



Staff Report 10/15/2015

Owner: Cindy Reavis

Applicant: Sunlight Partners, LLC; Blue Bird Solar, LLC

Parcel ID: 0609 02003

Location: 1134 Mabry Mill Road

Current Zoning: (A-R)
Agricultural Residential

Quasi-Judicial Hearing:
10/15/2015

Prepared by:
Jordan McMillen

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 & signature pages
- Exhibit 2.** Project Narrative & Justifications
- Exhibit 3.** Owner's Consent Form
- Exhibit 4.** NCDOT driveway permit Application
- Exhibit 5.** NPDES Stormwater Compliance & NCDENR Erosion & Sedimentation Control Plan Approval
- Exhibit 6.** Interconnection Request
- Exhibit 7.** Aerial photography/surrounding Zoning map
- Exhibit 8.** Boundary Survey
- Exhibit 9.** Solar Farm regulations (as per zoning ordinance)
- Exhibit 10.** Conditional Use Permit Check List
- Exhibit 11.** Site plan

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 Cindy Reavis.
3. The property is located at 1134 Mabry Mill Road or more specifically as tax parcel ID 0609 02003.
4. The property consists of 49 acres of which approximately 27 acres will be the array footprint.
5. The majority of the property is wooded with approximately 10 acres of open land. The applicant plans to clear approximately 17 acres.
6. The application requesting a conditional use permit was filed on September 3, 2015.
7. The adjoining property owners were notified on September 25, 2015
8. The property was posted on October 2, 2015.

Staff Comments

This application was submitted prior to the newly amended solar farm regulations and therefore the previous regulations will apply.

The applicant is requesting a conditional use permit to construct a 5 MW solar farm. As proposed, the solar farm project area would be leased from the current property owner and would cover approximately 49 acres, of which 27 acres would be the array footprint. The site plan calls for an 8 ft. fence with 3 strands of barbed wire.

The property is mostly wooded with approximately 10 acres of open land and slopes generally from northeast to southwest. The applicant plans to clear 17 acres of woodland within the fenced area. There are no known streams or wetlands located on the property. For the most part the buffer will consist of existing vegetation surrounding the entire farm and will be supplemented in small portions of the front (east side) and northern side as needed with a 25 foot planted buffer. When needed, the buffer will consist of a staggered, double row of evergreen shrubs which are expected to reach a minimum height of 8 feet and a minimum spread of 6 feet within 3 years of plantings. Additionally a row of 10 evergreen understory trees per 100 feet will be planted at a minimum height of 4 feet tall and a row of 5 evergreen canopy trees per 100 feet will be planted at a minimum height of 8 feet tall.

The property is adjacent to Interstate 85 and as proposed the fence would be approximately 250 feet from the right-of-way for I-85. According to the submitted justification, the property appraiser has mentioned that the proposed solar farm will not be visible. Overall, this area is predominantly zoned A-R (Agricultural Residential) with a residentially zoned parcel across Mabry Mill Road to the northwest. No existing residential structures are on the property with 1 residential structure bordering the property to the north.

An NCDOT driveway permit, E-911 address, and NC DENR Erosion and Sedimentation Control permit have all been obtained and submitted to staff. The applicant has applied for the interconnection agreement with Duke Energy Progress. The point of interconnection to electric grid is shown on the site plan, which is on the front or Northeastern side of the property. All other electric lines will be underground beyond the interconnection point.

The solar panels will have no moving parts and will have a relatively low profile with a height of 12 feet (ordinance requires less than 25 feet).

Staff Review Items

- In past solar farm reviews, the board has requested a minimum 30 foot buffer. This submittal includes a 25 foot buffer.
- No construction staging or materials storage area is shown on the site plan. Board should consider adding condition that all materials, vehicles and activity will be outside of the Right-of-way.
- The executed pages of the interconnection agreement with Duke Energy Progress need to be submitted prior to releasing conditional use permit – could be condition of approval.
- No tree or shrub species are mentioned – they must be evergreen as shown within USDA Plant Hardiness Zone 7B.



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 # | |
| Fee Paid | |
| BOA Date | |

Property Owner Information

Property Owner: Ms. Cindy Reavis

Mailing Address: 135 Frazier Rd.

