

Docket Item "H"

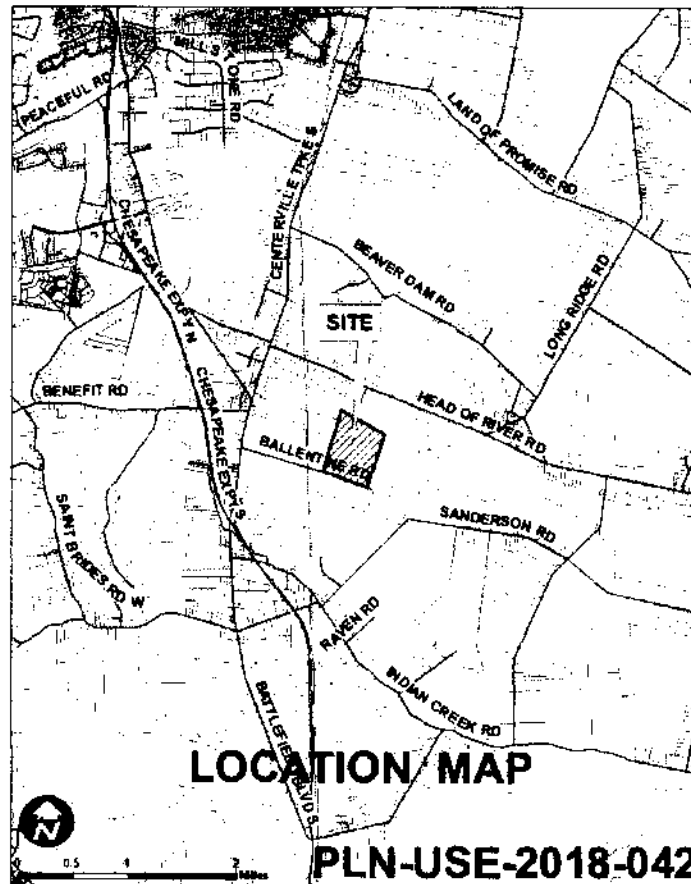
**PLN-USE-2018-042**

# Hickory Solar Farm Amendment

CITY COUNCIL PACKAGE FOR  
JANUARY 15, 2019

# Chesapeake

VIRGINIA



## Heard by Planning Commission on January 9, 2019

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**APPLICATION SUMMARY**

**PLN-USE-2018-042 Hickory Solar Farm Amendment**

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**PLN-USE-2018-042 Hickory Solar Farm Amendment APPLICANT:** Caden Energix  
**Hickory LLC OWNER:** Newbern Farms LLC **PROPOSAL:** A conditional use permit to  
amend stipulations number 7 and 12 of a previously approved application (PLN-USE-  
2017-003) for a solar farm facility. **ZONE:** A-1, Agricultural District **LOCATION:** On  
Ballentine Road, approximately 5000 ft. east from the intersection of Ballentine Road and  
Battlefield Blvds. **TAX MAP SECTION/PARCEL:** 0970000000660 **BOROUGH:** Butts  
Road

**SUBMITTED:** 9-27-18                      **ACCEPTED:** 10-24-18

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**CITY COUNCIL**

**HEARING DATE:** 12-11-18  
**ACTION:** APPROVED FOR CONCURRENT ADVERTISING  
**VOTE:** 8 - 1

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**STAFF RECOMMENDATION**

Approval with amendments to stipulations 2, 5, 6, 7, 8, 9, 10, 11, 12, 13, and 14, and  
additional stipulations 15, 16, and 17 to the previously approved application,  
PLN-USE-2017-003.

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**PLANNING COMMISSION**

**HEARING DATE(S):** 1-9-19  
**RECOMMENDATION:** APPROVAL of stipulations 1, 3-14 and 16 and 17 in  
the staff report with amended stipulation 2,  
deletion of stipulation 15 and renumbering of  
stipulations 16-17  
**VOTE:** 9 - 0

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APPLICATION SUMMARY

**PLN-USE-2018-042 Hickory Solar Farm Amendment**

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APPLICANT:

**Kenneth Niemann**  
Caden Energix Hickory LLC  
Caden Energy  
611 NW 72<sup>nd</sup> Street  
Miami, FL 33150  
(703) 801-0412  
[ken.niemann@cadenenergy.com](mailto:ken.niemann@cadenenergy.com)

OWNER:

**Newbern Farms LLC**  
999 Waterside Drive  
Suite 1400  
Norfolk, VA 23510  
(757) 477-3911  
[richard@burroughsdevelopment.com](mailto:richard@burroughsdevelopment.com)

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4. **PLN-USE-2018-042**

**PROJECT:** Hickory Solar Farm Amendment

**APPLICANT:** Caden Energix Hickory LLC

**OWNER:** Newbern Farms LLC

**PROPOSAL:** A conditional use permit to amend stipulations number 7 and 12 of a previous approved application (PLN-USE-2017-003) for a solar farm facility.

**ZONE:** A-1, Agricultural District

**LOCATION:** On Ballentine Road, approximately 5000 ft. east from the intersection of Ballentine Road and Battlefield Blvds.

**TAX MAP SECTION/PARCEL:** 0970000000660

**BOROUGH:** Butts Road

*(This item was approved for concurrent advertising and will be heard by City Council on January 15, 2019)*

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**PLANNING COMMISSION RECOMMENDATION:**

**APPROVAL of stipulations 1, 3-14 and 16 and 17 in the staff report with amended stipulation 2, deletion of stipulation 15 and renumbering of stipulations 16-17: (9 - 0; Deneau/Sweeney)**

1. The applicant/owner shall construct a City Standard Commercial Entrance, CG-11A to access the site prior to issuance of a Certificate of Occupancy. The entrance shall be constructed at the intersection of Battlefield Boulevard South and Ballentine Road and shall be depicted on the final site construction plan which is subject to review and approval of the Director of Development and Permits, or designee. In addition, a closure and restoration plan shall be a required component of the final site construction plan.
2. ~~The applicant/owner shall submit a Landscape Plan pursuant to the Chesapeake Zoning Ordinance prior to final construction plan approval. Said plan shall be subject to the review and approval of the City's Landscape Coordinator. Said plan shall consist of the following: a modified Buffer Yard D along the entirety of the property line, consisting of five (5) small trees, twenty five (25) shrubs, and a solid row of evergreen trees that are at least eight (8) feet in height at the time of planting for every 100 linear feet. All plant materials shall be subject to the review and approval of the City's Landscape Coordinator and shall be installed prior to the issuance of a Certificate of Occupancy for the use. The applicant/owner shall also install and maintain a security fence around the entire perimeter of the solar farm prior to the issuance of a Certificate of Occupancy for the use. Said fence shall be between six (6) to ten (10) feet in height. The fence shall not exceed six (6) feet in height unless the applicant/owner receives the approval of a~~

variance from the Board of Zoning Appeals. In no case shall the height of the solar panels exceed the height of the row of evergreen trees. install and maintain a security fence around the entire perimeter of the solar farm prior to the issuance of a certificate of occupancy for the use. Said fence shall be between six (6) to ten (10) feet in height. The fence shall not exceed six (6) feet in height unless the applicant/owner receives a variance from the Board of Zoning Appeals. In no case shall the solar panels exceed the height of the row evergreen trees planted along the Ballentine Road landscape buffer, as it is described below. The applicant/owner shall install and maintain the following landscaping, all of which shall be subject to the review and approval of the City's Landscape Coordinator.:

- a. Southern Property line along Ballentine Road: a modified Buffer Yard D shall be installed along the entirety of the property line prior to the issuance of a certificate of occupancy. Said buffer shall consist of five (5) small trees, twenty-five (25) shrubs, and a solid row of evergreen trees that are at least eight (8) feet in height at the time of planting for every 100 linear feet.
  - c. Northern, Eastern and Western property lines: if any parcel adjacent to the northern, eastern or western property lines of this site, whether such parcel is now existing or later created by subdivision, is rezoned for residential use, then the applicant/owner shall install and maintain a modified Buffer Yard D along the entire property line adjacent to the residentially zoned property. Said buffer shall consist of five (5) small trees, twenty-five (25) shrubs, and a solid row of evergreen trees that are at least eight (8) feet in height at the time of planting for every 100 linear feet. All such landscaping shall be installed within ninety (90) days of the date that any parcel, whether now existing or later created by subdivision, which is adjacent to the property subject to this use permit is rezoned for residential use.
3. The applicant/owner shall obtain a valid Run-Off Control Permit from the Department of Public Utilities prior to the approval of construction plans.
  4. The applicant/owner shall obtain all required permits and approvals from the Department of Development and Permits prior to the installation of the security fence and storage shed.
  5. The applicant/owner shall ensure that all power lines transferring the power generated from the property shall be placed underground unless the applicant/owner provides written correspondence to the Zoning Administrator from the utility provider(s) which establishes the lines must to be placed above ground.
  6. The applicant/owner agrees that the proposed use shall utilize SMA 2200-EV-US, SMA 2500-EV-US or an alternative solar panel inverter approved by the Navy and in compliance with the Navy's Electromagnetic Interference (EMI) assessment.

