#### STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH, NORTH CAROLINA

DOCKET NO. EMP-115, Sub 0

In the Matter of the Application of Cherry Solar, LLC for a Certificate of Public Convenience and Necessity for Merchant Plant Pursuant to N.C. Gen. Stat. 62-110.1 and Commission Rule R8-63 CHERRY SOLAR, LLC'S APPLICATION FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY FOR 180 MW MERCHANT PLANT

Cherry Solar, LLC (the "Applicant"), by and through its undersigned counsel, hereby applies to the North Carolina Utilities Commission (the "Commission") pursuant to N.C. Gen. Stat. § 62-101.1, and Commission Rule R8-63, for a Certificate of Public Convenience and Necessity for Merchant Plant authorizing the construction of a solar photovoltaic merchant plant facility with a capacity of 180 MW AC to be located in Northampton County, North Carolina. In support of its application, the Applicant provides the Commission with the exhibits attached hereto as required by N.C.U.C. Rule R8-63, and also shows unto the Commission the following:

- 1. Exhibit 1 attached hereto contains the required information about the Applicant.
- 2. All correspondence, documents and filings regarding this application should be sent to:

Joseph W. Eason
Nelson Mullins Riley & Scarborough LLP
GlenLake One, Suite 200
4140 Parklake Avenue
Raleigh, North Carolina 27612
Tel: (919) 329-3800
joe.eason@nelsonmullins.com
Attorney for the Applicant

And, with a copy also to the following corporate agent of Applicant:

Cherry Solar, LLC
Attn: Kenny Habul
192 Raceway Drive
Mooresville, NC 28117
704-662-0375
project.development@sunenergyl.com

The Applicant and its Counsel consent to electronic service of filings related to this application.

- 3. Exhibit 2 attached hereto contains the required information about the proposed generation facility.
- 4. Exhibit 3 attached hereto provides a description of the need for the facility in the state and/or region, with supporting documentation.
- 5. This Application has been signed and verified by an individual duly authorized to act on behalf of the Applicant for that purpose.
- 6. This Application is submitted together with the pre-filed direct testimony of Linda Nwadike, Director of Permitting and Community Relations for SunEnergyl, which testimony incorporates and supports this application and is submitted on behalf of the Applicant in accordance with NCUC Rule R8-63 (b)(5).
- 7. Confidential Information has been designated as such and filed under seal with this Commission contemporaneously with the filing of this Application in accordance with Rule R8-63(c).

WHEREFORE, the Applicant Cherry Solar, LLC, respectfully prays that this Commission consider the foregoing information submitted in support of this application and issue the Applicant a Certificate of Public Convenience and Necessity for the construction of the merchant plant described herein in accordance with N.C. Gen. Stat. §62-110.1 and NCUC Rule R8-63.

Respectfully submitted this 12 day of November, 2020.

Nelson Mullins Riley & Scarborough LLP 4140 Parklake Avenue, Suite 200 Raleigh, NC 27612

Tel: (919) 329-3800

joe.eason@nelsonmullins.com

Attorneys for the Applicant

# Cherry Solar, LLC CPCN Application – Merchant Plant NCUC EMP-115, sub 0

### INFORMATION ABOUT THE APPLICANT EXHIBIT 1

i. The full and correct name, business address, business telephone number and electronic mailing address of the Applicant;

Cherry Solar, LLC 192 Raceway Drive Mooresville, NC 28117 704-662-0375 project.development@sunenergy1.com

ii. A description of the Applicant, including the identities of its principal participant(s) and officers, and the name and business address of a person authorized to act as corporate agent or to whom correspondence should be directed;

Cherry Solar, LLC is a North Carolina limited liability company formed on September 24, 2020. Kenny Habul is duly authorized to act as a corporate agent of the Applicant for the purpose of this application. A copy of the Articles of Organization of the Applicant as filled with the North Carolina Secretary of State is attached as **Schedule 1-1**.

iii. A copy of the applicant's most recent annual report to stockholders, which may be attached as an exhibit, or, if the applicant is not publicly traded, its most recent balance sheet and income statement. If the applicant is a newly formed entity with little history, this information should be provided for its parent company, equity partner, and/or the other participant(s) in the project;

Cherry Solar, LLC is a newly formed affiliate of SunEnergy1, LLC ("SunEnergy1"); SunEnergy1 is the direct parent of the Applicant.

SunEnergy1 is one of the largest solar developers and engineering, procurement and construction companies in the U.S. SunEnergy1 is not a publicly traded company; therefore, its most recent balance sheet and income statement are filed under seal as confidential information (See <u>Confidential Schedule 1-2</u> of the Confidential Documents submitted with this Application).

iv. Information about generating facilities in the Southeastern Electric Reliability Council region which the Applicant or an affiliate has any ownership interest in

and/or the ability to control through leases, contracts, options, and/or other arrangements and information about certificates that have been granted for any such facilities not yet constructed.

The Applicant does not have any generating facilities in the Southern Electric Reliability Council region. The Applicant is an individual project company formed to own the solar facility assets for the project that is the subject of this application.

The Applicant's parent-affiliate, SunEnergy1 has ownership interest in and/or the ability to control through leases or contracts numerous solar generating facilities in the Southeastern Electric Reliability Council ("SERC") region. A list of generating facilities that SunEnergy1 has constructed within the Southern Electric Reliability Council region is attached as **Schedule 1-3**. A list of generating facilities that SunEnergy1 has under development but have not been completed sufficient to achieve commercial operation is attached as **Schedule 1-4**.

### Schedule 1-1

### Articles of Organization

#### State of North Carolina Department of the Secretary of State

SOSID: 2055389
Date Filed: 9/24/2020 3:15:00 PM
Elaine F. Marshall
North Carolina Secretary of State

C2020 268 00616

### Limited Liability Company ARTICLES OF ORGANIZATION

Pursuant to §57D-2-20 of the General Statutes of North Carolina, the undersigned does hereby submit these Articles of Organization for the purpose of forming a limited liability company.