City: Youngsville State: NC Zip Code: 27596

Phone #: (919) 210 - 3556 Fax #: () -

E-mail Address: reavis123@aol.com

Applicant Information

Applicant: Sunlight Partners, LLC. - Michael Wallace - Blue Bird Solar, LLC

Mailing Address: 27 Pearl Street FL 4.

City: Portland State: ME Zip Code: 04101

Phone #: (207) 899 - 1123 Fax #: () -

E-mail Address: mwallace@catecapital.com

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

Property Address: Roughly 900 Mabry Mill Rd. Henderson, NC (E911 not yet assigned)

Tax Map Number: _____ PIN (parcel identification #): 0609 02003

Type of Petition: CUP

Existing Zoning: A-R Proposed Zoning: _____

Acreage: Gross = 49. Site = 27 Road Frontage: 1700 Feet (both roads)

Existing Use: Agricultural Farm Fields

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:*

Proposed 5 MW AC Solar Facility.

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:

A DNER Sedimentation and Erosion Control Plan, Stamped Survey, DNER wetland review, Duke Progress Interconnection Application and NCUC Status is provided

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

Proposed Solar Farm.

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

See attached project narrative.



Vance COUNTY

Conditional Use Permit Application

NORTH CAROLINA

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

See attached project narrative. _____

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

See attached project narrative. _____

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

See Attached project narrative. _____

Property Owners Signature

Cindy Reavis
Please sign in blue or black ink

Date 8/18/15

Applicants' Signature

[Signature]
Please sign in blue or black ink

Date 9/8/15

2015

Project Narrative for Blue Bird Solar



Submitted by:

Sunlight Partners, LLC

8/10/2015

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INTRODUCTION

Sunlight Partners respectfully submits the following as supporting documentation for the affirmation that the Blue Bird Solar project meets the requirements for approval of a Conditional Use Permit (CUP) within the A-R zoning districts.

PROJECT DESCRIPTION

The proposed Blue Bird Solar project will consist of an unmanned, 5 Mega-watt (MW), fixed tilt, photovoltaic solar farm. The project is situated on Parcel No. 0609 02003 within Vance County.

Components of the project will consist of mounted photovoltaic solar panels, electrical power inverters, electrical transformers, and buried electrical conduit. The solar generating facility will interconnect to the existing utility grid. **Figure 1** shows a typical photovoltaic solar generating facility.



Figure 1 - Conceptual Site Rendering.

PROJECT LOCATION

The Blue Bird Solar project site is located at 900 Mabry Mill Rd. Henderson, NC. A final E911 address has not yet been assigned.

Figure 2 depicts project location.

Figure 2 – Blue Bird Solar project site.



REQUIRED FINDING OF FACT

- 1. Explain how the use / development is located, designed and proposed to be operated so as to maintain / promote the public health, safety and general welfare;**

The Blue Bird Solar Project will not materially endanger the public health, safety, or general welfare if located where proposed and developed according to the plan as submitted and approved.

Public Health & Safety- *The Blue Bird Solar facility will not adversely affect public health and safety. The solar facility is an unmanned, infrequently visited project site. As such, the project will not increase the existing demand on public safety agencies (police and fire departments). The project site will be enclosed with a fence, preventing access to the general public.*

- 2. Explain how the development complies with all required use and intensity regulations of the Land Development Code, other ordinances and resolutions, and state and federal regulations.**

The Blue Bird Solar project will comply with all required regulations of the Unified Development Ordinance (UDO) and any specific conditions and specifications required for this project. The UDO was reviewed during the design phase of this project, as a good faith effort at compliance, prior to the submittal of the Conditional Use Permit application.

- 3. Explain how the use / development is located, designed and proposed to be operated so as to maintain / enhance the value of contiguous property, or that use / development is a public necessity:**

Because the Blue Bird Solar project will have landscaping and natural buffers shielding the project from view, the project will not adversely affect the use, physical attribute, or impact the value of adjoining or abutting property.