7. The applicant/owner shall notify the Zoning Administrator in writing within thirty (30) days of a change in ownership of the proposed solar facility. The notification shall include the name, address, and contact information for the new owner and designee in the Commonwealth of Virginia. In addition, the applicant/owner shall provide written proof that the new owner entity has been advised of and agreed in writing to comply with all of the stipulations associated with the Conditional Use Permit. Said written proof shall be subject to the review and approval of the City Attorney, or designee.
8. The applicant/owner shall provide written notice to the Director of Development and Permits or designee at least thirty (30) days in advance of the cessation or abandonment of this use. Within one hundred and eighty (180) days of the cessation or abandonment of this use, the applicant/owner shall remove all photovoltaic systems (including, but not limited to inverters, modules/solar panels, and solar trackers), all other structural elements related to the photovoltaic system use, and restore the property to its pre-use grade.
9. Prior to receiving a certificate of occupancy, an Emergency Management Plan (EMP) will be provided to, and subject to the approval of, the Director of Development and Permits for the solar energy facility. The goal of this EMP is to provide safety guidelines and procedures for potential emergency-related incidents during all phases of the life of the facility (construction, operation, and decommissioning). The EMP shall cover, at a minimum, emergency communications and training, theft and vandalism, inclement weather, high voltage equipment, and fire safety and prevention.
10. The applicant/owner shall maintain insurance for the duration of the use. The applicant/owner shall provide to the City Attorney a Certificate of Insurance providing General Liability Insurance which shall include, at a minimum, the following information: (i) the name of the insurance company, policy number and expiration date; and (ii) the coverage and limits on coverage and including the amount of deductibles or self-insured retentions with a minimum limit of One Million Dollars (\$1,000,000) per occurrence and Two Million Dollars (\$2,000,000) aggregate, combined single limit, for bodily injury (including death) or property damage and Environmental Impairment insurance with minimum limits of \$1,000,000 per occurrence. The certificate of insurance shall be provided to the City Attorney prior to the issuance of a Certificate of Occupancy.
11. The applicant/owner shall ensure that the solar arrays are designed to withstand 120 mph wind speeds, as depicted on the approved final site plan.
12. The applicant/owner shall ensure that the proposed solar energy facility will only use mono-crystalline, poly-crystalline, or thin-film photovoltaic (PV) technology.

13. In light of and for so long as tax exemptions are afforded to solar facilities in Virginia and in an effort to promote and preserve agricultural lands, the applicant/owner offers and the City accepts an annual contribution of fifty thousand dollars (\$50,000.00) to the City of Chesapeake's Open Space and Agricultural Preservation Program or similar program as approved by the Director of Planning or designee. The first contribution shall be paid prior to the issuance of a Certificate of Occupancy for this use and each annual contribution shall be paid every twelve (12) months thereafter.
14. The applicant/owner shall manage the vegetation on-site without the use of herbicides, unless the treatment is approved by the City's Landscape Coordinator.
- ~~15. The applicant/owner shall maintain a minimum setback for the use of 150 feet from all property lines and a minimum of 250 feet if abutting a residentially zoned or use property. The setbacks imposed in this stipulation shall not apply to the required fencing and/or landscape buffers.~~
16. The applicant/owner shall provide emergency access, including but not limited to include unobstructed access utilizing fire lane marking in accordance with the PFM, Appendix 19, and a Knox Corporation key box or padlock for emergency access via the locked gate, prior to the issuance of a Certificate of Occupancy. The required emergency access and sufficiency of said access shall be subject to the review and approval of the City's Fire Marshal.
17. The applicant/owner shall submit a Decommission Plan to the Department of Development and Permits and the Office of the City Attorney prior to the issuance of a Certificate of Occupancy. The Decommission Plan shall outline the timeline for restoration of the site to pre-use condition and bonding to ensure implementation. Said Plan shall be subject to the review and approval of the Department of Development and Permits, or designee, and the Office of the City Attorney.

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Mrs. Shaffer read PLN-USE-2018-042 into the record for Commission review and action.

Staff Presentation:

Mr. Dao stated that based on the findings listed in the staff report, planning staff recommended that **PLN-USE-2018-042** be **APPROVED** with the stipulations as listed in the official agenda.

Proponent:

Kenneth Niemann, Caden Energix Hickory LLC, Caden Energy, 611 NW 72<sup>nd</sup> Street, Miami, Florida, applicant. Mr. Niemann described the history of previous approvals, status

of project, and completion timeline. Mr. Niemann requested two changes to the change the name of the applicant and the types of panels that will be used. He agrees with staff stipulations except stipulation 15. Increasing the setbacks reduces the project size by 20%, which reduces output by 20% and impacts financial and permitting approvals. He requested that the previously approved setback be preserved and that the enhanced landscaping be approved only if the adjacent properties are rezoned to residential. All requirements and permits will be transferred to the new owner, including contribution to the OSAP program.

Parikhit (Ricky) Sinha, 350 W Washington Street, Tempe, Arizona, representing First Solar. Mr. Sinha provided information on the technology of the facility and solar panels.

Isaac Panzarella, NCSV Energy Center, 1575 Varsity Drive, Raleigh, North Carolina. Mr. Panzarella provided information regarding the completed studies that confirm there are no public health or safety issues with the solar panels.

Vic Nicholls, 1124 Mill Lake Quarter, Chesapeake, Virginia, self. Ms. Nicholls stated she supports solar energy; however, she is concerned about the use of gas operated equipment to maintain the site. She asked if the monetary contribution would apply if the facility is sold.

Opponent:

Joseph Tuinstra, 901 Head of River Road, Chesapeake, Virginia, self. Mr. Tuinstra is an adjacent property owner and is concerned about the safety of the proposed facility and the change in the types of panels being used. He stated that a policy of minimum standards needs to be established before the application is approved.

Doug Vanderlip, 533 Head River Road, Chesapeake, Virginia, self. Mr. Vanderlip stated he purchased his property with the understanding that the adjacent property will remain farmland. He is concerned with hunting activities, wildlife, and environmental impacts. He is also concerned with traffic safety during construction. He opposes this application because it will negatively impact the rural character of the area.

**COMMISSION DISCUSSION:**

Commissioner Sweeney asked Deputy City Attorney Lindley to address enforcement of stipulations if the solar facility is transferred to a new owner. Ms. Lindley stated that all stipulations will be required of all future owners.

Chairman Ellis asked about the efficiency of thin-film panels versus mono and polycrystalline panels. Mr. Sinha stated that they have similar efficiency ratings. Commissioner Sweeney asked if the ratings are the same which he replied they are very similar.

Commissioner Gerloff asked Mr. Pearson to address the herbicide challenges. Mr. Pearson stated that the use of pesticides are generally used on the fence for vines, but would only use organic pesticides.



Secretary Deneau stated that the new stipulations are penalizing the applicant and the setbacks that were originally approved should be continued.

Commissioner Sweeney stated the applicant asked to modify only two stipulations; however, staff is recommending many more changes. The applicant has been gracious to accept all the changes except the setbacks. All permits were based on the original setbacks and should be preserved.

