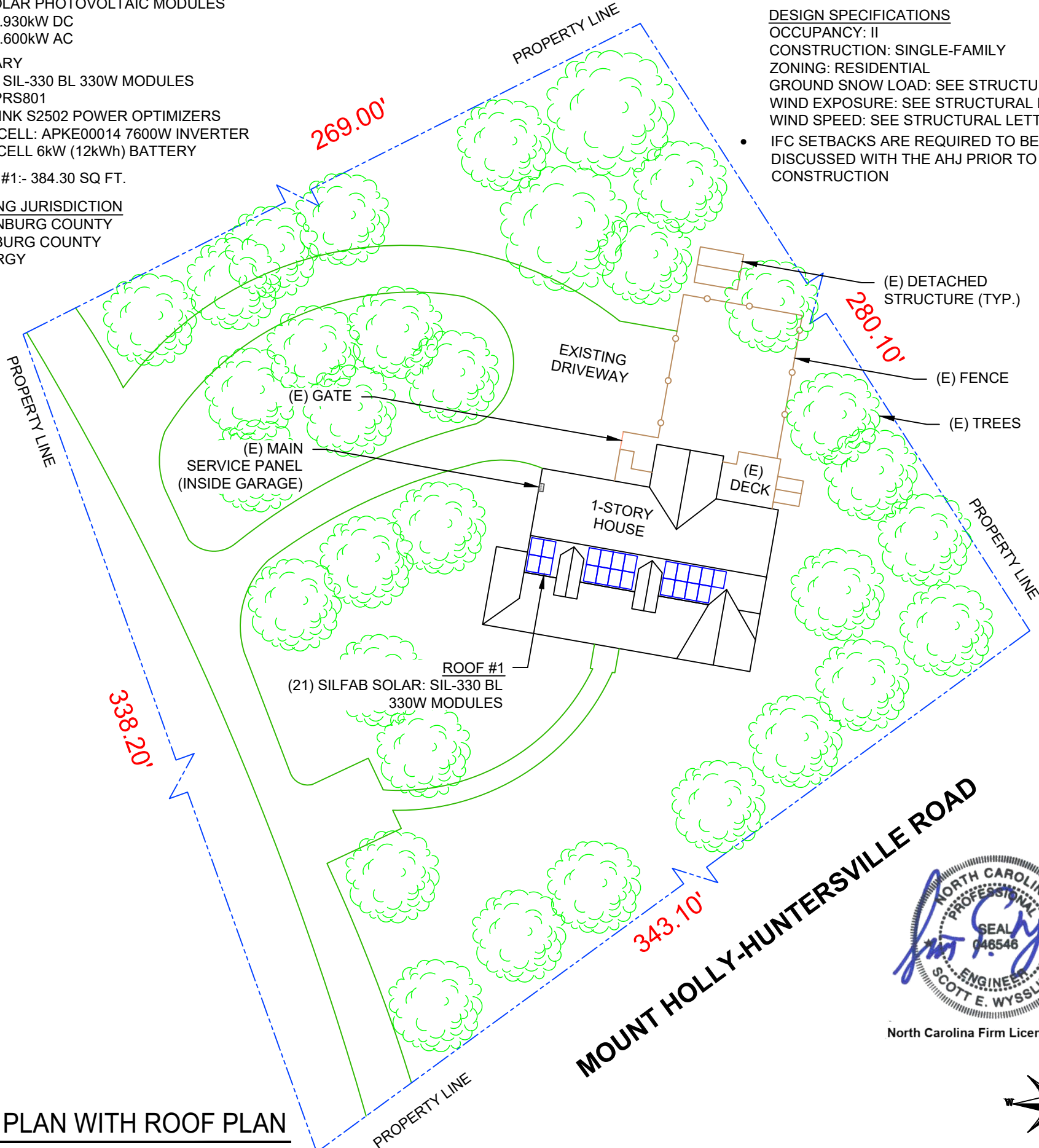
- | | |
|-------|--------------------------|
| PV-1 | PLOT PLAN & VICINITY MAP |
| PV-2 | ROOF PLAN & MODULES |
| PV-2A | STRING LAYOUT |
| PV-3 | ATTACHMENT DETAIL |
| PV-4 | ELECTRICAL LINE DIAGRAM |
| PV-5 | WIRING CALCULATIONS |
| PV-6 | LABELS |
| PV-7 | PLACARD |
| PV-8 | POWER OPTIMIZER CHART |
| PV-9+ | EQUIPMENT SPECIFICATIONS |

1

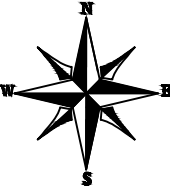
PLOT PLAN WITH ROOF PLAN

PV-1

SCALE: 1/32" = 1'-0"



North Carolina Firm License No. 46546



REVISIONS

DESCRIPTION	DATE	REV
INITIAL	08/02/2021	

SIGNATURE WITH SEAL

DATE: 08/02/2021

PROJECT NAME & ADDRESS

SHARON KENNEDY
RESIDENCE
10545 MOUNT
HOLLY-HUNTERSVILLE ROAD
HUNTERSVILLE, NC 28078

DC SIZE: 6.930 KW
AC SIZE: 7.600 KW

SHEET NAME
PLOT PLAN &
VICINITY MAP

SHEET SIZE

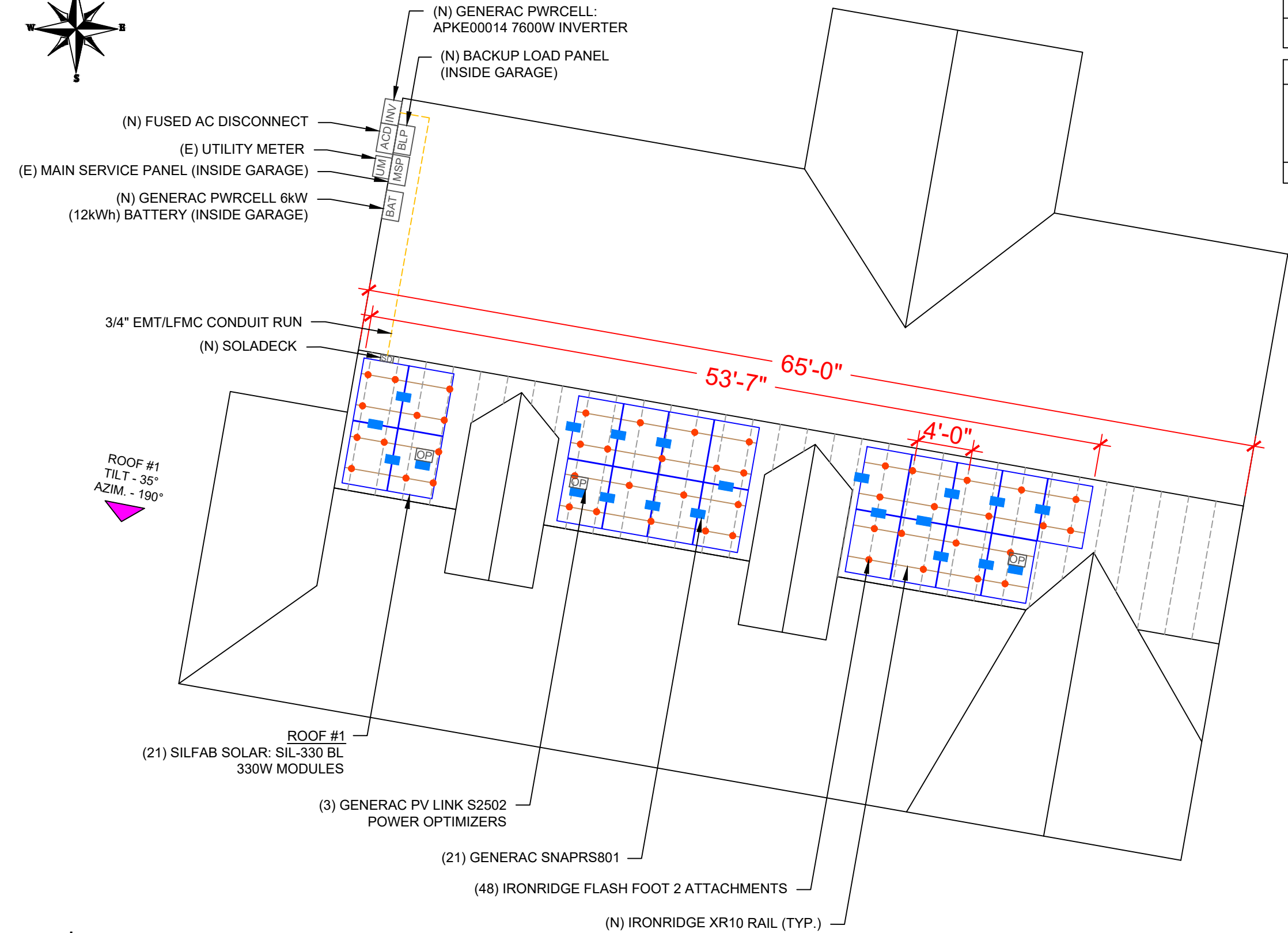
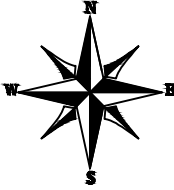
ANSI B
11" X 17"

SHEET NUMBER

PV-1

MODULE TYPE, DIMENSIONS & WEIGHT

NUMBER OF MODULES = 21 MODULES
MODULE TYPE = SILFAB SOLAR: SIL-330 BL 330W MODULES
MODULE WEIGHT = 42.99 LBS / 19.5KG.
MODULE DIMENSIONS = 66.9"x 39.4" = 18.30 SF

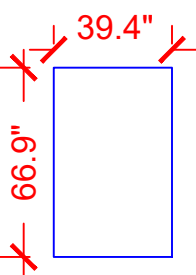


ROOF DESCRIPTION				
ROOF TYPE		COMPOSITE SHINGLE		
ROOF LAYER		1 LAYER		
ROOF	ROOF TILT	AZIMUTH	TRUSS SIZE	TRUSS SPACING
#1	35°	190°	2X4	24"

ARRAY AREA & ROOF AREA CALC'S				
ROOF	# OF MODULES	ARRAY AREA (Sq. Ft.)	ROOF AREA (Sq. Ft.)	ROOF AREA COVERED BY ARRAY (%)
#1	21	384.30	538.59	71



North Carolina Firm License No. 46546



SILFAB SOLAR:
SIL-330 BL 330W
MODULES

LEGEND

- INV - INVERTER
- ACD - AC DISCONNECT
- MSP - MAIN SERVICE PANEL
- SD - SOLADECK
- OP - PV LINK -S2502
- [Blue Square] - SNAPRS801



REVISIONS		
DESCRIPTION	DATE	REV
INITIAL	08/02/2021	

SIGNATURE WITH SEAL

DATE: 08/02/2021

PROJECT NAME & ADDRESS

SHARON KENNEDY
RESIDENCE
10545 MOUNT
HOLLY-HUNTERSVILLE ROAD
HUNTERSVILLE, NC 28078

DC SIZE: 6.930 KW
AC SIZE: 7.600 KW

SHEET NAME
ROOF PLAN &
MODULES

SHEET SIZE

ANSI B
11" X 17"

SHEET NUMBER

PV-2

1 ROOF PLAN & MODULES

PV-2 SCALE: 1/8" = 1'-0"

STRING LEGENDS	
---	STRING #1
---	STRING #2
---	STRING #3

BILL OF MATERIALS		
EQUIPMENT	QTY	DESCRIPTION
SOLAR PV MODULE	21	SILFAB SOLAR: SIL-330 BL 330W MODULES
SNAPRS	21	GENERAC SNAPRS801
OPTIMIZER	3	GENERAC PV LINK S2502 POWER OPTIMIZERS
INVERTER	1	GENERAC PWRCELL: APKE00014 7600W INVERTER
BATTERY	1	GENERAC PWRCELL 6kW (12kWh) BATTERY
AC DISCONNECT	1	60A FUSED AC DISCONNECT, 40A FUSES, 240V NEMA 3R, UL LISTED
SOLADECK	1	SOLADECK 600V,NEMA 3R, UL LISTED
ATTACHMENT	48	IRONRIDGE FLASH FOOT 2 ATTACHMENT
SQUARE-BOLT	48	SQUARE-BOLT BONDING ATTACHMENT HARDWARE
RAILS	11	IRONRIDGE XR10 RAIL-168" (14 FEET) BLACK
BONDED SPLICE	2	SPLICE KIT
MODULE CLAMPS	30	UNIVERSAL MODULE CLAMPS
END CLAMPS	24	END CLAMPS / STOPPER SLEEVE
GROUNDING LUG	6	IRONRIDGE GROUNDING LUG



REVISIONS		
DESCRIPTION	DATE	REV
INITIAL	08/02/2021	

SIGNATURE WITH SEAL

DATE: 08/02/2021

PROJECT NAME & ADDRESS

SHARON KENNEDY
RESIDENCE
10545 MOUNT
HOLLY-HUNTERSVILLE ROAD
HUNTERSVILLE, NC 28078

DC SIZE: 6.930 KW
AC SIZE: 7.600 KW

SHEET NAME
STRING
LAYOUT

SHEET SIZE

ANSI B
11" X 17"

SHEET NUMBER

PV-2A

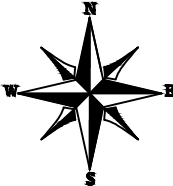
STRING #1
(PV LINK OPTIMIZER -1 :
7 MODULES)