Rich Kirkland was commissioned to perform an analysis on solar farm impacts on adjacent property values within Vance County and all over the State of North Carolina. Mr. Kirkland is a State Certified General Real Estate Appraiser by the State of North Carolina and an MAI. Mr. Kirkland's practice consists of residential and commercial appraisals in Durham, Johnston, Raeford, Vance, Warren, Guilford, Alamance, Nash, Granville, Vance, Orange, Randolph, Chatham and Caswell Counties of North Carolina.

Mr. Kirkland's study was performed to address the impact on adjacent property values related to two similar sized solar projects that Sunlight Partners was permitting as well as this one in Vance County. A complete report will be issued at County Commissioners meeting, including testimony by Mr. Kirkland which concludes; "My professional and expert opinion is that this proposed Solar Farm will not be visible and will have no impact on the market values of the surrounding properties. Blue Bird Solar with the proposed landscaping buffers and natural buffers will not create a negative externality for the surrounding properties as they will not be visible."

4. Explain how the use / development conforms with general plans for the physical development of the County's planning jurisdiction as embodied in the Land Development Code, The counties strategic plan, or other development policies adopted by the board of commissioners.

The proposed location for the Jordan Solar project is designated as Residential-Agricultural District. The Blue Bird Solar project will be in harmony with the area and will be in compliance with the plan for the physical development of the Town due to the fact that project will not increase the population density within the Residential/Agricultural area, will not require urban services, will not decrease the level of service on existing roads, and views of the Blue Bird Solar project will be shielded by natural and landscape buffers.

CONCLUSION

The Blue Bird Solar project has been designed, in good faith, to meet all required conditions and specifications as set forth by Vance County including tripling the proposed landscape buffer. Sunlight Partners believes that the finding of facts has been adequately addressed, and that the Blue Bird Solar project meets the requirements for approval of a Conditional Use Permit (CUP) within the A-R zoning district.



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

PAT MCCRORY
GOVERNOR

DIVISION OF HIGHWAYS

NICHOLAS J. TENNYSON
SECRETARY

Division Five

321 Gillburg Road
Henderson, North Carolina 27537
Telephone (252) 492-0111
Fax (252) 492-0123
9/16/2015

DRIVEWAY PERMIT: D53-91-15-012

COUNTY: Vance ✓

Cindy Reavis
135 Frazier Rd.
Youngsville, NC 27596

SUBJECT: Driveway Permit Onto SR1322 (1290' west from the intersection of
US158 and SR1322)

Attached for your file is a copy of the Driveway Permit which you requested.

This permit is approved with the understanding the owner/agent is responsible for the proper construction of the above drive and subject to the attached Special Provisions.

Please refer to Permit D53-91-15-012 in all future correspondence with this office concerning this drive. Should you have any questions, please contact this office at (252) 492-0111.

Sincerely,

A handwritten signature in black ink that reads "Stephen D. Winstead".

Stephen D. Winstead, P.E.

District Engineer

cc: J. R. Hopkins, P. E., Division Engineer
County Maintenance Engineer

D53-91-15-012

**National Pollutant Elimination System (NPDES)
Stormwater Permit Compliance Certification**

I Michael R. Wallace, a duly authorized representative of Blue Bird Solar, LLC., an industrial/commercial/residential facility requesting attachment to a North Carolina Department of Transportation highway drainage system at Mabry Mill Rd(E-911 not yet addressed) in Vance County County, do hereby certify the following:

Check appropriate box and circle type of facility

- The Industrial / Commercial / Residential facility does not require an NPDES stormwater permit.
- The Industrial / Commercial / Residential facility does require an NPDES stormwater permit. The permit has been obtained and a Stormwater Pollution Prevention Plan (SPPP) is in place. Appropriate structural stormwater best management practices (BMP) are designed and installed as required by the Department of Environment and Natural Resources (DENR) and/or the local governing agency. All structural stormwater BMP's are located outside of NCDOT right-of-way.

I understand if the Department of Transportation determines the facility is not in compliance with NPDES stormwater requirements, the Department will report the noncompliance to the DENR Division of Water Quality. I also understand that falsification of this certification may result in penalty of law against the facility and me as prescribed in the North Carolina General Statutes.