Commissioner Barlow asked about the hunting concerns and Commissioner Williams replied that laws are in place that no firearms be discharged within 150 feet of a structure and hunting can only take place with the permission of the property owner. Deputy City Attorney Lindley confirmed Commissioner Williams statement.

Commissioner Williams asked if the Commission should recommend only amended stipulations as originally requested. Secretary Deneau replied that staff is trying to bring all projects to a level playing field. Mr. Niemann stated that he is in concurrence with all of the new stipulations except the setback changes.

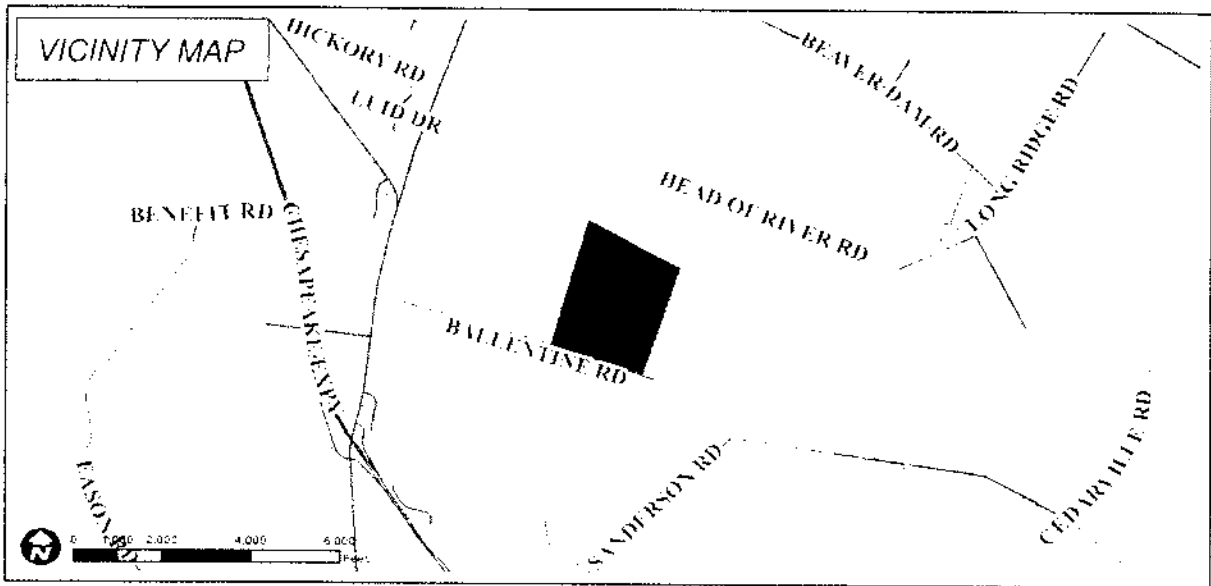
**COMMISSION VOTE:**

Secretary Deneau moved that **APPROVED** for the reasons stated in the staff report. The motion includes the approval of stipulations 1, 3-14 and 16 and 17 in the staff report with amended stipulation 2, deletion of stipulation 15, and renumbering stipulations 16-17. Commissioner Sweeney seconded the motion. The motion was carried by a vote of 9 – 0.

City of Chesapeake  
Department of Planning  
Post Office Box 15225  
Chesapeake, VA 23328  
(757) 382-6176  
www.cityofchesapeake.net/planning

**PLN-USE-2018-042**

*Hickory Solar Farm Amendment*



<b>Project Proposal:</b> A conditional use permit to amend stipulations number 7 and 12 of a previously approved application (PLN-USE-2017-003) for a solar farm facility.	
<b>Tax Map ID:</b> 0970000000660	<b>Existing Zoning:</b> A-1, Agricultural District
<b>Property Address / Borough:</b> On Ballentine Road, approximately 5000 ft. east from the intersection of Ballentine Road and Battiefield Blvds. / Butts Road Borough	<b>Existing 2035 Land Use Plan Designation:</b> A-1, Agricultural District
	<b>Public Hearing Date:</b> January 9, 2019
	<b>Staff Report Update:</b> January 7, 2019
	<b>Staff Report Date:</b> December 27, 2018
<b>Applicant(s) / Agent(s):</b> Caden Energix Hickory LLC	
<b>Property Owner(s):</b> Newbern Farms LLC	<b>Project Planner:</b> Hoa N. Dao, Senior Planner
<b>STAFF RECOMMENDATION</b>	
<input type="checkbox"/> APPROVED <input checked="" type="checkbox"/> APPROVED WITH STIPULATION(S) <input type="checkbox"/> CONTINUED <input type="checkbox"/> DENIED	

**FINDINGS:**

1. The proposed use of a solar farm on agricultural land is in conformity with and consistent with the policies contained in the City's Comprehensive Plan.
2. The solar farm use does not preclude the land from future use for traditional agricultural practices.
3. The proposal, with stipulations, is compatible with the surrounding community and will have no more adverse effects on the health, safety, or comfort of persons living or working in or driving through the area than would any other use generally permitted in the same district.

**STAFF RECOMMENDATION:**

Based on the findings contained in this staff report, Staff recommends that **PLN-USE-2018-042** be **APPROVED** with amendments to stipulations 2, 5, 6, 7, 8, 9, 10, 11, 12, 13, and 14, and additional stipulations 15, 16, and 17 to the previously approved application, PLN-USE-2017-003:

1. The applicant/owner shall construct a City Standard Commercial Entrance, CG-11A to access the site prior to issuance of a Certificate of Occupancy. The entrance shall be constructed at the intersection of Battlefield Boulevard South and Ballentine Road and shall be depicted on the final site construction plan which is subject to review and approval of the Director of Development and Permits, or designee. In addition, a closure and restoration plan shall be a required component of the final site construction plan.
2. The applicant/owner shall submit a Landscape Plan pursuant to the Chesapeake Zoning Ordinance prior to final construction plan approval. Said plan shall be subject to the review and approval of the City's Landscape Coordinator. Said plan shall consist of the following: a modified Buffer Yard D along the entirety of the property line, consisting of five (5) small trees, twenty-five (25) shrubs, and a solid row of evergreen trees that are at least eight (8) feet in height at the time of planting for every 100 linear feet. All plant materials shall be subject to the review and approval of the City's Landscape Coordinator and shall be installed prior to the issuance of a Certificate of Occupancy for the use. The applicant/owner shall also install and maintain a security fence around the entire perimeter of the solar farm prior to the issuance of a Certificate of Occupancy for the use. Said fence shall be between six (6) to ten (10) feet in height. The fence shall not exceed six (6) feet in height unless the applicant/owner receives the approval of a variance from the Board of Zoning Appeals. In no case shall the height of the solar panels exceed the height of the row of evergreen trees.
3. The applicant/owner shall obtain a valid Run-Off Control Permit from the Department of Public Utilities prior to the approval of construction plans.