STRING #2
(PV LINK OPTIMIZER -2 :
7 MODULES)

STRING #3
(PV LINK OPTIMIZER -3 :
7 MODULES)



North Carolina Firm License No. 46546

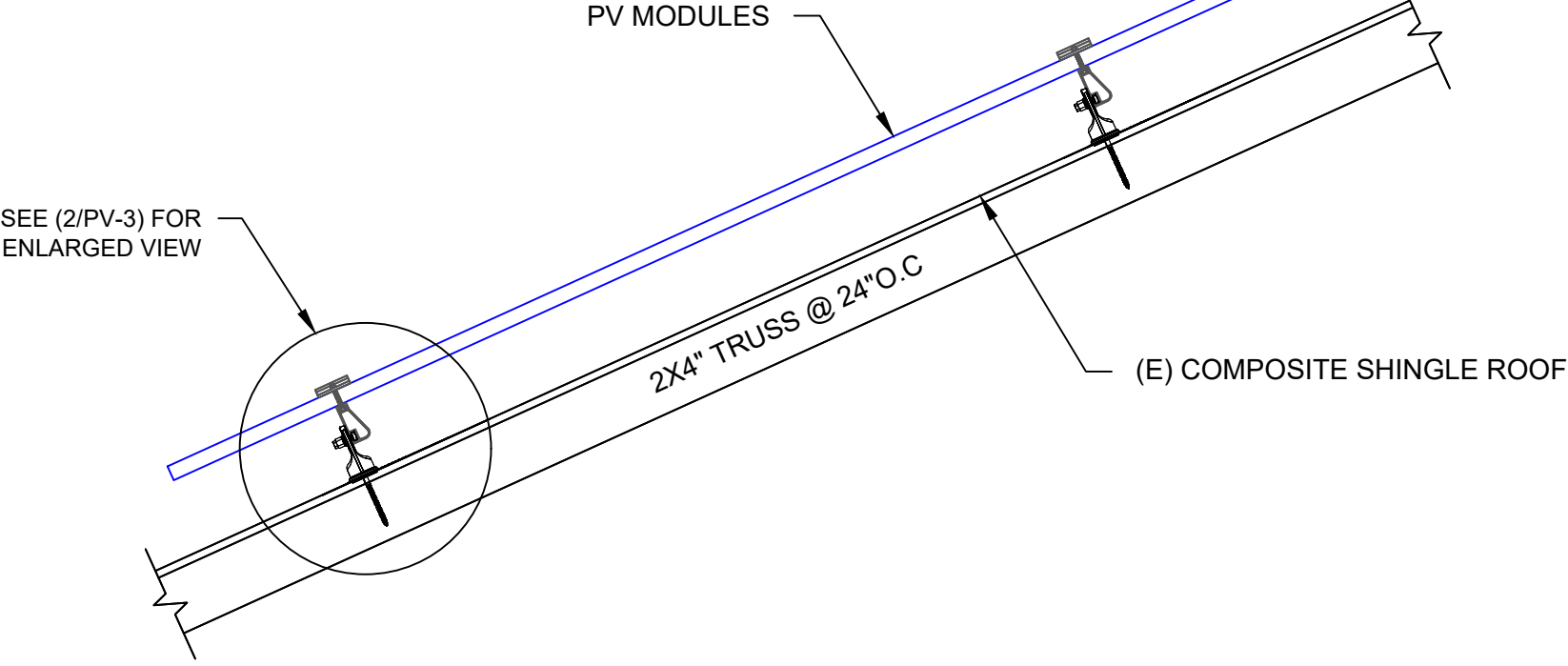


1

ATTACHMENT DETAIL

FPV-3

SCALE: 1" = 1'-0"



North Carolina Firm License No. 46546



REVISIONS

DESCRIPTION	DATE	REV
INITIAL	08/02/2021	

SIGNATURE WITH SEAL

DATE: 08/02/2021

PROJECT NAME & ADDRESS

SHARON KENNEDY
RESIDENCE
10545 MOUNT
HOLLY-HUNTERSVILLE ROAD
HUNTERSVILLE, NC 28078

DC SIZE: 6.930 KW
AC SIZE: 7.600 KW

SHEET NAME
ATTACHMENT
DETAIL

SHEET SIZE

ANSI B
11" X 17"

SHEET NUMBER

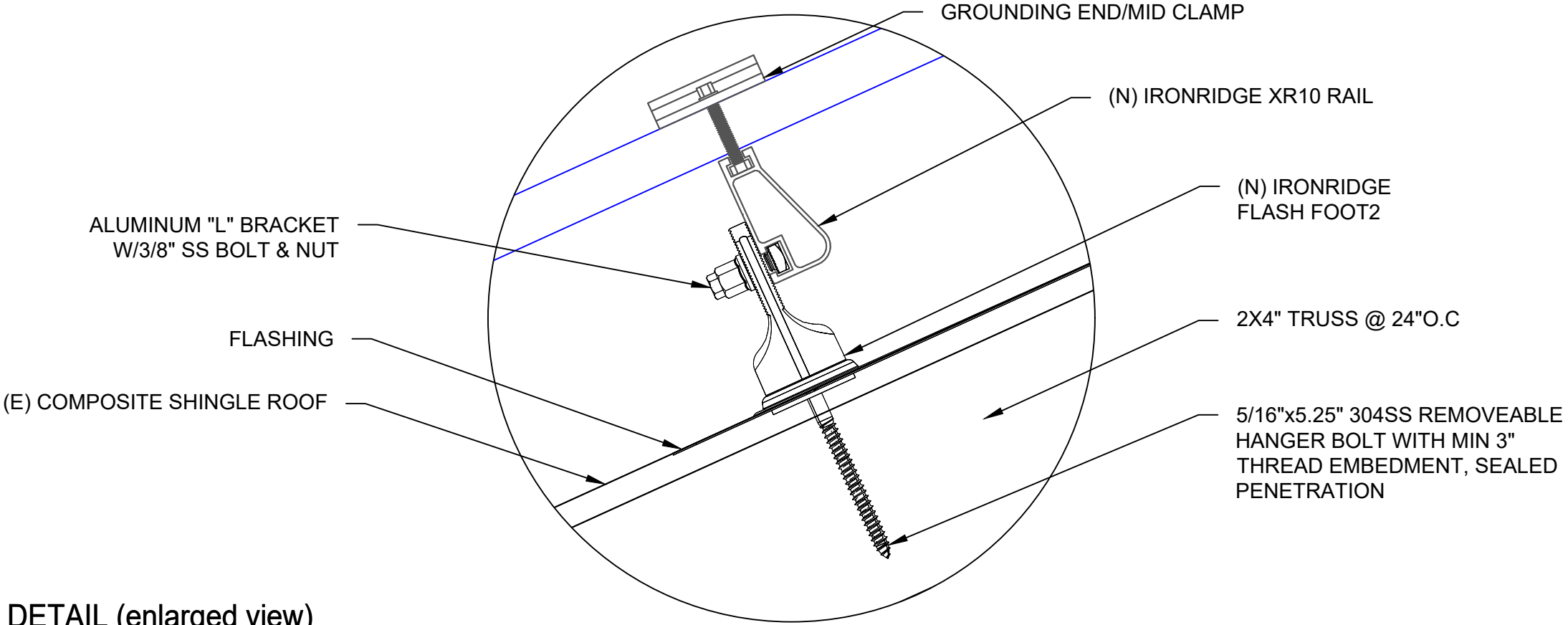
PV-3

2

ATTACHMENT DETAIL (enlarged view)

FPV-3

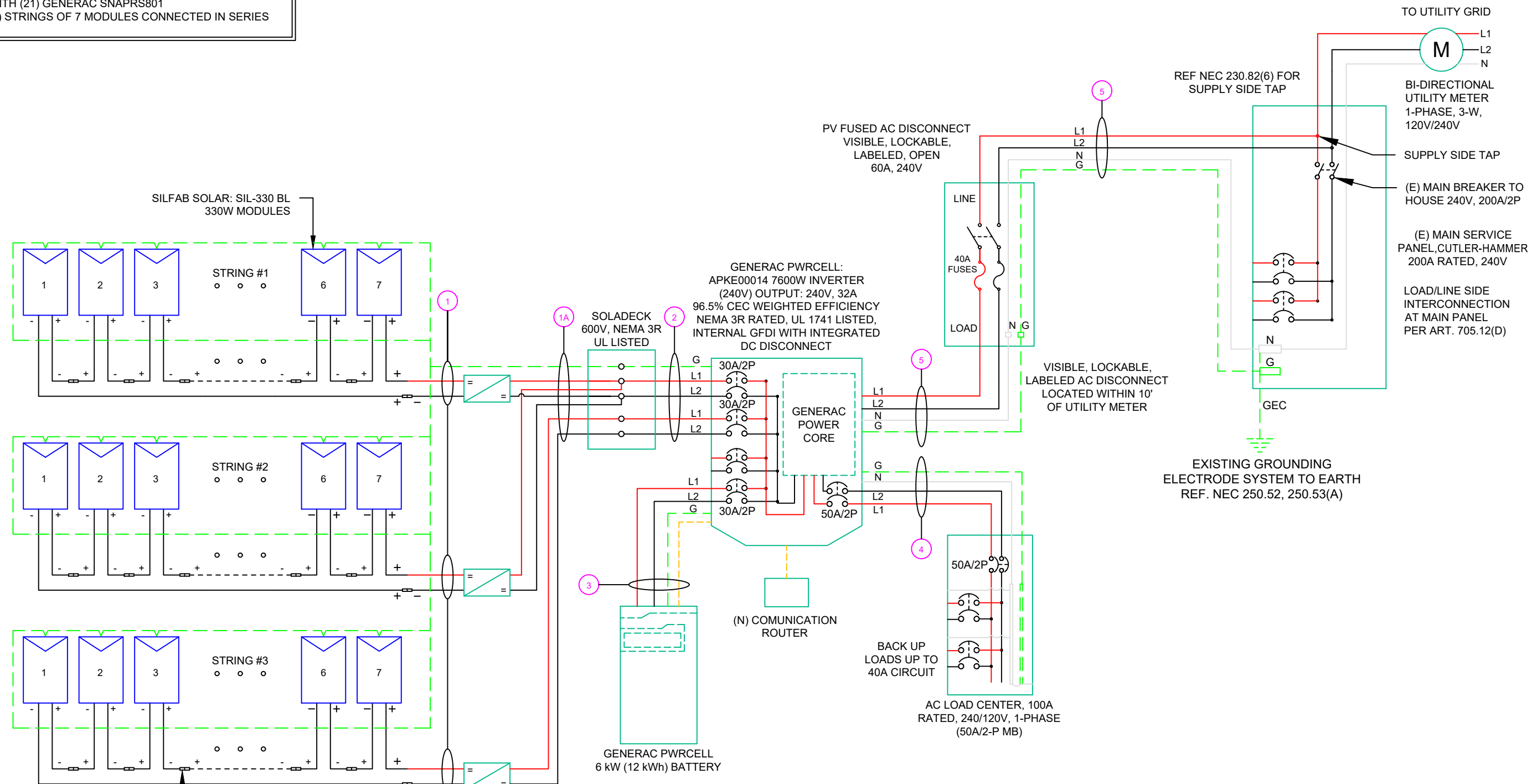
SCALE: NTS



DC SYSTEM SIZE: 6.930 kW DC
AC SYSTEM SIZE: 7.600 kW AC

(21) SILFAB SOLAR: SIL-330 BL 330W MODULES
WITH (21) GENERAC SNAPRS801
(3) STRINGS OF 7 MODULES CONNECTED IN SERIES

RACKING NOTE:-
1. BOND EVERY RAIL WITH #6 BARE COPPER



SNAP RS (RS801)
MAX INPUT CURRENT - 13 A
UL 1741 LISTED
MODULE LEVEL RAPID
SHUTDOWN (PVRSS)
COMPLIANT
NEMA 6P RATED

PV LINK SUBSTRING OPTIMIZER (S2502)
RATED POWER : 2500W
MPPT VOLTAGE RANGE: 60 TO 360 V
MAX OUTPUT VOLTAGE: 420V
MAX OUTPUT CURRENT: 8A
RAPID SHUTDOWN COMPLIANT
GROUND-FAULT PROTECTION COMPLIANT

SERVICE INFO	
UTILITY PROVIDER:	DUKE ENERGY
MAIN SERVICE VOLTAGE:	240V
MAIN PANEL BRAND:	CUTLER-HAMMER
MAIN SERVICE PANEL:	200A
MAIN STRING BREAKER RATING:	200A
MAIN SERVICE LOCATION:	NORTH-WEST
SERVICE FEED SOURCE:	UNDERGROUND