1.	The name of the limited liabil	lity company is: Cherry Solar, LLC						
_		(See Item 1 of the Instructions for appropriate entity designation)						
2.	person is executing these arti-	The name and address of each person executing these articles of organization is as follows: (State whether each person is executing these articles of organization in the capacity of a member, organizer or both by checking all applicable boxes.) Note: This document must be signed by all persons listed.						
	Name Kenny Habul	Business Address 192 Raceway Dr., Mooresville, NC 28117	Capacity					
		_	Member Organizer					
			Member Organizer					
3.	The name of the initial regist	ered agent is: Kenny Habul						
4.		of the initial registered agent office of the limited	l liability company is:					
	Number and Street 192 F	Raceway Dr.						
	<sub>City</sub> Mooresville	State: <u>NC</u> Zip Code: 28117	ounty: Iredell					
5.	The mailing address, if differ	The mailing address, if different from the street address, of the initial registered agent office is:						
	Number and Street							
	City	State: <u>NC</u> Zip Code: C	county:					
6.	Principal office information: (Select either a or b.)							
	a. The limited liability company has a principal office.							
	The principal office telephone number:							
	The street address and county of the principal office of the limited liability company is:							
	Number and Street:							
	City:	State: Zip Code: County:						

	Number and	d Street:					
	City:	Sta	ate:	Zip Code:	County	y:	
	b. 🔽 T	he limited liability com	npany does no	t have a principal	office.		
7.	Any other pattached.	provisions which the lin	nited liability	company elects to	o include (e.g., t	he purpose of	f the entity) are
8.	(Optional)	: Listing of Company cument.	Officials (See	instructions on the	importance of lis	ting the compa	my officials in th
	Name		Title	Busi	ness Address		
Э.		: Please provide a busi		ddres	vacy Redac		
	document is	ry of State's Office will	e-man me ousii	ness automatically	at the address pro	vided above at	no cost when a
	offered, ple	ase see the instructions for	or this documer	viewable on the wont.	ebsite. For more	information on	why this service
0.	offered, ple	ase see the instructions fo	or this documer	nt.		information on	why this service
	offered, ple	ase see the instructions for	or this documer	ess a future date is	specified:	information on	why this service
	offered, ple	les will be effective up	or this documer	nt.	specified:	information on	why this service
	offered, ple	les will be effective up	or this documer	ess a future date is	specified:		
	offered, ple	les will be effective up	or this documer	ess a future date is	specified:	Mbr/Org	
	offered, ple	les will be effective up	or this documer	cherry Solar, L	specified: .c Signature	 - Mbr/Org	
	offered, ple	les will be effective up	or this documer	cherry Solar, L	specified: .c Signature	 - Mbr/Org	
Γhis i	offered, pleading of the search of the searc	les will be effective up	or this document on filing, unless	Cherry Solar, Li  Kenny Habul - I	specified:  .c  Signature  Manager  pe or Print Name	<i>Mbr/Org</i>	
This i	offered, pleating These artices the 24 low space to be	les will be effective up  day of September  oe used if more than on	or this document on filing, unless	Cherry Solar, Li  Kenny Habul - I	Signature Manager De or Print Name	<i>Mbr/Org</i>	
This i	offered, pleating These artices the 24 low space to be	ase see the instructions followed les will be effective up day of September	or this document on filing, unless	Cherry Solar, Li  Kenny Habul - I	specified:  .c  Signature  Manager  pe or Print Name	<i>Mbr/Org</i>	

Filing fee is \$125. This document must be filed with the Secretary of State. 1.

#### Schedule 1-2

### **CONFIDENTIAL**

# SEE CONFIDENTIAL EXHIBITS SUBMITTED WITH APPLICATION

SunEnergy1, LLC Financial Statements

#### Schedule 1-3

Applicant's other affiliated generating facilities in the Southeastern Electric Reliability Council Region

The Applicant's affiliate SunEnergy1 has completed numerous solar generating facilities in the Southeastern Electric Reliability Council (SERC) region as shown in the below table.

<u>Site developed by SunEnergy1 with potential ownership Interest through lessees or contracts:</u>

Project	MW	County/State	Completion Date
Bethel	7	Pitts, NC	May 2016
Elizabeth City	28	Pasquotank, NC	April 2015
Everetts	7	Martin, NC	April 2015
Scotland Neck	28	Halifax, NC	March 2014
Battleboro	7	Edgecombe, NC	June 2015
Conetoe II	112	Edgecombe, NC	April 2016
Creswell	19.95	Washington, NC	June 2015
Kelford	30.10	Bertie, NC	February 2016
Sunbury	7	Gates, NC	March 2016
Whitakers	16.8	Whitakers, NC	February 2016
Whitepost I	14.99	Beaufort, NC	February 2013
Whitepost II	6.4	Beaufort, NC	May 2014
Windsor	7	Bertie, NC	April 2014
River Road	7	Hertford, NC	December 2016
Leggett	7	Whitakers, NC	July 2017
Barnhill	4	Pasquotank, NC	December 2016
Aulander Hwy 42	7	Hertford, NC	July 2017
Summit	84	Currituck, NC	February 2017
Shiloh Hwy 1108	7	Camden, NC.	March 2018
Sandy Solar	7	Camden, NC	April 2018
Chowan Jehu	7	Chowan, NC	March 2018
Scotland Neck 3	4	Halifax, NC	January 2015
Elk Park	0.197	Avery, NC	March 2012
SE1-Asheville	0.25	Buncombe, NC	May 2010
Plymouth Solar	6.5	Plymouth, NC	December 2014
Pamlico Solar	6.6	Beaufort, NC	February 2014
Choco Solar	7	Beaufort, NC	March 2015
Sugar Run Solar	6.6	Gates, NC	December 2015

Project	MW	County/State	Completion Date
Albertson Solar	7	Duplin, NC	December 2014
Conetoe Solar	6.6	Edgecombe, NC	January 2016
Williamston Speight	20.84	Martin, NC	December 2016
Ranchland	84	Currituck, NC	January 2018
Mill Pond	7	Martin, NC	September 2019
Jamesville	7	Martin, NC	October 2019
Aulander Holloman	112	Hertford, NC	June 2019