4. The applicant/owner shall obtain all required permits and approvals from the Department of Development and Permits prior to the installation of the security fence and storage shed.
5. The applicant/owner shall ensure that all power lines transferring the power generated from the property shall be placed underground unless the applicant/owner provides written correspondence to the Zoning Administrator from the utility provider(s) which establishes the lines must to be placed above ground.
6. The applicant/owner agrees that the proposed use shall utilize SMA 2200-EV-US, SMA 2500-EV-US or an alternative solar panel inverter approved by the Navy and in compliance with the Navy's Electromagnetic Interference (EMI) assessment.
7. The applicant/owner shall notify the Zoning Administrator in writing within thirty (30) days of a change in ownership of the proposed solar facility. The notification shall include the name, address, and contact information for the new owner and designee in the Commonwealth of Virginia. In addition, the applicant/owner shall provide written proof that the new owner entity has been advised of and agreed in writing to comply with all of the stipulations associated with the Conditional Use Permit. Said written proof shall be subject to the review and approval of the City Attorney, or designee.
8. The applicant/owner shall provide written notice to the Director of Development and Permits or designee at least thirty (30) days in advance of the cessation or abandonment of this use. Within one hundred and eighty (180) days of the cessation or abandonment of this use, the applicant/owner shall remove all photovoltaic systems (including, but not limited to inverters, modules/solar panels, and solar trackers), all other structural elements related to the photovoltaic system use, and restore the property to its pre-use grade.
9. Prior to receiving a certificate of occupancy, an Emergency Management Plan (EMP) will be provided to, and subject to the approval of, the Director of Development and Permits for the solar energy facility. The goal of this EMP is to provide safety guidelines and procedures for potential emergency-related incidents during all phases of the life of the facility (construction, operation, and decommissioning). The EMP shall cover, at a minimum, emergency communications and training, theft and vandalism, inclement weather, high voltage equipment, and fire safety and prevention.
10. The applicant/owner shall maintain insurance for the duration of the use. The applicant/owner shall provide to the City Attorney a Certificate of Insurance providing General Liability Insurance which shall include, at a minimum, the following information: (i) the name of the insurance company, policy number and expiration date; and (ii) the coverage and limits on coverage and including the amount of deductibles or self-insured retentions with a minimum limit of One Million Dollars (\$1,000,000) per occurrence and Two Million Dollars (\$2,000,000) aggregate, combined single limit, for bodily injury (including death) or property damage and

Environmental Impairment insurance with minimum limits of \$1,000,000 per occurrence. The certificate of insurance shall be provided to the City Attorney prior to the issuance of a Certificate of Occupancy.

11. The applicant/owner shall ensure that the solar arrays are designed to withstand 120 mph wind speeds, as depicted on the approved final site plan.
12. The applicant/owner shall ensure that the proposed solar energy facility will only use mono-crystalline, poly-crystalline, or thin-film photovoltaic (PV) technology.
13. In light of and for so long as tax exemptions are afforded to solar facilities in Virginia and in an effort to promote and preserve agricultural lands, the applicant/owner offers and the City accepts an annual contribution of fifty thousand dollars (\$50,000.00) to the City of Chesapeake's Open Space and Agricultural Preservation Program or similar program as approved by the Director of Planning or designee. The first contribution shall be paid prior to the issuance of a Certificate of Occupancy for this use and each annual contribution shall be paid every twelve (12) months thereafter.
14. The applicant/owner shall manage the vegetation on-site without the use of herbicides, unless the treatment is approved by the City's Landscape Coordinator.
15. The applicant/owner shall maintain a minimum setback for the use of 150 feet from all property lines and a minimum of 250 feet if abutting a residentially zoned or use property. The setbacks imposed in this stipulation shall not apply to the required fencing and/or landscape buffers.
16. The applicant/owner shall provide emergency access, including but not limited to include unobstructed access utilizing fire lane marking in accordance with the PFM, Appendix 19, and a Knox Corporation key box or padlock for emergency access via the locked gate, prior to the issuance of a Certificate of Occupancy. The required emergency access and sufficiency of said access shall be subject to the review and approval of the City's Fire Marshal.
17. The applicant/owner shall submit a Decommission Plan to the Department of Development and Permits and the Office of the City Attorney prior to the issuance of a Certificate of Occupancy. The Decommission Plan shall outline the timeline for restoration of the site to pre-use condition and bonding to ensure implementation. Said Plan shall be subject to the review and approval of the Department of Development and Permits, or designee, and the Office of the City Attorney.

**UPDATE:**

For clarification purpose, stipulation 15 is amended to allow fencing and landscape buffers to be installed within the proposed minimum setback.

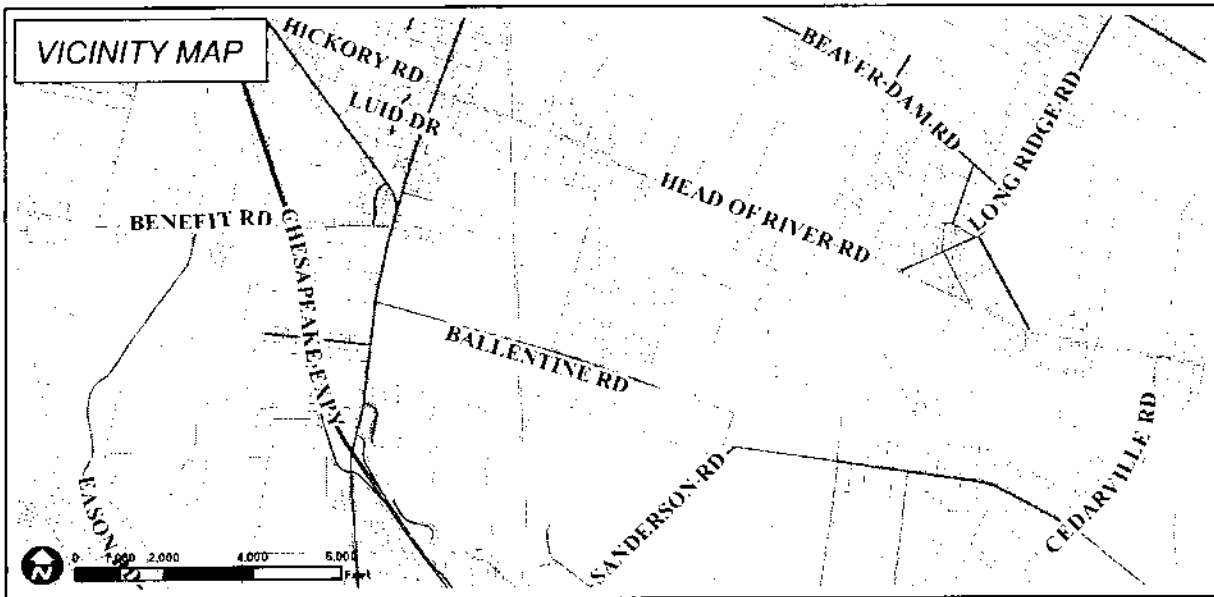
*Stipulation 15: The applicant/owner shall maintain a minimum setback for the use of 150 feet from all property lines and a minimum of 250 feet if abutting a residentially zoned or use property. The setbacks imposed in this stipulation shall not apply to the required fencing and/or landscape buffers.*

HND

cc: Karen E. Shaffer, AICP, Assistant Planning Director

**PLN-USE-2018-042**

*Hickory Solar Farm Amendment*



<b>Project Proposal:</b> A conditional use permit to amend stipulations number 7 and 12 of a previously approved application (PLN-USE-2017-003) for a solar farm facility.	
<b>Tax Map ID:</b> 0970000000660	<b>Existing Zoning:</b> A-1, Agricultural District
<b>Property Address / Borough:</b> On Ballentine Road, approximately 5000 ft. east from the intersection of Ballentine Road and Battlefield Blvds. / Butts Road Borough	<b>Existing 2035 Land Use Plan Designation:</b> A-1, Agricultural District
	<b>Public Hearing Date:</b> January 9, 2019 <b>Staff Report Date:</b> December 27, 2018
<b>Applicant(s) / Agent(s):</b> Caden Energix Hickory LLC	
<b>Property Owner(s):</b> Newbern Farms LLC	<b>Project Planner:</b> Hoa N. Dao, Senior Planner
<b>STAFF RECOMMENDATION</b>	
<input type="checkbox"/> APPROVED <input checked="" type="checkbox"/> APPROVED WITH STIPULATION(S) <input type="checkbox"/> CONTINUED <input type="checkbox"/> DENIED	

**FINDINGS:**

1. The proposed use of a solar farm on agricultural land is in conformity with and consistent with the policies contained in the City's Comprehensive Plan.
2. The solar farm use does not preclude the land from future use for traditional agricultural practices.
3. The proposal, with stipulations, is compatible with the surrounding community and will have no more adverse effects on the health, safety, or comfort of persons living or working in or driving through the area than would any other use generally permitted in the same district.

