



Staff Report 03/12/2015

Owner: James D. Goldston, Jr.

Applicant: Vance Solar 1, LLC

Parcel ID: 0456 03015

Location: Near 5501 Raleigh Road, Kittrell, NC 27544

Current Zoning: (A-R) Agricultural Residential

Public Hearing: 02/12/2015 continued to 3/12/2015

Prepared by: David Robinson

Description of Conditional Use Permit Request:

The applicant is requesting a conditional use permit to allow construction of a 5 MW solar farm under the use category of "Solar Energy System, Large Scale".

Exhibits as follows:

- Exhibit 1.** Application
- Exhibit 2.** Applicant's supporting materials; project justification
- Exhibit 3.** Correspondence regarding Interconnection Agreement
- Exhibit 4.** Aerial Photography/Surrounding Zoning Map
- Exhibit 5.** Boundary survey (*submitted since 2/12/15*)
- Exhibit 6.** Site Plan (*revised since 2/12/15*)
- Exhibit 7.** Driveway detail (*submitted since 2/12/15*)
- Exhibit 8.** Solar Farm regulations (as per zoning ordinance)
- Exhibit 9.** Conditional Use Permit Check List

DRAFT Findings of Fact

1. The request is for a conditional use permit to allow a 5 MW solar farm on a parcel zoned (A-R) Agricultural Residential.
2. The property is owned by James D. Goldston, Jr.
3. The property is located on the north side of Raleigh Road approximately ¾ of a mile southwest of Peter Gill Road.
4. The property consists of 58 +/- acres of which approximately 24 acres will be the array footprint.
5. The majority of the property is wooded and the applicant plans to clear 29 acres.
6. The application requesting a conditional use permit was filed on January 21, 2015.
7. The adjoining property owners were notified on January 23, 2015.
8. The property was posted on January 29, 2015.
9. The legal notice was run in the Henderson Daily Dispatch on February 3, 2015 and February 10, 2015.
10. The Board of Adjustment opened the hearing and heard testimony from staff at the February 12, 2015 meeting. Upon the staff's recommendation, 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 5 MW solar farm. As proposed, the solar farm project would involve leasing the property in its entirety (approximately 58 acres).

The notes on the site plan indicate an 8 foot tall chain link fence with 3 strands of barbed wire. However, labeling of the fence on the plan shows a 6 foot fence. Staff would like clarification to ensure that an 8 foot tall fence will encompass the entire perimeter of the site. The site plan indicates a 30' planted buffer along the front of the property that fronts Raleigh Road, along the eastern side portion that is adjacent to the Wedge Stone Mobile Home park, as well as the southern portion that abuts the Cheatham property. The landscaping plan specifies that the buffer will consist of an evergreen understory tree that will be 6 feet at the time of planting in addition to an evergreen shrub. It appears that existing vegetation will serve as screening along the western and northern sides of the property. However, no development exists within several hundred feet on these sides. Mill Creek and an adjacent tributary are located along the western and northern side of the project area. On the site plan the applicant has shown a 50 foot vegetative buffer on each side of the tributary. Further consideration of this creek will be accounted for by

NC DENR when the applicant applies for the Erosion and Sedimentation Control permit, as clearing of vegetation greater than 1 acre will occur. Staff recommends that a copy of the NC DENR permit be received prior to issuing a conditional use permit. Applicants must also obtain a local clearing and grading permit.

Additionally, staff recommends that a copy of the NC DOT driveway permit be received before issuing the permit. It is understood that this process has been started but the permit has not yet been issued. The applicant states in the supporting material that an interconnection agreement has been applied for with Duke Energy Progress. Correspondence providing evidence to this statement is included in the Board's packet. Staff would like a copy of the executed pages of the interconnection agreement before issuing a conditional use permit. An E-911 address has been applied for but not yet issued.

The applicant also states an intention to remove all obsolete or unused systems within twelve (12) months of cessation of operations.

In looking at the orthophotography, it appears that there is an old, abandoned structure approximately 80 feet from the Raleigh Road property line. Staff would like to know the applicant's plans for removal, as it is located in the area the applicant has designated for the construction laydown and staging area.

There is an existing powerline easement running parallel to Raleigh Road that crosses the front of the subject property. After talking with Andy Clayton, a Duke Energy representative, it does not appear that the temporary laydown and construction staging area (which proposed location is within the easement) will interfere with this easement, so long as precautions are taken not to damage or interfere with the electrical infrastructure.

The applicant's supporting materials indicate that the area beneath the solar panels will be planted with grass or alfalfa to stabilize the site and prevent erosion. It is believed that the entity that will complete this work and maintain the site has not yet been determined.

The solar panels will have no moving parts and will have a relatively low profile with a maximum height of 10 feet (ordinance requires less than 25 feet).