Camden Dam	7	Camden, NC	August, 2019
Mechanicsville	28	Hanover, VA	October, 2020

### Schedule 1-4 Projects in SERC region in development

Project	MW	County/State	Completion Date
Gliden	7	Chowan, NC	
Windsor Hwy 17	7	Bertie, NC	
Ryland Road	7	Chowan, NC	
Albemarle Beach	140	Washington, NC	
Pitt Solar	150	Pitt, NC	
Wildcat Road	7	Martin, NC	
Williamston Hwy 125	7	Martin, NC	
Shawboro Ridge	80	Currituck, NC	
Colice Hall	17	Hertford, NC	
Creswell Hwy 64	20	Tyrell & Washington, NC	
Manning	7	Edgecombe, NC	
Cherry	180	Northampton, NC	
Oak	120	Northampton, NC	

# Cherry Solar, LLC CPCN Application – Merchant Plant NCUC EMP-115, sub 0

### INFORMATION ABOUT THE PROPOSED FACILITY EXHIBIT 2

i. The nature of the proposed generating facility, including its type, fuel, expected service life, and the gross, net, and nameplate generating capacity of each generating unit and the entire facility, as well as the facility's total projected dependable capacity, in megawatts (alternating current); the anticipated beginning date for construction; the expected commercial operation date; and estimated construction costs;

The Applicant is proposing to construct a 180MW AC solar facility in Northampton County, based on the nameplate capacity of the panels. The gross and net capacity of the resource is equal to its nameplate capacity. The expected service life of the facility is approximately 40 years.

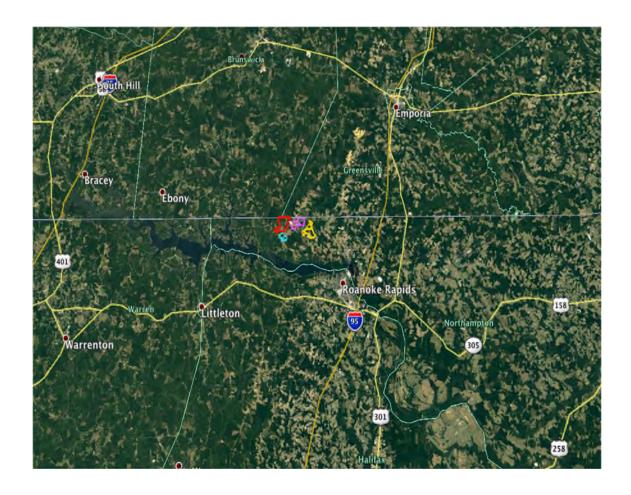
The Applicant anticipates beginning construction of the site during 1Q2023 and expects commercial operation of the facility by 4Q2023. The estimated construction cost of the facility is filed under seal as confidential information (See <u>Confidential</u> <u>Schedule 2-1</u> of the Confidential documents submitted with this Application).

ii. A color map or aerial photo (a U.S. Geological Survey map or aerial photo map prepared via the State's geographic information system is preferred) showing the proposed site boundary and layout, with all major equipment, including the generator, fuel handling equipment, plant distribution system, startup equipment, planned and existing pipelines, planned and existing roads, planned and existing water supplies, and planned and existing electric facilities;

A Site map of Cherry Solar, LLC showing the equipment layout is attached as **Schedule 2-2.** 

An aerial view showing the relationship of the site to nearby highways and state boundaries and county lines in its vicinity is reproduced below as Image 2-1.

IMAGE 2-1 General location of site proposed generation resource of Cherry Solar, LLC



iii. The E911 street address, county in which the proposed facility would be located, and GPS coordinates of the approximate center of the proposed facility site to the nearest second or one thousandth of a degree.

The E911 addresses and GPS coordinates for the proposed facility are:

922 Oak Grove Church Rd Gaston, NC 27832 GPS 36.5384, -77.7417 1315 Oak Grove Church Rd Gaston, NC 27832 GPS 36.5354, -77.7445

105 Crossvine Lane Gaston, NC 27832 GPS 36.5248, -77.7257

610 Cherry Tree Rd Gaston, NC 27832 GPS 36.5224, -77.7165

iv. In the case of natural gas-fired facilities, a map showing the proximity of the facility to existing natural gas facilities; a description of dedicated facilities to be constructed to serve the facility; and any filed agreements, service contracts, or tariffs for interstate pipeline capacity;

The facility is not a natural gas fired facility.

- v. A list of all needed federal, state and local approvals related to the facility and site, identified by title and the nature of the needed approval is listed in **Schedule 2-3** attached hereto. The same exhibit includes a copy of such approvals as has been obtained, or a report on the current status of the approvals. There will be no application related to an application for eligible facility status or exempt wholesale generator status pursuant to Section 32 of the Public Utility Holding Company Act of 1935 (PUHCA), as amended by the Energy Policy Act of 1992.
- vi. The proposed Cherry Solar generating facility will enter into a shared facility agreement with an adjacent solar generating facility of Oak Solar, LLC, in order to use the interconnection facilities that are built to accommodate Oak Solar, LLC. Please note that Oak Solar, LLC is affiliated with the Applicant's parent company SunEnergy1, LLC.