**STAFF RECOMMENDATION:**

Based on the findings contained in this staff report, Staff recommends that **PLN-USE-2018-042** be **APPROVED** with amendments to stipulations 2, 5, 6, 7, 8, 9, 10, 11, 12, 13, and 14, and additional stipulations 15, 16, and 17 to the previously approved application, PLN-USE-2017-003:

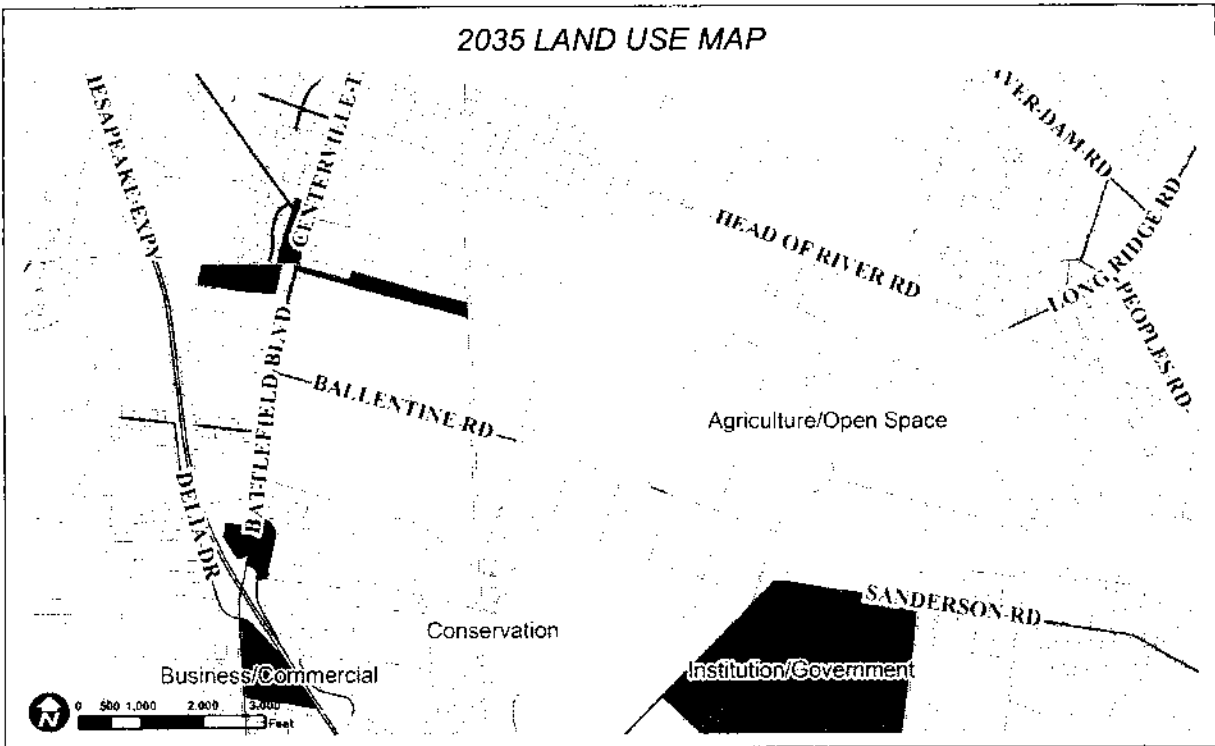
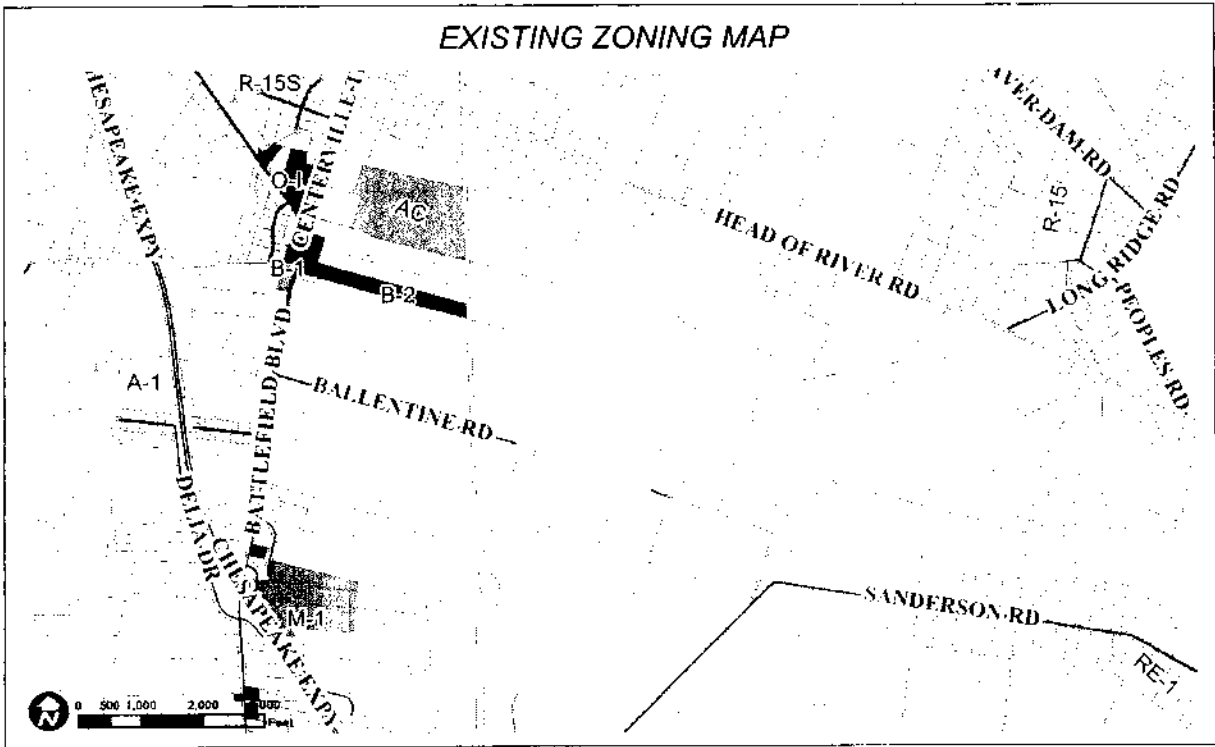
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2. The applicant/owner shall submit a Landscape Plan pursuant to the Chesapeake Zoning Ordinance prior to final construction plan approval. Said plan shall be subject to the review and approval of the City's Landscape Coordinator. Said plan shall consist of the following: a modified Buffer Yard D along the entirety of the property line, consisting of five (5) small trees, twenty-five (25) shrubs, and a solid row of evergreen trees that are at least eight (8) feet in height at the time of planting for every 100 linear feet. All plant materials shall be subject to the review and approval of the City's Landscape Coordinator and shall be installed prior to the issuance of a Certificate of Occupancy for the use. The applicant/owner shall also install and maintain a security fence around the entire perimeter of the solar farm prior to the issuance of a Certificate of Occupancy for the use. Said fence shall be between six (6) to ten (10) feet in height. The fence shall not exceed six (6) feet in height unless the applicant/owner receives the approval of a variance from the Board of Zoning Appeals. In no case shall the height of the solar panels exceed the height of the row of evergreen trees.
3. The applicant/owner shall obtain a valid Run-Off Control Permit from the Department of Public Utilities prior to the approval of construction plans.