Initial Review Items

- Perimeter fencing must be at least 8 feet in height
- Need executed interconnection agreement prior to releasing conditional use permit – could be condition of approval.
- Need copy of DENR erosion and control permit prior to releasing conditional use permit – could be condition of approval.
- Need NC DOT driveway permit – could be condition of approval.
- Approval of final site address from E-911 department – could be condition of approval.
- Vegetative buffers should include plants of an evergreen variety in addition to others and should be an adequate width to sufficiently buffer the non-residential use from surrounding uses.
- The site plan could use more detail regarding the amount of existing vegetation that will remain on the southern and eastern sides of the project that abut residential uses, as well as the type and width of planted buffers.
- Actual setbacks should be determined, especially along the southern and eastern sides of the project site.
- Applicant states that a field survey boundary has not yet been completed. Due to uncertainty regarding Four D Lane and the accurate location of the property boundary that separates the mobile home park, staff would like to see surveyed boundary lines.

Review of Material Submitted Since February 12, 2015 meeting:

- Entire perimeter fencing must be at least 8 feet in height
- Need executed interconnection agreement prior to releasing conditional use permit – could be condition of approval.
- Need copy of DENR erosion and control permit prior to releasing conditional use permit – could be condition of approval.
- Need NC DOT driveway permit – could be condition of approval.
- Approval of final site address from E-911 department – could be condition of approval.
- Staff would recommend that the 30' buffer on the south side of the property be extended along the entire length of the southern property line.



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 #	20150212-1
Fee Paid	\$250 ck# 2454
BOA Date	2/12/15

Property Owner Information

Property Owner: James D. Goldston, Jr.

Mailing Address: 13100 Old Creedmoor Rd

City: Raleigh State: NC Zip Code: 27613

Phone #: () - Fax #: () -

E-mail Address: _____

Applicant Information

Applicant: Vance Solar 1, LLC

Mailing Address: c/o Beth Trahos, Esq. Smith Moore Leatherwood LLP, P O Box 27525

City: Raleigh State: NC Zip Code: 27611

Phone #: (919) 755 - 8760 Fax #: (919) 828 - 3167

E-mail Address: beth.trahos@smithmoorelaw.com

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

Property Address: 5501 Raleigh Boulevard, Kittrell NC 27544

Tax Map Number: _____ PIN (parcel identification #): 0456 03015

Type of Petition: Conditional Use Permit

Existing Zoning: Agricultural Residential (A-R) Proposed Zoning: n/a

Acres: 58 ± Road Frontage: 558 ±

Existing Use: residential (trailer)

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:*

Proposal to construct solar farm under category "Solar Energy System, Large Scale"

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:

n/a

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 No

Please see attached.

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 No

Please see attached.



Vance COUNTY

NORTH CAROLINA

Conditional Use Permit Application

Vance County Planning & Development Department

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

Yes No

Please see attached.

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

Please see attached.

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.

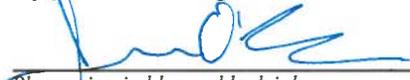
Yes No

Please see attached.

Property Owners Signature

_____ Date _____
Please sign in blue or black ink

Applicants' Signature

 _____ Date 10/30/14

Please sign in blue or black ink
Jerome O'Brien, organizer



Vance COUNTY

NORTH CAROLINA

Conditional Use Permit Application

Vance County Planning & Development Department

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

Yes No

Please see attached. _____

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

Please see attached. _____

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

Please see attached. _____

Property Owners Signature

[Handwritten Signature]
Please sign in blue or black ink

Date _____

Applicants' Signature

Please sign in blue or black ink

Date _____

STATE OF NORTH CAROLINA

BEFORE THE VANCE COUNTY BOARD
OF ADJUSTMENT

COUNTY OF VANCE

IN RE: Vance Solar 1, LLC and James D. Goldston, Jr.
Proposed Solar Farm
Vance County Parcel Number: 0456 03015

Address: 5501 Raleigh Road, Kittrell, North Carolina

**STATEMENT OF JUSTIFICATION IN SUPPORT OF THE
SPECIAL USE PERMIT APPLICATION**

NOW COMES THE PETITIONER, by and through counsel of record, and respectfully requests approval of their application for a conditional use permit to operate a Solar Farm at 5501 Raleigh Road, Kittrell, North Carolina. In support of this request, Petitioner provides the following information:

I. Introduction

Vance Solar 1 proposes to construct a solar farm on 58± acres owned by James D. Goldston, Jr. The property is currently zoned Agricultural Residential (“AR”). Adjacent and nearby properties are developed as homes and farms.

A solar farm is permitted in the AR district with a conditional use permit approved by the Board of Adjustment. Section 6.10(N) of the Vance County Zoning Ordinance (“Code”) includes standards for the development of a solar farm. The application, including site plan and this brief, is complete and complies with all requirements of the Code.

The solar farm will contain rows of Photovoltaic (PV) cells mounted on posts set in the ground individually. The posts are set individually in an effort to minimize the amount of grading on site. These rows of PV cells are referred to as “solar arrays.” The solar arrays will be fixed in place facing south in order to receive the maximum amount of solar energy. This configuration contains no moving parts. The power generated from the solar farm will be connected to the power grid for use by consumers.