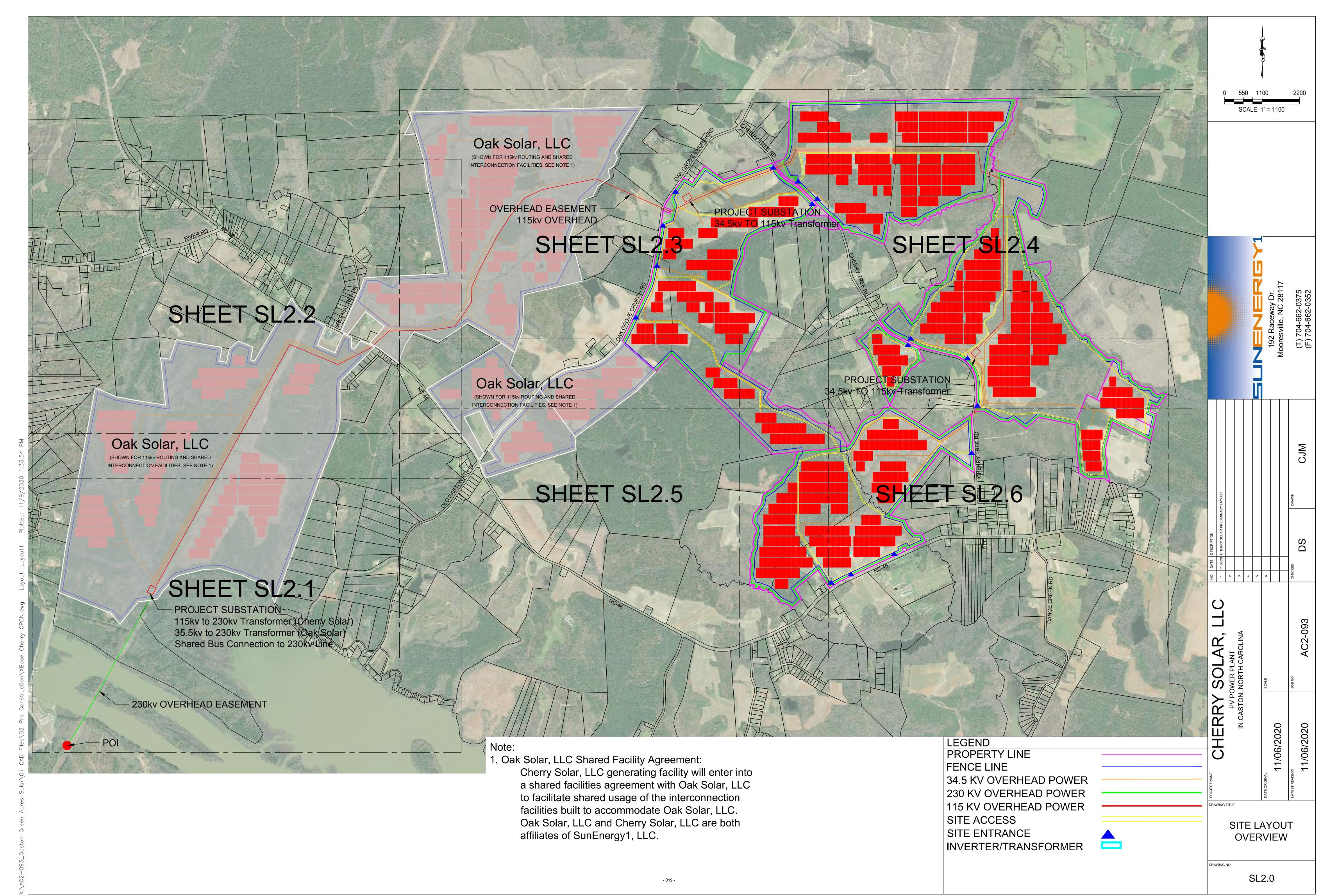
### Schedule 2-1

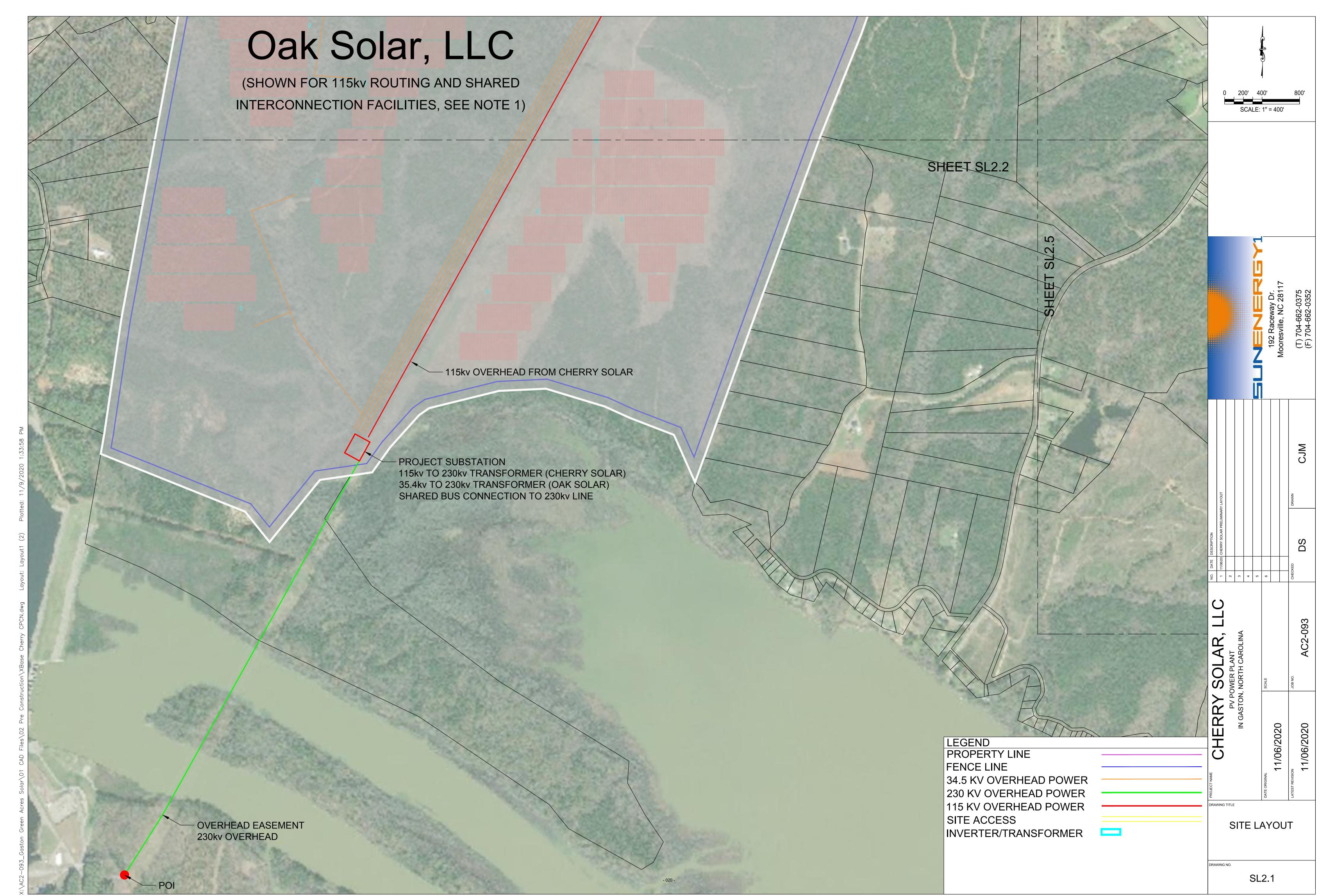
### **CONFIDENTIAL**

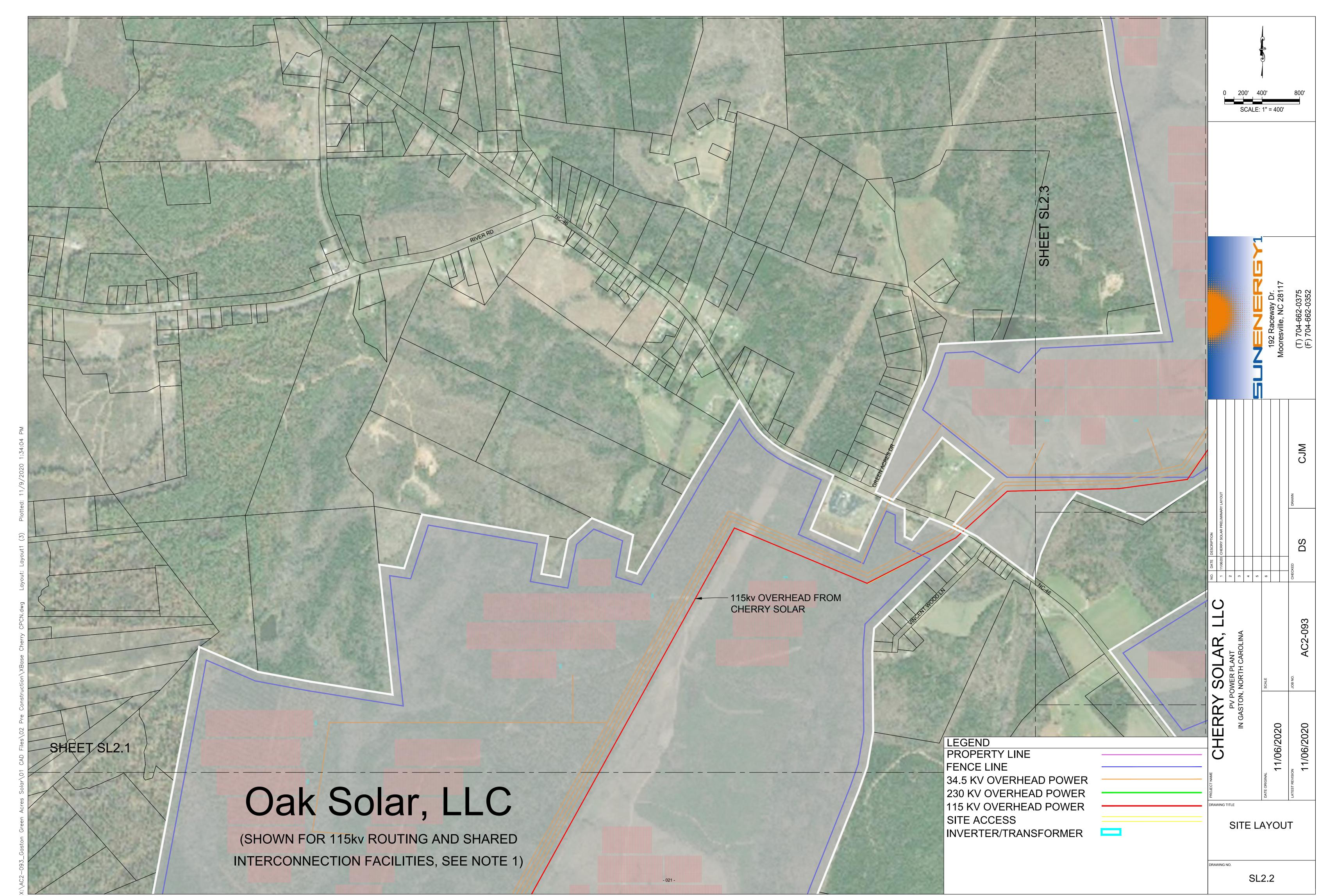
# SEE CONFIDENTIAL EXHIBITS SUBMITTED WITH APPLICATION

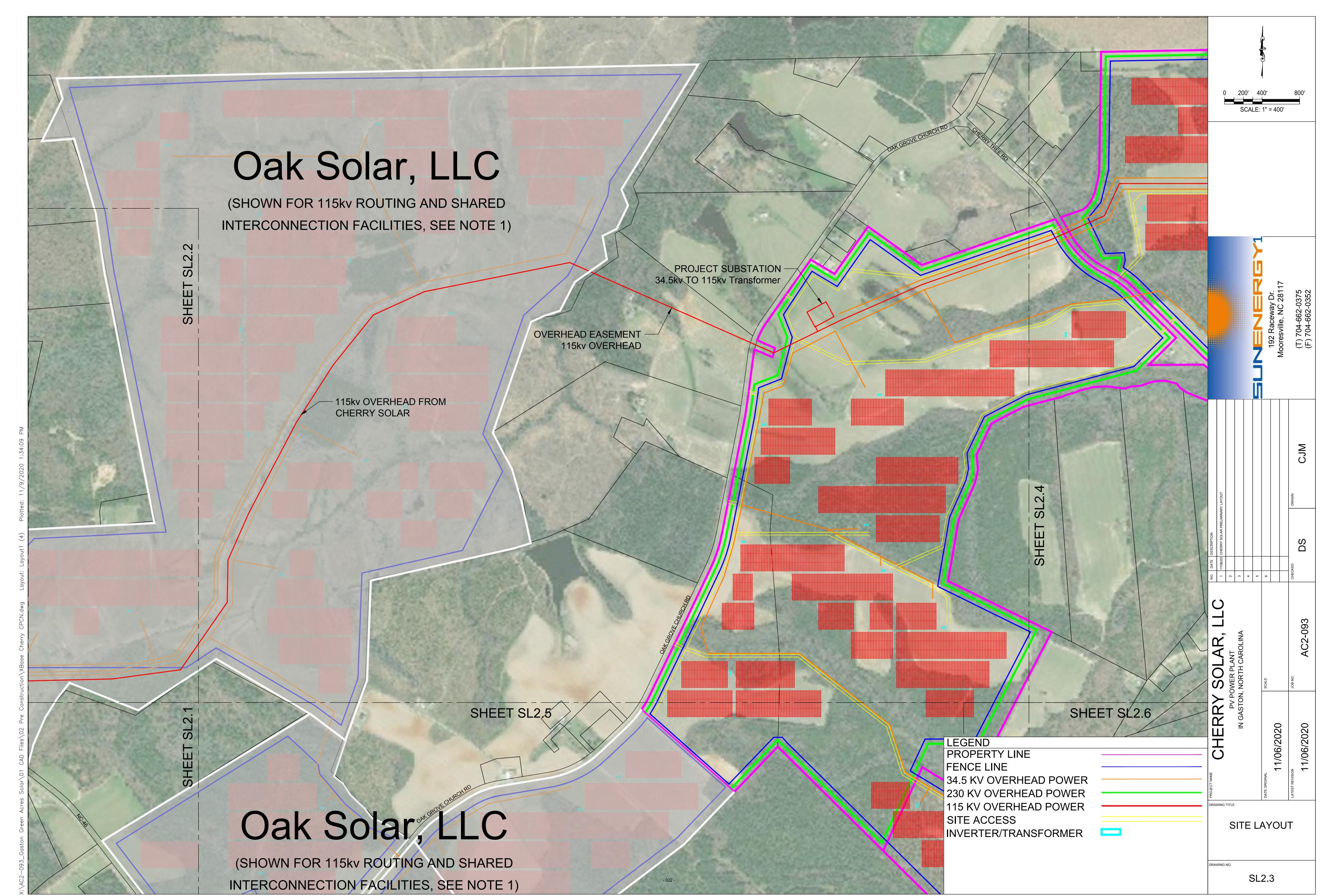
Cherry Solar Construction Costs

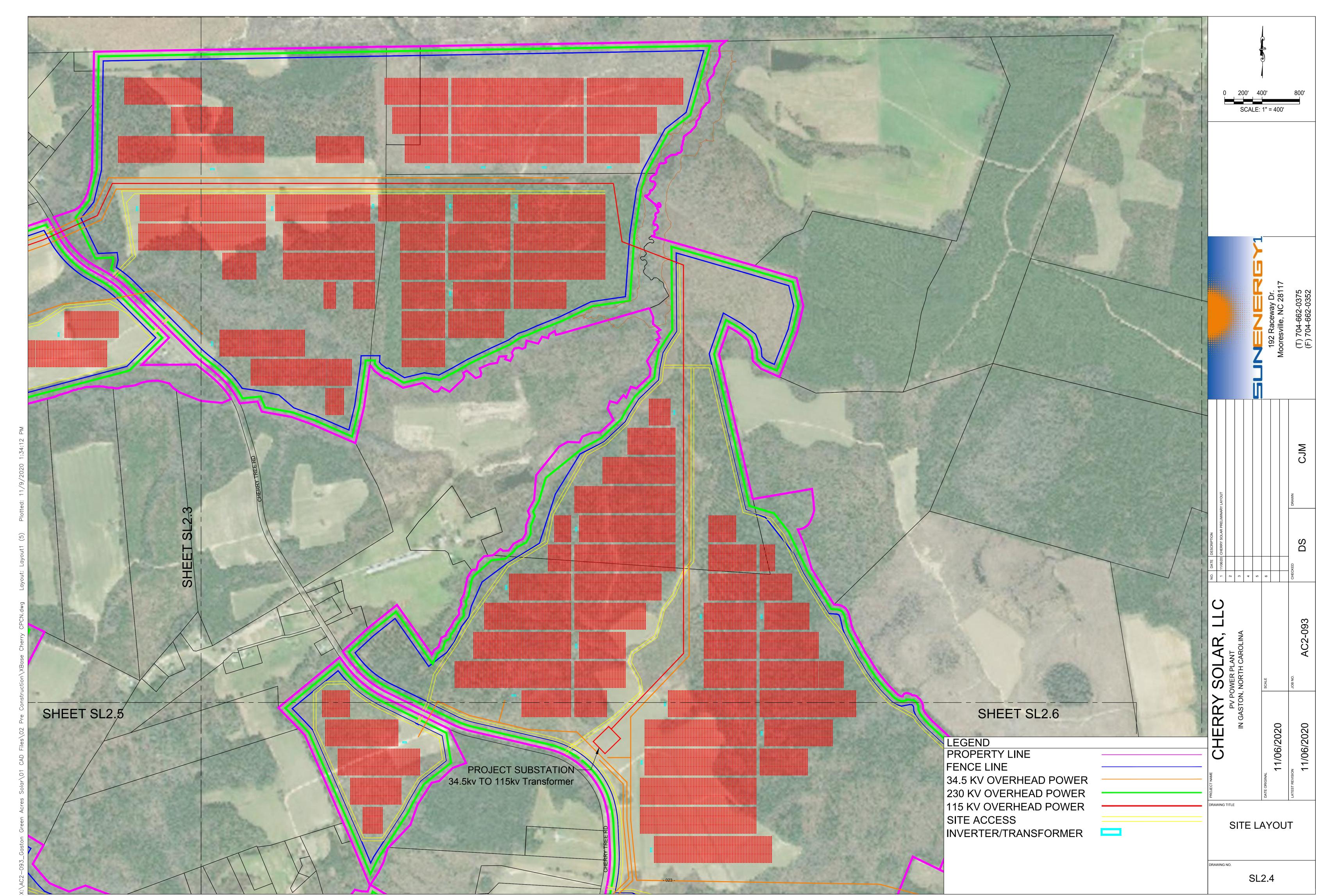
Schedule 2-2 Cherry Site Plan

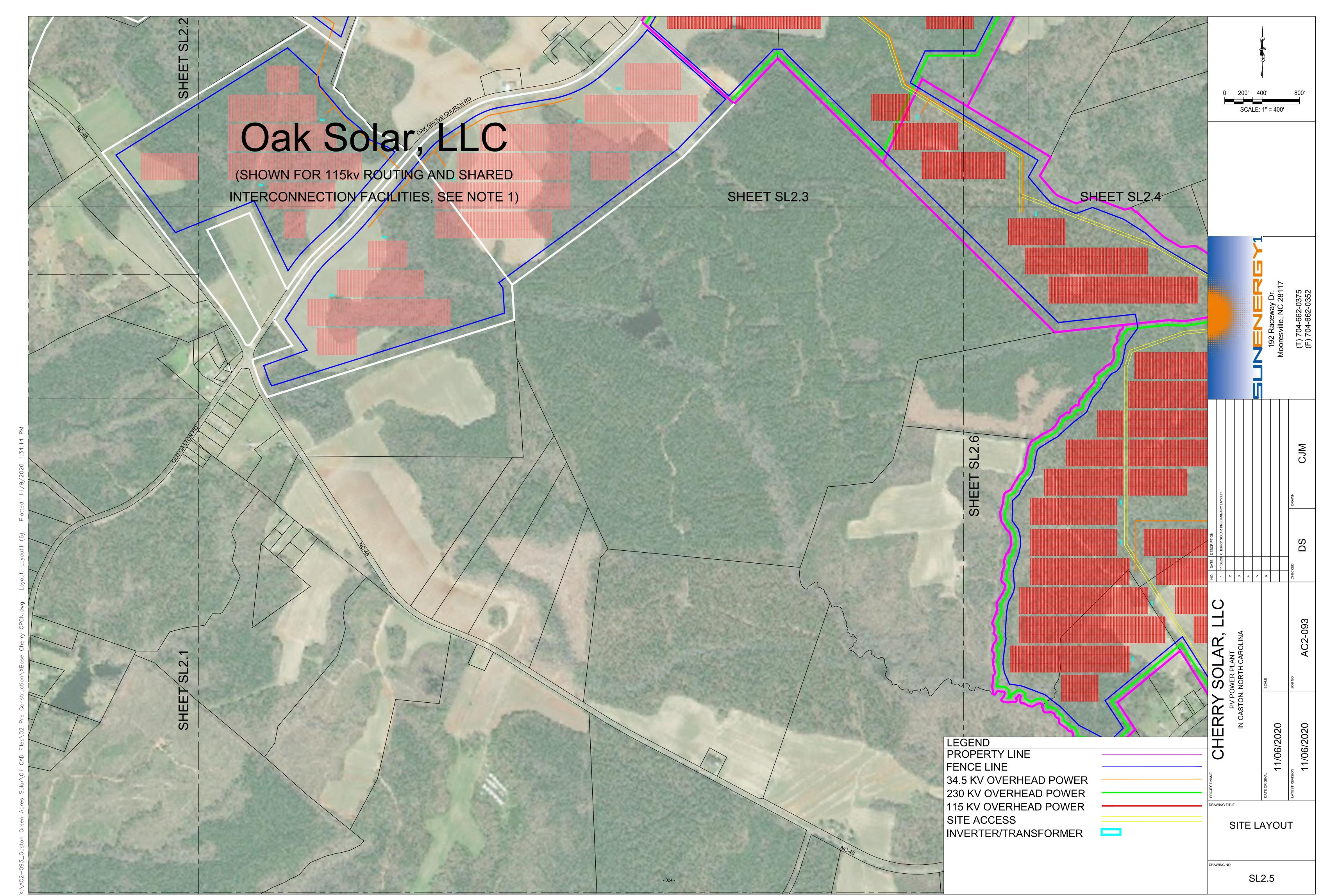