QTY	CONDUCTOR INFORMATION		CONDUIT TYPE	CONDUIT SIZE
(6)	CU#10AWG -	PV WIRE/USE-2	N/A	N/A
(1)	CU#6AWG -	BARE COPPER IN FREE AIR		
(6)	CU#10AWG -	PV WIRE/USE-2	N/A	N/A
(1)	CU#6AWG -	BARE COPPER IN FREE AIR		
(4)	CU#10AWG -	THWN-2 (L1,L2)	EMT OR LFMC IN ATTIC	3/4"
(1)	CU#10AWG -	THWN-2 GND		
(2)	CU#10AWG -	THWN-2 (L1,L2)	EMT OR LFMC	3/4"
(1)	CU#10AWG -	THWN-2 GND		
(2)	CU#8AWG -	THWN-2 (L1,L2)	EMT OR LFMC	3/4"
(1)	CU#8AWG -	THWN-2 NEUTRAL		
(1)	CU#10AWG -	THWN-2 GND	EMT OR LFMC	3/4"
(2)	CU#6AWG -	THWN-2 (L1,L2)		
(1)	CU#6AWG -	THWN-2 NEUTRAL	EMT OR LFMC	3/4"
(1)	CU#6AWG -	THWN-2 GND		



REVISIONS		
DESCRIPTION	DATE	REV
INITIAL	08/02/2021	

SIGNATURE WITH SEAL

DATE: 08/02/2021

PROJECT NAME & ADDRESS

SHARON KENNEDY
RESIDENCE
10545 MOUNT
HOLLY-HUNTERSVILLE ROAD
HUNTERSVILLE, NC 28078

DC SIZE: 6.930 KW
AC SIZE: 7.600 KW

SHEET NAME
ELECTRICAL LINE
DIAGRAM

SHEET SIZE
ANSI B
11" X 17"

SHEET NUMBER
PV-4

SOLAR MODULE SPECIFICATIONS	
MANUFACTURER / MODEL #	SILFAB SOLAR: SIL-330 BL 330W MODULES
VMP	34.20V
IMP	9.65A
VOC	42.1V
ISC	9.98A
TEMP. COEFF. VOC	-0.301%/°C
MODULE DIMENSION	66.9"L x 39.4"W x 1.50"D (In Inch)

POWER OPTIMIZER (GENERAC PV LINK S2502 POWER OPTIMIZERS)	
RATED POWER	2500W
MAXIMUM INPUT VOLTAGE	420Voc
MPPT VOLTAGE RANGE	60-360Vmp
NOMINAL OUTPUT	380Vdc
MAXIMUM OUTPUT	420Adc
MAXIMUM OUTPUT CURRENT	8A
MAXIMUM SHORT CIRCUIT CURRENT	18A

AMBIENT TEMPERATURE SPECS	
RECORD LOW TEMP	-11°
AMBIENT TEMP (HIGH TEMP 2%)	34°
MODULE TEMPERATURE COEFFICIENT OF Voc	-0.301%/°C

INVERTER SPECIFICATIONS	
MANUFACTURER / MODEL #	GENERAC PWRCELL: APKE00014 7600W INVERTER
NOMINAL AC POWER	7.600 KW
NOMINAL OUTPUT VOLTAGE	240 VAC
NOMINAL OUTPUT CURRENT	32A

PERCENT OF VALUES	NUMBER OF CURRENT CARRYING CONDUCTORS IN EMT
0.80	4-6
0.70	7-9
0.50	10-20

AC FEEDER CALCULATIONS																						
CIRCUIT ORIGIN	CIRCUIT DESTINATION	VOLTAGE (V)	FULL LOAD AMPS "FLA" (A)	FLA*1.25 (A)	OCPD SIZE (A)	NEUTRAL SIZE	GROUND SIZE	CONDUCTOR SIZE	75°C AMPACITY (A)	AMPACITY CHECK #1	AMBIENT TEMP. (°C)	TOTAL CC CONDUCTORS IN RACEWAY	90°C AMPACITY (A)	DERATION FACTOR FOR AMBIENT TEMPERATURE NEC 310.15(B)(2)(a)	DERATION FACTOR FOR CONDUCTORS PER RACEWAY NEC 310.15(B)(3)(a)	90°C AMPACITY DERATED (A)	AMPACITY CHECK #2	FEEDER LENGTH (FEET)	CONDUCTOR RESISTANCE (OHM/KFT)	VOLTAGE DROP AT FLA (%)	CONDUIT SIZE	CONDUIT FILL (%)
INVERTER 1	AC DISCONNECT	240	32	40	40	CU #6 AWG	CU #6 AWG	CU #6 AWG	65	PASS	34	2	75	0.96	1	72	PASS	5	0.491	0.065	3/4" EMT	38.0488
AC DISCONNECT	POI	240	32	40	40	CU #6 AWG	CU #6 AWG	CU #6 AWG	65	PASS	34	2	75	0.96	1	72	PASS	5	0.491	0.065	3/4" EMT	38.0488

CUMULATIVE VOLTAGE DROP	0.13
-------------------------	------

DC FEEDER CALCULATIONS																					
CIRCUIT ORIGIN	CIRCUIT DESTINATION	VOLTAGE (V)	FULL LOAD AMPS "FLA" (A)	FLA*1.56 (A)	OCPD SIZE (A)	GROUND SIZE	CONDUCTOR SIZE	75°C AMPACITY (A)	AMPACITY CHECK #1	AMBIENT TEMP. (°C)	TOTAL CC CONDUCTORS IN RACEWAY	90°C AMPACITY (A)	DERATION FACTOR FOR AMBIENT TEMPERATURE NEC 310.15(B)(2)(a)	DERATION FACTOR FOR CONDUCTORS PER RACEWAY NEC 310.15(B)(3)(a)	90°C AMPACITY DERATED (A)	AMPACITY CHECK #2	FEEDER LENGTH (FEET)	CONDUCTOR RESISTANCE (OHM/KFT)	VOLTAGE DROP AT FLA (%)	CONDUIT SIZE	CONDUIT FILL (%)
STRING 1	SOLADECK	380	8.00	12.48	20	BARE COPPER #6 AWG	CU #10 AWG	35	PASS	34	2	40	0.96	1	38.4	PASS	5	1.24	0.026	N/A	#N/A
STRING 2	SOLADECK	380	8.00	12.48	20	BARE COPPER #6 AWG	CU #10 AWG	35	PASS	34	2	40	0.96	1	38.4	PASS	5	1.24	0.026	N/A	#N/A
STRING 3	SOLADECK	380	8.00	12.48	20	BARE COPPER #6 AWG	CU #10 AWG	35	PASS	34	2	40	0.96	1	38.4	PASS	5	1.24	0.026	N/A	#N/A
SOLADECK	INVERTER	380	16.00	24.96	30	CU #10 AWG	CU #10 AWG	35	PASS	34	4	40	0.96	0.8	30.72	PASS	25	1.24	0.261	3/4" EMT	19.79362

String 1 Voltage Drop	0.287
String 2 Voltage Drop	0.287
String 3 Voltage Drop	0.287

ELECTRICAL NOTES

- ALL EQUIPMENT TO BE LISTED BY UL OR OTHER NRTL, AND LABELED FOR ITS APPLICATION.
- ALL CONDUCTORS SHALL BE COPPER, RATED FOR 600 V AND 90 DEGREE C WET ENVIRONMENT.
- WIRING, CONDUIT, AND RACEWAYS MOUNTED ON ROOFTOPS SHALL BE ROUTED DIRECTLY TO, AND LOCATED AS CLOSE AS POSSIBLE TO THE NEAREST RIDGE, HIP, OR VALLEY.
- WORKING CLEARANCES AROUND ALL NEW AND EXISTING ELECTRICAL EQUIPMENT SHALL COMPLY WITH NEC 110.26.
- DRAWINGS INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS. CONTRACTOR SHALL FURNISH ALL NECESSARY OUTLETS, SUPPORTS, FITTINGS AND ACCESSORIES TO FULFILL APPLICABLE CODES AND STANDARDS.
- WHERE SIZES OF SOLADECK, RACEWAYS, AND CONDUITS ARE NOT SPECIFIED, THE CONTRACTOR SHALL SIZE THEM ACCORDINGLY.
- ALL WIRE TERMINATIONS SHALL BE APPROPRIATELY LABELED AND READILY VISIBLE.
- 8.) MODULE GROUNDING CLIPS TO BE INSTALLED BETWEEN MODULE FRAME AND MODULE SUPPORT RAIL, PER THE GROUNDING CLIP MANUFACTURER'S INSTRUCTION.
- MODULE SUPPORT RAIL TO BE BONDED TO CONTINUOUS COPPER G.E.C. VIA WEEB LUG OR ILSCO GBL-4DBT LAY-IN LUG.
- TEMPERATURE RATINGS OF ALL CONDUCTORS, TERMINATIONS, BREAKERS, OR OTHER DEVICES ASSOCIATED WITH THE SOLAR PV SYSTEM SHALL BE RATED FOR AT LEAST 75 DEGREE C.



REVISIONS		
DESCRIPTION	DATE	REV
INITIAL	08/02/2021	

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DATE: 08/02/2021

PROJECT NAME & ADDRESS
SHARON KENNEDY RESIDENCE 10545 MOUNT HOLLY-HUNTERSVILLE ROAD HUNTERSVILLE, NC 28078

DC SIZE: 6.930 KW
AC SIZE: 7.600 KW

SHEET NAME
WIRING CALCULATIONS
SHEET SIZE
ANSI B 11" X 17"
SHEET NUMBER
PV-5

CAUTION:
AUTHORIZED SOLAR
PERSONNEL ONLY!

LABEL-1:
LABEL LOCATION:
AC DISCONNECT

WARNING: PHOTOVOLTAIC
POWER SOURCE

EVERY 10' ON CONDUIT & ENCLOSURES

LABEL- 2:
LABEL LOCATION:
EMT/CONDUIT RACEWAY
SOLADECK / JUNCTION BOX
CODE REF: NEC 690.31 (D)(2)

WARNING
ELECTRICAL SHOCK HAZARD
TERMINALS ON THE LINE AND LOAD SIDES MAY
BE ENERGIZED IN THE OPEN POSITION

LABEL- 3:
LABEL LOCATION:
AC DISCONNECT
INVERTER
MAIN SERVICE PANEL
SUBPANEL
MAIN SERVICE DISCONNECT
CODE REF: NEC 690.13(B)

WARNING DUAL POWER SOURCE
SECOND SOURCE IS PHOTOVOLTAIC SYSTEM

LABEL- 4:
LABEL LOCATION:
PRODUCTION METER
UTILITY METER
MAIN SERVICE PANEL
SUBPANEL
CODE REF: NEC 705.12(C) & NEC 690.59

WARNING
TURN OFF PHOTOVOLTAIC AC
DISCONNECT PRIOR TO
WORKING INSIDE PANEL

LABEL- 5:
LABEL LOCATION:
MAIN SERVICE PANEL
SUBPANEL
MAIN SERVICE DISCONNECT
CODE REF: NEC 110.27(C) & OSHA 1910.145 (f) (7)

CAUTION
PHOTOVOLTAIC SYSTEM CIRCUIT IS
BACKFEED

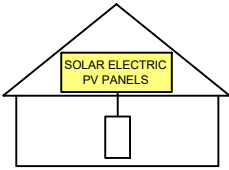
LABEL- 6:
LABEL LOCATION:
MAIN SERVICE PANEL (ONLY IF SOLAR IS BACK-FED)
SUBPANEL (ONLY IF SOLAR IS BACK-FED)
CODE REF: NEC 705.12(D) & NEC 690.59

WARNING
POWER SOURCE OUTPUT
CONNECTION. DO NOT
RELOCATE THIS
OVERCURRENT DEVICE

LABEL- 7:
LABEL LOCATION:
MAIN SERVICE PANEL (ONLY IF SOLAR IS BACK-FED)
SUBPANEL (ONLY IF SOLAR IS BACK-FED)
CODE REF: NEC 705.12(B)(3)(2)

SOLAR PV SYSTEM EQUIPPED
WITH RAPID SHUTDOWN

TURN RAPID SHUTDOWN
SWITCH TO THE
"OFF" POSITION TO
SHUT DOWN PV SYSTEM
AND REDUCE
SHOCK HAZARD
IN THE ARRAY



LABEL- 8:
LABEL LOCATION:
AC DISCONNECT
CODE REF: IFC 605.11.3.1(1) & NEC 690.56(C)

RAPID SHUTDOWN SWITCH
FOR SOLAR PV SYSTEM

LABEL- 9:
LABEL LOCATION:
AC DISCONNECT
CODE REF: NEC 690.56(C)(2)

PHOTOVOLTAIC
AC DISCONNECT

LABEL- 10:
LABEL LOCATION:
AC DISCONNECT
CODE REF: NEC 690.13(B)

PHOTOVOLTAIC
DC DISONNECT

LABEL- 11:
LABEL LOCATION:
INVERTER
CODE REF: NEC 690.13(B)

PHOTOVOLTAIC
AC DISCONNECT

NOMINAL OPERATING AC VOLATGE 240 V

RATED AC OUTPUT CURRENT 32.00 A

LABEL- 12:
LABEL LOCATION:
MAIN SERVICE PANEL
SUBPANEL
AC DISCONNECT
CODE REF: NEC 690.54

INVERTER
AC DISCONNECT

NOMINAL OPERATING AC VOLATGE 240 V

RATED AC OUTPUT CURRENT 32.00 A

LABEL- 13:
LABEL LOCATION:
INVERTER
CODE REF: NEC 690.54

MAXIMUM VOLTAGE 380 V

MAXIMUM CIRCUIT CURRENT 20 A

MAXIMUM RATED OUTPUT
CURRENT OF THE CHARGE
CONTROLLER OR DC-TO-DC
CONVERTER (IF INSTALLED)

