



Planning and Development Department

156 CHURCH STREET, HENDERSON, NC 27536

(252) 738-2080 / FAX 738-2089

Staff Report 08/14/2014

Owner: Claude T. Jackson

Applicant: ESA
Henderson NC, LLC

Parcel ID: 0224 02021

Location:
Bearpond/Facet Road
intersection (behind
Bearpond Fire
Department)

Current Zoning: (L-I)
Light Industrial

Public Hearing:
05/8/2014 tabled until
8/14/2014

Prepared by:
Jordan McMillen

Description of Conditional Use Permit Request:

The applicant is requesting a conditional use permit to allow construction of a 10 MW solar farm under the use category of "Solar Energy System, Large Scale".

Exhibits as follows:

Exhibit 1. Application

Exhibit 2. Site Plan

Exhibit 3. Conditional Use Permit Check List

DRAFT Findings of Fact

1. The request is for a conditional use permit to allow a 10 MW solar farm on a parcel zoned (L-I) Light Industrial.
2. Claude T. Jackson is the property owner. The property is to be leased by ESA Henderson NC, LLC.
3. The property is located directly behind 325 Bearpond Road, but access will be from Facet Road; Property more specifically identified as tax parcel 0224 02021.
4. The property consists of 68 +/- acres of which 35.7 acres will be the array footprint area with 35.3 acres as open space. The property currently is wooded with no structures.
5. The lot is currently zoned (LI) Light Industrial.
6. The application requesting a conditional use permit was filed on February 28, 2014.
7. The adjoining property owners were notified on April 25, 2014
8. The property was posted on April 25, 2014.
9. The legal notice was run on April 23, and April 30, 2014.
10. The Board of Adjustment opened the hearing and heard testimony from staff and the senior project manager at the May 8, 2014 meeting. Upon reviewing the submitted application, the board tabled the matter to allow additional information to be submitted in accordance with the concerns noted.

Staff Comments

The applicant is requesting a conditional use permit to construct a 10 MW solar farm. As proposed, the solar farm project area would be leased from the current property owner and would cover approximately 68 acres of which nearly 36 acres would be covered with solar panels. The proposal calls for an 8 ft. fence on the site plan with an 8 ft. hedge and landscape buffer on the north (abuts Variety Wholesalers) and on the east (abuts US Hwy 1). The fence and landscaped buffer heights proposed meet the ordinance requirements, however no specific details have been provided for how this will be accomplished. Also, no details have been provided on whether lighting would be provided or on the type of groundcover that would be utilized or how the groundcover/weeds will be controlled within the site. Mr. Jackson owns all of the property on the west side of this parcel and the Bearpond Vol. Fire Department and US 1 interchange is located to the south of the property.

The proposed solar farm will be located approximately 0.85 miles from the previously approved site on Bearpond Road and will be approximately 0.5 miles from the site approved by the City of Henderson along Martin Creek Road. To date neither the County ordinance nor the NC State template ordinance has provisions requiring a separation between solar farms. This may be something that the Planning Board may want to consider for future ordinance amendments.

The solar panels will have no moving parts and will have a relatively low profile with a maximum height of 8 feet (ordinance requires less than 25 ft). The project area will be

approximately 300 ft. from the nearest structure (Bearpond Vol. Fire Department building) and the solar panels will be approximately 550 feet from the building.

Initial Concerns:

1. The application mentions a 6 ft. fence but the site plan mentions an 8 ft. fence. **The applicant is aware and would install an 8 ft. fence – this should be made a condition of the board.**
2. The existing site plan does not appear to account for an existing recognized stream and pond on the property. **A revised site plan has been submitted that accounts for these.**
3. Setbacks are shown as 30 feet, but must be as follows in LI zoning district (front – 75 feet, side – 25 feet, and rear – 75 feet). **Setbacks have been revised.**
4. No details are provided for landscaping or how buffer and groundcover will be accomplished or maintained. **The revised site plan shows existing trees to remain as the buffer.**
5. Driveway permit will need submitted prior to any final zoning approval.
6. Additional details need provided on land to be cleared and evidence of NCDENR involvement (i.e. permits) needs to be provided. **DENR has been contacted - recommend requiring NCDENR certificate of completion prior to issuance of local certificate of occupancy.**
7. Need submittal of interconnection agreement
8. Need for inclusion of interconnection point on the site plan and information to confirm compliance with ordinance regarding underground utilities. **Interconnection point is shown on site plan – site plan also shows utilities as underground.**