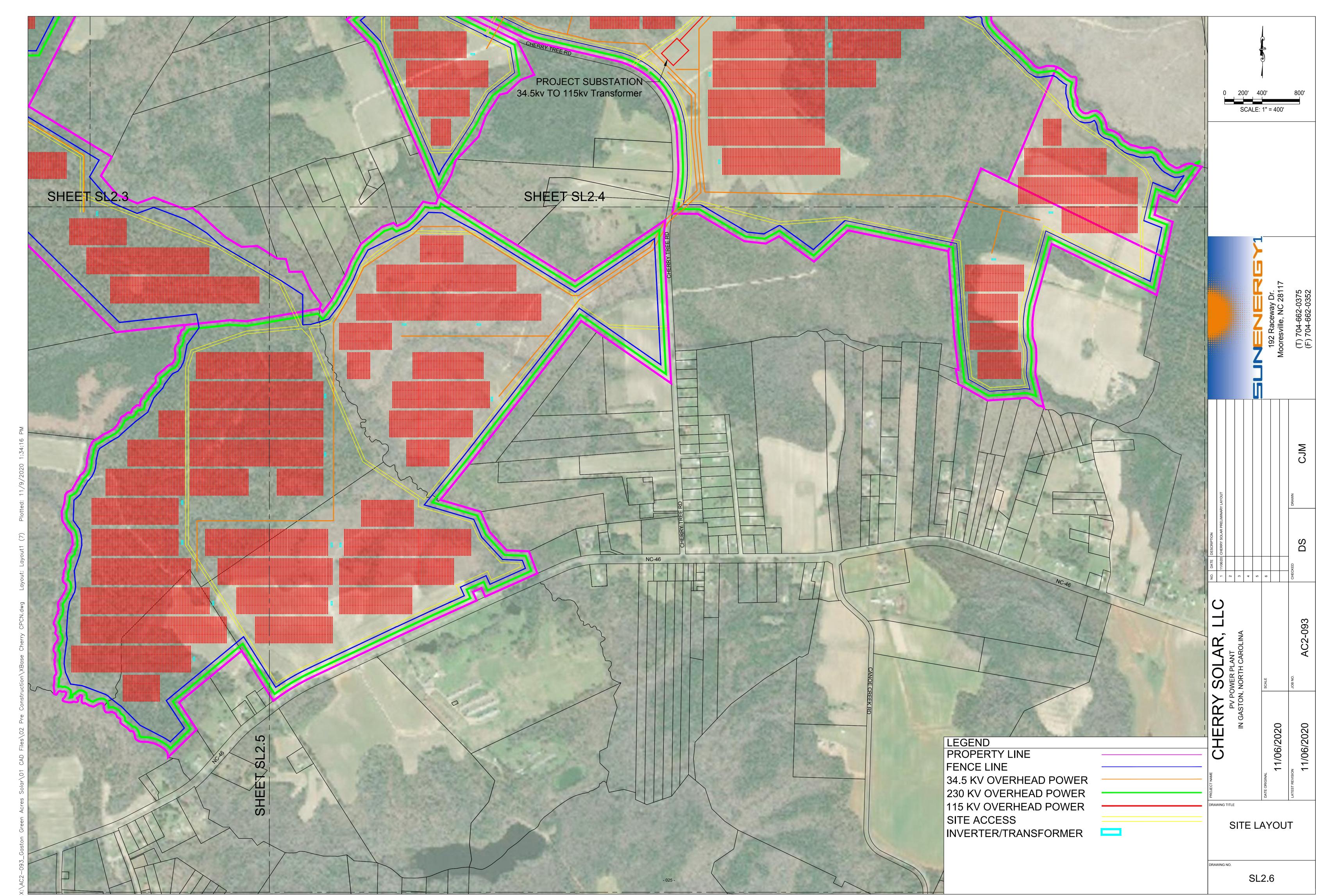


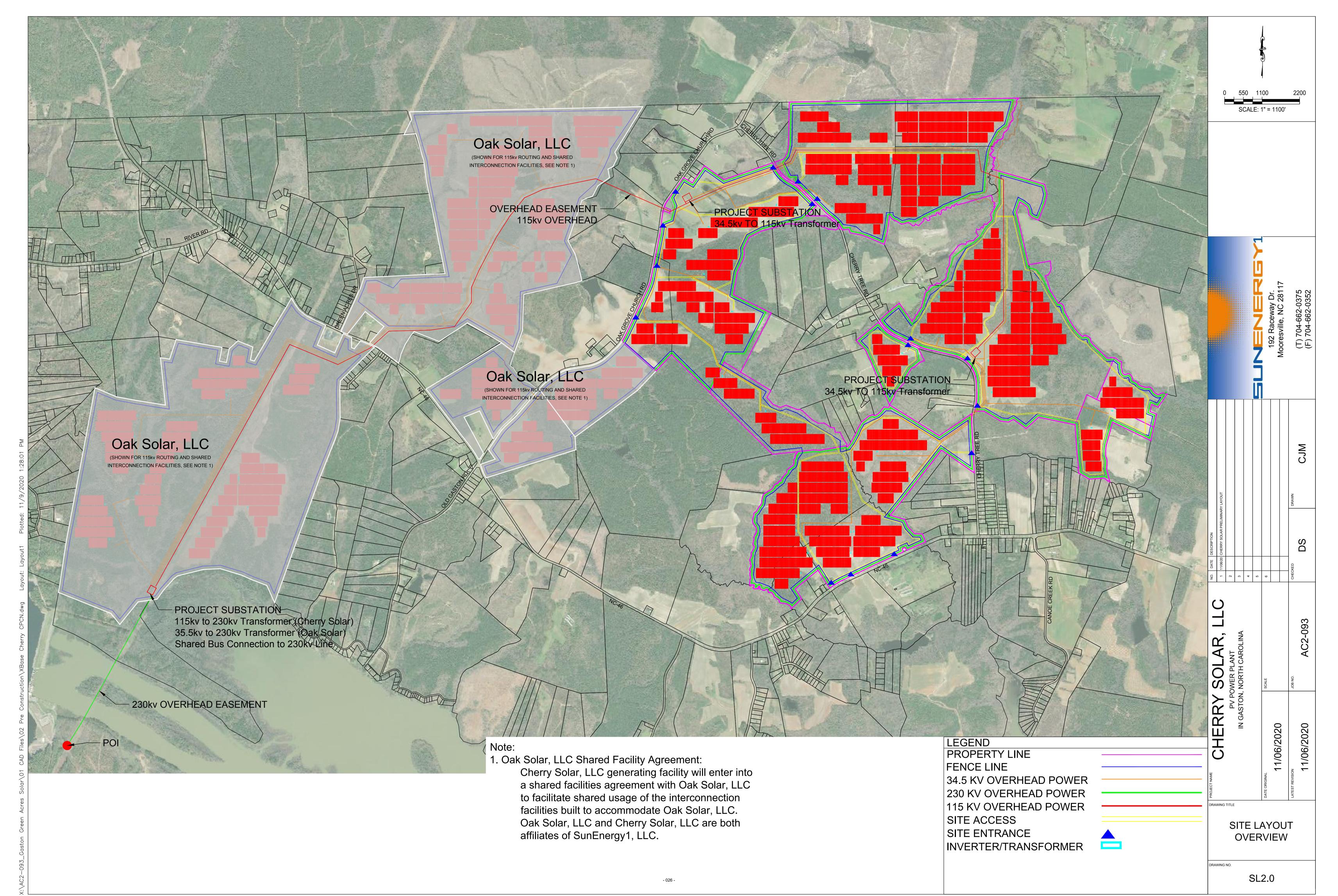












# Schedule 2-3 Required List of Permits or Certificates

	Title	Status	Сору
Federal			
USACOE	Wetland Delineation	In Process	N
FERC	Market Base Rate Authorization	Forthcoming	N
FERC	EQR	Forthcoming	N
State			
CPCN	Generation CPCN-NCUC	Application	N
NC-DOT	Driveway Permits	Forthcoming	N