Solar energy is a public necessity. Demand for electricity has increased in recent years, and our society is dependent upon conventional sources of power such as coal, gas, and nuclear energy. Conventional sources of electricity are expensive, finite resources that require significant environmental disruption and public safety risk to maintain or extract. Solar energy is a clean, cheap, unlimited resource with little environmental impact.

The proposed solar farm will consume practically no county services: no seats in county schools or on school buses, virtually no refuse or recycling needs, no special sheriff

protection, no light pollution, no emissions of any kind, no demand for water from depleted aquifers and no sewage disposal.

II. Statement in Support of Application

Pursuant to Code Section 6.3, to issue a conditional use permit, the Board of Adjustment shall find the following:

A. That the use will not materially endanger the public health or safety if located according to the plan submitted and approved.

The proposed solar farm will not materially endanger the public health or safety. The site will generate almost no traffic. The solar facility will not be staffed daily; employees are expected to visit the property weekly or less frequently to check and maintain the equipment, mow the grass and make repairs. The site will have access from Raleigh Road.

The proposed solar farm will protect against soil erosion and sedimentation. Care is taken to minimize grading on the site by individually setting poles to support the solar cells. The areas beneath the solar panels will be planted with grass or alfalfa to stabilize the site. During construction, erosion control measures will be maintained in accordance with the County regulations. The site will comply with State of North Carolina and Vance County stormwater regulations.

The proposed solar farm will protect the public, community or private water supplies and avoid adverse impacts on surface water or ground water. As there will be no employees on site, there is no need for utilities. State environmental buffers will be maintained and respected.

B. That the use meets all required conditions and specifications.

Pursuant to Zoning Ordinance Section 6.10(N), the proposal must comply with the following use-specific requirements:

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.

No system, equipment or structure (excluding possibly electric transmission lines and utility poles) will exceed 25' in height when measured as the ordinance specifies.

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.

The minimum zoning setbacks for the AR district are: front 50 feet, side 25 feet, rear 35 feet. As shown on the accompanying site plan, the ground mounted solar systems meet or exceed these setbacks.

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.

The active area of the solar farm will be enclosed by a six foot (6') high fence

4. Lighting: All lighting shall be arranged and shaded so as to reflect the light away from adjoining properties and streets.

Lighting, if any, will be arranged and shaded 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.

Solar farms are quiet. The solar arrays have no moving parts. The only sound occurs during daylight hours with the quiet hum of electrical transformers, invertors and substation delivering solar power to the power grid. Similar facilities are located in neighborhoods to deliver power to homes. At night, when the sun is not available, there is no energy being created and no noise on the site.

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.

But for the point of interconnection, all new power transmission lines will be located underground.

7. Approved Solar Components: Electric solar system components must have a UL listing.

All solar system components to be located on the property 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.

The solar farm will be in conformance with the requirements of the current editions of the State Building and Electrical Codes.

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.

Noted. Applicant has applied for the interconnection agreement with Duke Energy Progress. Applicant is pursuing same with great diligence and an agreement with Duke Energy Progress is anticipated.

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.

Noted.

C. That the use will not substantially injure the value of adjoining or abutting property, or that the use is a public necessity.

The proposed use will not injure the value of adjoining or abutting properties. Solar farms are quiet. The solar arrays have no moving parts. The only sound occurs during daylight hours with the quiet hum of electrical transformers, invertors and substation delivering solar power to the power grid. Similar facilities are located in neighborhoods to deliver power to homes. At night, when the sun is not available, there is no energy being created and no noise on the site. Solar farms generate fewer vehicles trips than the average home. Employees visit the site once a week or even less frequently. Solar panels are designed to absorb light, rather than reflect it.

D. That the location and character of the use, if developed according to the plan as submitted and approved, will be in harmony with the area in which it is to be located and in general conformity with the Vance County Land Use Plan.

The proposed solar farm is consistent with the residential and agricultural land use pattern that exists in the area today. Solar farms make good neighbors: they are quiet and they do not create dust or odor as other permitted uses can. Solar farms generate fewer vehicle trips than the average home. Solar panels are shorter in height than a typical home or barn. When mounted on racks, the panels will be less than 10' in height. A landscaped buffer yard will provide a transition between the solar farm and the adjacent home to the west.

Use of the property as a solar farm allows owners to maintain large tracts of land that would otherwise have to be sold for development as yet another subdivision. Allowing

the property to develop as a solar farm maintains the rural character of the area while providing a sustainable benefit to the community.