Vance COUNTY

NORTH CAROLINA

Conditional Use Permit Application

Vance County Planning & Development Department

156 Church Street, Suite 3
Henderson, NC 27536
Ph: (252) 738-2080
Fax: (252) 738-2089

For Administrative Use Only:

Case #	20140510-2
Fee Paid	ck \$250
BOA Date	5/10/14

Property Owner Information

Property Owner: Claude T. Jackson
Mailing Address: 100 West Winds Road
City: Macon State: NC Zip Code: 27551
Phone #: (863) 657-2520 - Fax #: () -
E-mail Address: verianandclaud@embarqmail.com

Applicant Information

Applicant: ESA Henderson NC, LLC
Mailing Address: 801 International Parkway, Suite 500
City: Lake Mary State: FL Zip Code: 32746
Phone #: (407) 268 - 6455 Fax #: (407) 268 - 6475
E-mail Address: craigl@esarenewables.com

Property Information *For multiple properties please attach an additional sheet.*

Property Address: 611 Bearpond Road, Henderson, NC
Tax Map Number:
PIN (parcel identification #): 0224 02021
Type of Petition: Conditional Use
Existing Zoning: Light Industrial Proposed Zoning: Light Industrial
Acreage: 68 +/- Acres Road Frontage: _____
Existing Use: Vacant

Deed Reference

- ☐ Metes and bounds description attached
☐ Site plan/sketch of proposal attached



Vance COUNTY

NORTH CAROLINA

Conditional Use Permit Application

Vance County Planning & Development Department

Statement of Justification

1. Application is hereby made for the following use: *Please explain below:*

We propose building a large scale ground mounted solar farm. The site is directly across Highway 1. The project site is directly west of a PEC Substation and overhead lines run along the north property line. There will be a 6' security fence surrounding the property and a landscape buffer to screen the modules from view.

2. The intent is to : *Check all that apply:*

- ☒ Construct a new structure for a conditional use;
- ☐ Repair the existing structure for the conditional use;
- ☐ Alter and/or expand the existing structure for the conditional use;
- ☐ Other

3. The following requirements have been provided: *Check all that apply:*

- ☒ Site plan;
- ☐ Property description;
- ☒ NC DOT entrance permit (if applicable);

4. Additional information:

Attached please find our completed application for NCDOT driveway permit.

In order to issue a Conditional Use Permit, the Board shall consider each of the following conditions, and based on the evidence presented at the hearing(s) make findings in regards to each and must find that the issuance of the Conditional Use Permit is in the best interest of the county.

A. The use requested is among those listed as an eligible conditional use in the district in which the subject property is located.

Yes X No

Solar Farms are included as a conditional use in Light Industrial zoning.

B. The use or development is located, designed and proposed to be operated so as to maintain or promote the public health or safety;

Yes X No

The project will be designed to meet all local, state and Federal Codes to protect the health, safety and welfare of the public. It will generate clean, renewable energy to benefit the community.



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- C. The use or development complies with all required regulations of the Zoning Ordinance and all applicable specific conditions and specifications;

Yes ☒ No ☐

The project complies with all required regulations of the Zoning Ordinance and all applicable specific conditions and specifications.

- D. The use or development is located, designed and proposed to be operated so as to maintain or enhance the value of adjoining or abutting property, or that use or development is a public necessity;

Yes ☒ No ☐

The project is located, designed and will operate to enhance the value of adjoining property through job creation, creation of clean renewable energy, and increase to the tax base. It will be landscaped to screen the project from view and will have no emissions or make any noise effecting the neighbors.

- E. The use or development will be in harmony with the area in which it is located and will be in general conformity with the plan of development of the County.

Yes ☒ No ☐

The development will be in harmony with the area in which it is located and will be in general conformity with the plan of development of the County.