Signature: Michael R. Wallace

Date: 8.17.2015

Note: If the applicant has a question as to whether an NPDES stormwater permit is required, he or she may contact the N.C. Division of Water Quality in Raleigh at (919) 733-5083 (ask for Stormwater and General Permits Unit).

VERIFICATION OF COMPLIANCE WITH ENVIRONMENTAL REGULATIONS

(Check Appropriate Box)

- Permits from the N.C. Department of Environment and Natural Resources and the U.S. Army Corp of Engineers are not required for this project. However, all applicable federal and state regulations have been followed.

- The required permits from the N.C. Department of Environment and Natural Resources and the U.S. Army Corp of Engineers have been obtained for this project. Copies of permits and Completion Certificates are attached.

- All applicable NPDES Stormwater Permit requirements have been met for this project. (The applicant should contact the N.C. Division of Water Quality in Raleigh to determine if a stormwater permit is required.)

- The project is in compliance with all applicable sedimentation and erosion control laws and regulations.

Project Name: Blue Bird Solar

Township: Henderson County: Vance County

Project Engineer: Michael R. Wallace Phone No.: 207-899-1123

Project Contact: Michael R. Wallace

Applicant's Name: Blue Bird Solar - Michael Wallace

P.E. SEAL

Date Submitted: 8.15.2015





North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

September 3, 2015

LETTER OF APPROVAL

Sunlight Partners LLC
Michael Wallace
27 Pearl St Unit 4
Portland,

RE: Project Name: BLUE BIRD SOLAR
Acres Approved: 29.29
Project ID: VANCE-2016-002
County: Vance, City: Henderson
Address: 900 Mabry Mill Rd.
River Basin: Roanoke
Stream Classification: Other
Submitted By: Randall Miller
Date Received by LQS: August 31, 2015
Plan Type: Utilities

Dear Sir or Madam:

This office has reviewed the subject erosion and sedimentation control plan. We find the plan to be acceptable and hereby issue this Letter of Approval. The enclosed Certificate of Approval must be posted at the job site. This plan approval shall expire three (3) years following the date of approval, if no land-disturbing activity has been undertaken, as is required by Title 15A NCAC 4B .0129.

Please be aware that your project will be covered by the enclosed NPDES Construction Stormwater General Permit NCG010000. Please become familiar with all the requirements and conditions of this permit in order to achieve compliance.

Title 15A NCAC 4B .0118(a) requires that a copy of the approved erosion control plan be on file at the job site. Also, this letter gives the notice required by G.S. 113A-61.1(a) of our right of periodic inspection to insure compliance with the approved plan.

Letter of Approval
Sunlight Partners
September 3, 2015
Page 2 of 2

North Carolina's Sedimentation Pollution Control Act is performance-oriented, requiring protection of existing natural resources and adjoining properties. If, following the commencement of this project, the erosion and sedimentation control plan is inadequate to meet the requirements of the Sedimentation Pollution Control Act of 1973 (North Carolina General Statute 113A-51 through 66), this office may require revisions to the plan and implementation of the revisions to insure compliance with the Act.

Acceptance and approval of this plan is conditioned upon your compliance with Federal and State water quality laws, regulations, and rules. In addition, local city or county ordinances or rules may also apply to this land-disturbing activity. This approval does not supersede any other permit or approval.

Please note that this approval is based in part on the accuracy of the information provided in the Financial Responsibility Form, which you provided. You are requested to file an amended form if there is any change in the information included on the form. In addition, it would be helpful if you notify this office of the proposed starting date for this project. Please notify us if you plan to have a preconstruction conference.

Your cooperation is appreciated.

Sincerely,



Tessa Monday
Environmental Engineer
Land Quality Section

Enclosures: Certificate of Approval
NPDES Permit

cc: Randall L Miller, PE
Thompson & Associates
1149 Executive Circle Suite D-2, Cary NC 27511

NPDES File

NORTH CAROLINA INTERCONNECTION REQUEST

Utility: Progress / Duke Energy Carolinas, Inc.

Designated Contact Person: Attention: Customer Owned Generation-Mail Code ST13A

Address: POBox 1010 Charlotte NC28201 Overnight Mailing: 400 South Tryon St. Charlotte NC28202

Telephone Number: 866.233.2290

Fax: 980.373.5244 E-Mail Address: customerownedgeneration@duke-energy.com

An Interconnection Request is considered complete when it provides all applicable and correct information required below.