The proposed solar farm is consistent with the Vance County Land Use Plan (“Plan”). The Plan recommends future development around the community of Kittrell to the advantage of Vance County, stating that “[G]ood quality development, minimum disruptions to highway traffic and an attractive, inviting community will attract new business and residential development.” Permitting the non-obtrusive, environmentally friendly, renewable electricity facility proposed demonstrates the County’s commitment to sustainable growth. The proposed solar farm has no need of public utilities. While solar farms are good neighbors to residential and agricultural land uses. Permitting the proposed solar farm protects the current surrounding land uses while introducing those non-residential uses recommended in the Plan.

David York

From: James Luster <jluster@pinegateholdings.com>
Sent: Tuesday, November 04, 2014 9:48 AM
To: Beth Trahos
Subject: Fwd: IC14-118 - Interconnection Request - Vance Solar 1

Beth,

Below is an email from Brad Carroll with DEP in regards to the Vance Solar 1 interconnection request as well as the interconnection request number. I don't really have anything more formal. I have a couple update emails from Duke if you'd like those as well.

Let me know if we need any additional documentation.

Thanks,

James Luster
Pine Gate Holdings, LLC
4651 Salisbury Rd., Ste 400
Jacksonville, FL 32256
Phone: 407.963.2391

----- Forwarded message -----

From: **Carroll, Brad** <Brad.Carroll@duke-energy.com>
Date: Thu, Jul 10, 2014 at 4:24 PM
Subject: IC14-118 - Interconnection Request - Vance Solar 1
To: "jluster@pinegateholdings.com" <jluster@pinegateholdings.com>
Cc: PEC Generator Interconnections <customer.generation.pec@duke-energy.com>

Mr. Luster,

We have receipt of your interconnection request, and it is currently under evaluation. If anything is missing or requires clarification, or we have questions about the equipment or design, we will back in touch, so there is no need to contact us at this time. You should expect us to be back in contact within two calendar weeks of today.

The interconnection request number in the subject line **MUST** be in the subject line of all email correspondence or it may be discarded.

David York

From: Pine Gate <jluster@pinegateholdings.com>
Sent: Thursday, November 06, 2014 1:29 PM
To: Beth Trahos
Subject: Fwd: IC14-118 - Interconnection Request - Vance Solar 1

Sent from my iPhone

Begin forwarded message:

From: "CustomerOwnedGeneration@duke-energy.com" <CustomerOwnedGeneration@duke-energy.com>
Date: September 26, 2014 at 1:44:30 PM EDT
To: "jluster@pinegateholdings.com" <jluster@pinegateholdings.com>
Subject: IC14-118 - Interconnection Request - Vance Solar 1

Mr. Luster,

We are going to be unable to complete your Facilities Study within the 45 business day window and we will need more time due to the high demand of interconnection requests we are currently receiving. We will do our best to complete this study as soon as we can.

Thank you,

Brad Carroll
UC Synergetic Contractor for Duke Energy Progress

US 1 Bypass S
US 1 Bypass S

R30
Zoning
Category

S. Cobble
Creek Dr

Stoneridge Dr

Ryans
Way Ln

MA Ln

AR
Zoning
Category

RMHC
Zoning
Category

Four D Ln

Raleigh Rd

R20
Zoning
Category





CALLS FROM "A" TO "B"

COURSE	BEARING	DISTANCE
L-1	N 48°59'29"E	72.47'
L-2	N 07°38'51"W	113.37'
L-3	N 34°05'41"E	255.14'
L-4	N 01°39'54"E	182.23'
L-5	N 37°38'43"E	55.13'
L-6	N 00°18'59"W	107.84'
L-7	N 53°22'44"E	116.57'
L-8	S 78°08'29"E	100.82'
L-9	S 52°59'45"E	105.54'
L-10	S 70°15'18"E	70.21'
L-11	N 59°43'35"E	125.78'
L-12	N 01°55'20"E	111.62'
L-13	N 58°43'35"E	125.78'
L-14	N 07°27'13"W	125.80'
L-15	N 02°29'57"W	108.53'
L-16	N 28°28'25"W	107.61'
L-17	N 09°12'12"W	137.97'
L-18		
L-19		
L-20		
L-21		

NOTE: ALL POINTS FROM "A" TO "B" ARE CALLED FROM THE CENTERLINE OF CREEK. FROM "A" TO "B" IS PROPERTY LINE.

To the best of my knowledge, this survey is not located within 2000 feet of a Child Monument.

NOTE: All distances are horizontal ground distances.

ALL OF THE FOLLOWING PROPERTY MARGERS ARE CONTROL CORNERS UNLESS OTHERWISE NOTED: RWB,MS,WP,CEP,DEB,SP,EP.

THIS SURVEY HAS BEEN PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT AND DOES NOT REPRESENT WARRANTIES OR UNDERTAKINGS OR ENCUMBRANCES ON THE PROPERTY.