Property Owners Signature

Charles Z. Jackson
Please sign in blue or black ink

Date

2-7-14

Applicants' Signature

Lindsay Huel
Please sign in blue or black ink

Date

2/12/14



Vance COUNTY

NORTH CAROLINA

Conditional Use Permit Application

Vance County Planning & Development Department

Property Information *(Additional Parcel)*

Property Address: 611 Bearpond Road

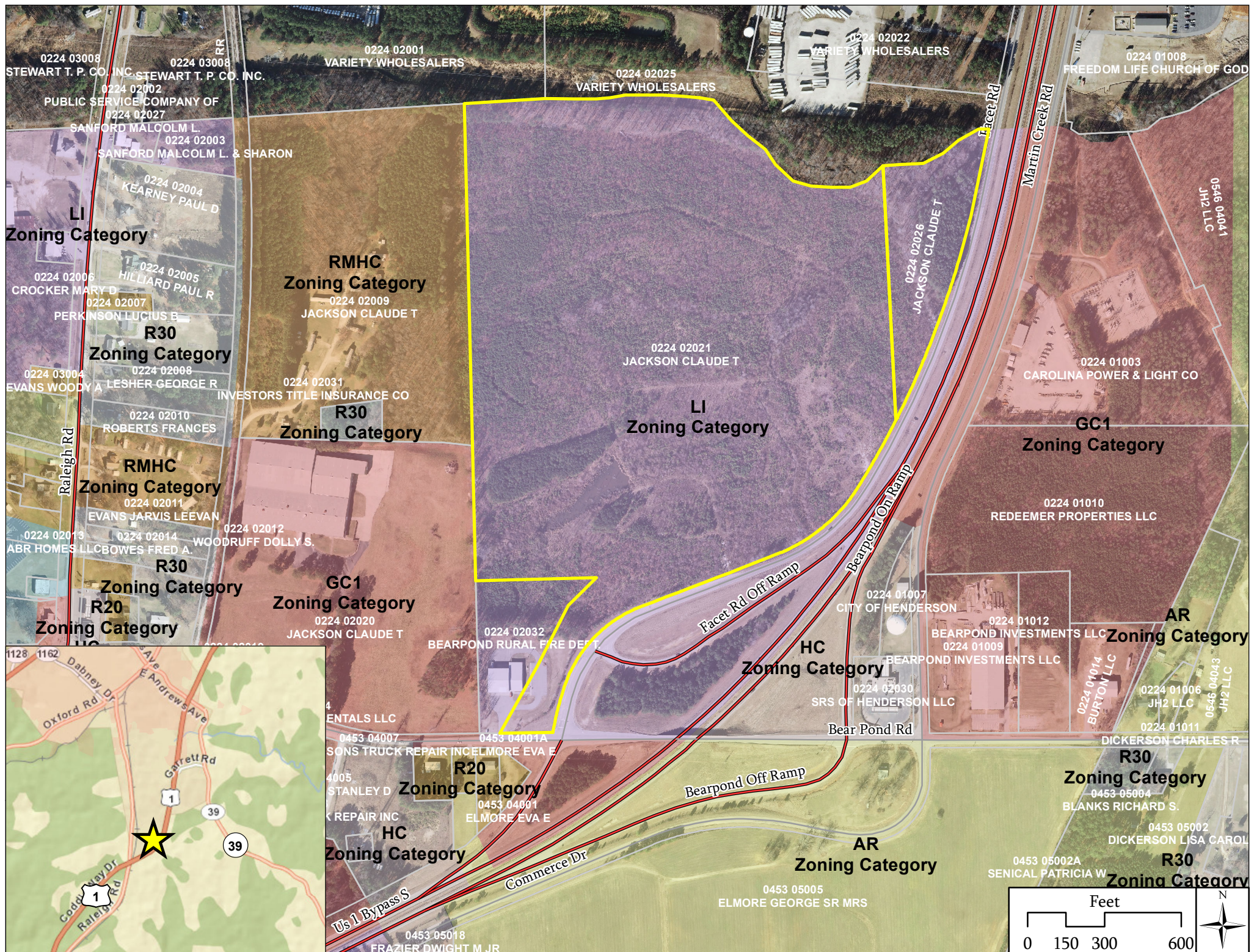
Tax Map Number: _____ PIN (parcel identification #): 0224 02026

Type of Petition: Conditional Use

Existing Zoning: Light Industrial Proposed Zoning: Light Industrial

Acreage: 3 +/- acres Road Frontage: _____

Existing Use: Vacant







April 7, 2014

Deputy County Manager Vance County
156 Church Street, Suite 3
Henderson, NC 27536
Attn: Jordan D. McMillen

RE: ESA Henderson NC, LLC

Dear Mr. McMillen:

Please accept this letter as notification that ESA Henderson NC, LLC is a manager managed LLC and I have the authority to execute agreements and behalf of and bind the company. I am aware that Craig Livingston and/or Lindsay Herold will be working with the County and making presentations, applications, etc on behalf of the company and I give them the authority to do so.