Preamble and Instructions

An Interconnection Customer who requests a North Carolina Utilities Commission jurisdictional interconnection must submit this Interconnection Request by hand delivery, mail, e-mail, or fax to the Utility.

Request for: Fast Track Process Study Process
(All Generating Facilities larger than 2 MW must use the Study Process.)

Processing Fee or Deposit

Fast Track Process – Non-Refundable Processing Fees

- If the Generating Facility is 20 kW or smaller, the fee is \$100.
- If the Generating Facility is larger than 20 kW but not larger than 100 kW, the fee is \$250.
- If the Generating Facility is larger than 100 kW but not larger than 2 MW, the fee is \$500.

Study Process – Deposit

If the Interconnection Request is submitted under the Study Process, whether a new submission or an Interconnection Request that did not pass the Fast Track Process, the Interconnection Customer shall submit to the Utility a deposit not to exceed \$1,000 towards study costs.

Change in Ownership – Non-Refundable Processing Fee

If the Interconnection Request is submitted solely due to a transfer of ownership of the Generating Facility, the fee is \$50.

Interconnection Customer Information

Legal Name of the Interconnection Customer (or, if an individual, individual's name)

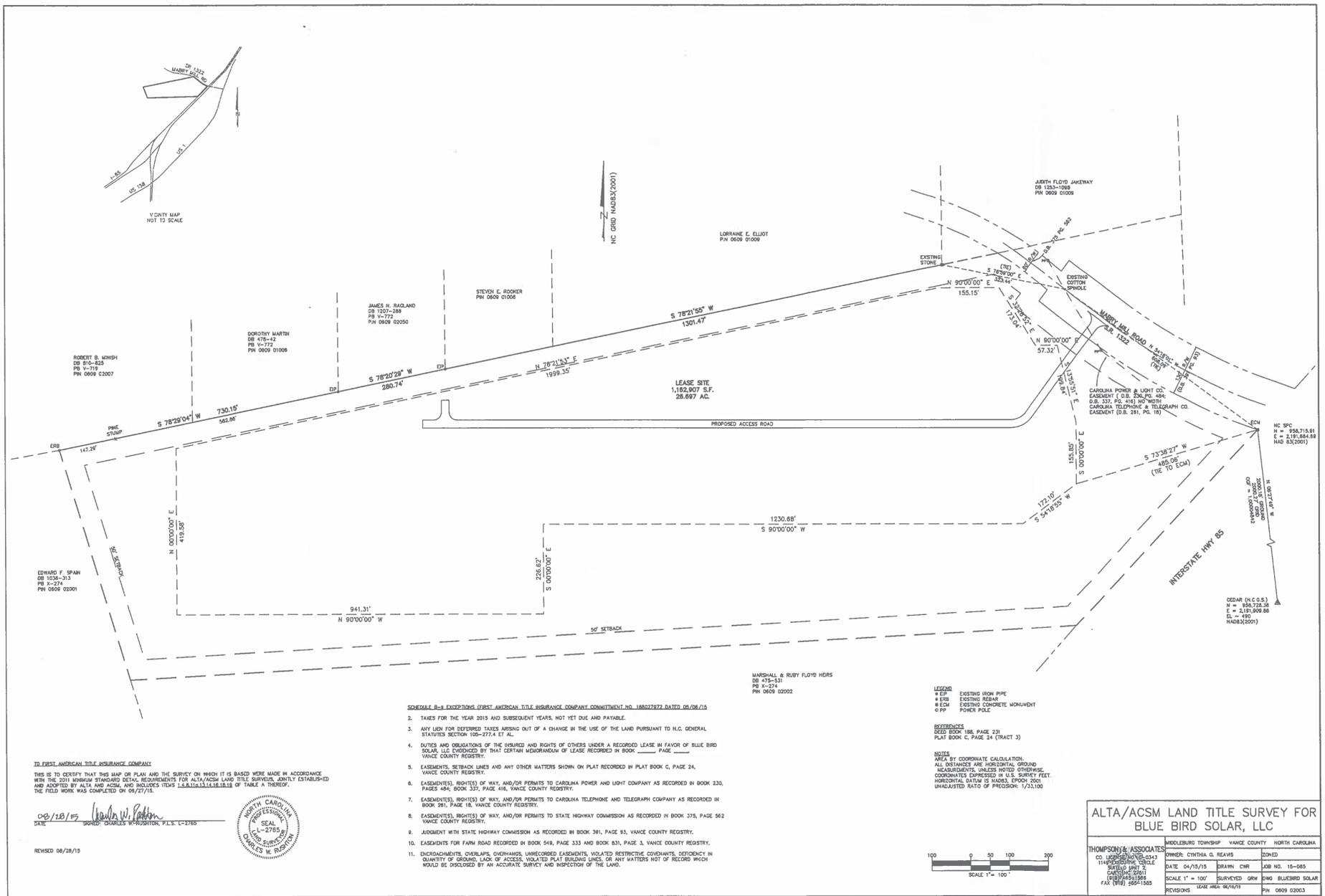
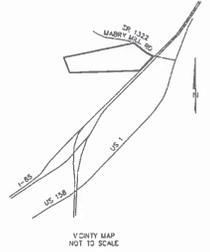
Name: Blue Bird Solar, LLC
Contact Person: Keith Colson
Mailing Address: 4115E Valley Auto Dr. #204
City: Mesa State: AZ Zip: 85206
Facility Location (if different from above): 900 Mabry Mill Rd. Henderson, NC 27537
Telephone (Day): (480) 582-1540 Telephone (Evening): (801) 550-7150
Fax: (480) 582-1540 E-Mail Address: keith.colson@sunlightpartners.com