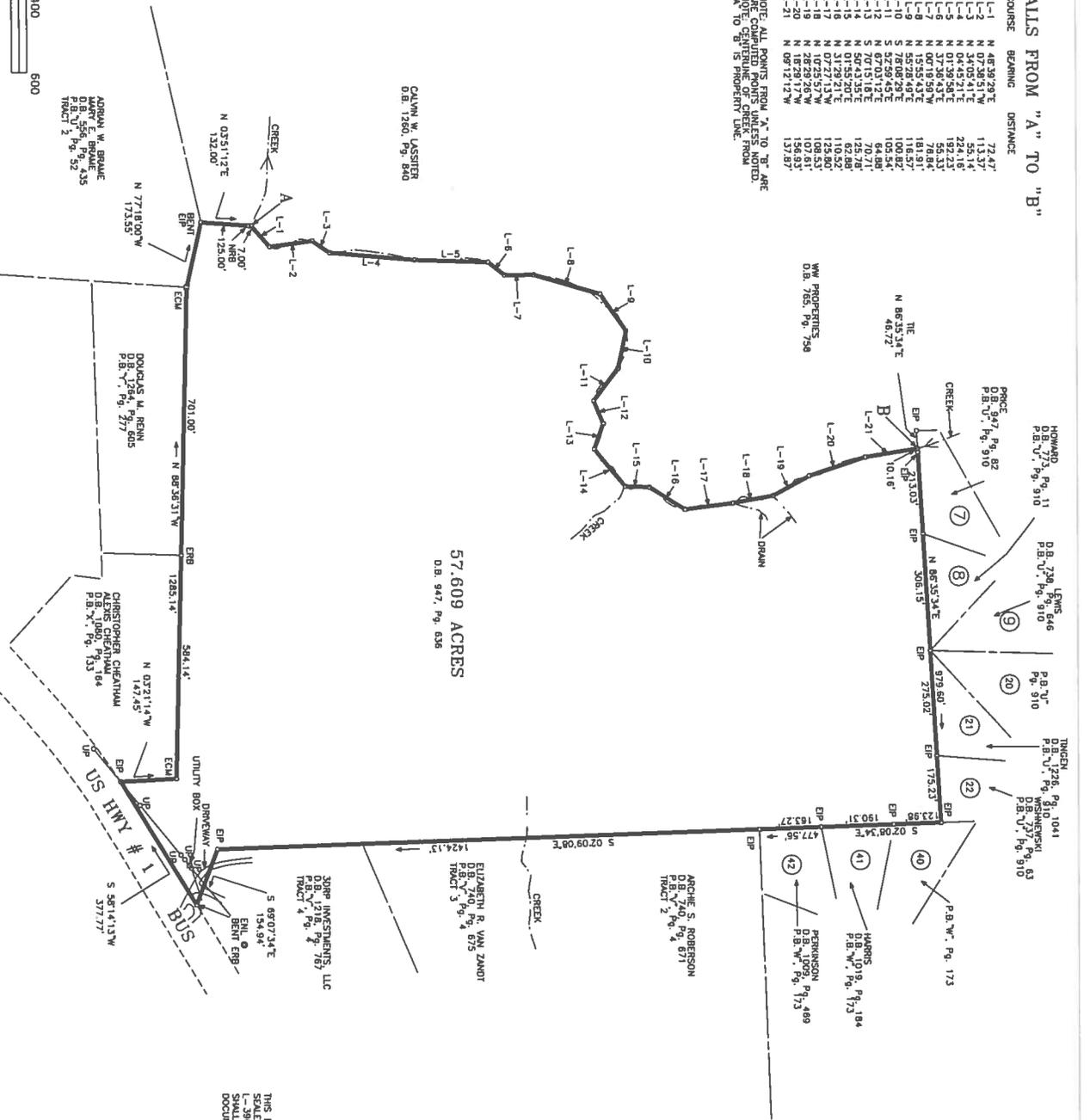
NOTE: Area computed by Coordinate Method

This plot is subject to all easements, agreements and rights of way of record prior to the date of this plot.

- LEGEND**
- EP Existing Iron Pin Found
 - RP New Iron Spike Set Found
 - NIS New Iron Spike Set Found
 - ERK Existing Rock Nail Found
 - ERB Existing Rebar Found
 - NIB New Rebar Set
 - ENS Existing Round Spike Found
 - ECM Existing Concrete Monument Found
 - EHL Existing Nail Found
 - MS Monument Set Found
 - MS Monument Set Found
 - R/W Right-of-Way
 - N/F Note or Easement
 - UAC Unmarked Nail Found



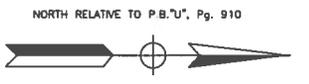
I, Robert C. Cawthorne, certify that this plot was drawn under my supervision from an actual field survey made under my supervision from deeds referenced on the face of the plot; that the ratio of precision as indicated is 1:10,000; that the scale of the plot is 1" = 200'; that the registration number and date of registration are as indicated; and that I am duly licensed as a Professional Land Surveyor in the State of North Carolina.