4. The applicant/owner shall obtain all required permits and approvals from the Department of Development and Permits prior to the installation of the security fence and storage shed.
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7. The applicant/owner shall notify the Zoning Administrator in writing within thirty (30) days of a change in ownership of the proposed solar facility. The notification shall include the name, address, and contact information for the new owner and designee in the Commonwealth of Virginia. In addition, the applicant/owner shall provide written proof that the new owner entity has been advised of and agreed in writing to comply with all of the stipulations associated with the Conditional Use Permit. Said written proof shall be subject to the review and approval of the City Attorney, or designee.
8. The applicant/owner shall provide written notice to the Director of Development and Permits or designee at least thirty (30) days in advance of the cessation or abandonment of this use. Within one hundred and eighty (180) days of the cessation or abandonment of this use, the applicant/owner shall remove all photovoltaic systems (including, but not limited to inverters, modules/solar panels, and solar trackers), all other structural elements related to the photovoltaic system use, and restore the property to its pre-use grade.
9. Prior to receiving a certificate of occupancy, an Emergency Management Plan (EMP) will be provided to, and subject to the approval of, the Director of Development and Permits for the solar energy facility. The goal of this EMP is to provide safety guidelines and procedures for potential emergency-related incidents during all phases of the life of the facility (construction, operation, and decommissioning). The EMP shall cover, at a minimum, emergency communications and training, theft and vandalism, inclement weather, high voltage equipment, and fire safety and prevention.
10. The applicant/owner shall maintain insurance for the duration of the use. The applicant/owner shall provide to the City Attorney a Certificate of Insurance providing General Liability Insurance which shall include, at a minimum, the following information: (i) the name of the insurance company, policy number and expiration date; and (ii) the coverage and limits on coverage and including the amount of deductibles or self-insured retentions with a minimum limit of One Million Dollars (\$1,000,000) per occurrence and Two Million Dollars (\$2,000,000) aggregate, combined single limit, for bodily injury (including death) or property damage and

Environmental Impairment insurance with minimum limits of \$1,000,000 per occurrence. The certificate of insurance shall be provided to the City Attorney prior to the issuance of a Certificate of Occupancy.

11. The applicant/owner shall ensure that the solar arrays are designed to withstand 120 mph wind speeds, as depicted on the approved final site plan.
12. The applicant/owner shall ensure that the proposed solar energy facility will only use mono-crystalline, poly-crystalline, or thin-film photovoltaic (PV) technology.
13. In light of and for so long as tax exemptions are afforded to solar facilities in Virginia and in an effort to promote and preserve agricultural lands, the applicant/owner offers and the City accepts an annual contribution of fifty thousand dollars (\$50,000.00) to the City of Chesapeake's Open Space and Agricultural Preservation Program or similar program as approved by the Director of Planning or designee. The first contribution shall be paid prior to the issuance of a Certificate of Occupancy for this use and each annual contribution shall be paid every twelve (12) months thereafter.
14. The applicant/owner shall manage the vegetation on-site without the use of herbicides, unless the treatment is approved by the City's Landscape Coordinator.
15. The applicant/owner shall maintain a minimum setback for the use of 150 feet from all property lines and a minimum of 250 feet if abutting a residentially zoned or use property.
16. The applicant/owner shall provide emergency access, including but not limited to include unobstructed access utilizing fire lane marking in accordance with the PFM, Appendix 19, and a Knox Corporation key box or padlock for emergency access via the locked gate, prior to the issuance of a Certificate of Occupancy. The required emergency access and sufficiency of said access shall be subject to the review and approval of the City's Fire Marshal.
17. The applicant/owner shall submit a Decommission Plan to the Department of Development and Permits and the Office of the City Attorney prior to the issuance of a Certificate of Occupancy. The Decommission Plan shall outline the timeline for restoration of the site to pre-use condition and bonding to ensure implementation. Said Plan shall be subject to the review and approval of the Department of Development and Permits, or designee, and the Office of the City Attorney.



**PROJECT DESCRIPTION:**

The applicant seeks approval to amend stipulations 7 and 12 of a previously approved conditional use permit (PLN-USE-2017-003) for operation of a 32 megawatts solar farm facility on a 154 acre parcel. The original stipulation 7 limits the use of the solar facility to only the applicant (New Energy Ventures, Inc.), and the original stipulation 12 limits the type of panels to only mono or poly-crystalline photovoltaic solar panels. The applicant requests to change the applicant name from New Energy Ventures, Inc. to Caden Energix Hickory, LLC, a subsidiary company of New Energy Ventures, Inc. In addition, the applicant requests to amend stipulation 12 to allow the use of thin-film photovoltaic panels.

**COMMENTS:**

AGENCIES NOTIFIED	RESPONSE REC'D DATE	AGENCIES NOTIFIED	RESPONSE REC'D DATE
D & P / Dev Eng	No Objection	City Attorney	No Objection
D & P / Zoning	No Objection	Fire Prevention	No Objection
D & P / Landscape	No Objection	Police	No Objection
D & P / Code Enforce	No Comments	US Navy	No Objection
Public Utilities	No Objection	Agricultural Advisory Comm.	No Comments
Economic Dev.	No Comments		

*Received comments are attached.*

**STAFF ANALYSIS:**

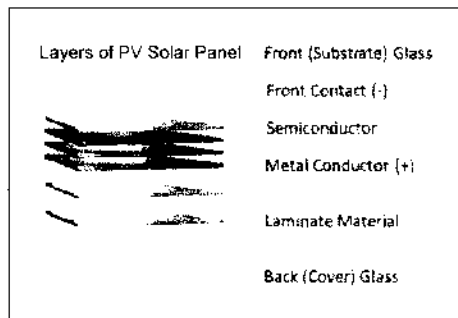
On February 13, 2018, City Council approved PLN-USE-2017-003 with stipulations. Stipulation 7 was drafted to ensure adequate enforcement of the Chesapeake Zoning Ordinance. In the event of a zoning violation, the City requires a point of contact for the operator of the use to remediate the condition(s) resulting in the violation. The proposed change to stipulation 7 meets this requirement as well as allows the applicant to shift the operation of the solar facility to Caden Energix Hickory, LLC. As drafted, the proposed stipulation 7 requires the applicant to provide written notice to the City of any change of ownership of the proposed solar facility and requires the applicant to provide contact information of the new operator and designee in the Commonwealth. Therefore, staff has no objection with the applicant's request to amend stipulation 7 to allow a different entity, other than the applicant, to operate the solar facility.

The applicant also requests to amend stipulation 12, to allow the use of thin-film solar panels. The previous stipulation limited the solar facility to the use of mono or poly-crystalline photovoltaic panels. Of the three types of solar panels (mono-crystalline, poly-crystalline, and thin-film), thin-film technology is considered to be more hazardous to the environment due to the presence of the chemical compound cadmium. However, technological innovations in solar technology coupled with new construction methods

have resulted in a wider acceptance and use of thin-film panels in the commercial solar industry.

In the event a panel is damaged from fire or breakage, it is designed to encapsulate the small amount of hazardous chemicals between two sheets of glass and sealed with an industrial laminate, similar to the windshield on an automobile. Studies have shown that the average amount of lead contained in each solar panel is approximately 13 grams, one-half of the lead in a typical 12-gauge shotgun shell, or roughly 1/750<sup>th</sup> of the lead in a single car battery.<sup>1</sup> Solar panels, such as thin film panel contains approximately

7 grams of cadmium telluride (CdTe), which has 1/100<sup>th</sup> the toxicity of free cadmium. It should be noted that CdTe is a very stable compound that is non-volatile and non-soluble in water. Research shows that less than 0.1% of the cadmium is released when the panel is exposed to fire; the rest is encapsulated in molten glass from the panel.<sup>2</sup> First Solar is one of the primary manufacturers of thin-film panel in the USA with projects all over the world, including three (3) that are in Virginia, one (1) of which is at Oceana. The Navy has reviewed the application and has no objection to the applicant's request to change the panel type to thin-film panel.



To be consistent with the studies presented to City Council since the approval of this original use permit, staff also recommends amendments to stipulations 2, 5, 6, 8, 9, 10, 11, 13, and 14, as well as the addition of stipulations 15, 16, and 17 be considered with this application.

**STIPULATION 2:** The applicant/owner shall submit a Landscape Plan pursuant to the Chesapeake Zoning Ordinance prior to final construction plan approval. Said plan shall be subject to the review and approval of the City's Landscape Coordinator. Said plan shall consist of the following: ~~a modified Buffer Yard E D along the entirety of the property line, consisting of small and medium canopy trees that are at least 6 feet in height, shrubs that are in a minimum industry standard 3-gallon container at planting, and a solid evergreen buffer along the entirety of the property line adjacent to the residential properties to screen the use.~~ five (5) small trees, twenty-five (25) shrubs, and a solid row of evergreen trees that are at least 8 feet in height at the time of planting for every 100 linear feet. ~~The solid evergreen buffer shall include trees that are at least 8 feet in height at time of planting, and shrubs that are in a minimum industry standard 3-gallon container at time of planting.~~ All plant materials shall be subject to the review and approval of the City's Landscape Coordinator and shall be installed prior to the issuance of a Certificate of Occupancy for the use. The applicant/owner shall also install and maintain a 6-foot security fence around the entire perimeter of the solar farm prior to the issuance of a Certificate of Occupancy for the use. Said fence shall be between six (6) to ten (10) feet

<sup>1</sup> First Solar (2017), Thin Film Photovoltaic Technology FAQ.