LABEL- 14:
LABEL LOCATION:
INVERTER
CODE REF: NEC 690.53

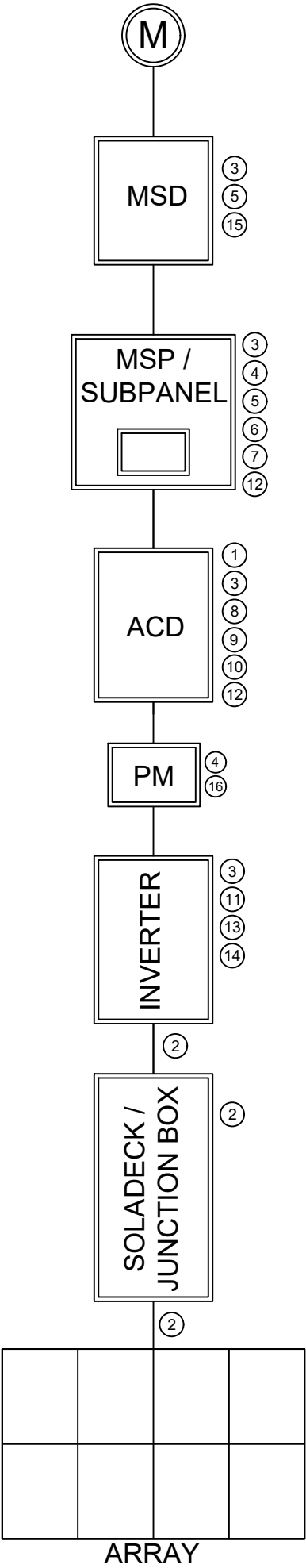
MAIN PHOTOVOLTAIC
SYSTEM DISCONNECT

LABEL- 15:
LABEL LOCATION:
MAIN SERVICE DISCONNECT (ONLY IF MAIN SERVICE DISCONNECT IS PRESENT)
CODE REF: NEC 690.13(B)

PRODUCTION METER

LABEL- 16:
LABEL LOCATION:
PRODUCTION METER (ONLY IF PRODUCTION METER IS USED)

NOTE:
** ELECTRICAL DIAGRAM SHOWN IS FOR
LABELING PURPOSES ONLY. NOT AN ACTUAL
REPRESENTATION OF EQUIPMENT AND
CONNECTIONS TO BE INSTALLED. LABEL
LOCATIONS PRESENTED MAY VERY
DEPENDING ON TYPE OF INTERCONNECTION
METHOD AND LOCATION PRESENTED
ELECTRICAL DIAGRAM PAGE. **





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RESIDENCE
10545 MOUNT
HOLLY-HUNTERSVILLE ROAD
HUNTERSVILLE, NC 28078

DC SIZE: 6.930 KW
AC SIZE: 7.600 KW

SHEET NAME

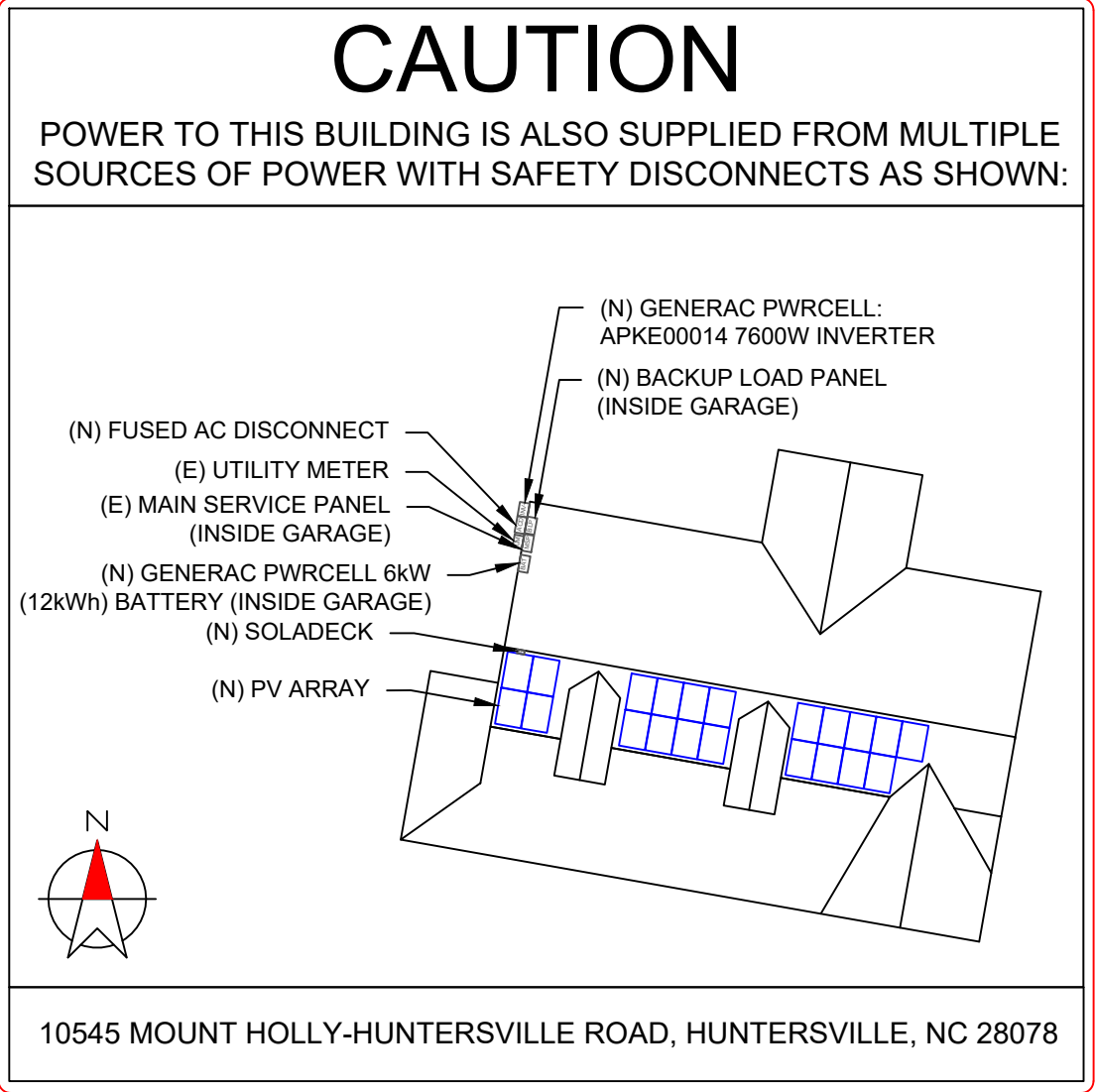
LABELS

SHEET SIZE

ANSI B
11" X 17"

SHEET NUMBER

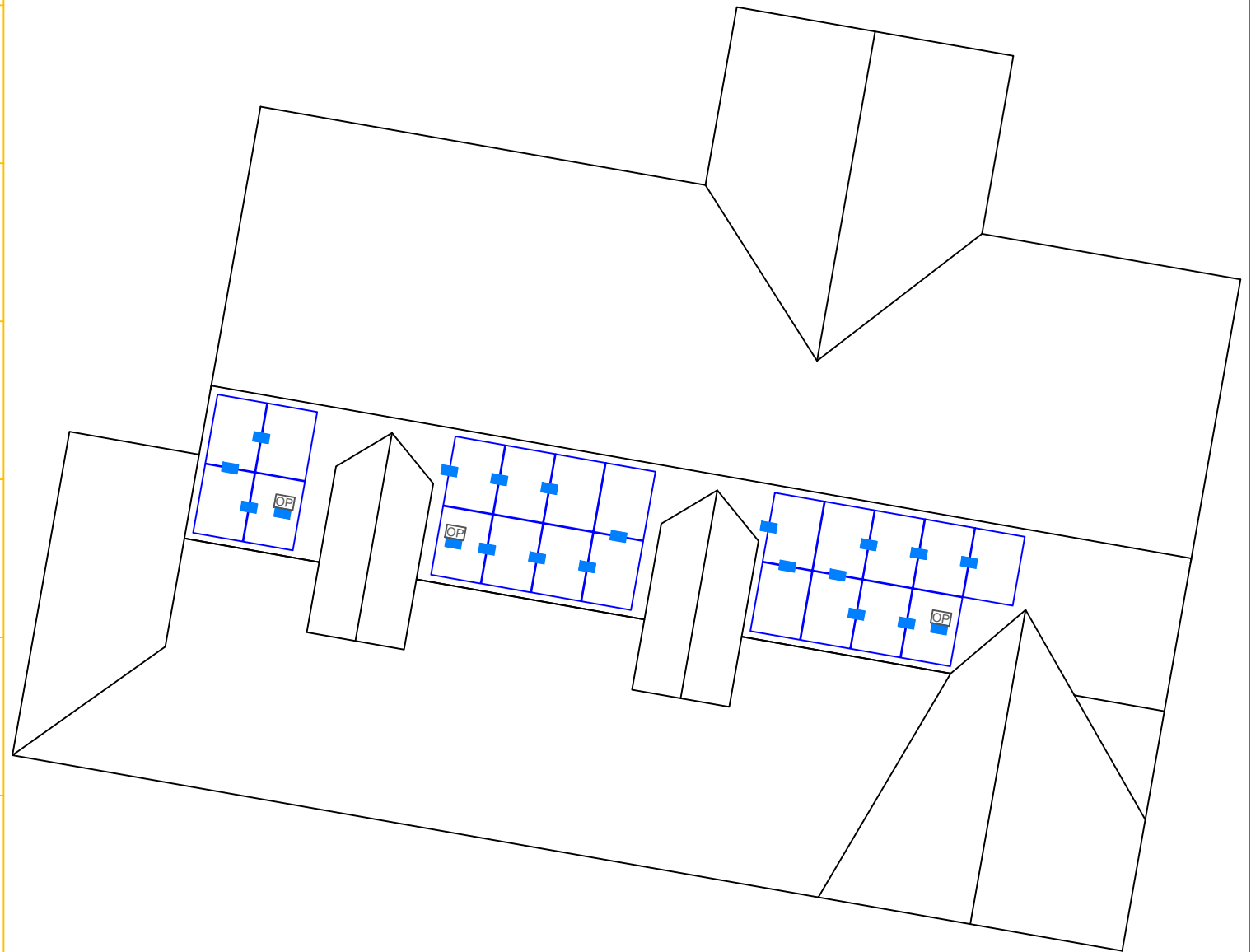
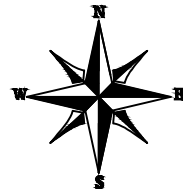
PV-6



1-10 11-20 21-30 31-40 41-50 51-60

1
2
3
4
5
6
7
8
9
10

POWER OPTIMIZER CHART



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RESIDENCE
10545 MOUNT
HOLLY-HUNTERSVILLE ROAD
HUNTERSVILLE, NC 28078

DC SIZE: 6.930 KW
AC SIZE: 7.600 KW

SHEET NAME
POWER
OPTIMIZER CHART

SHEET SIZE

ANSI B
11" X 17"

SHEET NUMBER

PV-8



BC Series SIL-330 BL



126 Cell Monocrystalline PV Module



CHUBB
* Chubb provides error and omission insurance to Silfab Solar, Inc.

INDUSTRY LEADING WARRANTY

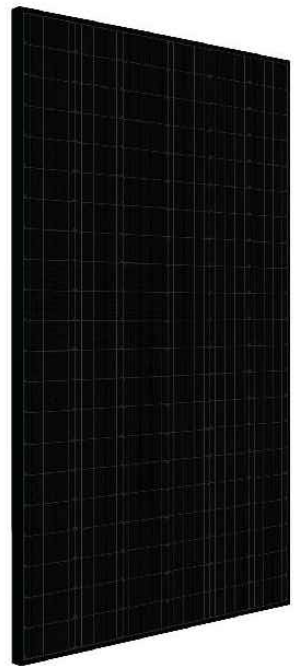
All our products include an industry leading 25-year product workmanship and 30-year performance warranty.

MAXIMUM ENERGY OUTPUT

Silfab BC Series utilizes next generation Back Contact technology to reduce production/manufacturing steps and improve quality while maximizing power. Ideal for residential and commercial projects where maximum power density is preferred.

NORTH AMERICAN QUALITY

Silfab is the largest and most automated solar manufacturer in North America. Utilizing premium quality materials and strict quality control management to deliver the highest efficiency, premium quality PV modules 100% made in North America.



PROVIDES MAXIMUM EFFICIENCY

126 high-efficiency half-cut cells combined with a black conductive back-sheet resulting in a maximum power rating of 330Wp.

35+ YEARS OF SOLAR INNOVATION

Leveraging over 35+ years of worldwide experience in the solar industry, Silfab is dedicated to superior manufacturing processes and innovations such as Bifacial and Back Contact technologies to ensure our partners have the latest in solar innovation.

BAA / ARRA COMPLIANT

Silfab panels are designed and manufactured to meet Buy American Act Compliance. The US State Department, US Military and FAA have all entrusted Silfab panels in their solar installations.

LIGHT AND DURABLE

Engineered to accommodate low load bearing structures up to 5400Pa. The light-weight frame is exclusively designed for wide-ranging racking compatibility and durability.

LOWEST DEFECT RATE

Total automation ensures strict quality controls during the entire manufacturing process at our ISO certified facilities. 48.18 ppm as per December 2018.