Alternative Contact Information (if different from the Interconnection Customer)

Contact Name: Michael R. Wallace, PE
Title: Managing Director, Project Management
Address: 27 Pearl Street, 4th Floor
Portland ME 04101
Telephone (Day): (480) 899-1123 Telephone (Evening): (480) 217-2216
Fax: 888-556-6451 E-Mail Address: mwallace@catecapital.com

- Application is for: New Generating Facility
 Capacity Addition to Existing Generating Facility
 Transfer of Ownership of Existing Generating Facility

If capacity addition to existing Generating Facility, please describe: _____



- SCHEDULE B-E EXCEPTIONS (FIRST AMERICAN TITLE INSURANCE COMPANY COMMITMENT NO. 186072972 DATED 08/08/15)**
2. TAXES FOR THE YEAR 2015 AND SUBSEQUENT YEARS, NOT YET DUE AND PAYABLE.
 3. ANY LIEN FOR DEFERRED TAXES ARISING OUT OF A CHANGE IN THE USE OF THE LAND PURSUANT TO N.C. GENERAL STATUTES SECTION 105-277.4 ET AL.
 4. DUTIES AND OBLIGATIONS OF THE HURLED AND RIGHTS OF OTHERS UNDER A RECORDED LEASE IN FAVOR OF BLUE BIRD SOLAR, LLC ENDOVISED BY THAT CERTAIN MEMORANDUM OF LEASE RECORDED IN BOOK _____ PAGE _____ VANCE COUNTY REGISTRY.
 5. EASEMENTS, SETBACK LINES AND ANY OTHER MATTERS SHOWN ON PLAT RECORDED IN PLAT BOOK C, PAGE 24, VANCE COUNTY REGISTRY.
 6. EASEMENT(S), RIGHT(S) OF WAY, AND/OR PERMITS TO CAROLINA POWER AND LIGHT COMPANY AS RECORDED IN BOOK 230, PAGES 494, BOOK 337, PAGE 416, VANCE COUNTY REGISTRY.
 7. EASEMENT(S), RIGHT(S) OF WAY, AND/OR PERMITS TO CAROLINA TELEPHONE AND TELEGRAPH COMPANY AS RECORDED IN BOOK 261, PAGE 18, VANCE COUNTY REGISTRY.
 8. EASEMENT(S), RIGHT(S) OF WAY, AND/OR PERMITS TO STATE HIGHWAY COMMISSION AS RECORDED IN BOOK 375, PAGE 562 VANCE COUNTY REGISTRY.
 9. JUDGMENT WITH STATE HIGHWAY COMMISSION AS RECORDED IN BOOK 361, PAGE 63, VANCE COUNTY REGISTRY.
 10. EASEMENTS FOR FARM ROAD RECORDED IN BOOK 549, PAGE 333 AND BOOK 631, PAGE 3, VANCE COUNTY REGISTRY.
 11. ENCROACHMENTS, OVERLAPS, OVERHANDS, UNRECORDED EASEMENTS, VIOLATED RESTRICTIVE COVENANTS, DEFICIENCY IN QUANTITY OF GROUND, LACK OF ACCESS, VIOLATED PLAT BOUNDARY LINES OR ANY MATTERS NOT OF RECORD WHICH WOULD BE DISCLOSED BY AN ACCURATE SURVEY AND INSPECTION OF THE LAND.