Please feel free to contact me with any further questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Daniel Ros', is written over a horizontal line.

Daniel Ros
ESA Henderson NC, LLC
Member
407-268-6455

Use Type	AR	R30	R20	R10	RMHC	HC	GC1	LI	IM	EIA	OI	OS	WOZ	Parking-Loading
Adult Establishments	X	X	X	X	X	CU	CU	CU	X	X	X	X	X	Parking: 4 per 1,000 SF Loading: N/A
Airports	CU	X	X	X	X	X	CU	CU	CU	CU	CU	X	X	Special Study Required***
Commercial Communications Towers (Cell Towers)	CU	X	X	X	X	CU	CU	CU	CU	CU	CU	CU	CU	Parking: 2 per tower Loading: 1
Cemetery (Church, Family)	P	P	P	CU	X	X	X	X	X	X	X	P	CU	N/A
Cemetery (Commercial)	P	CU	X	X	X	X	X	X	X	X	X	CU	CU	Parking: 6 per 1,000 SF of office-building Loading: 1
Shooting Ranges	CU	X	X	X	X	X	X	X	X	X	X	CU	CU	Parking: 1.5 per shooting station Loading: 1
Solar Collector (Accessory)	P	P	P	P	P	P	P	P	P	P	P	P	P	N/A
Solar Energy Systems, Large Scale (Solar Farms)	CU	X	X	X	X	X	X	CU	CU	CU	CU	X	X	Parking: 1/ every 2 employees on shift of greatest employment
TEMPORARY USES														
Commercial (temporary-see Definitions) Outdoor Sales	P	P	X	X	X	P	P	P	P	P	P	P	P	Parking: staff review Loading: N/A
Concrete/Asphalt Operations	X	X	X	X	X	X	X	CU	P	X	X	X	X	Parking: staff review Loading: 1 per vehicle
Contractor's Office (located at project site for duration of project)	CU	CU	X	X	X	CU	CU	CU	P	CU	CU	X	CU	Parking: 1 per 200 SF Loading: N/A
Farmstand	P	P	X	X	X	P	P	P	X	X	X	P	P	Parking: 8 spaces Loading: N/A
Manufactured Housing Unit for Office and/or Exhibition	CU	CU	CU	CU	P	P	P	P	X	X	CU	CU	CU	Parking: 1 per vehicle Loading: N/A
Manufactured Home for Hardship	CU	CU	CU	CU	P	X	X	X	X	X	X	X	CU	Parking: 2 per dwelling unit Loading: N/A
Public Interest Event and/or Special Event	CU	CU	CU	CU	CU	CU	CU	CU	CU	CU	CU	CU	CU	Parking: 1/patron Loading: 1 per vehicle
Temporary Miscellaneous Sales (see Definitions)	CU	CU	CU	CU	CU	CU	CU	CU	CU	CU	CU	CU	CU	Parking: 1 per vehicle Loading: N/A
***See Section 6.10.L														