<sup>2</sup> NC Clean Energy Technology Center at N.C. State University (2017). Health and Safety Impacts of Solar Photovoltaics.

in height. The fence shall not exceed six (6) feet in height unless the applicant/owner receives the approval of a variance from the Board of Zoning Appeals. In no case shall the height of the solar panels exceed the height of the security fence row of evergreen trees.

STIPULATION 5: The applicant/owner ~~agrees~~ shall ensure that all power lines transferring the power generated from the property ~~to the existing Dominion Virginia Power distribution system on Battlefield Boulevard South, which are both on-site and off-site,~~ shall be placed underground unless the applicant/owner provides written correspondence to the Zoning Administrator from the utility provider(s) ~~Dominion Virginia Power~~ which ~~requires~~ establishes the lines must to be placed above ground ~~to the Zoning Administrator.~~

STIPULATION 6: The applicant/owner agrees that the proposed use shall utilize SMA 2200-EV-US, SMA 2500-EV-US or an alternative solar panel inverter approved by the Navy and in compliance with the Navy's Electromagnetic Interference (EMIS) assessment.

STIPULATION 8: The applicant/owner shall provide written notice to the Director of Development and Permits or designee at least thirty (30) days in advance of the cessation or abandonment of this use. Within one hundred and eighty (180) days of the cessation or abandonment of this use, the applicant/owner shall remove all photovoltaic systems (including, but not limited to inverters, modules/solar panels, and solar trackers), and all other structural elements related to the photovoltaic system use, and restore the property to its pre-use grade. ~~The applicant/owner shall also restore the property to its pre-use grade, as approved by the Director of Development and Permits or designee, within the referenced 180 days.~~

STIPULATION 9: Prior to receiving a certificate of occupancy, an Emergency Management Plan (EMP) will be provided to, and subject to the approval of, the Director of Development and Permits for the solar energy facility. The goal of this EMP is to provide safety guidelines and procedures for potential emergency-related incidents during all phases of the life of the facility (construction, operation, and decommissioning). The EMP shall cover, at a minimum, emergency communications and training, theft and vandalism, inclement weather, high voltage equipment, and fire safety and prevention.

STIPULATION 10: The applicant/owner shall maintain insurance for the duration of the use. The applicant/owner shall provide to the City Attorney a Certificate of Insurance providing General Liability Insurance which shall include, at a minimum, ~~least~~ the following information: (i) the name of the insurance company, policy number and expiration date; and (ii) the coverage and limits on coverage and including the amount of deductibles or self-insured retentions with a minimum limit of One Million Dollars (\$1,000,000) per occurrence and Two Million Dollars (\$2,000,000) aggregate, combined single limit, for bodily injury (including death) or property damage and Environmental Impairment insurance with minimum limits of \$1,000,000 per occurrence. The certificate of insurance shall be provided to the City Attorney prior to the issuance of a eCertificate of eOccupancy.

STIPULATION 11: The applicant/owner ~~agrees~~ shall ensure that the solar arrays ~~are~~ shall be designed to withstand 120 mph wind speeds, as depicted on the approved final site plan.

STIPULATION 12: The applicant/owner ~~agrees~~ shall ensure that the proposed solar energy facility ~~will~~ shall only use mono-crystalline, or poly-crystalline, or thin-film photovoltaic (PV) technology. ~~This stipulation shall be included as a condition on the final site plan.~~

STIPULATION 13: In light of and for so long as tax exemptions are afforded to solar facilities in Virginia and in an effort to promote and preserve agricultural lands, the applicant/owner ~~agrees to make~~ offers and the City accepts an annual contribution of fifty thousand dollars (\$50,000.00) to the City of Chesapeake's Open Space and Agricultural Preservation Program or similar program as approved by the Director of Planning or designee. The first contribution shall be paid prior to the issuance of a Certificate of Occupancy for this use and each annual contribution shall be paid every twelve (12) months thereafter.

STIPULATION 14: The applicant/owner ~~agrees to~~ shall manage the vegetation on-site without the use of herbicides, unless the treatment is approved by the City's Landscape Coordinator.

STIPULATION 15: The applicant/owner shall maintain a minimum setback for the use of 150 feet from all property lines and a minimum of 250 feet if abutting a residentially zoned or use property.

STIPULATION 16: The applicant/owner shall provide emergency access, including but not limited to include unobstructed access utilizing fire lane marking in accordance with the PFM, Appendix 19, and a Knox Corporation key box or padlock for emergency access via the locked gate, prior to the issuance of a Certificate of Occupancy. The required emergency access and sufficiency of said access shall be subject to the review and approval of the City's Fire Marshal.

STIPULATION 17: The applicant/owner shall submit a Decommission Plan to the Department of Development and Permits and the Office of the City Attorney prior to the issuance of a Certificate of Occupancy. The Decommission Plan shall outline the timeline for restoration of the site to pre-use condition and bonding to ensure implementation. Said Plan shall be subject to the review and approval of the Department of Development and Permits, or designee, and the Office of the City Attorney.

The proposed amendments and additional stipulations will assist in preventing the solar facility from causing a nuisance to its surrounding area. Further, the recommended amendments and additions are consistent with other solar farm facility applications in the City.

Based on these findings, the proposed conditional use is not anticipated to have an adverse effect upon or be incompatible with the use or enjoyment of adjacent and surrounding properties. Based on the uses in the surrounding area and comments received, staff finds that the proposal, with the prescribed stipulations, is compatible with

the surrounding community and will have no more adverse effects than would any other use generally permitted in the same district.