DOMESTIC PRODUCTION

Silfab is 100% North American which means our customer service is direct, efficient and local. Your solar panels can be delivered anywhere in the Continental USA within days.

SUPERIOR POWER

Superior Power achieved through relocation of tabbing ribbon to reduce shading on module front surface.

AESTHETICALLY PLEASING

Sleek aesthetics from black cells to black back-sheet without tabbing or bus-bar ribbons, ideal for residential applications.

STABLE PERFORMANCE

Enhanced life-time performance through reduced thermal stresses and increased current flow paths.

PID RESISTANT

PID Resistant due to advanced cell technology and material selection. In accordance to IEC 62804-1

Electrical Specifications		SILFAB SIL-330 BL mono PERC MWT Technology	
Test Conditions		STC	NOCT
Module Power (Pmax)	Wp	330	249.7
Maximum power voltage (Vpmax)	V	34.20	30.74
Maximum power current (Ipmax)	A	9.65	8.11
Open circuit voltage (Voc)	V	42.1	38.9
Short circuit current (Isc)	A	9.98	8.19
Module efficiency	%	19.4	18.4
Maximum system voltage (VDC)	V	1000	
Series fuse rating	A	20	
Power Tolerance	Wp	0/+10	

Measurement conditions: STC 1000 W/m² • AM 1.5 • Temperature 25 °C • NOCT 800 W/m² • AM 1.5 • Measurement uncertainty ≤ 3%
• Sun simulator calibration reference modules from Fraunhofer Institute. Electrical characteristics may vary by ±5% and power by 0/+10W.

Temperature Ratings		SILFAB SIL-330 BL mono PERC MWT Technology	
Temperature Coefficient Isc	%/°C	+0.031	
Temperature Coefficient Voc	%/°C	-0.301	
Temperature Coefficient Pmax	%/°C	-0.419	
NOCT (± 2°C)	°C	40.6	
Operating temperature	°C	-40/+85	

Mechanical Properties and Components		SILFAB SIL-330 BL mono PERC MWT Technology	
Module weight (± 1 kg)	kg	19.5	
Dimensions (H x L x D; ± 1mm)	mm	1700 x 1000 x 38	
Maximum surface load (wind/snow)*	Pa	4000 Pa rear load / 5400 Pa front load	
Hail impact resistance		Ø 25 mm at 83 km/h	
Cells		126 high-efficiency half-cut mono-PERC MWT c-Si cells	
Glass		3.2 mm high transmittance, tempered, DSM antireflective coating	
Backsheet		Multilayer, integrated insulation film and electrically conductive backsheet	
Frame		Anodized Al (Black)	
Bypass diodes		3 diodes-20SQ040 (45V, 20A)	
Cables and connectors		1000 mm Ø 5.7 mm (4 mm ²), Multicontact MC4 connectors (refer to installation manual)	
Junction Box		UL 3730 Certified, IP67 rated	

Warranties		SILFAB SIL-330 BL mono PERC MWT Technology	
Module product workmanship warranty		25 years**	
		30 years	
		≥ 97% end of 1 st year	
		≥ 90% end of 12 th year	
		≥ 82% end of 25 th year	
		≥ 80% end of 30 th year	

Linear power performance guarantee

Certifications		SILFAB SIL-330 BL mono PERC MWT Technology	
Product		ULC ORD C1703, UL 1703, FSEC and CEC listed. Product durability proven up to 3 x IEC, climate chamber tests up to DH3000-TC600-HF30 UL Fire Rating: Type 1	
Factory		ISO9001:2015	

*Please refer to the Safety and Installation Manual for mounting specifications.
**12 year extendable to 25 years subject to registration and conditions outlined under "Warranty" at www.silfabsolar.com.

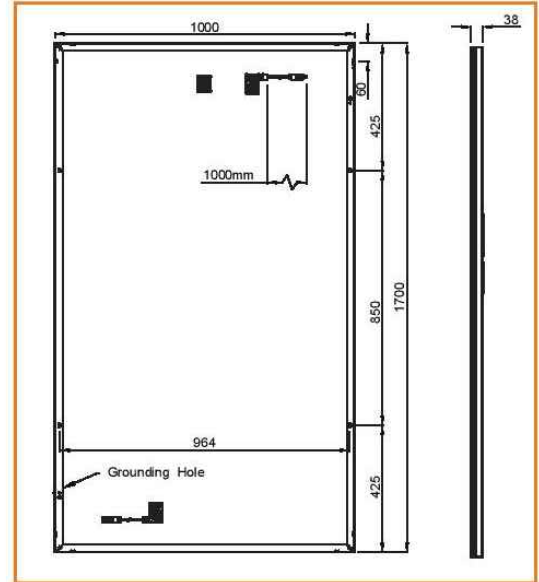
▲ Warning: Read the installation and User Manual before handling, installing and operating modules.

- Modules Per Pallet: 26
- Pallets Per Truck: 36
- Modules Per Truck: 936



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240 Courtneypark Drive East
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DATE: 08/02/2021

PROJECT NAME & ADDRESS

SHARON KENNEDY
RESIDENCE
10545 MOUNT
HOLLY-HUNTERSVILLE ROAD
HUNTERSVILLE, NC 28078

DC SIZE: 6.930 KW
AC SIZE: 7.600 KW

SHEET NAME
EQUIPMENT
SPECIFICATION

SHEET SIZE
ANSI B
11" X 17"

SHEET NUMBER
PV-9

GENERAC

SnapRS™

Inline Disconnect Switch
Model: APKE00011



Generac SnapRS are a simple way to satisfy rapid shutdown compliance for solar + storage systems. Generac SnapRS are NEC 2017/2020 690.12 compliant, don't require any extra hardware to mount, and need no pairing or fussy digital communications

FEATURES & BENEFITS

- Fast, easy, and simple to install
- One SnapRS device per PV module
- Achieves PVRSS Compliance
- Low cost, high efficiency solution

SYSTEM DESIGN

Snap a Generac SnapRS disconnect device (RS) to the negative lead (-) of each module in the solar array for simple module-level rapid shutdown compliance. SnapRS devices isolate array voltage when a rapid shutdown command is given by a connected PWRcell™ Inverter. When signaled by the inverter, SnapRS units isolate each PV module in the array, reducing array voltage to <80V in seconds.

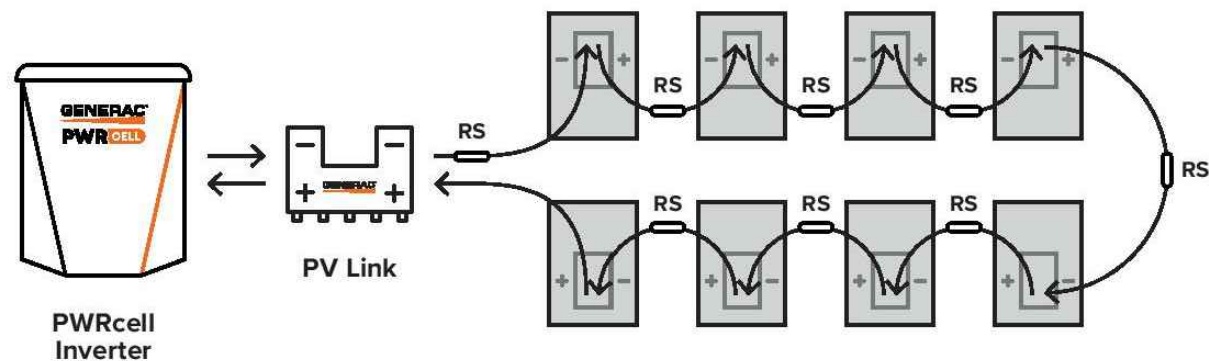


Diagram is applicable for most 60 cell PV modules. Modules with higher cell count may require a different arrangement. Contact Generac for more details.

Specifications

SnapRS™ (APKE00011)	
PV MODULE MAX VOC:	75 V
EFFICIENCY:	99.8%*
MAX INPUT CURRENT:	13 A
SHUTDOWN TIME:	<10 Seconds
ENCLOSURE RATING:	NEMA 6P
OPERATING TEMPERATURE - FAHRENHEIT (CELSIUS):	-40 to 158 °F (-40 to 70 °C)
CERTIFICATIONS:	UL1741
WEIGHT - LB (KG):	0.17 (0.08)
DIMENSIONS, L x W x H - IN (MM):	7" x 1" x 1" (177.8 x 25.4 x 25.4)
WARRANTY:	25 Years

*When used with a 50V panel

Connect one SnapRS device to the negative lead of each PV module in the PV Link controlled array for complete PV Rapid shutdown performance



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PROJECT NAME & ADDRESS

SHARON KENNEDY
RESIDENCE
10545 MOUNT
HOLLY-HUNTERSVILLE ROAD
HUNTERSVILLE, NC 28078

DC SIZE: 6.930 KW
AC SIZE: 7.600 KW

SHEET NAME
EQUIPMENT
SPECIFICATION

SHEET SIZE

ANSI B
11" X 17"

SHEET NUMBER

PV-10

GENERAC

PV Link™

2500W MPPT Substring Optimizer
Model: APKE00010

PV Link is the simple solar optimizer for quick installation and long-lasting performance. Connect PV modules to each PV Link to overcome shading and challenging roof lines.

FEATURES & BENEFITS

- Fast, simple installation
- Lower failure risk than module-level optimizers
- NEC 2017 rapid shutdown compliant with SnapRS™
- Quick connections with MC4 connectors
- Exports up to 2500W
- Compatible with PWRcell™ Inverters
- Cost-effective solution for high-performance PV
- Ground-fault protection

SINGLE-STRING PV ARRAY WITH SnapRS DEVICES

Where PV module-level rapid shutdown is required (NEC 690.12), a SnapRS device (RS) is installed to negative (-) lead of each PV module.

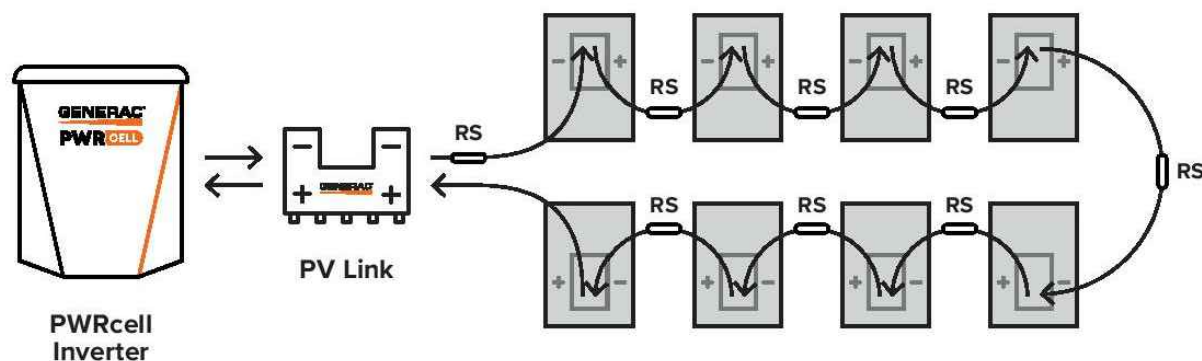


Diagram is applicable for most 60 cell PV modules. Modules with higher cell count may require a different arrangement. Contact Generac for more details.



Specifications

PV Link™ (APKE00010)	
RATED POWER*:	2500W
PEAK EFFICIENCY:	99%
MPPT VOLTAGE RANGE:	60-360 VMP
MAX INPUT VOLTAGE:	420 VOC; max when cold
MAX OUTPUT:	420 VOC
NOMINAL OUTPUT (Rebus™):	380 VDC
MAX OUTPUT CURRENT (CONTINUOUS):	8 A
MAX OUTPUT CURRENT (FAULT):	10 A
MAX INPUT CURRENT (CONTINUOUS):	13 A @ 50°C, 10 A @ 70°C
MAX INPUT SHORT CIRCUIT CURRENT (ISC):	18 A
STANDBY POWER:	<1 W
PROTECTIONS:	Ground-fault, Arc-fault (Arc-fault Type 1 AFCI, Integrated), PVRSE
MAX OPERATING TEMP: FAHRENHEIT (CELSIUS)	158 °F (70 °C)
SYSTEM MONITORING:	PWRview™ Web Portal and Mobile App
ENCLOSURE:	Type 3R
WEIGHT - LB (KG):	7.3 lb (3.3 kg)
DIMENSIONS, L x W x H - IN (MM):	15.4" x 2" x 9.6" (391.2 x 50.8 x 243.8)
COMPLIANCE:	UL 1741, CSA 22.2
WARRANTY:	25 Years

*PV Link can tolerate higher than rated power at its input if Max Input Voltage and Short Circuit Current specifications are not exceeded



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RESIDENCE
10545 MOUNT
HOLLY-HUNTERSVILLE ROAD
HUNTERSVILLE, NC 28078

DC SIZE: 6.930 KW
AC SIZE: 7.600 KW

SHEET NAME
EQUIPMENT
SPECIFICATION

SHEET SIZE

ANSI B
11" X 17"

SHEET NUMBER

PV-11

GENERAC[®]

PWRCELL

7.6kW 1Ø, 11.4kW 3Ø PWRcell Inverter with CTs
Model: APKE00014, APKE00013



Solar + storage is simple with the Generac PWRcell™ Inverter. This bi-directional, REbus™-powered inverter offers a simple, efficient design for integrating smart batteries with solar. Ideal for self-supply, backup power, zero-export and energy cost management, the PWRcell Inverter is the industry's most feature-rich line of inverters, available in single-phase and three-phase models.

