

FILE NUMBER \_\_\_\_\_

SPECIAL EXCEPTION APPLICATION

APPLICATION CHECKLIST

Please use the checklist to ensure that all items required by your application have been included.

**INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED**

Should you have any questions, please call the Zoning office at 229-263-5184

Completed	Description
√ - Attached	Letter of Intent
√ - LOI	Map and parcel numbers of subject property
√ - A-G Zone	Current Zoning District of subject property
√ - LOI, Attachment A	List of adjacent property owners obtained from the Tax Assessor's office
√ - LOI, Attachment B	Conceptual site plan
√ - See below, and Special Exception Application Form, and LOI	Signature of the Applicant
√ - Previously Sent	\$120.00 Application Fee
√ - Previously Sent- \$280 total for notifications to all 40 adjacent property owners as listed in LOI Attachment A	\$7.00 Fee per property owner for notification
√ - Previously Sent	\$100.00 Advertising Fee

I certify that the above items have been completed.

  
\_\_\_\_\_  
Signature of Applicant

5/31/2019  
Date

FILE NUMBER \_\_\_\_\_

**SPECIAL EXCEPTION APPLICATION**

**OFFICIAL USE ONLY**

SUBMITTAL DEADLINE: \_\_\_\_\_

**PUBLIC HEARING DATES**

PLANNING COMMISSION \_\_\_\_\_ GOVERNING BODY \_\_\_\_\_

Date Received: \_\_\_\_\_ Received By: \_\_\_\_\_

Property Posted: \_\_\_\_\_ Letters Mailed: \_\_\_\_\_

This is an application for Special Exception. This completed application, together with all required attachments and fees must be returned to the Planning and Zoning Administrator by one of the established monthly deadlines in order to initiate review and consideration of the request. The applicant is responsible for the completeness, accuracy, and timely submittal of this application including all of its attachments and fees. Unless otherwise stated, please type or neatly print the responses to each of the following:

**1) Applicant Information:** (Contact person authorized to receive communication regarding this application):

Name: Quitman Solar, LLC - Stephen Land, Project Manager, NextEra Energy Resources, LLC

Complete Address: 700 Universe Boulevard Juno Beach, FL 33408 Phone: 513-649-4240

Has the applicant made any campaign contributions over \$250.00 to any local government official of the local government considering the application? YES  NO  (Circle One)

**2) Property Information:** Map Number See Attachment  All or Part (Circle One) of Parcel Number See attachment for Parcel Numbers

**General Location Description:**

Adjacent to the southbound lane of Barwick Road, approximately 8.6 miles southeast of Pavo and 4.6 miles northwest of Quitman.

Existing Use of Property: Agriculture - Crops Proposed Use: Solar Power Facility

Acreage (use square footage if less than 1 acre) 1,698 acres Current Zoning District AG

Has this property been denied a zoning change during the past 12 months? YES \_\_\_ NO X

Has any public hearing been held regarding this property during the past 3 years? YES \_\_\_ NO X  
(If yes, please describe) \_\_\_\_\_

How will the property receive water and sewer service? Public NA private NA community NA septic NA

3) **Owner Information:** If the applicant listed above is not the current owner of the property, please list the name and address of all current owners of record of the subject property.

**If the applicant is not the current owner or is one of multiple owners, a notarized Letter of Authorization shall be signed and submitted by the owner(s) authorizing the Applicant to submit and be responsible for this application.**

<u>Map/Parcel Number</u>	<u>Owner of Record</u>	<u>Mailing Address</u>
See Letter of Intent, and attached mailing addresses.		

4) **Special Exception Request** Construct and operate a solar facility that produces electricity using photovoltaic panels. Solar facility will connect to the electrical grid via an onsite transmission line.

5) **Approximate cost of work involved:** \$150,000,000

6) **Please explain why the Special Exception should be granted:** To construct and operate a solar energy facility.

Solar facilities are compatible with agricultural and rural land uses. Applicant has designed the Project to minimize impacts to natural resources.

Special Exceptions granted by the appropriate governing body shall be executed within a period of twelve (12) months from date of approval. Special Exceptions not executed within this time period shall become null and void and are subject to procedures for resubmission as established herein. Special Exceptions are not transferable except upon written approval of the appropriate governing body.

7) **Attachments:** The following items must be submitted in full prior to acceptance of this application.

**A) Adjacent Property Owners** (See page 5) A complete list, on provided form, of all current owners of record for properties located immediately adjacent to, or directly across the street or railroad right-of-way from the subject property. This information may be obtained from the Brooks County Tax Assessor's Office. (The accuracy and completeness of this information shall be the responsibility of the applicant)

**B) Letter of Intent:** stating the request, why the request is being made, and any other specific information pertaining to the request.

**C) Proposed conceptual site plan:** Plan shall include:

- 1) Applicant name, date of drawing and revision dates if applicable.
- 2) The size and location of the lot.
- 3) The dimensions and location of the existing building or structure(s) on the lot in question.
- 4) The dimensions and location of the proposed building, structure, or additions(s) on the lot.
- 5) If applicable, the location of any existing buildings on adjacent lots and their property line distance
- 6) Any additional information necessary to allow understanding of the proposed use and development

**Special Exception Process:** The Brooks County Planning Commission shall review the application for a Special Exception at a public hearing and shall make a **recommendation only** to the Brooks County Commissioners. At a second public hearing, the Brooks County Commissioners shall hear and decide all requests for Special Exceptions. In making this decision the governing body will consider the following:

- A) Is the type of street providing access to the use adequate to serve the proposed Special Exception use?
- B) Is access into and out of the property adequate to provide for traffic and pedestrian safety, the anticipated volume traffic flow, and to allow access by emergency vehicles?
- C) Are public facilities such as schools, water, sewer, or other public utilities and police and fire protection adequate to serve the proposed Special Exception use?
- D) Are refuse, service parking, and loading areas on the property located or screened to protect other properties in the area from such adverse effects as noise, light glare, and other negative impacts?
- E) Will the hours and manner of operation of the Special Exception use have no adverse impacts on other properties in the area?
- F) Will the height, size, and location of the buildings or other structures on the property be compatible with the height, size, and location of buildings or other structures on neighboring properties?

The County Commission may impose or require such additional restrictions and standards as may be necessary to protect the health and safety of workers and residents in the community, and to protect the value and use of property in the general neighborhood; and provided that wherever the County Commission shall find in the case of any permit granted pursuant to the provisions of these regulations that any term, condition, or restrictions upon which such permit was granted are not being complied with, said County Commission shall rescind and revoke such permit after giving due notice to the parties concerned and granting full opportunity for a public hearing.

**PLEASE READ THE ABOVE AND THEN SIGN BELOW**

**I do hereby certify that to the best of my knowledge, the above information and attachments are true and correct. I authorize the staff of the Planning and Zoning Office or their designee to enter and inspect the premises, which are the subject of this application.**

  
\_\_\_\_\_  
Signature of Applicant

Date 5/28/2019

May 31, 2019

Billy Ingram  
Brooks County Inspections and Zoning Office  
610 South Highland Street  
Jefferson, GA 31643  
[w.billyingram@windstream.net](mailto:w.billyingram@windstream.net)

Subject: Letter of Intent for Special Exception Application for the Quitman II Solar Site, Brooks County, Georgia

Dear Mr. Ingram:

Quitman II Solar, LLC (Quitman II Solar or Applicant) is pleased to submit this Letter of Intent (LOI) for the proposed Quitman II Solar Energy Project (Project) to the Brooks County Planning & Zoning Commission and the Brooks County Commission for review and consideration. Quitman II Solar is proposing to construct and operate the Project, a 150-megawatt (MW) solar photovoltaic (PV) generating facility in unincorporated Brooks County. The Project Site (Site or Project Area) is located approximately 7 miles northwest of the City of Quitman, east of Hodges Road and north of Dry Lake Road. The Project is located within seven tax parcels, in the Agricultural Use (AG) District. The Project Area would cover approximately 1,698 acres within these parcels. The exact area needed for the solar facility would be refined through continued coordination with interested agencies and development of the Project's engineering.

Key features of the Project would be:

- Approximately 365,853 solar photovoltaic modules and approximately 48 inverter skids to convert the power from DC to AC;
- A battery energy storage system (BESS) consisting of battery modules, power conversion system (PCS), and other associated equipment in custom enclosures, co-located on-site, and integrated with the solar facility;
- A Project substation which would include equipment that would step-up the voltage to accommodate an interconnection to the Georgia Power 230kV Daisy substation;
- 34.5 kV AC collection system;
- Access and maintenance roads throughout the Project site;
- Single-axis tracking construction with panel heights of approximately 8 feet; and
- A seven-foot security fence surrounding the facility.

The Project would be designed to deliver power to the Transmission Owner through an interconnection to the Georgia Integrated Transmission System. The Applicant is proposing to construct an onsite substation (Project substation) that would step up the voltage to accommodate an interconnection to the Georgia Power 230kV Daisy Substation, which is just east of the Project.

The Project Site is located in the AG Zoning District. According to Brooks County, solar energy generation and utility substations are considered a special exception use<sup>1</sup> which is defined by Section 2-1 of the Brooks County Zoning Ordinance as follows:

*A special exception is a use which within certain districts specified by this ordinance is not permitted as a matter of right but may be permitted within these districts by the Brooks County Commission after the Planning Commission and County Commission have: (1) reviewed the proposed site plans for the use, its location within the county, its arrangement and design, its relationship to neighboring property and other conditions peculiar to the particular proposal which would determine its desirability or undesirability; (2) has found the proposal not to be contrary to the intent of this ordinance; and (3) has approved the use as specified.*

This submittal contains the required materials for a Special Exception Application, listed below:

- Special Exception Checklist (preceding pages);
- Special Exception Application Form (preceding pages);
- Letter of Intent (this document) addressing requirement of Special Exception Application Form and the Brooks County Zoning Ordinance as follows:
  - 1.0 Statement of Request;
  - 2.0 Reason for Request;
  - 3.0 Project-Specific Information;
  - 4.0 Standards for Exercise of Zoning Powers;
  - 5.0 Standards for Special Exception Review;
  - 6.0 Conclusion;
  - Attachment A: List of Adjacent Property Owners;
  - Attachment B: Conceptual Site Plan;
  - Attachment C: Setbacks;
  - Attachment D: Parcel Map;
- Fees in the amount of \$500 (submitted separately 5/10).<sup>2</sup>

In addition, requirements for an application for a Special Exception approval listed in Section 13-6.2 of the Brooks County Zoning Ordinance are provided as listed in Table 1.