HND

cc: Karen E. Shaffer, AICP, Assistant Planning Director

**ATTACHMENTS:**

1. Site Plan, revised December 20, 2018
2. 2016 Aerial Map.

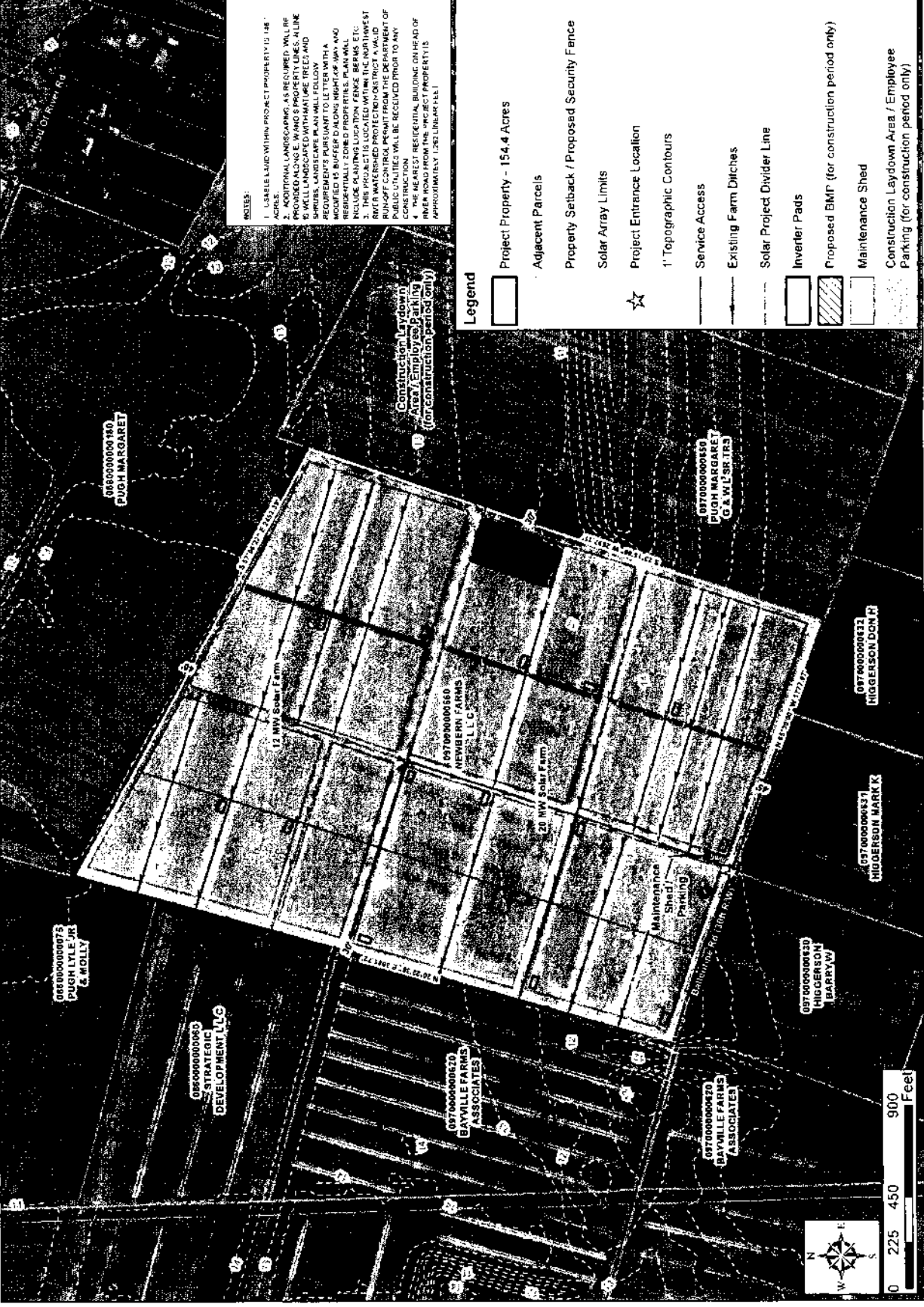


**NOTES:**

1. USABLE LAND WITHIN PROJECT PROPERTY IS 154.4 ACRES.
2. ADDITIONAL LANDSCAPING AS REQUIRED, WILL BE PROVIDED ALONG E, W AND S PROPERTY LINES. PLANTING SPECIFICATIONS AND SCHEDULES WILL BE PROVIDED WITH THE PERMIT.
3. SERVICES AND UTILITIES PLANS WILL FOLLOW ALL REQUIREMENTS PURSUANT TO LETTER WITH A MODIFIED 12' BUFFER D ALONG HEIGHT OF WAY AND RESIDENTIALLY ZONED PROPERTIES. PLANS WILL INCLUDE PLANTING LOCATION, FENCE, BEAMS, ETC.
4. ALL PROPOSED UTILITY LOCATIONS WILL BE SET WITH WATERFED PROTECTION ON STRICT A VALID RUN-OFF CONTRACT PERMIT FROM THE DEPARTMENT OF PUBLIC UTILITIES WILL BE RECEIVED PRIOR TO ANY CONSTRUCTION.
5. THE NEAREST RESIDENTIAL BUILDING ON HEAD OF APPROXIMATELY 1.25 MILES AWAY.

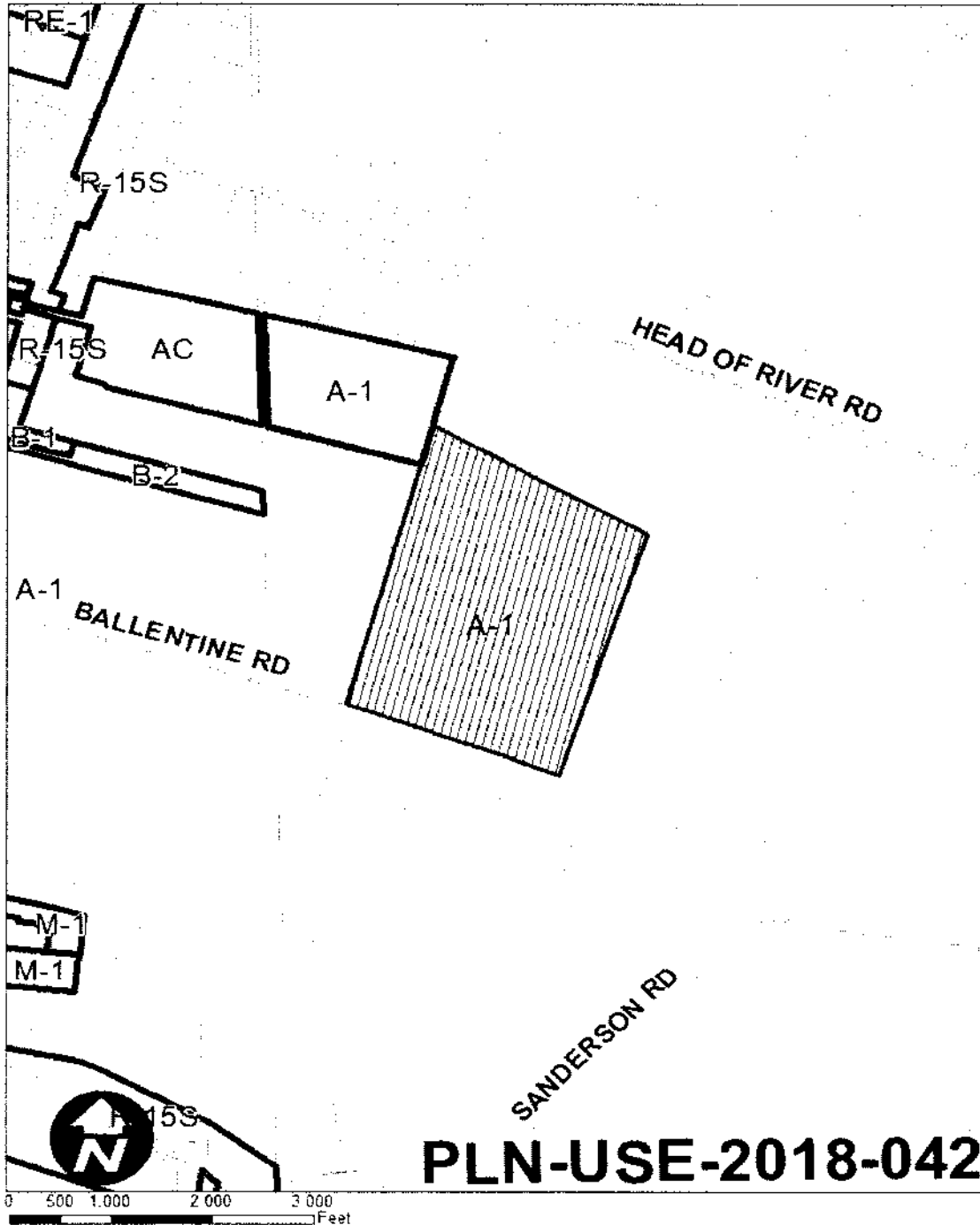
**Legend**

- Project Property - 154.4 Acres
- Adjacent Parcels
- Property Setback / Proposed Security Fence
- Solar Array Limits
- Project Entrance Location
- 1' Topographic Contours
- Service Access
- Existing Farm Ditches
- Solar Project Divider Line
- Inverter Pads
- Proposed BMP (for construction period only)
- Maintenance Shed
- Construction Laydown Area / Employee Parking (for construction period only)
- Construction Laydown Area / Employee Parking (for construction period only)





**PLN-USE-2018-042**



**PLN-USE-2018-042**

**Hickory Solar Farm Amendment**

**APPLICANT:** Caden Energix Hickory LLC **OWNER:** Newbern Farms LLC **PROPOSAL:** A conditional use permit to amend stipulations number 7 and 12 of a previous approved application (PLN-USE-2017-003) for a solar farm facility. **ZONE:** A-1, Agricultural District **LOCATION:** On Ballentine Road, approximately 5000 ft. east from the intersection of Ballentine Road and Battlefield Blvds. **TAX MAP SECTION/PARCEL:** 0970000000660 **BOROUGH:** Butts Road

**PLANNER**  
H. Dao

**PLANNING COMMISSION MEETING**  
January 09, 2019