LEGEND
 * EP EXISTING IRON PIPE
 * ER EXISTING REBAR
 * ECH EXISTING CONCRETE MONUMENT
 * PP POWER POLE

REFERENCES
 DEED BOOK 186, PAGE 231
 PLAT BOOK C, PAGE 24 (TRACT 3)

NOTES
 AREA BY COORDINATE CALCULATION.
 ALL DISTANCES ARE HORIZONTAL. GROUND MEASUREMENTS, UNLESS NOTED OTHERWISE, COORDINATED IN U.S. SURVEY FEET. HORIZONTAL DATUM IS NAD83. EPOCH 2000. UNQUALIFIED DATE OF PRECISION: 1/25/10

TO FIRST AMERICAN TITLE INSURANCE COMPANY
 THIS IS TO CERTIFY THAT THIS MAP OR PLAN AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2011 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/ACSM LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND ACSM, AND INCLUDES ITEMS 1-11, 13-15, 17-18, 20-21, 23-24, 26-27, 29-30, 32-33, 35-36, 38-39, 41-42, 44-45, 47-48, 50-51, 53-54, 56-57, 59-60, 62-63, 65-66, 68-69, 71-72, 74-75, 77-78, 80-81, 83-84, 86-87, 89-90, 92-93, 95-96, 98-99, 101-102, 104-105, 107-108, 110-111, 113-114, 116-117, 119-120, 122-123, 125-126, 128-129, 131-132, 134-135, 137-138, 140-141, 143-144, 146-147, 149-150, 152-153, 155-156, 158-159, 161-162, 164-165, 167-168, 170-171, 173-174, 176-177, 179-180, 182-183, 185-186, 188-189, 191-192, 194-195, 197-198, 200-201, 203-204, 206-207, 209-210, 212-213, 215-216, 218-219, 221-222, 224-225, 227-228, 230-231, 233-234, 236-237, 239-240, 242-243, 245-246, 248-249, 251-252, 254-255, 257-258, 260-261, 262-263, 265-266, 268-269, 271-272, 273-274, 276-277, 279-280, 282-283, 285-286, 288-289, 291-292, 294-295, 297-298, 300-301, 303-304, 306-307, 309-310, 312-313, 315-316, 318-319, 321-322, 324-325, 327-328, 330-331, 333-334, 336-337, 339-340, 342-343, 345-346, 348-349, 351-352, 354-355, 357-358, 360-361, 362-363, 365-366, 368-369, 371-372, 373-374, 376-377, 379-380, 382-383, 385-386, 388-389, 391-392, 394-395, 397-398, 400-401, 403-404, 406-407, 409-410, 412-413, 415-416, 418-419, 421-422, 424-425, 427-428, 430-431, 433-434, 436-437, 439-440, 442-443, 445-446, 448-449, 451-452, 454-455, 457-458, 460-461, 462-463, 465-466, 468-469, 471-472, 473-474, 476-477, 479-480, 482-483, 485-486, 488-489, 491-492, 494-495, 497-498, 500-501, 503-504, 506-507, 509-510, 512-513, 515-516, 518-519, 521-522, 524-525, 527-528, 530-531, 533-534, 536-537, 539-540, 542-543, 545-546, 548-549, 551-552, 554-555, 557-558, 560-561, 562-563, 565-566, 568-569, 571-572, 573-574, 576-577, 579-580, 582-583, 585-586, 588-589, 591-592, 594-595, 597-598, 600-601, 603-604, 606-607, 609-610, 612-613, 615-616, 618-619, 621-622, 624-625, 627-628, 630-631, 633-634, 636-637, 639-640, 642-643, 645-646, 648-649, 651-652, 654-655, 657-658, 660-661, 662-663, 665-666, 668-669, 671-672, 673-674, 676-677, 679-680, 682-683, 685-686, 688-689, 691-692, 694-695, 697-698, 700-701, 703-704, 706-707, 709-710, 712-713, 715-716, 718-719, 721-722, 724-725, 727-728, 730-731, 733-734, 736-737, 739-740, 742-743, 745-746, 748-749, 751-752, 754-755, 757-758, 760-761, 762-763, 765-766, 768-769, 771-772, 773-774, 776-777, 779-780, 782-783, 785-786, 788-789, 791-792, 794-795, 797-798, 800-801, 803-804, 806-807, 809-810, 812-813, 815-816, 818-819, 821-822, 824-825, 827-828, 830-831, 833-834, 836-837, 839-840, 842-843, 845-846, 848-849, 851-852, 854-855, 857-858, 860-861, 862-863, 865-866, 868-869, 871-872, 873-874, 876-877, 879-880, 882-883, 885-886, 888-889, 891-892, 894-895, 897-898, 900-901, 903-904, 906-907, 909-910, 912-913, 915-916, 918-919, 921-922, 924-925, 927-928, 930-931, 933-934, 936-937, 939-940, 942-943, 945-946, 948-949, 951-952, 954-955, 957-958, 960-961, 962-963, 965-966, 968-969, 971-972, 973-974, 976-977, 979-980, 982-983, 985-986, 988-989, 991-992, 994-995, 997-998, 1000-1001.