**Table 1: Requirements of Section 13-6.2 of the Brooks County Zoning Ordinance**

Requirement	Location
Section 13-6.2 (A) - The community or area in which is located the land proposed to be reclassified and the street number, if any, or if none, the location with respect to the nearby public roads in common use;	Table 2 and Figure 1 in this LOI
Section 13-6.2 (B) - A plat of the land in question, and a description by metes and bounds, bearings, and distances of the land, or if the boundaries conform to the lot boundaries within a subdivision for which a plat is	Table 2 and Figure 1 in this LOI

<sup>1</sup> Solar energy or energy generation is not explicitly identified in the Schedule of Permitted Uses, but a “utility substation” is considered a Special Exception use for the AG Zoning District (Jefferson County Zoning Ordinance Section 5-1). Based on the County Commission’s approval of the Quitman Solar facility, solar is considered a Special Exception use in the AG Zoning District.

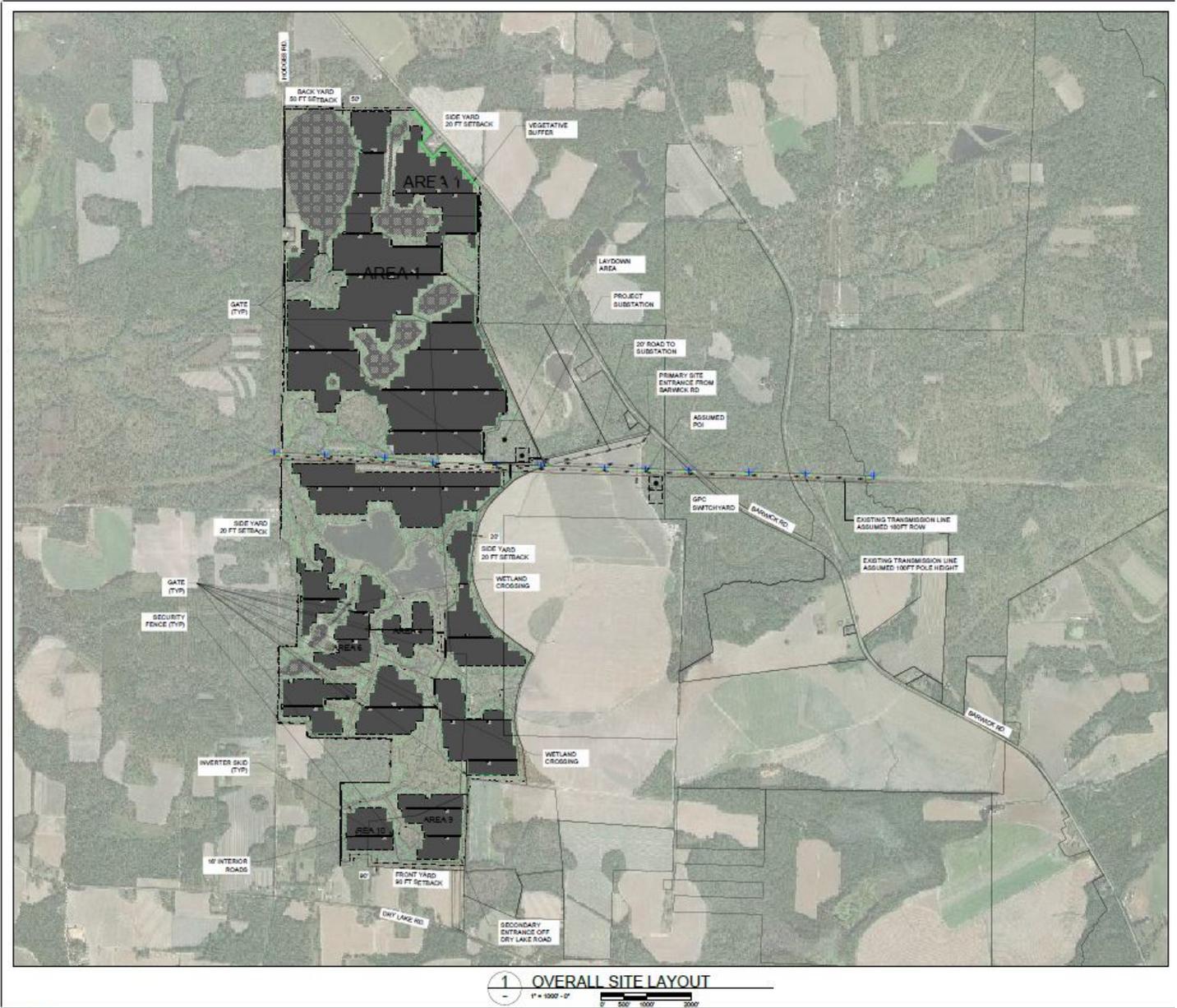
<sup>2</sup> Fee components include \$120.00 Application Fee, \$100 Advertising Fee, and \$7 fee per adjacent property owners for notification (35 adjacent property owners, listed in Attachment A).

recorded in the land records of the County; then the lot, block, and subdivision designations with appropriate plat reference; or the map and parcel number according to the current tax mapping system of Brooks County;	
Section 13-6.2 (C) - The present Zoning district classification and the proposed Special Exception usage proposed for the subject property;	The present zoning is the AG Zoning District. The proposed Special Exception use is as a PV solar generation facility and a utility substation.
Section 13-6.2 (D) - The names and address of the owners of the land, and the names and addresses of abutting property owners;	Names and address of abutting property owners are included in Attachment A.
Section 13-6.2 (E) - The area of the land proposed to be reclassified stated in square feet of less than one (1) acre, and in acres if one (1) or more;	No land is proposed to be reclassified. The proposed Project area includes approximately 1,700 acres.
Section 13-6.2 (F) - The application number, date of application, and action taken on all prior applications filed for the development district reclassification or Special Exception use of the whole or part of the land proposed for Special Exception use.	See preceding Application Form. Quitman II Solar, LLC is not aware of any prior applications filed for the proposed Project parcels.

### 1.0 Statement of Request

The Applicant is respectfully requesting the Brooks County Planning and Zoning Commission’s and the Brooks County Board of Commissioners’ approval of a Special Exception Application approving the construction and operation of a PV solar energy production facility, proposed to be located in the AG Zoning District in unincorporated Brooks County, Georgia.

Figure 1 – Area Map



## 2.0 Reason for Request

Quitman II Solar, a wholly-owned subsidiary of NextEra Energy Resources (NextEra) is proposing to develop a solar energy project within an unincorporated area of Brooks County. A list of parcels included in the proposal is provided below (Table 2). A list of adjacent property owners is provided in Attachment A.

## 3.0 Project-Specific Information

The applicant intends to sell the power to Georgia Power Company starting in late 2021 under a 30-year power purchase agreement. The Project would interconnect to the regional electrical system through the Georgia Power Company’s Daisy substation, which is located to the east of the Project area (Figure 1). The following

provides details about the size and location of the Project, proposed Project facilities, the construction process, operational activities, and additional compliance required.

### Size and Location

Quitman II Solar selected the Site based on availability of a large area of land that has historically been used for silviculture, and proximity to existing electrical infrastructure, including the Quitman Solar Facility currently under construction. The Site is located in an area of agricultural and low-density rural residential use. The Site encompasses approximately 1,700 acres, of privately-owned land in the AG Zoning District, located east of Hodges Road and north of Dry Lake Road, northwest of the City of Quitman and east of the City of Boston. The Project would be located on seven parcels as shown in Figure 1, and listed in Table 2.

**Table 2: Quitman II Solar Project Parcels**

Parcel Number	Owner Name	Total Parcel Size (Acres)
035 0012A	Quitman II Solar, LLC	6
035 0016	Quitman II Solar, LLC	852.57
050 0008	Quitman II Solar, LLC	592.3
036 0021	Quitman II Solar, LLC	8.8
050 00081	Quitman II Solar, LLC	30.39
050 00084	Quitman II Solar, LLC	1.72
034 0020	Quitman II Solar, LLC	206.34

Source: <http://www.qpublic.net/ga/Jefferson/>

This submittal contains a Proposed Conceptual Site Plan (Attachment B) that reflects an effort to maximize the energy production of the Project while allowing for applicable setbacks from neighbors, roadways, and sensitive and regulated resources. While the overall layout would remain substantially similar to the Proposed Conceptual Site Plan (Attachment B), minor changes may occur as a result of ongoing site evaluation, design optimization, and the final approval process. Any changes subsequent to this application would not infringe upon indicated setbacks in the current site layout. Setbacks are defined by Section 2-1 of the Brooks County Zoning Ordinance “the shortest distance between the centerline of a street and the principal building for structure on a lot.” Section 6-1 of the Brooks County Zoning Ordinance defines the following required setbacks for the AG zone:

- Minimum Front Yard Setbacks (feet from centerline of right-of-way) (plus 1/2 any amount which the right of way width exceeds 60 feet for residential streets, 80 feet for collector streets, and 100 feet for Major and Secondary Streets)
  - Arterial Roadways – 100 feet
  - Collector Roadways – 90 feet (applies to Dry Lake Road, per project design)
  - Residential Streets – 80 feet (applies to Hodges Road, per project design)
- Minimum Side Yard Setbacks – 20 feet
- Minimum Rear Yard Setbacks – 50 feet
- Quitman II Solar is owned by Quitman II Solar, LLC. As indicated on the Proposed Conceptual Site Plan (Attachment B), all required setbacks would be observed in accordance with the Brooks County Zoning Ordinance.

## Proposed Components and Energy Conversion Process

The Project would include the following major components, systems and associated facilities, described in detail in the following sections:

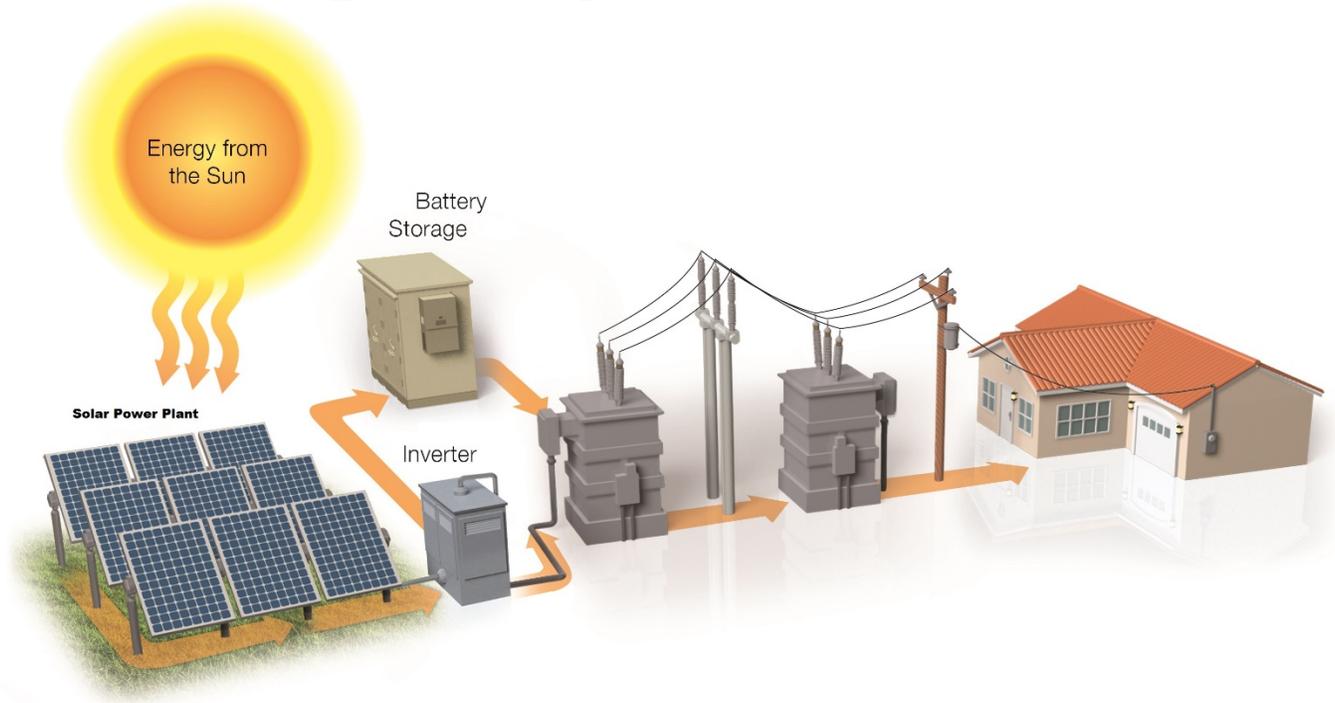
- Solar arrays, panels and mounting structures;
- Battery energy storage system (BESS)
- Inverters and electrical collection system;
- A Project substation which would include a controls enclosure;
- Automated facility control and monitoring system;
- Access and interior roads; and
- Perimeter fencing.

No structures are designed for occupancy on the site. Operations and maintenance support, including warehousing of critical spare parts, would be staged out of a regional office. A small parking area that would accommodate operations and maintenance vehicles would be located adjacent to the Project substation. It is expected the Site would be visited about once a week or less, typically by one to two people, for schedule checks and maintenance and on an as-needed basis.

## Solar Arrays, Panels, and Mounting Structures

The Quitman II Solar Site array would be composed of a single-axis tracking solar array, in which rows of PV panels track the sun from east to west daily to maximize energy production. PV panels would be approximately eight feet in height. The Project would deliver up to 150 MW of power to the Georgia Power-owned electrical grid through the Georgia Power “Daisy” Substation (Attachment B).

A simplified diagram of how solar energy is converted to electricity through Project facilities is provided in Figure 2. The Project would convert the sun’s energy into direct current (DC) electrical energy within photovoltaic (PV) modules (panels), which would be mounted on structures and grouped as blocks. Each block of PV modules is configured into arrays with a power conversion unit (PCU) that includes inverters and transformers to convert the DC electricity into alternating current (AC) electricity, with an output of approximately 3.5 MW for each block. The PCU also increases the voltage of the electricity for collection of the energy output across each block for delivery to the Project substation.

**Figure 2: General Solar Energy Conversion Diagram**

The PV panels are a crystalline based product with an anti-reflective coating that are rectangular in shape, and black/dark grey in color. The PV panels would be mounted onto structures that would “track” or follow the sun as it moves in the sky throughout the day to allow for the most efficient energy production that would align with the power purchase demand profile. The panels would be generally oriented towards the south, but may vary in orientation from 180° depending on final engineering.

The panels and tracking systems would be supported by steel posts spaced approximately ten to twenty feet apart. The Project is expected to utilize pile-driven posts inserted into the ground to an approximate depth of six to ten feet below grade; however, depth may vary throughout the Site based on soil conditions, local topography, and further geotechnical analysis. Once mounted on a structure, at certain times of the day, the bottom of each solar module would be at between one and two feet above grade, while the top would be at approximately eight feet above grade depending on the variation in terrain. At maximum tracking tilt, the panels would typically be approximately eight feet in height.

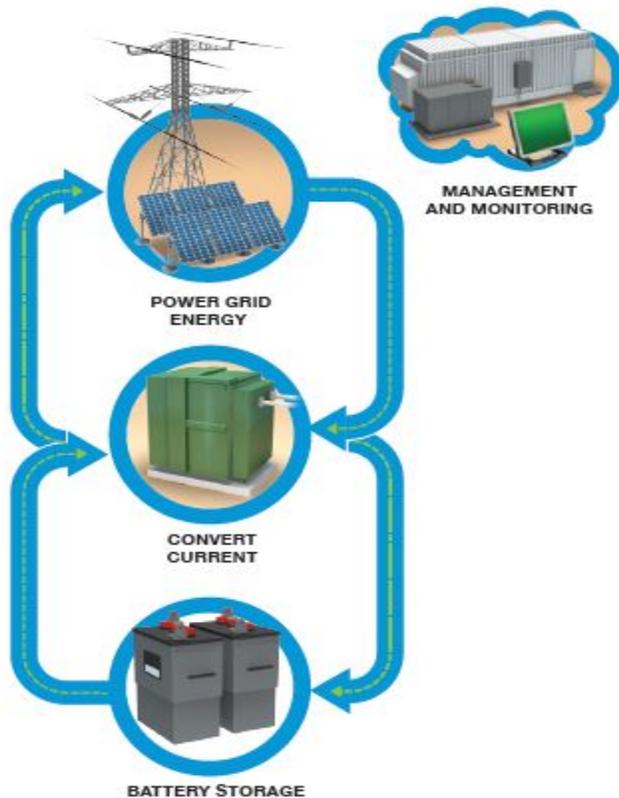
### Battery Energy Storage System (BESS)

The BESS will be comprised of lithium-ion battery cells built into modules. Each module has its own battery management system to communicate and actively manage performance and safety metrics. The modules will be in racks within an enclosure, which will be mounted on skids or a concrete foundation/piers. The modules will be connected to disconnect switches that ultimately connect to the inverter. The battery modules are typically housed in ISO customized containers, mounted on a concrete pad. HVAC and fire suppression systems are integrated into the container. The PCU and pad-mount transformers are located outside of the system connected by cabling.

The PCU is typically integrated on a skid with or without the medium-voltage transformer. Thermal management system of the modules will be supported with HVAC units installed on the enclosures. The BESS

will be connected to an on-site Supervisory Control and Data Acquisition (“SCADA”) communications facility linked to NEER’s central monitoring system. A battery management system monitors the voltage, temperature and current for safe, reliable transfer of energy. The BESS automatically shuts off if the batteries are operating outside of the predefined parameters. The BESS will also be remotely monitored by NextEra’s proprietary asset management system.

**Figure 3: General Battery Energy Storage System (BESS) Conversion Diagram**



### Inverters and Electrical Collection System

PV modules are electrically connected in series (called a string) by wire harnesses that carry DC electricity to combiner boxes. Each combiner box would collect power from several strings of modules and feed a PCU via cables typically placed in covered underground DC trenches, or in an above ground collection system that is strung approximately two feet above the ground between the tracker rows.

Each PCU would consist of a unit containing several power inverter units which are connected to an adjacent transformer. The PCU units would be approximately eight to ten feet tall and approximately 20-40 feet long depending on the inverter type; the transformer adjacent to the inverters would be approximately six to seven feet tall. The PCU’s would be placed either on driven steel piles or on concrete pad foundations that would be designed to specifications necessary to meet the local geotechnical conditions. These foundation designs would be finalized as the design advances. The inverters change the DC output from the combiner boxes to AC electricity. The resulting AC current from each individual PCU would then be transformed to the AC collection voltage at the adjacent pad-mounted transformers. These medium-voltage transformers would be placed on a pre-cast concrete pad or piers and the collection circuits from the output of each transformer would be installed underground. The AC collection voltage would be 34.5 kV. These medium voltage

collection circuits would deliver AC electricity from the PCU's to the Project substation. The PCU's are low noise systems with sound levels at under 40 dBA at 50 feet from the unit allowing for very low noise levels at the property line.

### Project Substation

The Project would have an onsite collection substation (Project substation) that would combine all the AC power from the collection circuits, and step-up the voltage to 230kV for injection into the electrical grid. The Project substation would be located within the Project Area as shown in Attachment B, adjacent to the West Valdosta to Thomasville 230kV transmission line and west of the Georgia Power Daisy Substation.

The Project substation would occupy approximately two to three acres within a six-foot-tall fence with additional one-foot of three-strand barbed wire enclosure. The ground coverage would be crushed rock. The Project substation equipment would consist of a 34.5/230 kV main transformer, one 230kV and multiple 34.5kV breakers, motor-operated and manually-operated switches, a controls enclosure, instrument transformers for metering, and galvanized steel support structures. The control enclosure would house the protection and control equipment, metering equipment, and communication equipment. It would resemble a prefabricated house trailer with no windows and would measure approximately 15 by 45 feet.

After the final voltage step-up, the Project would be interconnected to the Georgia Power electrical grid at a voltage of 230kV through the Georgia Power Substation. The switchyard would consist of a four-breaker ring bus and cover an area of approximately 300 feet by 300 feet (final dimensions to be determined by Georgia Power). Specific dimensions and specifications for facilities to be constructed and owned by Georgia Power as part of the transmission system would be determined by Georgia Power and GTC.

With the exception of 230 kV lines, typically all on-site electrical runs would be either underground or above ground hung on module racking structures. Overhead 230 kV runs would be required inside the Project substation, inside Georgia Power Company's Daisy Substation and for interconnections. While those runs and related structures may exceed 25 feet in height due to electrical code compliance, no other structures on site would be more than 25 feet in height.

The Project substation would contain remote-operated breakers that would isolate the Project from the electrical grid in case of emergency or at the direction of Georgia Power. Code and interconnection agreement requirements dictate the processes and restrict access related to actuation of those breakers. Postings at the Project access gates, Project substation, and Georgia Power switchyard would include emergency contact information for the Operator (NextEra Energy Resources' Renewable Operations Control Center) and Georgia Power that would provide contact numbers to be used for isolation of the Project from the electrical grid.

### Automated Facility Control and Monitoring System

The facility control and monitoring system would have two primary components; the on-site SCADA system and the accompanying sensor network. The on-site SCADA system would offer near real-time readings of the monitored devices, as well as control capabilities for the devices where applicable.

NextEra's Renewable Operations Control Center (ROCC), located at a secure location at NextEra's Juno Beach, Florida headquarters, serves as a twenty-four hour by seven day a week control and monitoring center. This center operates or monitors all of NextEra's generating fleet and is responsible for:

- Resetting of remotely capable Project faults as needed;

- Calling out technicians based on projected solar conditions to optimize the delivery capabilities of the Project;
- Communication with the local transmission provider and off-taker as required; and
- Predictive and diagnostic monitoring of Project equipment to optimize delivery capabilities.