57.609 ACRES
D.B. 947, Pg. 638

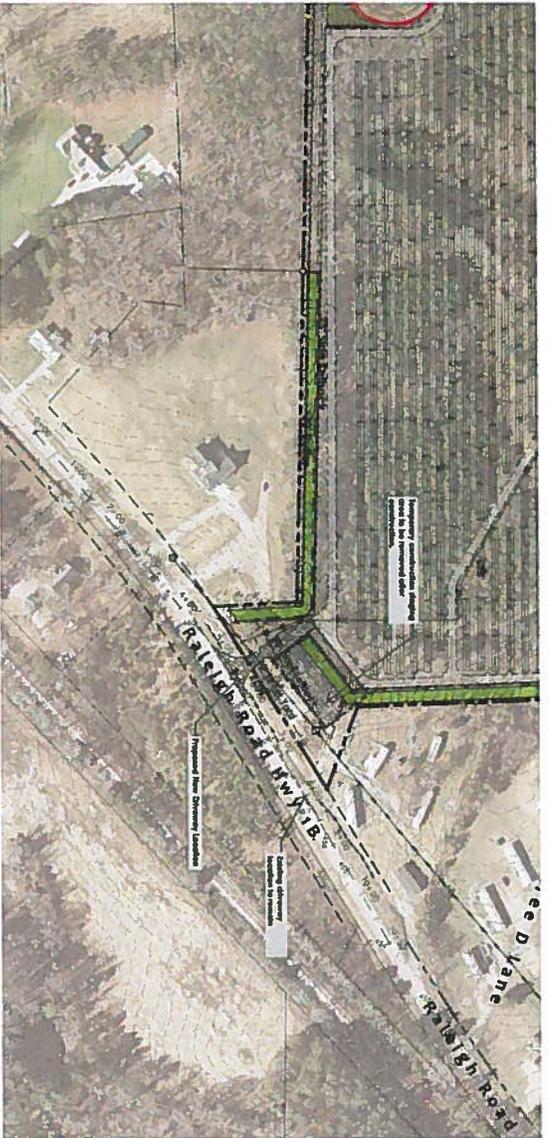
CAWTHORNE & ASSOCIATES
Registered Land Surveyors, P.A.

License No.: C-0378
822 Dobney Drive
Henderson, North Carolina 27536
Phone # 252-492-0041 Fax # 252-492-2846

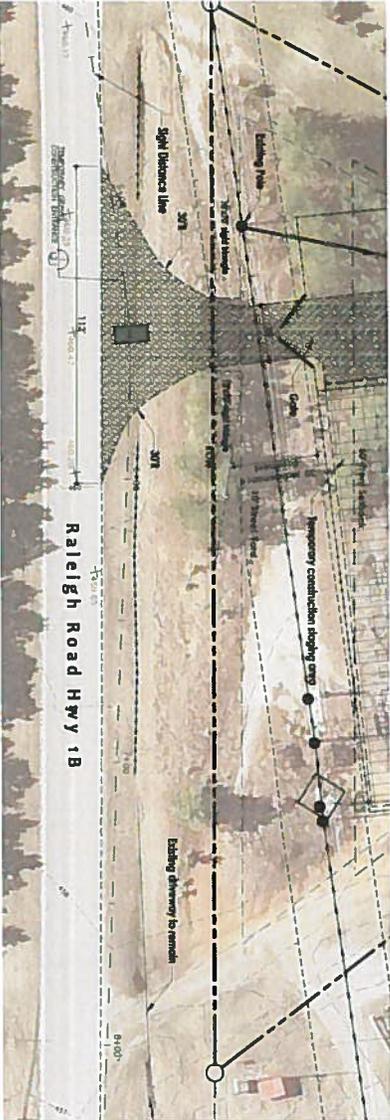


THIS DOCUMENT ORIGINALLY ISSUED AND SEALED BY ROBERT C. CAWTHORNE L-3861, ON 2-24-2015 THIS MEANS THAT IT IS BEING RECONSIDERED A CURRENT DOCUMENT.

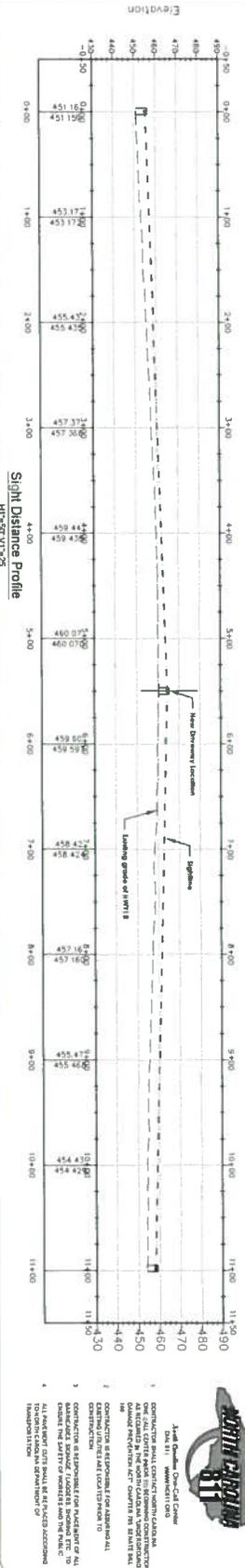
SURVEY FOR
VANCE SOLAR, LLC.
OWNER - JAMES D. GOLDSTON, JR.
KITTELL TOWNSHIP
VANCE COUNTY, NORTH CAROLINA
SCALE 1" = 200' FEBRUARY 24, 2015
FILE # 91-15-004-L
TAX MAP # 456-3-15