0-B/18/15
 DATE
 REWISD 08/28/15



ALTA/ACSM LAND TITLE SURVEY FOR BLUE BIRD SOLAR, LLC

THOMPSON & ASSOCIATES
 CO. LICENSED SURVEYOR
 1149 W. STATE ST. SUITE 200
 CHARLOTTE, NC 28202
 PHONE: 704.375.1499
 FAX: (919) 269-1585

INDOLEBURG TOWNSHIP VANCE COUNTY NORTH CAROLINA
 PRIMER: CYNTHIA G. REAVIS ZONED
 DATE 04/15/15 DRAWN CHR JOB NO. 15-065
 SCALE 1" = 100' SURVEYED GRYW DWD BLUEBIRD SOLAR
 REVISIONS: NEAR AREA 06/18/15 P/N 0909 02003

| 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 |
|-----------|--------------------------|--------------------------|------------|--------------------------|--------------------------|--------------|--------------------------|--------------------------|-------|
| 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"/> | |
| Harvin: | <input type="checkbox"/> | <input type="checkbox"/> | Stainback: | <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 |
|-----------|--------------------------|--------------------------|------------|--------------------------|--------------------------|--------------|--------------------------|--------------------------|-------|
| 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"/> | |
| Harvin: | <input type="checkbox"/> | <input type="checkbox"/> | Stainback: | <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 |
|-----------|--------------------------|--------------------------|------------|--------------------------|--------------------------|--------------|--------------------------|--------------------------|-------|
| 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"/> | |
| Harvin: | <input type="checkbox"/> | <input type="checkbox"/> | Stainback: | <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 |
|-----------|--------------------------|--------------------------|------------|--------------------------|--------------------------|--------------|--------------------------|--------------------------|-------|
| 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"/> | |
| Harvin: | <input type="checkbox"/> | <input type="checkbox"/> | Stainback: | <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 |
|-----------|--------------------------|--------------------------|------------|--------------------------|--------------------------|--------------|--------------------------|--------------------------|-------|
| 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"/> | |
| Harvin: | <input type="checkbox"/> | <input type="checkbox"/> | Stainback: | <input type="checkbox"/> | <input type="checkbox"/> | | | | |