### Access and Interior Roads

The primary entrance would be off Barwick Road, approximately 1 mile northwest of the Talokas Road intersection. A secondary access point will be located at the south end of the property off Dry Lake Road shown in Attachment B. Simple turn-outs or driveways would be constructed to accommodate the entrance of vehicles onto the Project property. These turn-outs would be designed to accommodate all foreseeable vehicle traffic in accordance with local ordinances.

Access throughout the Site would be via a network of non-improved roads constructed between the arrays (see Attachment B). The arrays and PCUs would be accessible via 16-foot wide primary access corridors situated in an east to west direction with the ability to go between rows of panels in a perpendicular direction. These access corridors would consist of unpaved compacted native soils or imported road base (if required based on geotechnical recommendations) and would later be used during operation and maintenance activities.

### Perimeter Fencing

A permanent 7-foot security fence comprised of 6-foot chain-link mesh with an additional one-foot of three-strand barbed wire would surround the solar facility. The fence would be a total of seven feet in height above grade. Fencing would be secured to posts set three to four feet below grade. The fencing would be installed during the construction phase, and would prevent unauthorized access by the general public to ensure security and prevent injury from construction hazards and contact with high-voltage equipment. The perimeter fence would also help prevent larger wildlife and windblown trash/litter from entering the facility. Primary and secondary gates of similar construction would be located around the Site to provide access to the various sections of the solar arrays. Signs would be posted near each entrance warning of the Project's hazards and providing emergency contact information.

### Construction Activities and Schedule

There is an approximate 12-month construction phase. Actual timelines may vary based on factors including but not limited to weather, soil conditions, and equipment deliveries. Details will be provided closer to the commencement of construction. Figure 3 illustrates the typical construction sequence for solar energy facilities.

Figure 3: Typical Construction Sequence for Solar Energy Facilities



Site Preparation

*SURVEYING AND STAKING*

Prior to construction, land surveyors would obtain or calculate benchmark data, grades, and alignment from plan information and provide control staking to establish the alignments, benchmarks, and elevations necessary to facilitate construction of the Project. Surveyors would also stake any existing utilities or other areas which would require avoidance by construction personnel and vehicles.

During construction, the surveyor would re-establish and set additional control points as needed. Additionally, sensitive aquatic resources including wetlands, floodplains, streams and open water ponds identified during the wetland delineation conducted in April, 2019, would be marked in the field via flagging, roping, staking, or fencing for avoidance during construction as specified in any applicable permitting requirements or regulations.

*VEGETATION REMOVAL, GRADING, AND SITE CLEARANCE*

Construction areas would be cleared of miscellaneous debris and/or vegetation that would impede vehicle access in order to prepare the site for safe and efficient installation of Project components. Current vegetation clearing within the Project site would entail tree felling and destumping, as well as mowing followed by

limited grading. Brush and tree clearing would be limited to areas outside exclusion zones. Exclusion zones include jurisdictional wetlands and other waters of the US (WOTUS), floodplains, and stream buffers (in Attachment B).

The installation of a solar PV facility requires reasonably flat topography. Because the Project Area is fairly flat, minimal grading would be necessary. Grading for the construction of the Project would consist of cutting, filling, and compaction of earth in isolated areas (e.g., Project substation and PCU units) around the Site to meet the final design requirements. For larger areas that require grading to even out slopes, a disc and roll technique may be used. The disc and roll technique is based on conventional farming practices using tractors to till the soil, which helps smooth out any rough areas, and then drum rollers to compact the soil.

Materials suitable for compaction (including engineered fill) would be brought to the Site if needed and off-loaded at the designated road or foundation location for immediate dispersion. Engineered fill is a material that is placed and compacted in accordance with approved design criteria for a specific piece of equipment or intended purpose. Areas that may require engineered fill include inverter, Project substation, and Georgia Power switchyard pad locations, BESS pad locations, and potentially certain parts of the collection system trenches.

Materials unsuitable for compaction, such as mowed debris, would be removed and loaded immediately for subsequent disposal at a designated off-site location. Contaminated materials are not expected; however, if any such materials are encountered during excavation, they would be disposed of at the nearest appropriate facility in accordance with applicable laws, ordinances, regulations, and standards.

The Project would use water for dust control during construction as necessary.

A small lay-down area, occupying approximately two acres, would be established near the onsite substation or within the project area. The location of the lay-down area is subject to final design and engineering. During the construction timeframe, the lay-down area would provide a storage location for construction materials, and a location for two to four construction trailers. After construction the lay-down area would be returned to its former condition.

### Solar Equipment Installation

During array assembly, multiple crews and various types of vehicles would be working within the Project Area. These vehicles include flatbed trucks for transporting arrays, small all-terrain vehicles, and pick-up trucks used to transport equipment and workers throughout the Project Area.

The tracking system supports would be constructed using steel piles driven into the ground. Driven steel pile foundations are typically galvanized and used where high load bearing capacities are required. The pile is driven using a hydraulic ram, which requires two workers. Soil disturbance would be restricted to the hydraulic ram machinery, about the size of a small tractor, temporarily disturbing soil at each pile insertion location.

Solar PV panels would be shipped to the Site ready for installation and delivered to temporary lay-down areas within the solar field. From the lay-down areas, palletized boxes of panels would be delivered to crews throughout the Project Area, and those crew members would mount and secure each individual panel to the racking structures.

Other crews would be engaged in excavating and constructing foundations for the PCUs and pad mount transformers, and installing the PCU equipment using cranes. Electricians and instrumentation installers would then run the electrical cabling throughout the solar field and electrically connect the components.

### Project Substation

The Project substation would take approximately four months to construct, electrically connect, and test. Construction work within would include site preparation and installation of substructures and electrical equipment. Materials and equipment would be delivered to and stored at the Project substation site. Galvanized steel would support most of the equipment.

Installation of concrete foundations and embedments for equipment would require the use of trenching machines, concrete trucks and pumpers, vibrators, forklifts, boom trucks, and large cranes. Above ground and below ground conduits from this equipment would run to a controls enclosure that would house the protection, control, and automation relay panels. Batteries and battery chargers would be installed inside the controls enclosure to provide backup power to the control system. Crushed rock would cover open areas of the site and adequate lighting would be installed for worker safety during construction and operation.

### Construction Equipment and Work Force

Construction equipment that would be used at different times during the construction process would include:

- Flat-bed trucks
- Concrete trucks and pumpers
- All-terrain vehicles
- Pick-up trucks
- Hydraulic ram
- Cranes
- Trenching machines
- Vibrators
- Forklifts
- Boom trucks
- Vehicle-mounted power auger or backhoe
- Disking machines
- Rollers
- Tensioners and/or pullers
- Line trucks
- Wire trailers
- Tractors

The total number of construction workers (consisting of laborers, craftsmen, supervisory personnel, support personnel, and construction management personnel) would be approximately 200 workers on average for the duration of Project construction. During certain portions of the schedule when manpower-intensive tasks take place, the Project would utilize a peak of approximately 300 workers on site.

### Construction Traffic

As the site work progresses, construction equipment and materials would be delivered by truck and would be staged in the order of installation. Delivery of construction equipment and Project components would be coordinated with local agencies to ensure compliance with all applicable State, County, and local requirements. Weight and height restrictions would be verified and any required permits would be obtained

by the delivery service. Only the main transformers are expected to require heavy haul (oversize) transport and transportation permits. Transportation of any hazardous materials to the Site would comply with all U.S. Department of Transportation, U.S. Environmental Protection Agency (“EPA”), and all other applicable regulations.

### Operations and Maintenance Activities

Various maintenance activities would occur at the Project during operations. It is expected the Site would be visited about once a week or less, typically by one to two people, for scheduled checks and maintenance and on an as-needed basis. Additional workers may be needed occasionally depending on the complexity of maintenance activities or repairs needed. Operations and maintenance activities are further described below.

### Annual Facilities Operations Plan

The facility would be operated in accordance with proven practices utilized by NextEra Energy’s Power Generation Division throughout its PV and BESS portfolio and across other generating technologies. The following services and maintenance activities would take place in conformity with an annual facility operating plan:

- Perform all scheduled and unscheduled service and required preventative maintenance of all equipment.
- Provide scheduled and unscheduled services to the electrical system from the inverters to the Project substation including the pad mount transformers and collection system.
- Coordinate all warranty work with PV equipment and inverter supplier during the warranty period.
- Employ, hire, train, direct and discharge, per agreed upon guidelines, all employees any contractor hired to support service and maintenance of the on-site equipment.
- Provide qualified supervision of service and maintenance employees.
- Provide any and all technical support required for service and maintenance. Develop, maintain, and implement safety programs for the employees.
- Provide all regulatory required training including, but not limited to hazardous materials and occupational safety and health.
- Provide all materials, tools, supplies, consumables, equipment, vehicles, maintenance equipment, safety equipment, operating equipment, clothing and other supplies, personal property, and assets necessary to conduct scheduled and unscheduled service and preventative maintenance of the equipment per manufacturer’s specifications.
- Provide 24-hour remote monitoring and diagnostic analysis of PV site conditions from the ROCC located at NextEra’s corporate headquarters.
- Provide regular and ongoing reports concerning the service and maintenance of the Project.
- Develop, implement, and update an Annual Service and Maintenance Plan that delineates major and minor services to be performed each month.
- Respond to emergencies, nonscheduled shutdowns, and outages in an appropriate manner - if weather and site conditions permit - to attempt to minimize loss of facility revenue, damage to the equipment, or bodily harm to personnel.
- Provide reset and emergency response call-out capability, if weather and site conditions permit.
- Provide timely telephonic, electronic, and written notice, if required, in the event of any facility malfunction or unusual event at or involving the equipment.

- Monitor component failures and perform root cause analysis in a reasonable time frame:
  - Develop and maintain a database of component failures
  - Perform root cause analysis to identify failure modes
  - Develop and maintain predictive models to forecast future failures
  - Identify counter-measures to mitigate failures and implement those counter-measures determined to be cost effective throughout the equipment
- Maintain the facility in compliance with all applicable federal, state, and local laws/ordinances and regulations, including but not limited to safety, industrial hygiene, and environmental conditions on, under, or about the facility (air, soil, and ground water conditions), endangered species, and hazardous materials.
- Comply with site mandated safety and environmental standards.
- Conduct preventive maintenance inspections of facility equipment. Visual, electrical, and mechanical inspections would include but not be limited to the following detailed activities:
  - Inspect torque of electrical and mechanical connections
  - Inspect condition of finish or corrosion protection
  - Inspect integrity of module mechanical and electrical connections (random)
  - Inspect for discoloration or damage to modules
  - Inspect damage to support structures
  - Verify integrity of installation and support of electrical cable and conduit systems
  - Verify integrity and completeness of the wiring
  - Identify conditions of accelerated corrosion
  - Identify any distortion or other structural damage resulting from excessive wind, rain, or snow, if applicable
  - Identify excessive misalignment or shifting of modules and system components.
  - Check for evidence of wildlife (birds, rodents, bugs, nesting or soiling)
  - Check for broken module glass
  - Identify any bulging or distorted module junction boxes
  - Identify any discolored wiring, signs of arcing or overheating
  - Check inverter filters and heat sinks for accumulation of debris or dust
  - Check for and remove any plant material that may come in contact with components
  - Regular inspections consisting of checks on modules, electrical connections, combiner boxes, inverters, and switchyard equipment

### Vegetation Management

The Project has been designed to avoid removal of natural vegetation wherever possible, including vegetation within the buffer zones of mapped natural resource areas (shown in Attachment B). Vegetation on the Site would be actively maintained to control growth and prevent overshadowing or shading of the PV panels. Traditional trimming and mowing would be performed on an interval basis to maintain the vegetation at a height below approximately 24 inches. During operations, selective use of herbicides may also be employed around structures to control invasive or noxious weeds.