- c. *Warning signs.* Warning signs meeting National Rifle Association (NRA) guidelines for shooting ranges shall be posted at one hundred-foot intervals along the entire perimeter of the shooting range facility and along the entire perimeter of the property lines in the same intervals.
 - d. *Distance from occupied dwelling.* All shooting stations, targets, and firing lines shall be located at least one-half (1/2) mile from any existing, occupied dwelling.
 - e. *Access to facility.* Access to the facility and shooting range shall be secured and controlled, with ingress and egress permitted only during operating hours as established below. Prior to issuance of a permit, a valid driveway permit must be obtained from North Carolina Department of Transportation.
 - f. *Written variance.* The distance requirements of this section may be varied with written permission in the form of an affidavit from all adjoining property owners and all rightful leaseholders of dwellings located within the ½ mile surrounding area affected thereby, except that written approval is not needed for any adjoining land owned by the State of North Carolina.
5. **Operational Requirements:**
- a. *Maintenance.* Where not otherwise specified within this ordinance, shooting range facilities shall be operated and maintained in a manner that shall meet or exceed the guidelines as specified by the Range Technical Team Advisor upon inspection going by the guidelines in the NRA's Range Source Book: A Guide to Planning and Construction, current edition.
 - b. *Best Management Practices.* Outdoor Shooting Ranges shall provide a plan outlining its Best Management Practices (BMPs) relating to lead management. Said plan shall meet or exceed the guidelines as specified by the Environmental Protection Agency's (EPA) Best Management Practices for Lead at Outdoor Shooting Ranges, current edition.
 - c. *Hours of operation.* Shooting Ranges shall be allowed to operate between sunrise and sunset Monday through Saturday, except that the hours may be extended after sunset for purposes of subdued-lighting certification of law enforcement officers, or may be extended for other purposes only when a permit allowing such activity is issued in advance by the Sheriff's Office.
 - d. *Liability insurance.* The permittee shall be required to carry a minimum of three million dollars (\$3,000,000.00) per occurrence of liability insurance. Such insurance shall name Vance County as an additional insured party and shall save and hold Vance County, its elected and appointed officials, and employees acting within the scope of their duties harmless from and against all claims, demands, and causes of action of any kind or character, including the cost of defense thereof, arising in favor of a person or group's members or employees or third parties on account of any property damage arising out of the acts or omissions of the permittee, his/her group, club, or its agents or representatives. The County shall be notified of any policy changes or lapses in coverage.

N. Solar Energy Systems, Large Scale (Solar Farms)

- 1. Height: Systems, equipment and structures shall not exceed twenty-five (25) feet in height when ground mounted. Excluded from this height requirement, however, are

electric transmission lines and utility poles. Roof mounted systems shall not exceed the maximum height for the applicable zoning district.

2. Setback: Active solar system structures must meet the following setbacks:
 - a. Ground mounted– Ground mounted solar energy systems as part of a solar farm shall meet the minimum zoning setback for the zoning district in which it is located.
3. Screening and Fencing: Adequate fencing shall be provided along the perimeter of the area (with all entrances gated) to prevent trespassing on the property.
4. Lighting: All lighting shall be arranged and shaded so as to reflect the light away from adjoining properties and streets.
5. Noise: Noise levels measured at the property line shall not exceed fifty (50) decibels when located adjacent to an existing residence or residential district.
6. Power Transmission Lines: To the extent practical, all new power transmissions lines to any building, structure or utility connection shall be located underground. Existing above ground utility lines shall be allowed to remain in their current location.
7. Approved Solar Components: Electric solar system components must have a UL listing.
8. Compliance with Building and Electrical Codes: All solar farms shall be in conformance with the requirements of the State Building and Electrical Codes (current addition), the State of North Carolina and Vance County. All active solar systems shall be inspected by a Vance County building inspector.
9. Utility Notification: No grid tied photovoltaic system shall be installed until evidence has been given to the Planning and Development Department that the owner has been approved by the utility company to install an interconnected customer-owned generator. Off-grid systems shall be exempt from this requirement.
10. Abandonment: It is the responsibility of the owner to notify the County and to remove all obsolete or unused systems within twelve (12) months of cessation of operations. Reusable components are to be recycled whenever possible.

O. WIRELESS COMMUNICATIONS TOWERS (“CELL TOWERS”)

1. The purpose of the following requirements is to promote and to protect the public health, welfare, and safety by regulating existing and proposed communication towers. The requirements are intended to protect property values, create a more attractive economic and business climate, and enhance and protect the scenic and natural beauty of designated areas.
2. *General Requirements.* When allowed, such towers and associated equipment shall be subject to the following additional requirements:
 - a. Towers shall not interfere with normal radio and television reception in the vicinity. Commercial messages shall not be displayed on any tower. Violations shall be considered zoning violations and shall be corrected under the enforcement provisions.
 - b. Lighting shall not exceed the Federal Aviation Administration (FAA) minimum if lighting is required by the FAA. The lights shall be oriented so as not to project directly onto surrounding residential property, consistent with FAA requirements. Prior to issuance of a building permit, the applicant shall be required to submit documentation from the FAA that the lighting is the minimum lighting required by the FAA.
 - c. Towers shall be constructed and maintained in conformance with all applicable building code requirements.
 - d. In order to protect the public from unnecessary exposure to electromagnetic radiation, the tower owner shall provide appropriate

Conditional Use Permit Check Sheet

1. The use requested is among those listed as an eligible conditional use in the district in which the subject property is located.