Site Plan
1"=100'

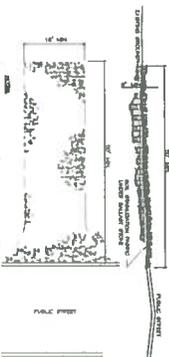


Driveway Enlargement Plan
1"=20'



Sight Distance Profile
1"=25'

- ### GRADING AND DRAINAGE NOTES
1. Performance of the proposed plans is dependent on the existing conditions shown on the site plan and as indicated on the drawings.
 2. Grading shall be done in accordance with the approved grading plan.
 3. All grading shall be done in accordance with the approved grading plan.
 4. All grading shall be done in accordance with the approved grading plan.
 5. All grading shall be done in accordance with the approved grading plan.
 6. All grading shall be done in accordance with the approved grading plan.
 7. All grading shall be done in accordance with the approved grading plan.
 8. All grading shall be done in accordance with the approved grading plan.
 9. All grading shall be done in accordance with the approved grading plan.
 10. All grading shall be done in accordance with the approved grading plan.
 11. All grading shall be done in accordance with the approved grading plan.



1 Stabilized Construction Entrance
1"=10'

Bloc Design
1310 S Iron Street, Suite 111
Chamblee, GA 30341
Phone: 770-428-1848
www.blocdesign.com

Prepared by: [Name]
Checked by: [Name]
Date: [Date]