### Road Maintenance

No paved roads are expected to be required on the Site. If required, standard maintenance practices for the type of road constructed would be employed.

Unpaved roads internal to the fenced Project Area would be maintained regularly to control the flow of water on and around the road, remove obstacles, and maintain a solid surface. Maintenance would be completed by conducting regular surveys to inspect the conditions of the road surfaces, and blading, grading, or compacting the road surfaces to preserve a minimally sloped and smooth planed surface.

### Project Substation

During operations, the Project as well as its substation and the Transmission Owner's switchyard would be unmanned. All Project substation monitoring and control functions would be performed remotely. Unauthorized entry into the Project substation and the Transmission Owner switchyard would be prevented by fencing and locked gates. Warning signs would be posted and entry would be restricted to the Project's authorized personnel.

Routine operation may include a single pickup truck visiting the Project substation for switching, as well as larger maintenance trucks for equipment maintenance. Maintenance activities would include equipment testing, equipment monitoring and repair, and emergency and routine procedures for service continuity and preventive maintenance. It is expected the Site would be visited about once a week or less, typically by one to two people, for schedule checks and maintenance and on an as-needed basis.

## 4.0 Standards for Exercise of Zoning Powers

Section 14-2.8 (E) of the Brooks County Code requires the consideration of the following Standards for Exercise of Zoning Powers for any application brought before the Planning Commission or the County Commission for a Zoning decision:

1. *Is the proposed Zoning or use suitable in view of the Zoning and development of adjacent and nearby property?*

Yes, the proposed Project is suitable in view of the Zoning and development of adjacent and nearby property, which were confirmed by Brooks County to be in the AG Zoning District. Solar facilities are becoming more common in rural areas in the southeastern United States. During operations, they are generally considered compatible with a wide range of adjacent land uses including low-density rural and agricultural land uses, because of their passive nature. Specifically, PV solar facilities typically:

- Do not require regular or consistent staffing after construction;
- Do not cause excessive noise;
- Do not have nighttime lighting (unless emergency maintenance is required);
- Do not emit air or water pollution during operations;
- Are readily screened from adjacent and nearby property by existing vegetation or planted buffers; and
- Do not cause negative impacts from glare. PV panels are designed to generate energy by absorbing light rather than reflecting light, and have anti-reflective coatings to minimize potential for glare.

The Project intends to sell power under a power purchase agreement for the first 30 years of its life. At the end of the useful life, the Site could be restored to its preconstruction condition and return to agricultural use.

2. *Does the request represent the possible creation of an isolated district unrelated to adjacent and nearby districts and would the proposed use adversely affect the existing use or usability of adjacent or nearby property?*

No rezoning is proposed, and the proposed Project area would continue to be zoned as the AG Zoning District as are the surrounding adjacent and nearby properties. After construction, the proposed Project would be a

passive use that is compatible with adjacent land uses and would not restrict potential uses of nearby properties. It can return to AG use after decommissioning of the facility.

3. *Will the proposed use cause an excessive or burdensome use of public facilities or services, including but not limited to streets, schools, water, sewer, or other public utilities, including police and fire protection?*

No, the proposed Project would not cause an excessive or burdensome use of public facilities or services, and is not anticipated to impact streets, schools, water, sewer, public utilities, police and fire protection or other public services as described below:

- Improvement to public roadways is not required. Road closures for construction are not anticipated, though minor and temporary traffic delays on surrounding roads are possible during the construction period. Quitman II Solar would comply with the Brooks County Road Use Ordinance (Brooks County Code Section 34-20), and would obtain the necessary permits for vehicles having a gross weight in excess of 26,001 lbs.
- The proposed Project would not require installation of public utilities such as water and sewer service.
- During operations, the proposed Project would be staffed remotely, and would not impact public schools by causing an influx of workers.
- The proposed Project is not anticipated to impact public safety, or police or fire protection services. The Project Area would be surrounded by a 7-foot fence and access gates would be locked to prevent unauthorized access.

4. *Is the proposed use supported by new or changing conditions not anticipated by the Comprehensive Plan or is the proposed use compatible and consistent with the purpose and intent of the Comprehensive Plan?*

The proposed Project is compatible and consistent with the purpose and intent of the Brooks County 2030 Comprehensive Plan, which sets forth a Community Vision that is supported by a number of goals, policies and objectives focused on elements including economic development. The Project supports the Economic and Industrial Development portion of the Vision Statement, which states:

*Economic and Industrial Development initiatives will have expanded the economy through innovation and investment in education and supportive infrastructure. The community will have an integrated system of technology, utility and transportation networks that support a vital economy and offer ample employment and business opportunities to all (Brooks County 2030 Comprehensive Plan, page 6).*

The comprehensive plan was partially updated in 2017.<sup>3</sup> For the updated version, this Project supports the Economic Development Opportunity A and DCA Quality Community Objectives 1 (Economic Prosperity), 2 (Resource Management) by developing the solar industry, an expanding industry that is suitable for the community and provides local economic benefits, long-term sustainability, and minimal impacts to the natural resources of the county. This Project represents a new industry that supports local economic growth and diversification, would not cause the loss of historic features, and minimizes impacts to natural resources. DCA Quality Community Objectives specifically states “Promote the efficient use of natural resources and identify

<sup>3</sup> Southern Georgia Regional Commission. June 5, 2017. 2017 Joint Comprehensive Plan Update – Brooks County & The Cities of Barwick, Morven, Pavo, and Quitman. Available:

[https://dca.ga.gov/sites/default/files/Jefferson\\_co\\_barwick\\_ci\\_morven\\_ci\\_pavo\\_ci\\_Jefferson\\_ci\\_plan\\_update\\_2017.pdf](https://dca.ga.gov/sites/default/files/Jefferson_co_barwick_ci_morven_ci_pavo_ci_Jefferson_ci_plan_update_2017.pdf).

and protect environmentally sensitive areas of the community. This may be achieved by promoting energy efficiency and renewable energy generation...”

Local benefits would include the following:

- Generates safe and low-cost renewable energy that would not emit air or water pollution during operations, and would not use water to generate electricity;
- Support to the local economy through purchase of regional goods and services;
- Provides approximately 300 construction jobs during peak construction. The Applicant’s construction contractor would attempt to hire as many local workers as possible. Typically, the ratio of travelers vs. non-travelers would be approximately 30% vs. 70%; and
- Provides valuable tax revenue with little impact on resources.

The *Brooks County 2030 Comprehensive Plan* designated the majority of the subject property as Agricultural Area in Brooks County Future Development Map. The Project area does not occur within the Rural Conservation overlay or Historic Areas. While the Agricultural Area Character Area description does not mention utilities or solar developments, solar farms are generally accepted to be compatible uses in rural and agricultural areas across the Southeast because of their passive nature as described in the discussion of Standards for Exercise of Zoning Powers, Standard #1.

5. *Will the proposed change adversely influence existing conditions in the neighborhood or the city or county at large and are there substantial reasons why the property cannot or should not be used as currently districted?*

The proposed Project is not anticipated to adversely influence existing conditions in the area, nor are there reasons why the property cannot or should not be used as currently districted. No change in Zoning District is proposed because solar energy is considered a compatible use in agricultural and low-density rural residential areas. After construction, the proposed Project Area would be utilized as a largely passive use of land and is not anticipated to adversely influence the surrounding area as described in Standards for Exercise of Zoning Powers, Standard #1.

6. *Are there potential adverse impacts on the environment, including but not limited to drainage, soil erosion and sedimentation, flooding, air quality, and water quality and quantity?*

Current design of the Site avoids and minimizes potential impacts to sensitive environmental resources to the greatest extent practicable. Quitman II Solar has conducted desktop studies and field reconnaissance site assessments, to identify the presence of regulated aquatic resources, sensitive ecological habitat and potential for cultural resources. These due diligence efforts and any additional required compliance are summarized as follows:

- The Project would generate renewable energy that would not emit water pollution during operations, and would not use water to generate electricity.
- A formal wetland delineation for the site was completed May 23, 2019. The Project will avoid and minimize wetland impacts to the greatest extent practicable and buffers will be established, where feasible, to further help minimize the potential for indirect impacts to Waters of the U.S. (WOTUS). If impacts to these areas are unavoidable, a jurisdictional determination and Clean Water Act Section 404/401 permit authorization will be required by the U.S. Army Corps – Savannah District. The Site has been reviewed for potential occurrences for rare, threatened and endangered species. The Project is not anticipated to adversely affect protected species. Appropriate agency consultations, species-

specific surveys, best management practices, and pre-construction clearance surveys will be conducted in accordance with applicable state and federal regulations.

- Quitman II Solar conducted a review of Georgia’s Natural, Archaeological and Historic Resources Geographic Information System (GNAHRGIS) database and the National Register of Historic Places (NRHP). The NRHP did not identify any listed or eligible for listing within 5 miles of the Site. According to the Georgia Natural, Archeological, and Historic Resource GIS database, three buildings along Hodges Road are known to be constructed between 1920 and 1940 and may require additional review to ensure compliance with the National Historic Preservation Act (NHPA), where applicable. While a cultural resources survey was not conducted, no potentially eligible sites or structures were observed on Site.
  - The Georgia Environmental Protection Division (EPD) would provide coverage under the National Pollutant Discharge Elimination System (NPDES) Construction Stormwater Permit for Standalone Construction Projects GAR100001. The Applicant would conform to minimum standards provided by the Brooks County Code Section 18-45 and provide best management practices for all land-disturbing activities. According to the Georgia Soil and Water Conservation Commission, Brooks County is not a Local Issuing Authority.<sup>4</sup>
  - Quitman II Solar would prepare a Spill Prevention, Control, and Countermeasure (SPCC) Plan because transformer oil would be utilized onsite. An SPCC Plan is required by the U.S. Environmental Protection Agency (EPA) (Region 4) if a facility would store over 1,320 gallons of oil or related products onsite. The SPCC Plan would address the facility operating procedures to prevent oil spills, the control measures that would be installed to prevent oil from entering navigable water or adjoining shoreline, and countermeasures to contain, cleanup, and mitigate the impacts of an oil spill on navigable waters or adjoining shorelines.
  - Quitman II Solar would comply with Brooks County Code Section 22.18 – 22-61, Flood Damage Prevention. No Project facilities are proposed in flood hazard areas.
  - Quitman II Solar would use water trucks to mitigate dust emissions during construction. The Project would generate renewable energy and would not emit air pollution during operations.
7. *Are the costs required of the public in providing, improving, increasing or maintaining public utilities, schools, streets and public safety necessities reasonable when considering the proposed changes?*

No costs are anticipated to be required of the public for providing, improving, increasing, or maintaining public utilities, schools, streets and public safety necessities. As provided in discussion of criterion 3, the Project is not anticipated to impact public utilities, schools, streets, or public safety.