	True	False		True	False		True	False	TOTAL
Alston:	<input type="checkbox"/>	<input type="checkbox"/>	Harvin:	<input type="checkbox"/>	<input type="checkbox"/>	Stainback:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Brummitt:	<input type="checkbox"/>	<input type="checkbox"/>	Johnson:	<input type="checkbox"/>	<input type="checkbox"/>	Alternate 1:	<input type="checkbox"/>	<input type="checkbox"/>	
Haley:	<input type="checkbox"/>	<input type="checkbox"/>	Shaw:	<input type="checkbox"/>	<input type="checkbox"/>	Alternate 2:	<input type="checkbox"/>	<input type="checkbox"/>	

2. The use or development is located, designed and proposed to be operated so as to maintain or promote the public health or safety.

	True	False		True	False		True	False	TOTAL
Alston:	<input type="checkbox"/>	<input type="checkbox"/>	Harvin:	<input type="checkbox"/>	<input type="checkbox"/>	Stainback:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Brummitt:	<input type="checkbox"/>	<input type="checkbox"/>	Johnson:	<input type="checkbox"/>	<input type="checkbox"/>	Alternate 1:	<input type="checkbox"/>	<input type="checkbox"/>	
Haley:	<input type="checkbox"/>	<input type="checkbox"/>	Shaw:	<input type="checkbox"/>	<input type="checkbox"/>	Alternate 2:	<input type="checkbox"/>	<input type="checkbox"/>	

3. The use or development complies with all required regulations of the Zoning Ordinance and all applicable specific conditions and specifications.

	True	False		True	False		True	False	TOTAL
Alston:	<input type="checkbox"/>	<input type="checkbox"/>	Harvin:	<input type="checkbox"/>	<input type="checkbox"/>	Stainback:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Brummitt:	<input type="checkbox"/>	<input type="checkbox"/>	Johnson:	<input type="checkbox"/>	<input type="checkbox"/>	Alternate 1:	<input type="checkbox"/>	<input type="checkbox"/>	
Haley:	<input type="checkbox"/>	<input type="checkbox"/>	Shaw:	<input type="checkbox"/>	<input type="checkbox"/>	Alternate 2:	<input type="checkbox"/>	<input type="checkbox"/>	

4. The use or development is located, designed and proposed to be operated so as to maintain or enhance the value of adjoining or abutting property, or that the use is a public necessity;

	True	False		True	False		True	False	TOTAL
Alston:	<input type="checkbox"/>	<input type="checkbox"/>	Harvin:	<input type="checkbox"/>	<input type="checkbox"/>	Stainback:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Brummitt:	<input type="checkbox"/>	<input type="checkbox"/>	Johnson:	<input type="checkbox"/>	<input type="checkbox"/>	Alternate 1:	<input type="checkbox"/>	<input type="checkbox"/>	
Haley:	<input type="checkbox"/>	<input type="checkbox"/>	Shaw:	<input type="checkbox"/>	<input type="checkbox"/>	Alternate 2:	<input type="checkbox"/>	<input type="checkbox"/>	

5. The use or development will be in harmony with the area in which it is to be located and will be in general conformity with the plan of development of the County.

	True	False		True	False		True	False	TOTAL
Alston:	<input type="checkbox"/>	<input type="checkbox"/>	Harvin:	<input type="checkbox"/>	<input type="checkbox"/>	Stainback:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Brummitt:	<input type="checkbox"/>	<input type="checkbox"/>	Johnson:	<input type="checkbox"/>	<input type="checkbox"/>	Alternate 1:	<input type="checkbox"/>	<input type="checkbox"/>	
Haley:	<input type="checkbox"/>	<input type="checkbox"/>	Shaw:	<input type="checkbox"/>	<input type="checkbox"/>	Alternate 2:	<input type="checkbox"/>	<input type="checkbox"/>	