FEATURES & BENEFITS

- Single inverter for grid-tied solar with smart battery integration
- Simplified system design: No autotransformer or battery inverter needed
- User-selectable modes for backup power, self-supply, time-of-use and zero-export
- Free system monitoring included via PWRview™ Web Portal and Mobile App

AC OUTPUT/GRID-TIE	MODEL APKE00014	MODEL APKE00013
RATED AC POWER OUTPUT:	7600W	11400W
AC OUTPUT VOLTAGE:	120/240, 1Ø VAC	120/208, 3Ø VAC
AC FREQUENCY:	60 Hz	60 Hz
MAXIMUM CONTINUOUS OUTPUT CURRENT:	32 A, RMS	32 A, RMS
GROUND-FAULT ISOLATION DETECTION:	Included	Included
CHARGE BATTERY FROM AC:	Yes	Yes
THD (CURRENT):	< 2%	< 2%
TYPICAL NIGHTTIME POWER CONSUMPTION:	< 7W	< 7W

AC OUTPUT/BACKUP	MODEL APKE00014	MODEL APKE00013
RATED AC BACKUP POWER OUTPUT (ISLANDED):	8000W	8000W
MAXIMUM AC BACKUP POWER OUTPUT:	10000W	10000W
AC BACKUP OUTPUT VOLTAGE:	120/240, 1Ø VAC	120/240, 1Ø VAC
AC FREQUENCY:	60 Hz	60 Hz
AC CIRCUIT BREAKER:	50 A	50 A
THD (VOLTAGE):	< 2%	< 2%
AUTOMATIC SWITCHOVER TIME:	< 1Seconds	< 1Seconds
TYPICAL NIGHTTIME POWER CONSUMPTION:	30W	30W

¹Inverter limits DC current import to AC power rating. Total DC current from multiple DC inputs may safely exceed this value up to Max. Input Current. The inverter safely limits the amount utilized.
²Per input, four DC inputs total

DC INPUT	MODEL APKE00014	MODEL APKE00013
DC INPUT VOLTAGE RANGE:	360-420 VDC	360-420 VDC
NOMINAL DC BUS VOLTAGE:	380 VDC	380 VDC
MAX IMPORT CURRENT ³ :	20 A	30 A
MAX INPUT CURRENT ³ :	30 A	30 A
REVERSE-POLARITY PROTECTION:	Yes	Yes
GROUND-FAULT ISOLATION DETECTION:	Yes	Yes
TRANSFORMERLESS, UNGROUNDED:	Yes	Yes
TYPICAL NIGHTTIME POWER CONSUMPTION:	< 7W	< 7W

DC INPUT/ BATTERY	MODEL APKE00014	MODEL APKE00013
MAXIMUM CONTINUOUS POWER:	8000W	8000W
INTERNAL DC DISTRIBUTION BREAKERS:	4x 2p30A	4x 2p30A
DC FUSES ON PLUS AND MINUS:	40 A	40 A
2-POLE DISCONNECTION:	Yes	Yes

EFFICIENCY	MODEL APKE00014	MODEL APKE00013
PEAK EFFICIENCY:	97%	98%
CEC WEIGHTED EFFICIENCY:	96.50%	97.50%

Specifications

FEATURES AND MODES	
ISLANDING ³ :	Yes
GRID SELL:	Yes
SELF CONSUMPTION:	Yes
PRIORITIZED CHARGING FROM RENEWABLES:	Yes
GRID SUPPORT - ZERO EXPORT:	Yes

ADDITIONAL FEATURES	
SUPPORTED COMMUNICATION INTERFACES:	REbus™, CANbus, RS485 ⁴ , Ethernet
SYSTEM MONITORING:	PWRview™ Web Portal and Mobile App
BACKUP LOADS DISCONNECT ⁵ :	Yes
MANUAL INVERTER BYPASS SWITCH:	Automatic
WARRANTY:	10 Years

STANDARDS COMPLIANCE	
SAFETY:	UL1741 SA, CSA 22.2
GRID CONNECTION STANDARDS:	IEEE1547, Rule 21, Rule 14H, CSIP
EMISSIONS:	FCC Part 15 Class B

DIMENSIONS AND INSTALLATION SPECIFICATIONS	
ENCLOSURE KNOCKOUTS - QTY, SIZE - IN (MM):	6 x Combo 3/4" x 1" (19 x 25.4) 7 x Combo 1/2" x 3/4" (12.7 x 19)
DIMENSIONS L x W x H - IN (MM):	24.5" x 19.25" x 8" (622.3 x 488.9 x 203.2)
WEIGHT - LB (KG):	62.7 (28.4)
COOLING:	Forced convection
NOISE:	< 40 dBA
OPERATING TEMPERATURE - FAHRENHEIT (CELSIUS):	-4 to 122 °F (-20 to 50 °C) ⁵
PROTECTION RATING:	NEMA 3R

INSTALLATION GUIDELINES	
BATTERY TYPES SUPPORTED:	PWRcell™ Battery
MODULE STRING SIZE PER PV LINK OPTIMIZER:	Varies, refer to PV Link Installation Manual
MAXIMUM RECOMMENDED DC POWER FROM PV:	10kW (1Ø), 15kW (3Ø)
PWRcell BATTERIES PER INVERTER:	Up to 2

³3Ø inverters offer islanding for 1Ø loads
⁴Modbus
⁵Reduced power at extreme temperatures

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PROJECT NAME & ADDRESS
SHARON KENNEDY RESIDENCE 10545 MOUNT HOLLY-HUNTERSVILLE ROAD HUNTERSVILLE, NC 28078

DC SIZE: 6.930 KW
AC SIZE: 7.600 KW

SHEET NAME EQUIPMENT SPECIFICATION
SHEET SIZE ANSI B 11" X 17"
SHEET NUMBER PV-12

GENERAC

PWRCELL

OUTDOOR RATED BATTERY

PWRcell Outdoor Rated Battery Cabinet (Ordering SKU: APKE00028)

3.0kWh PWRcell DCB Battery Module

Model #: BJ-DCB05ZKBG (Ordering SKU: G0080040)

3.0kWh PWRcell EX Battery Module

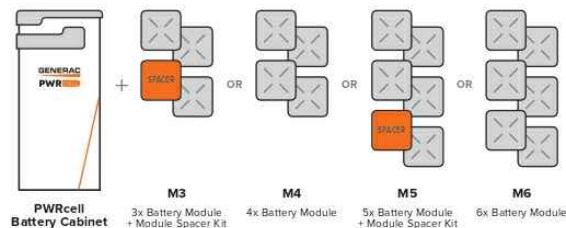
Model #: G0080001

The PWRcell™ Outdoor Rated (OR) Battery Cabinet is a Type 3R smart battery enclosure that allows for a range of configurations to suit any need, small or large, indoor or outdoor. No other smart battery offers the power and flexibility of PWRcell.

PWRcell BATTERY CABINET DESIGN

The PWRcell Battery Cabinet allows system owners the flexibility to scale from an economical 9kWh to a massive 18kWh by installing additional battery modules to the PWRcell Battery Cabinet. An existing PWRcell Battery Cabinet can be upgraded with additional modules. Use the graphic below and the chart on the back of this sheet to understand what components you need for your chosen PWRcell configuration.

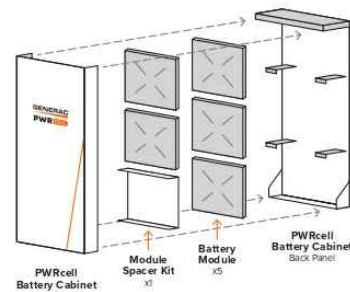
BATTERY CONFIGURATION GUIDE



FEATURES & BENEFITS

- Connect 2 PWRcell Battery Cabinets to a single PWRcell Inverter for up to 36kWh of storage
- Best-in-class battery backup power
- Plug-and-play with PWRcell Inverter and PV Link™
- Time-of-use (TOU) and zero-export ready
- Residential and commercial application ready.
- 3R-rated cabinet allows for outdoor or indoor installation
- Additional mounting hardware for outdoor installations comes standard to provide additional ground clearance and support

BATTERY CABINET ASSEMBLY



Specifications

PWRcell™ BATTERY CONFIGURATIONS

3.0 kWh DCB / 3.0 kWh EX				
BATTERY MODULE SERIES:	3	4	5	6
BATTERY MODULES:	3	4	5	6
USABLE ENERGY:	9 kWh	12 kWh	15 kWh	18 kWh
NOMINAL CONT. AC POWER ¹ :	3.4 kW	4.5 kW	5.6 kW	6.7 kW
MAX. CONT. AC POWER ² :	4.5 kW	6 kW	7.5 kW	9 kW
NOMINAL CONT. DC (CHARGE/DISCHARGE) - A:	11.6	15.5	19.4	23.3
PEAK MOTOR STARTING CURRENT (2 SEC) - A, RMS:	25	33	42	50
REbus™ VOLTAGE - INPUT/OUTPUT:	360-420 VDC			
NOMINAL VOLTAGE:	380 VDC			
DC-DC ROUND-TRIP EFFICIENCY:	96.5%			
MAXIMUM AMBIENT OPERATING TEMPERATURE:	14 TO 122 °F (-10 TO 50 °C)			
OPTIMAL AMBIENT OPERATING TEMPERATURE:	41 to 104 °F (5 to 40 °C)			
MAXIMUM INSTALLATION ALTITUDE - FT (M):	9834 (3000)			
DIMENSIONS, L x W x H - IN (MM):	22" x 10" x 68" (559 x 254 x 1727)			
WEIGHT, ENCLOSURE - LB (KG):	115 (52)			
WEIGHT, INSTALLED W/ DCB MODULES - LB (KG):	280 (127)	335 (152)	390 (177)	445 (202)
WEIGHT, INSTALLED W/ EX MODULES - LB (KG):	287 (130)	344 (156)	401 (182)	459 (208)
WEIGHT, ACCESSORY MOUNTING HARDWARE - LB (KG):	21 (10)			
ENCLOSURE TYPE:	Type 3R			
WARRANTY - LI-ION MODULES:	10 Years, (7.56MWh)			
WARRANTY - ELECTRONICS AND ENCLOSURE:	10 Years			
COMMUNICATION PROTOCOL:	REbus™ DC Nanogrid™			
SEISMIC RATING:	IEEE 693-2018 (HIGH)			
COMPLIANCE:	UL 9540, UL 1973, UL 1642, CSA 22.2 #107.1			

¹Average AC power over a complete discharge cycle. ²Peak Performance, values provided for 40°C (104°F).

Note: Charge/discharge rate may be reduced at temperature extremes

PWRcell ACCESSORIES

Inside of the PWRcell Battery Cabinet, battery modules are stacked two deep on three levels, allowing for up to six modules to be connected in series. You can upgrade an existing PWRcell Battery Cabinet by adding Battery Modules and a Module Spacer (APKE00008). A Module Spacer is only required for battery configurations with an odd number of modules (i.e. 3 or 5).

Generac offers a convenient PWRcell Battery Upgrade Kit (APKE00009) to help replace lost or misplaced hardware.

Note: When adding modules, be sure all modules within an individual cabinet are of the same series type (i.e., EX or DCB).

PWRcell MODEL BUILDER

PRODUCT SERIES	ENCLOSURE TYPE	# OF MODULES	BATTERY SERIES
PWRcell	OR	M3	DCB
	IR (Indoor Rated) OR (Outdoor Rated)	3 Modules 4 Modules 5 Modules 6 Modules	DCB EX

Sample Model Name: PWRcell OR M3 DCB

Generac Power Systems, Inc.
S45 W29290 Hwy. 59, Waukesha, WI 53189
www.Generac.com | 888-GENERAC (436-3722)

A0000949454 REV F

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Specifications are subject to change without notice.

GENERAC®



REVISIONS

DESCRIPTION	DATE	REV
INITIAL	08/02/2021	

SIGNATURE WITH SEAL

DATE: 08/02/2021

PROJECT NAME & ADDRESS

SHARON KENNEDY
RESIDENCE
10545 MOUNT
HOLLY-HUNTERSVILLE ROAD
HUNTERSVILLE, NC 28078

DC SIZE: 6.930 KW
AC SIZE: 7.600 KW

SHEET NAME
EQUIPMENT
SPECIFICATION

SHEET SIZE

ANSI B
11" X 17"

SHEET NUMBER

PV-13



Datasheet

Flush Mount System



Built for solar's toughest roofs.

IronRidge builds the strongest mounting system for pitched roofs in solar. Our components have been tested to the limit and proven in extreme environments, including Florida's high-velocity hurricane zones.

Our rigorous approach has led to unique structural features, such as curved rails and reinforced flashings, and is also why our products are fully certified, code compliant and backed by a 25-year warranty.



Strength Tested

All components evaluated for superior structural performance.



PE Certified

Pre-stamped engineering letters available in most states.



Class A Fire Rating

Certified to maintain the fire resistance rating of the existing roof.



Design Assistant

Online software makes it simple to create, share, and price projects.



UL 2703 Listed System

Entire system and components meet newest effective UL 2703 standard.



25-Year Warranty

Products guaranteed to be free of impairing defects.

XR Rails ☺

XR10 Rail



A low-profile mounting rail for regions with light snow.