8. *Will the proposed change be detrimental to the value or improvement of development of adjacent or nearby property in accordance with existing requirements and development standards?*

The Project is not anticipated to be detrimental to the value and would not impact potential improvements or developments on adjacent or nearby property. The solar energy facility would be low-profile and obscured from many views by vegetation. Operating solar facilities are passive land uses that are considered compatible

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<sup>4</sup> Georgia Soil and Water Conservation Commission. Local Issuing Authority List. Online: [https://gaswcc.georgia.gov/sites/gaswcc.georgia.gov/files/imported/SWCC/Files/Local\\_Issuing\\_Authorities\\_Updated\\_List%20-%20December-2017.pdf](https://gaswcc.georgia.gov/sites/gaswcc.georgia.gov/files/imported/SWCC/Files/Local_Issuing_Authorities_Updated_List%20-%20December-2017.pdf).

with agricultural and low-density rural residential areas. The Project would not be staffed regularly so activity at the site would be minimal after construction.

9. *Is the proposed change out of scale with the needs of the neighborhood or Brooks County or does the request reflect a reasonable balance between the promotion of the public health, safety, morality, or general welfare and the right to unrestricted use of property?*

The Applicant believes that the proposed Project reflects a reasonable balance between general welfare and the right to unrestricted use of property. A solar facility is a passive use of land that would produce low-cost renewable energy, is not anticipated to have detrimental environmental or public health impacts, would not consume water to generate electricity, is not anticipated to emit air and water pollution during operations, and would benefit the local economy as discussed in Section 4.0 Standards for Exercise of Zoning Power, Standard #3.

10. *Will the proposed change constitute a grant of special privilege to the individual owner as contrasted with the adjacent or nearby neighborhood or with the general public?*

The proposed Project would not constitute a grant of special privilege to any specific landowners given that the proposed use is permissible under the Brooks County zoning ordinance section 5-1.2.

## 5.0 Standards for Special Exception Review

In addition to the Standards for Exercise of Zoning Powers, the following sections provide discussion of the Standards for Special Exception Review listed in Section 14-2.8 (F) of the Brooks County Code, and also listed in the Brooks County Special Exception Application Form (page 4).

- A. *Is the type of street providing access to the use adequate to serve the proposed Special Exception use?*

Yes, the type of street providing access to the Project Area is adequate to serve the Project. The Site would be accessed mainly from the primary entrance off Barwick Road, which is a major collector that primarily serves intra-county travel between the cities of Jefferson and Pavo. A secondary entrance gate would be constructed along Dry Lake Road. See the Construction Equipment and Workforce section (Section 3.0) for a detailed list of construction vehicles needed for this Project, which Barwick Road can accommodate. Maximum construction crews would total approximately 300 workers at the peak, and construction is anticipated to last approximately 15 months total (12 months for the solar array). Solar facilities are passive facilities that do not require regular or consistent staffing after construction. Once construction is complete, it is expected the Site would be visited about once a week or less, typically by one to two people, for schedule checks and maintenance and on an as-needed basis. This level of access is more than adequately served by Barwick Road.

Per the Brooks County Code Section 34-20, vehicles exceeding 26,001 lbs. would be limited to state routes, truck routes, or major highway systems (such as US-83/Georgia State Route(SR) 38, and SR 333) where at all possible or feasible. Quitman II Solar would also comply with Section 34-61 of the Brooks County Code to obtain a Driveway Permit if required.

*B. Is access into and out of the property adequate to provide for traffic and pedestrian safety, the anticipated volume traffic flow, and to allow access by emergency vehicles?*

Yes, the primary entrance off Barwick Road would provide adequate access during and after construction for traffic and pedestrian safety, the anticipated light volume of traffic flow, and allow easy access by emergency vehicles. Average annual daily traffic (AADT) data for 2017 indicates 760 daily vehicle trips along Barwick Road near the Project.<sup>5</sup> Photovoltaic solar farms do not require regular or consistent staffing after construction. Maximum construction crews would total approximately 300 workers, and construction is anticipated to last 15 months (12 months for the solar array). Construction vehicles would most likely be arriving and leaving around dawn and dusk, as construction would typically occur during daylight hours. Minor traffic delays caused by slow-moving construction vehicles may occur on Barwick Road but are not anticipated to be frequent.

*C. Are public facilities such as schools, water, sewer, or other public utilities and police and fire protection adequate to serve the proposed Special Exception use?*

Yes, public facilities are adequate to serve the Project. As described in Section 4.0, Standards for Exercise of Zoning Powers, Standard #3, the proposed Project is not expected to impact schools, water, sewer, or other public utilities and police and fire service.

*D. Are refuse, service parking, and loading areas on the property located or screened to protect other properties in the area from such adverse effects such as noise, light glare, and other negative impacts?*

Sufficient onsite receptacles would be provided to contain litter and construction waste until construction activity is complete. Receptacles would be emptied as necessary. No permanent refuse areas are proposed during operations and maintenance because the facility would be staffed remotely. The Site would be kept free of refuse during this time, and refuse would be removed from the site immediately.

Construction workers would park in designated areas in the interior of the site during the construction timeframe and would not park along streets. Construction vehicles onsite would be limited to workers and deliveries and be temporary in nature. A designated cleared area near the primary construction entrance and within the Project boundaries would be utilized. This area would be reclaimed after construction to be returned to its former grade and condition. The northern entrance to the site is separated from the closest residence by a 200-foot buffer of mature vegetation which would provide visual screening.

Once construction is complete, it is expected the Site would be visited about once a week or less, typically by one to two people, for schedule checks and maintenance and on an as-needed basis. A parking and loading area would be located adjacent to the Project substation, and would have sufficient space for 3-4 vehicles to support operations. The parking area would facilitate loading/unloading of parts and equipment for maintenance operations scheduled to take place at the Project. No formal parking bollards would be employed to designate parking locations.

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<sup>5</sup> Georgia Department of Transportation Traffic Analysis and Data Application. Online: <https://gdottrafficdata.drakewell.com/publicmultinodemap.asp>. Accessed 5/21/19.

E. *Will the hours and manner of operation of the Special Exception use have no adverse impacts on other properties in the area?*

Because of the passive nature of solar power generation, minimal adverse impacts to other properties in the area are anticipated during operation of the facility. Adverse impacts to other properties are more likely to occur during the construction phase, which is temporary and anticipated to last approximately 15 months. During construction, potential adverse impacts to adjacent uses may include noise, dust, stormwater drainage, trash, light, glare, and views of activity at the Site where not obstructed by vegetation. The Applicant would employ the following measures to prevent or mitigate these potentially adverse impacts during the construction and operations/maintenance timeframes:

- The Applicant would adhere to all federal, state, and local regulations pertaining to potential impacts including but not limited to water quality, drainage, air quality, hazardous materials, and noise.
- During construction, the Applicant would abide by the requirements of Brooks County Code Section 26-19, and construction would typically occur between the hours of 7:00 a.m. to 11:00 p.m. on weekdays. However, if night or weekend construction work is necessary, the Applicant would obtain a permit specified by the Brooks County Building Inspector per Section 26-20 of the Brooks County Code. During maintenance, any work that involves disturbing or unnecessary noises would also be typically during the hours between 7:00 a.m. and 11:00 p.m., except in case of urgent necessity in the interest of public health and safety per Section 26-19(5) of the Brooks County Code.
- After construction, it is expected the Site would be visited about once a week or less, typically by one to two people, for schedule checks and maintenance and on an as-needed basis. These activities would typically occur in the daytime, except in the case of emergencies.
- Water trucks would be used to prevent dust intrusion into neighboring properties.
- The Georgia EPD would provide coverage under the NPDES Construction Stormwater Permit for Standalone Construction Projects GAR100001. The Applicant would conform to minimum standards provided by the Brooks County Code Section 18-45 and provide best management practices for all land-disturbing activities.
- The construction site would be maintained free of litter and construction waste, and litter and construction waste would not be allowed to be spilled, discharged, or blown by wind and water. Sufficient onsite receptacles would be provided to contain litter and construction waste until construction activity is complete. Receptacles would be emptied as necessary.
- After construction, the property (including the fence, landscaped areas, and internal site itself) would be maintained in good condition and free of trash and refuse.
- Any lighting would be minimized, designed to prevent intrusion into neighboring properties, and utilized only during emergencies.
- Noise from the facility would be limited. The PCU's are low noise systems with sound levels at under 40 dBA at 50 feet from the unit allowing for very low noise levels at the property line, which is approximately the same level as the hum from a refrigerator.<sup>6</sup>
- The PV panels are designed to generate energy by absorbing light rather than reflecting light, and have anti-reflective coatings to minimize potential for glare. Therefore, glare from PV is not anticipated to cause negative impacts.

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<sup>6</sup> U.S. Department of Health and Human Services, Center for Disease Control. *What Noises Cause Hearing Loss?* Online: [https://www.cdc.gov/nceh/hearing\\_loss/what\\_noises\\_cause\\_hearing\\_loss.html](https://www.cdc.gov/nceh/hearing_loss/what_noises_cause_hearing_loss.html). Accessed 6/7/18.

- If nighttime construction or maintenance is necessary, lighting would be temporary, minimal and localized at the immediate construction site. Lighting may also be used in the dusk hours to safely finish tasks and for workers to leave. Construction lighting would be removed from the Site upon completion of the construction.
- Minimal lighting would be employed on the Site during the operational phase. Motion-controlled lights would be installed at the Project substation controls enclosure, but are generally kept in the “off” position unless maintenance personnel are onsite or working at night during emergency repairs or maintenance. During operations, nighttime lights would only be utilized for emergency repairs and would be shielded and directed downwards to minimize light intrusion at adjacent facilities.