REVISIONS

NO.	DESCRIPTION	DATE
1	28.11	PL, Complete
2	2.1.1.13	Plan Change

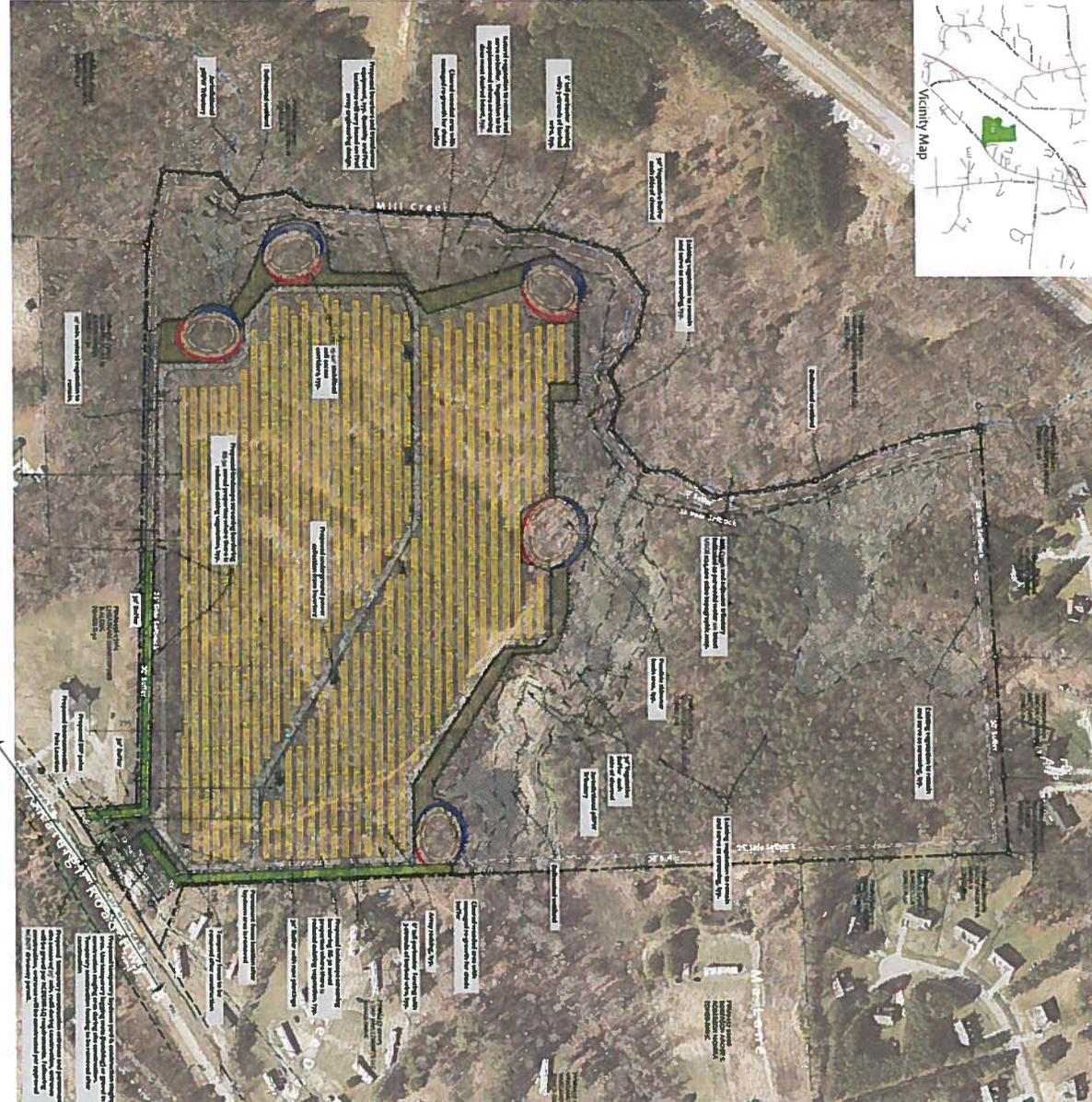
Vance Soler Hwy 1B
Vance County

Driveway Location Plan

DATE: [Date]
DRAWN BY: [Name]
CHECKED BY: [Name]
PROJECT NUMBER: [Number]
SCALE: [Scale]

REVISIONS

NO.	DESCRIPTION	DATE
1	28.11	PL, Complete
2	2.1.1.13	Plan Change



Site Details
 10000 S. 100th St.
 Overland Park, KS 66213
 913.461.1111
 913.461.1112
 913.461.1113
 913.461.1114
 913.461.1115
 913.461.1116
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 913.461.1121
 913.461.1122
 913.461.1123
 913.461.1124
 913.461.1125
 913.461.1126
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Ground-Mount Solar Array Installation
 Vance Solar, LLC
 Vance County, LLC

Project Name	0001	Revision	0001
Client	Vance Solar, LLC	Drawn By	0001
Checked By	0001	Scale	AS SHOWN
Approved By	0001	Date	0001

Conditional Use Site Plan
 CU1

SITE DATA

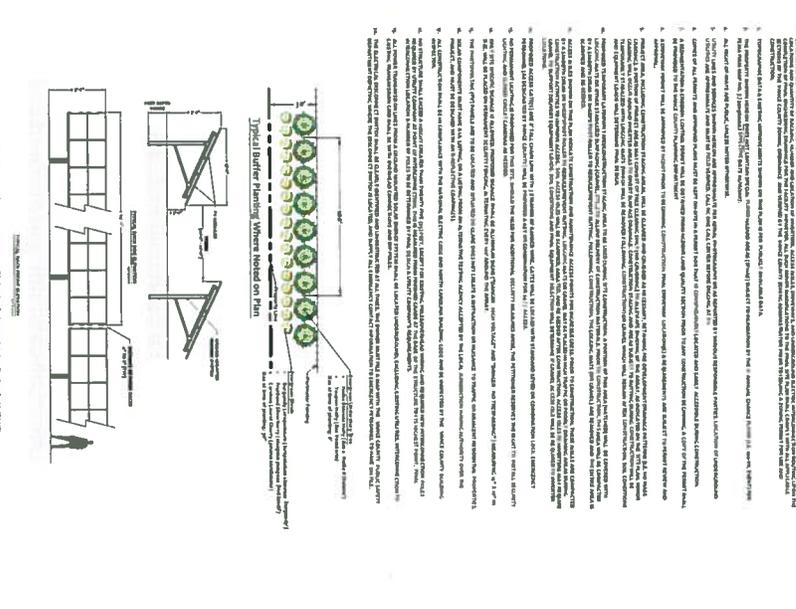
PROJECT: 0001 - 0001
 CLIENT: Vance Solar, LLC
 DATE: 0001
 SCALE: AS SHOWN

1st Particulars Worksheet

Particulars	Area (sq ft)	Volume (cu ft)	Notes
1.00	10000	10000	Site Area
2.00	5000	5000	Impervious Surface
3.00	2000	2000	Water Features
4.00	1000	1000	Other
5.00	5000	5000	Other
6.00	1000	1000	Other
7.00	1000	1000	Other
8.00	1000	1000	Other
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39.00	1000	1000	Other
40.00	1000	1000	Other
41.00	1000	1000	Other
42.00	1000	1000	Other
43.00	1000	1000	Other
44.00	1000	1000	Other
45.00	1000	1000	Other
46.00	1000	1000	Other
47.00	1000	1000	Other
48.00	1000	1000	Other
49.00	1000	1000	Other
50.00	1000	1000	Other

NOTES

1. The project is located on a 100-acre site in Overland Park, Kansas.
2. The site is zoned CU1 (Conditional Use).
3. The project consists of a ground-mounted solar array.
4. The solar array will be installed on a 5-acre portion of the site.
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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"/>	
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"/>	
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"/>	
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"/>	
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"/>	
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"/>	