- 6' spanning capability
- Moderate load capability
- Clear and black finish

XR100 Rail



The ultimate residential solar mounting rail.

- 8' spanning capability
- Heavy load capability
- Clear and black finish

XR1000 Rail



A heavyweight mounting rail for commercial projects.

- 12' spanning capability
- Extreme load capability
- Clear anodized finish

Bonded Splices



All rails use internal splices for seamless connections.

- Self-drilling screws
- Varying versions for rails
- Forms secure bonding

Clamps & Grounding ☺

UFOs



Universal Fastening Objects bond modules to rails.

- Fully assembled & lubed
- Single, universal size
- Clear and black finish

Stopper Sleeves



Snap onto the UFO to turn into a bonded end clamp.

- Bonds modules to rails
- Sized to match modules
- Clear and black finish

CAMO



Bond modules to rails while staying completely hidden.

- Universal end-cam clamp
- Tool-less installation
- Fully assembled

Bonding Hardware



Bond and attach XR Rails to roof attachments.

- T & Square Bolt options
- Nut uses 7/16" socket
- Assembled and lubricated

Attachments ☺

FlashFoot2



Flash and mount XR Rails with superior waterproofing.

- Twist-on Cap eases install
- Wind-driven rain tested
- Mill and black finish

Conduit Mount



Flash and mount conduit, strut, or junction boxes.

- Twist-on Cap eases install
- Wind-driven rain tested
- Secures 3/4" or 1" conduit

Knockout Tile



Replace tiles and ensure superior waterproofing.

- Flat, S, & W tile profiles
- Form-fit compression seal
- Single-lag universal base

All Tile Hook



Mount on tile roofs with a simple, adjustable hook.

- Works on flat, S, & W tiles
- Single-socket installation
- Optional deck flashing

Resources



Design Assistant

Go from rough layout to fully engineered system. For free.

[Go to IronRidge.com/design](https://www.ironridge.com/design)



Endorsed by FL Building Commission

Flush Mount is the first mounting system to receive Florida Product approval for 2017 Florida Building Code compliance.

[Learn More at bit.ly/floridacert](https://bit.ly/floridacert)



REVISIONS

DESCRIPTION	DATE	REV
INITIAL	08/02/2021	

SIGNATURE WITH SEAL

DATE: 08/02/2021

PROJECT NAME & ADDRESS

SHARON KENNEDY
RESIDENCE
10545 MOUNT
HOLLY-HUNTERSVILLE ROAD
HUNTERSVILLE, NC 28078

DC SIZE: 6.930 KW

AC SIZE: 7.600 KW

SHEET NAME

EQUIPMENT
SPECIFICATION

SHEET SIZE

ANSI B
11" X 17"

SHEET NUMBER

PV-14



UFO Family of Components

Tech Brief

Simplified Grounding for Every Application

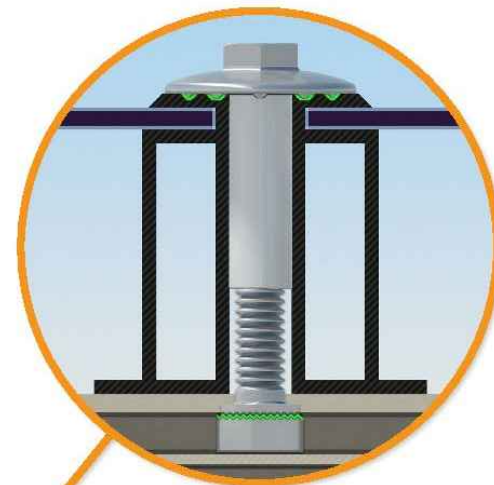
The UFO family of components eliminates the need for separate grounding hardware by bonding solar modules directly to IronRidge XR Rails. All system types that feature the UFO family—Flush Mount, Tilt Mount and Ground Mount—are fully listed to the UL 2703 standard.

UFO hardware forms secure electrical bonds with both the module and the rail, resulting in many parallel grounding paths throughout the system. This leads to safer and more reliable installations.



Stopper Sleeve

The Stopper Sleeve snaps onto the UFO, converting it into a bonded end clamp.



Universal Fastening Object (UFO)

The UFO securely bonds solar modules to XR Rails. It comes assembled and lubricated, and can fit a wide range of module heights.



Bonded Splice

Each Bonded Splice uses self-drilling screws to form a secure connection. No bonding strap needed.



Grounding Lug

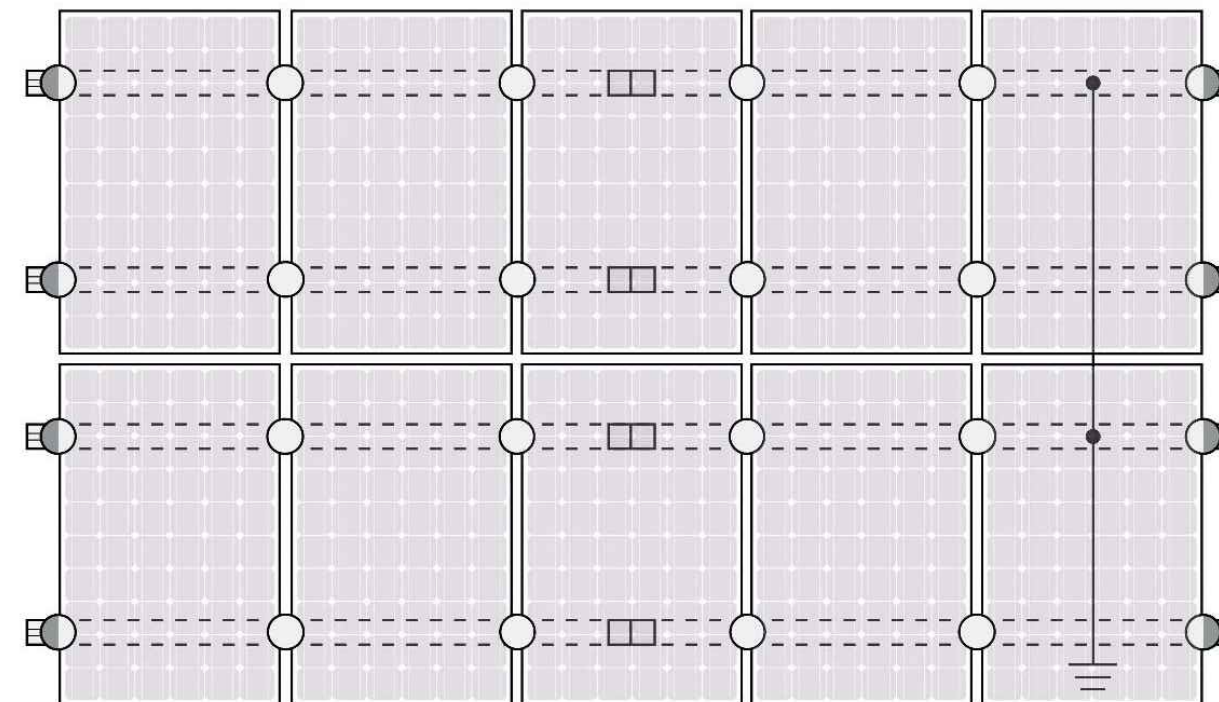
A single Grounding Lug connects an entire row of PV modules to the grounding conductor.



Bonded Attachments

The bonding bolt attaches and bonds the L-foot to the rail. It is installed with the same socket as the rest of the system.

System Diagram



○ UFO ◐ Stopper Sleeve ● Grounding Lug □ Bonded Splice — Ground Wire

⚠ Approved Enphase microinverters can provide equipment grounding of IronRidge systems, eliminating the need for grounding lugs and field installed equipment ground conductors (EGC). A minimum of two microinverters mounted to the same rail and connected to the same Engage cable is required. Refer to installation manuals for additional details.

UL Certification

The IronRidge Flush Mount, Tilt Mount, and Ground Mount Systems have been listed to UL 2703 by Intertek Group plc.

UL 2703 is the standard for evaluating solar mounting systems. It ensures these devices will maintain strong electrical and mechanical connections over an extended period of time in extreme outdoor environments.

Go to [IronRidge.com/UFO](https://www.ironridge.com/UFO)

Cross-System Compatibility

Feature	Flush Mount	Tilt Mount	Ground Mount
XR Rails	✓	✓	XR1000 Only
UFO/Stopper	✓	✓	✓
Bonded Splice	✓	✓	N/A
Grounding Lugs	1 per Row	1 per Row	1 per Array
Microinverters & Power Optimizers	Enphase - M250-72, M250-60, M215-60, C250-72 Darfon - MIG240, MIG300, G320, G640 SolarEdge - P300, P320, P400, P405, P600, P700, P730		
Fire Rating	Class A	Class A	N/A
Modules	Tested or Evaluated with over 400 Framed Modules Refer to installation manuals for a detailed list.		

Tech Brief



REVISIONS

DESCRIPTION	DATE	REV
INITIAL	08/02/2021	

SIGNATURE WITH SEAL

DATE: 08/02/2021

PROJECT NAME & ADDRESS

SHARON KENNEDY
RESIDENCE
10545 MOUNT
HOLLY-HUNTERSVILLE ROAD
HUNTERSVILLE, NC 28078

DC SIZE: 6.930 KW
AC SIZE: 7.600 KW

SHEET NAME
EQUIPMENT
SPECIFICATION

SHEET SIZE

ANSI B
11" X 17"

SHEET NUMBER

PV-15

SolaDeck

FLASHED PV ROOF-MOUNT COMBINER/ENCLOSURE

Basic Features

- Stamped Seamless Construction
- 18 Gauge Galvanized Steel
- Powder Coated Surfaces
- Flashes into the roof deck
- 3 Roof deck knockouts .5", .75", 1"
- 5 Centering dimples for entry/exit fittings or conduit
- 2 Position Ground lug installed
- Mounting Hardware Included



SolaDeck Model SD 0783



SolaDeck UL50 Type 3R Enclosures

Available Models:

- Model SD 0783 - (3" fixed Din Rail)
- Model SD 0786 - (6" slotted Din Rail)



SolaDeck UL 1741 Combiner/Enclosures

Models SD 0783-41 and SD 0786-41 are labeled and ETL listed UL STD 1741 according to the UL STD 1741 for photovoltaic combiner enclosures.

Max Rated - 600VDC, 120AMPS

Model SD 0783-41 3" Fixed Din Rail fastened using Norlock System

**Typical System Configuration

- 4- Din Rail Mounted Fuse Holders 600VDC 30 AMP
- 1- Power Distribution Block 600VDC 175AMP
- 1- Bus Bar with UL lug

Model SD 0786-41 6" Slotted Din Rail fastened using steel studs

**Typical System Configuration

- 4- Din Rail Mounted Fuse Holders 600VDC 30 AMP
- 4- Din Rail Mounted Terminal Blocks
- Bus Bars with UL lug

**Fuse holders and terminal blocks added in the field must be UL listed or recognized and meet 600 VDC 30 AMP 110C for fuse holders, 600V 50 AMP 90C for rail mounted terminal blocks and 600 V 175 AMP 90C for Power Distribution Blocks. Use Copper Wire Conductors.



Cover is trimmed to allow conduit or fittings, base is center dimpled for fitting locations.



Model SD 0783-41, wired with Din Rail mounted fuse holders, bus bar and power distribution block.



Model SD 0786-41, wired with Din Rail mounted fuse holders, terminal blocks and bus bars.