F. *Will the height, size, and location of the buildings or other structures on the property be compatible with the height, size, and location of the buildings or other structures on neighboring properties?*

Yes, the height, size and location of the buildings and other structures on the property would be compatible with the height, size, and location of the buildings or other structures on neighboring properties. No buildings designed for occupancy are planned for the Site. Structures planned for the site include the solar panels and accessory equipment, electrical equipment associated with the Project substation and the Transmission Owner switchyard, and a controls enclosure within the fence of the onsite substation. Utility facilities including high-voltage transmission towers, communications towers, and distribution lines occur onsite or in the surrounding area. The controls enclosure would resemble a farm shed and would not exceed the maximum building height for the AG Zoning District of 35 feet (Brooks County Zoning Ordinance, Section 6-1). The proposed PV panels are low-profile and approximately eight feet in height. Existing and proposed vegetative buffers (as described in Section 4.0 Standards for Exercise of Zoning Powers, Standard #4) would serve to obscure the low-profile PV panels from many views.

## 6.0 Conclusion

The proposed solar installation for Quitman II Solar, LLC is properly sited and at an advantageous location to maximize solar energy potential, in addition to having minimal environmental impacts. As described in this LOI and supporting materials, we believe the Project meets the requirements set forth by Brooks County regulations, and state and federal regulations. Quitman II Solar, LLC will benefit the community during the construction period and over the Project’s operating life.

We look forward to working with you on the development of this Project and would be happy to answer any questions you may have. Thank you.

Sincerely,

*Stephen Land*

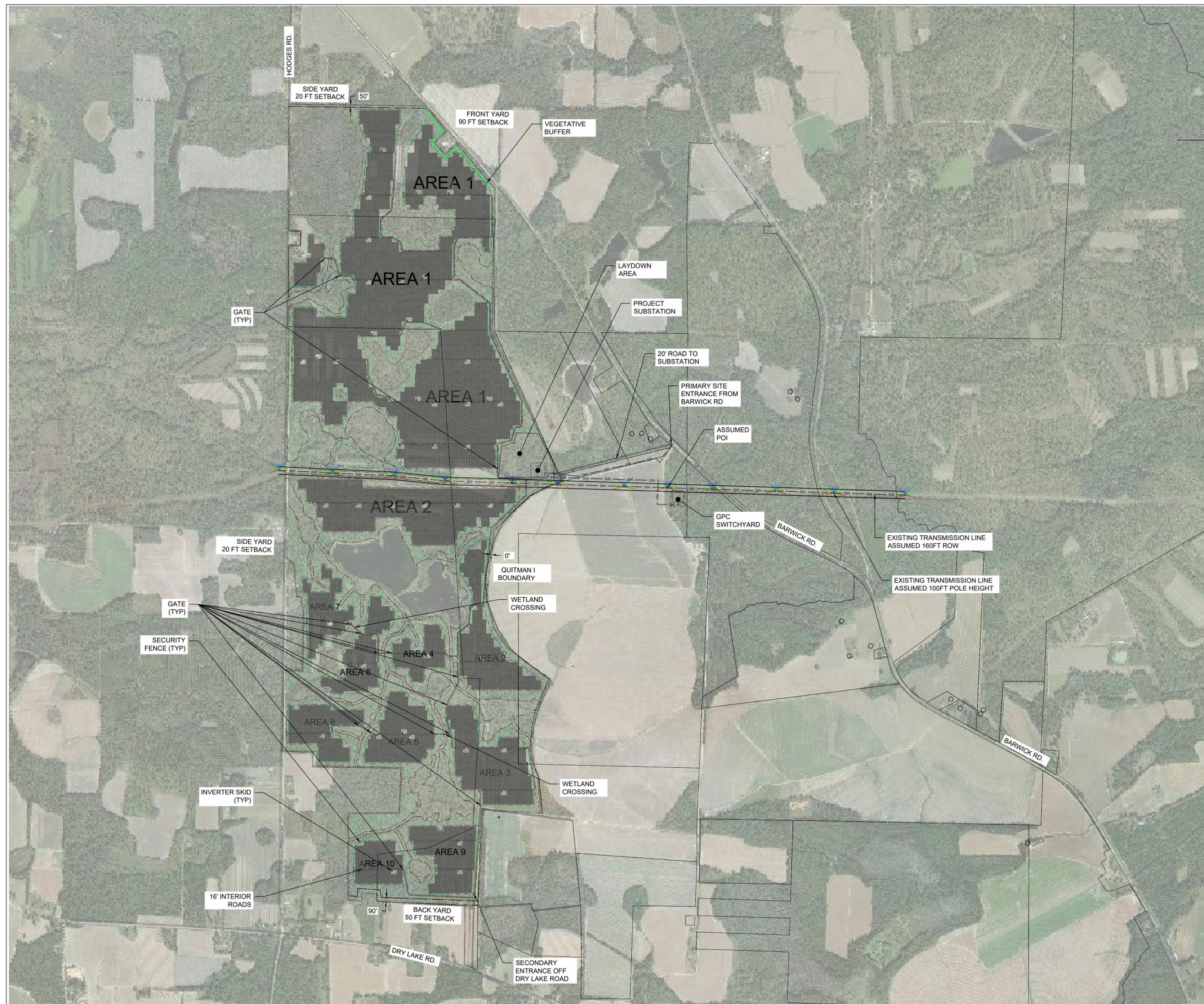
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 Juno Beach, FL 33408  
 PH: 513-649-4240  
[Stephen.Land@nexteraenergy.com](mailto:Stephen.Land@nexteraenergy.com)

**Attachment: A**  
**Adjacent Property Owner  
Parcel List**

APN	Owner 1	Owner 2	Number	Direction	Street Name	Mode	City	State	ZIP	LEGAL1
034 0019	S J & L TURNER FAMILY FARMS LLLP		4498		GREEN ISLAND	RD	VALDOSTA	GA	316024934	603-202/205/208
034 0019B	MULKEY, J RICHARD	CROFT, KIMBERLY	216		VINLAND	CIR	MOULTRIE	GA	317687916	233-356 & 676-222
034 0020	MESSER, SAMUEL L	MESSER, SHEILA A	7540		STATE ROAD 33		BOSTON	GA	31626	& LL 519 PB 15-108
034 00201	DUCK, BRIAN K	DUCK, ANGELA M	8515		BARWICK	RD	QUITMAN	GA	316434406	PB 16-34
035 0004	HORNE, ALICE ESTELLA		1505	S	JEFFERSON	ST	QUITMAN	GA	316433527	557-020
035 0005	BEULAH HILL CHURCH		1593		HODGES	RD	DIXIE	GA	316293130	N.D.
035 0006C	MILLER, MATTIE		921	NE	199TH	ST	MIAMI	FL	331795814	195-239
035 0012	GOSIER, DAN		4746		GROOVERVILLE	RD	QUITMAN	GA	316436928	108-725 & 126-125
035 0012D	GOSIER, EDDIE MACK		910		PONDEROSA	DR	VALDOSTA	GA	316013477	303-289
035 0012E	TURNER, JOHN		1410		HODGES	RD	DIXIE	GA	316293129	PB 8-197 (7-2-81)
035 0012F	UNITED STATES OF AMERICA		2108	E	HILL	AVE	VALDOSTA	GA	316010600	517-295
035 0012G	SNEED, ETHEL MAE		2332		KARA	DR	TALLAHASSEE	FL	323033718	108-752
035 0013	ARNOLD, JAMES A				PO BOX 825		QUITMAN	GA	316430825	210-247
035 0014	UNITED STATES OF AMERICA		2108	E	HILL	AVE	VALDOSTA	GA	316010600	414-152
035 0017	HORNE, JEREMY	HASAN, SEAN N			HODGES	RD	DIXIE	GA	31629	EDDIE WILLIAMS PLACE
035 0019	S J & L TURNER FAMILY FARMS LLLP		4498		GREEN ISLAND	RD	VALDOSTA	GA	316024934	603-202/205/208
036 0008	FRAZIER, SIMON		18515	NW	22ND	PL	MIAMI GARDENS	FL	330563216	27-474
036 0014	JOE & DRUS PLACE LLC				PO BOX 997		THOMASVILLE	GA	317990997	PB 20-128
036 0017A	FRAZIER, DOROTHY	FRAZIER, FRANK R	5017		DRY LAKE	RD	DIXIE	GA	316293208	783-599
036 0018	WRIGHT, JAMES W		2980		APPOMATTOX	WAY	DECATUR	GA	300342708	105-310
036 0019	FRAZIER, ROSA LEE		444	W	62ND	ST	JACKSONVILLE	FL	322083914	115-676
036 0020	PHILLIPS, ESTER J	HENRY, D JOHNSON	6521		DRY LAKE	RD	QUITMAN	GA	316435905	TRT 2 (O'NEAL PLAT)
036 0027	WHITE, CORIENNE		6724	NE	MIAMI	PL	MIAMI	FL	331385438	090-267
036 0031	WRIGHT, WILLIE GERALD		5544		OAKWOOD	DR	STONE MOUNTAIN	GA	300871539	TRT 4A OF 7-178
036 0031D	WALLACE, ROBERT L	WALLACE, TANGELA R	4869		DRY LAKE	RD	DIXIE	GA	316293205	475-059
036 0087	FOUR GIRLS & A FARM LLC				HODGES	RD	DIXIE	GA	31629	790-477
049 0001	FRIENDSHIP CHURCH		5479		DRY LAKE	RD	DIXIE	GA	316293216	K-185
049 0002	WILSON, MILLIE		515		PARKVIEW	DR	DETROIT	MI	482142967	PB 17-138 TRACTS 1A
049 00021	BROWN, DAZAN		4		CHESTNUT	ST	PLYMOUTH MEETING	PA	194622704	PB 17-138 TRACT 2
049 00022	QUITMAN SOLAR LLC				CHEWBERRY	RD	QUITMAN	GA	31643	PB 17-138 PORTION OF PB 21-41
049 00029	GOSIER, THOMAS C	GOSIER	1010		RIVER	ST	VALDOSTA	GA	316015330	PB 17-138 TR 1
050 0001	PERKINS LESLIE LESJUE A PERKINS TRU		2517		MARTUCCI	RD	SEFFNER	FL	335842453	476-006
050 0003	LASSETER, SHANNON DEAN TURNER		4498		GREEN ISLAND	RD	VALDOSTA	GA	316024934	233-352
050 00082	JOE & DRUS PLACE LLC				PO BOX 997		THOMASVILLE	GA	317990997	423-259
050 00086	QUITMAN SOLAR LLC				BARWICK	RD	QUITMAN	GA	31643	PORTION OF PB 21-40
050 00087	QUITMAN SOLAR LLC				DEWBERRY	RD	QUITMAN	GA	31643	ALSO LL 493 PORTION OF PB 21-41
050 00088	DAVISON, ROBERT D	DAVISON, KAYLA B	799		DRY LAKE	RD	BOSTON	GA	316265415	PORTION OF PB 21-41
022 0008	L G LEE FARMS LLLP		112		MIMOSA	DR	THOMASVILLE	GA	317926605	& LL 496, 497, 471, 516