RSTC Enterprises, Inc • 2219 Heimstead Road • Eau Claire, WI 54703
For product information call 1(866) 367-7782



REVISIONS

DESCRIPTION	DATE	REV
INITIAL	08/02/2021	

SIGNATURE WITH SEAL

DATE: 08/02/2021

PROJECT NAME & ADDRESS

SHARON KENNEDY
RESIDENCE
10545 MOUNT
HOLLY-HUNTERSVILLE ROAD
HUNTERSVILLE, NC 28078

DC SIZE: 6.930 KW

AC SIZE: 7.600 KW

SHEET NAME

EQUIPMENT
SPECIFICATION

SHEET SIZE

ANSI B
11" X 17"

SHEET NUMBER

PV-16

North

Huntersville

Huntersville

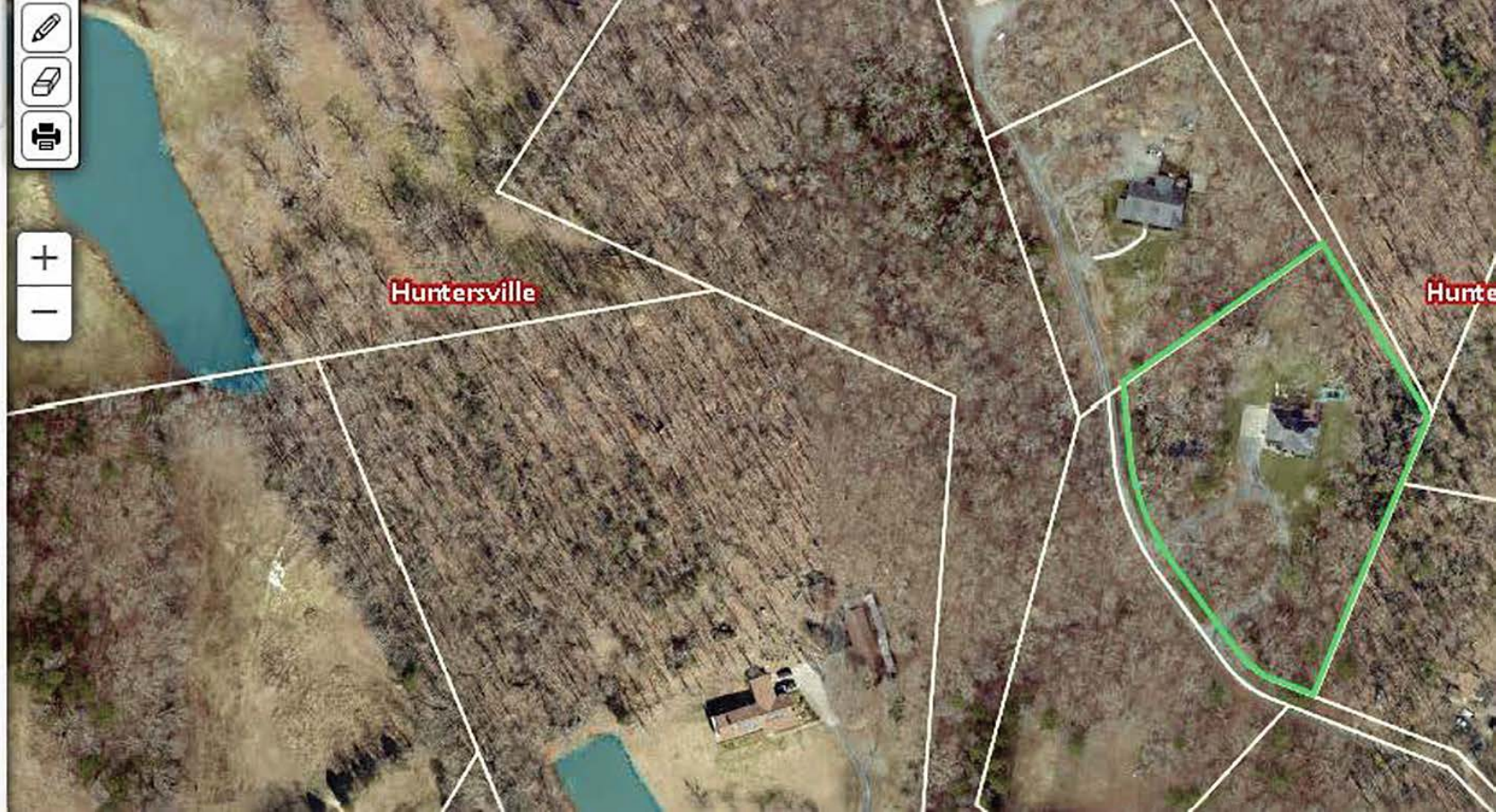
10500-11171
Mt Holly-Huntersville



Parcel ID	GIS ID
01703221	01703221
Address located on Property (Postal City)	
10541 MT HOLLY-HUNTERSVILLE RD HUNTERSVILLE NC 28078	
Owner Name	Mailing Address
WILLIAM SCOTT WOOD	10541 MT HOLLY-HUNTERSVILLE RD HUNTERSVILLE NC 28078
Is ownership or parcel boundary wrong? Request Change	
Is the mailing address wrong? Request Change	
Link To	
Google Street View	
Birdseye View maintained by Mecklenburg County	
Unselect Property	



Parcel ID	GIS ID
01703223	01703223
Address located on Property (Postal City)	
10551 MT HOLLY-HUNTERSVILLE RD HUNTERSVILLE NC 28078	
Owner Name	Mailing Address
BEAU KELLY	10551 MT HOLLY HUNTERSVILLE RD HUNTERSVILLE NC 28078
Is ownership or parcel boundary wrong? Request Change	
Is the mailing address wrong? Request Change	
Link To	
Google Street View	
Birdseye View maintained by Mecklenburg County	
Unselect Property	



REQUEST:

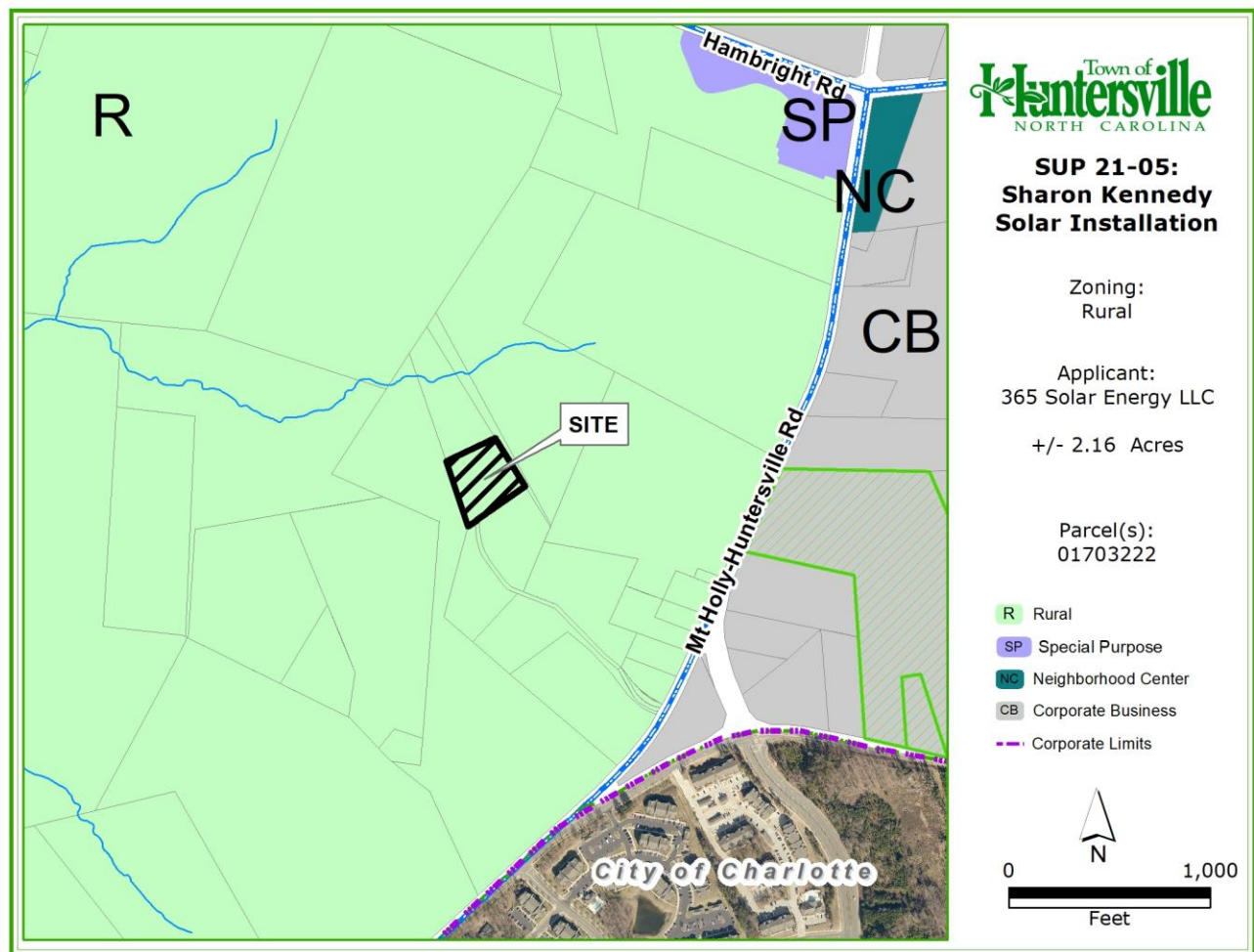
Special Use Permit by 365 Solar Energy LLC for Solar Panels at 10545 Mt.
Holly-Huntersville Rd – SUP21-05

PART 1: DESCRIPTION

Petition #SUP21-05 Solar Installation is a request by Chris Wilson on behalf of Sharon Kennedy to place Solar Panels on the front roof slope at 10545 Mt. Holly-Huntersville Rd (Tax parcel #s 01703222).

In accordance with Article 9.54.1 of the Town's Zoning Ordinance, minor residential solar energy facilities facing a public street or common access space are allowed in the Rural District (R) with the issuance of a special use permit.

PART 2: LOCATION



PART 3: STAFF FINDINGS

Article 3. 2.1 A

Uses Permitted with Special Use Permit: Solar Energy facility, minor residential, as follows: located on the façade elevation facing public street or common access; or located on the roof slope above the façade of the structure facing public street or common access.

STAFF FINDINGS

The applicant is requesting the installation of solar panels be placed on the front sloping roof, thus requiring a special use permit.

Article 9.54

Any major or minor solar energy facility shall require approval from all applicable state and federal agencies as well as the affected energy provider.

STAFF FINDINGS: Staff will follow up with the applicant to ensure all applicable permits are obtained, but at this time we have not obtained a statement from the applicant acknowledging this requirement.

Article 9.54.1

Residential Property (refer to illustration): Minor solar facilities shall be allowed in accordance with the provisions below. However, these conditions will be waived if they prevent reasonable use of solar collectors as provided in GS 160D-914.

Minor Solar Facility on Residential Property		
Street/ common access or yard	Street or Common Access	(1) Front yard placement is prohibited.
	Front Yard Prohibited (1)	(2) Front façade placement (if facing street or common access) requires a Special Use Permit (SUP).
	Front Façade SUP (2)	(3) Front roof slope placement requires a Special Use Permit (SUP)
	Side Yard (4) Roof (3) SUP (5) Side Yard (4)	(4) Side & rear yard placement permitted as by-right accessory use in all districts subject to the issuance of a zoning permit.
	Rear Yard (4)	(5) Side & rear roof slope placement permitted as a by-right accessory use in all districts subject to the issuance of a zoning permit.

STAFF FINDINGS: The applicant is requesting a special use permit for the installation of solar panels on the front roof slope, thus requiring a special use permit. See attached application for project site plan (attachment A).

Article 9.54.1 (e)

Minor rooftop solar energy facilities shall not be considered as rooftop equipment on any building type and therefore, do not require screening and are not subject to any architectural standards that would prohibit reflective materials.

STAFF FINDINGS: The solar energy facilities will not be considered rooftop equipment and screening or architectural standards are not required.

Article 11.4.10 (F)

Recommendation and Decision

- (1) In considering an application for a special use permit, the Planning Board is an advisory capacity and the Town Board, in a decision making capacity, shall consider, evaluate and may attach reasonable and appropriate conditions and safeguards to the location, nature, and extent of the proposed use and its relations to surrounding property, for the purpose of ensuring that the conditions of permit approval will be complied with and any potentially injurious effect of the special use on adjoining properties, the character of the neighborhood, or the health, safety, and general welfare of the community will be minimized.
- (2) Any such conditions may relate to parking areas and driveways, pedestrian and vehicular circulation systems, screening and buffer areas, intensity of site development, the timing of development, and other matters the Town Board may find appropriate or the applicant may propose. The applicant will have a reasonable opportunity to consider and respond to any additional conditions or requirements prior to final action by the Town Board.

STAFF FINDINGS: The applicant provided documentation stating that the solar panels have an antireflective coating. Currently the front roof slope faces a common access drive and is not visible from adjacent property owner's lots. Staff is not aware of any effects the minor solar energy facility (solar panels) will have on the health and safety of adjacent property owners.

PART 4: PLANNING STAFF RECOMENDATIONS
--

Staff finds this Special Use Permit amendment request:

- Does not adversely affect adjacent property owners or the general welfare of the community.
- All legal notification requirements have been met.

Therefore, staff recommends approval of Petition #SUP21-05 Solar Panels based on the above findings of fact.

PART 5: PUBLIC HEARING/FINAL ACTION
--

The Special Use Permit Hearing is tentatively scheduled for December 20, 2021.

PART 6: ATTACHMENTS

Attachment A: General Application, Project Site Plan, Solar Panel Information, Adjacent Properties.

PART 7: Planning Board Decision Statements

In Favor of the Special Use Permit

In considering the Special Use Permit SUP21-05, Solar Panels for 10545 Mt. Holly-Huntersville Rd, we, the Planning Board, find that the request meets all required conditions and specifications, is reasonable and does not pose an injurious effect on the adjoining properties, and finds that the character of the neighborhood or the health, safety and general welfare of the community will be minimized. This decision is supported by the following findings:

- 1)
 - 2)
- Add additional statements as necessary.

Against Special Use Permit

In considering the Special Use Permit SUP21-05, Solar Panels for 10545 Mt. Holly-Huntersville Rd, we, the Planning Board, find that the request does not meet the required conditions and specifications.

(List which conditions are not being met)

- 1)
 - 2)
- Add additional statements as necessary.

**Town of Huntersville
Planning Board
November 16, 2021**

To: Town Board

From: Tracy Barron, Exec Asst

Date: November 16, 2021

Subject:

EXPLAIN REQUEST:

ACTION RECOMMENDED:

FINANCIAL IMPLICATIONS:

ATTACHMENTS:

1. 2022 Schedule draft

Planning Board 2022 Regular Meetings

The Regular Meetings for the Planning Board shall be held on the fourth (4th) Tuesday of each and every month at 6:30 p.m., at the Town Hall location unless otherwise noted below or changed upon compliance of the Open Meeting Law.

January 25

February 22

March 22

April 26

May 24

June 28

July 26

August 23

September 27

October 25

November 15 (3rd Tuesday)

December 20 (3rd Tuesday)