# Attachment: B

**Site Plan**

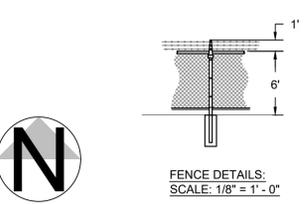
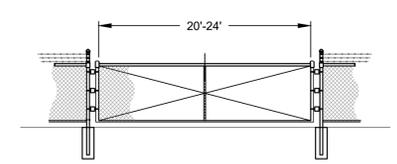


**1** OVERALL SITE LAYOUT  
 1" = 1000' - 0"  
 0' 500' 1000' 2000'

- SHEET NOTES:**
1. LOCATIONS SHOWN ARE FOR GENERAL GUIDANCE ONLY. SLOPES OF THE SITE ARE NOT DEPICTED AND LOCATIONS MUST BE VERIFIED ON SITE BEFORE INSTALLATION. SITE LAYOUT ASSUMES 50 FT TREE HEIGHT.
  2. 90FT SETBACK FROM PROPERTY LINE TO MODULES ALONG BARWICK ROAD
  3. 50FT SETBACK FROM PROPERTY LINE TO MODULES ALONG ALL OTHER BOUNDARIES

**LEGEND**

- PROPERTY BOUNDARY
- PARCEL LINES
- ADJACENT PARCEL LINES
- FENCE LINE
- ROAD
- OVERHEAD ELECTRICAL
- SETBACK
- RIGHT OF WAY (ROW)
- SETBACK FOR TREE SHADING NATURAL
- RESOURCES EXCLUSION AREA, 35 FT SETBACK
- EXISTING RESIDENCES
- VEGETATION BUFFER
- TRANSMISSION STRUCTURE



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**ENGINEER'S STAMP**

CLIENT  
**NEXTERA ENERGY RESOURCES**

PROJECT NAME  
**QUITMAN II SOLAR**

SITE LOCATION  
 BROOKS COUNTY, GA  
 30.860406°, -83.637885°

**DRAWING ISSUE**

1	05/05/2019	PRELIMINARY
2	05/23/2019	NEW WETLAND

**REVISION ISSUE**

DRAWN BY: ZZ CHECKED BY: MH  
 PROJECT NO.: 19016  
 DRAWING TITLE  
**OVERALL SITE LAYOUT**

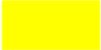
DRAWING NUMBER  
**E200**

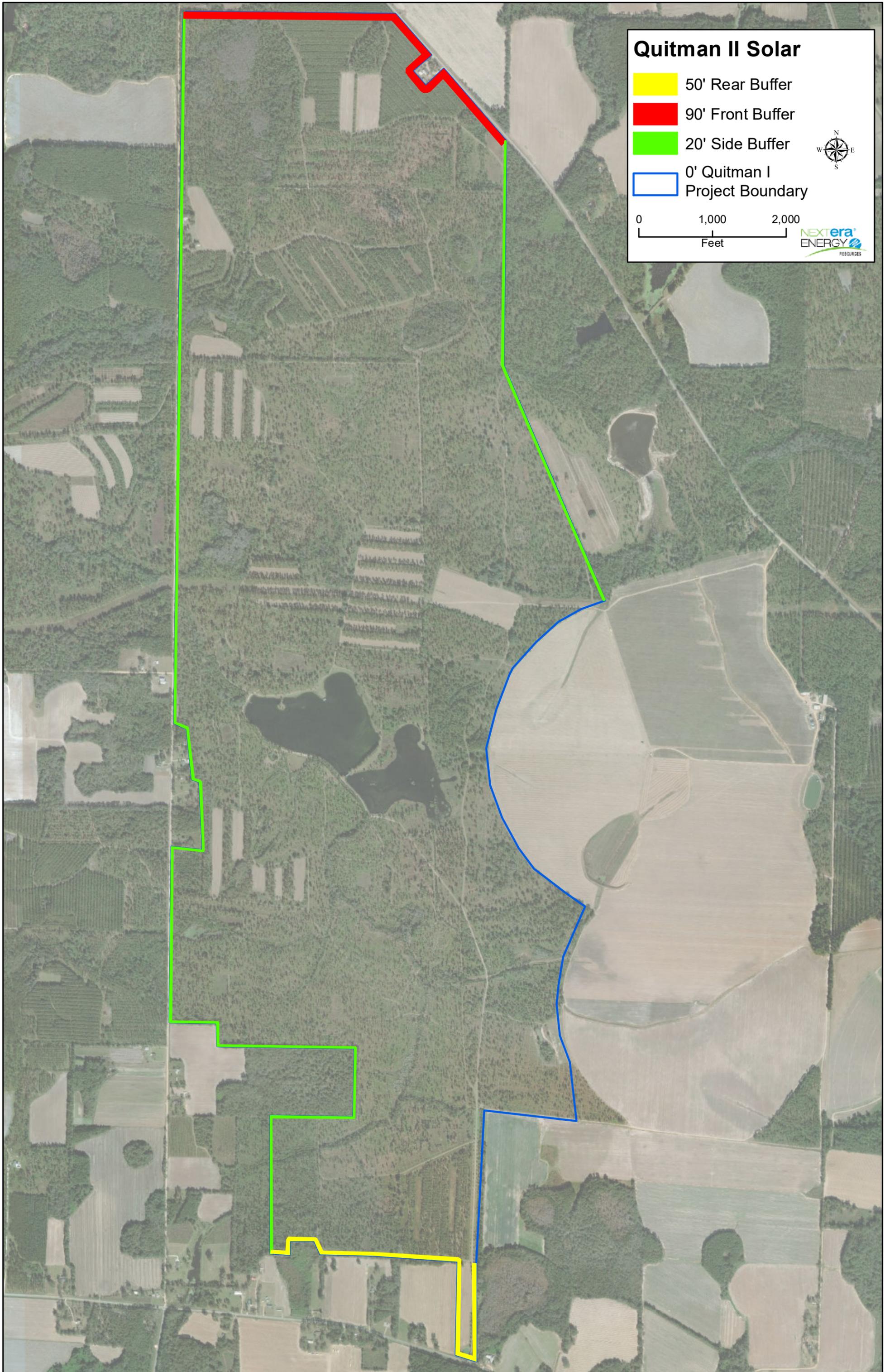
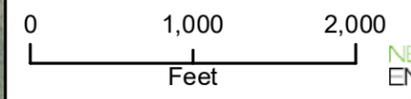
**PRELIMINARY - NOT FOR CONSTRUCTION**

# Attachment: C

## **Setbacks**

# Quitman II Solar

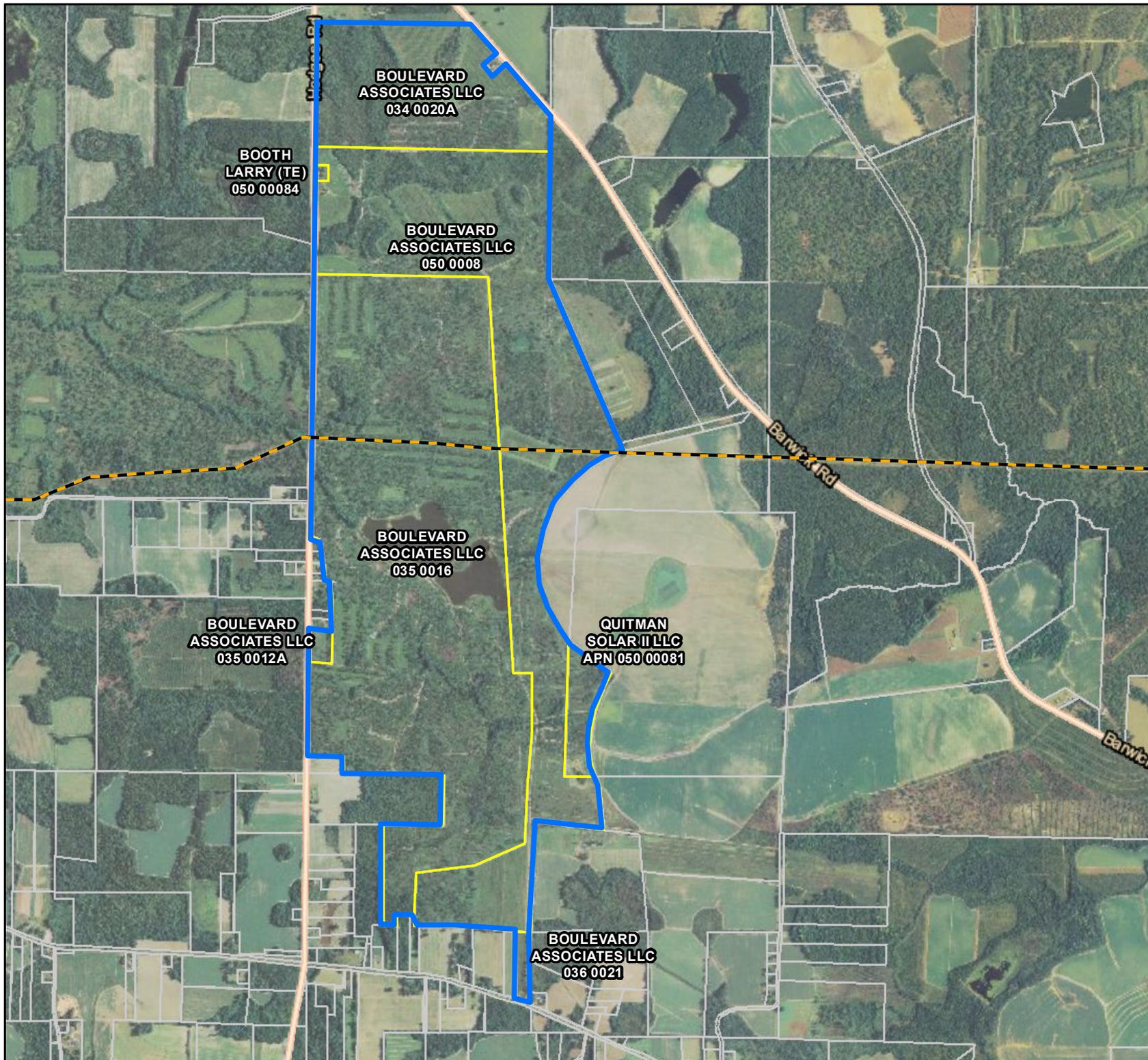
-  50' Rear Buffer
-  90' Front Buffer
-  20' Side Buffer
-  0' Quitman I Project Boundary



# Attachment: D

## Parcel Map

# Quitman II Solar



**BOULEVARD ASSOCIATES LLC**  
034 0020A

**BOOTH LARRY (TE)**  
050 00084

**BOULEVARD ASSOCIATES LLC**  
050 0008

**BOULEVARD ASSOCIATES LLC**  
035 0016

**BOULEVARD ASSOCIATES LLC**  
035 0012A

**QUITMAN SOLAR II LLC**  
APN 050 00081

**BOULEVARD ASSOCIATES LLC**  
036 0021

- Existing 230kV Line
- Project Boundary
- Parcel Lines