NCDEQ	<b>Erosion and Sedimentation Control Permits</b>	In Process	N
NCDNR	Archaeological Survey	Forthcoming	N
Local			
	Zoning ( some parcels)	Obtained	Y Note the permit will be revised to capture the correct entity.
	Zoning ( other parcels)	Forthcoming	N
	Building/Electrical Permit	Forthcoming	N

WILLIAM FLYNN DIRECTOR

TIM LASSITER ZONING OFFICER

CINDY ROYCE ADMIN. ASSISTANT

TOMMY LAMM
BUILDING INSPECTOR

#### NORTHAMPTON COUNTY CODE ENFORCEMENT DEPARTMENT

PO BOX 97 JACKSON, NC 27845 Ph. (252) 534-5171 Fax (252) 534-1538



November 7, 2019

Linda Nwadike Sun Energy 1 192 Raceway Drive Mooresville, NC 28117

Ms. Nwadike:

I have once again reviewed the proposed Gaston Green Acres solar farm and was unable to find anything that would prevent a zoning permit from being issued. However, it is my recommendation that you wait until you are closer to breaking ground to re-instate the permit.

A typical zoning permit has a life of only six (6) months. It can be extended a bit if a building permit is purchased for the same project but that too is only good for six (6) months unless an inspection is performed within that first six months, then it is good for a year. The life of the zoning permit will run with the life of the building permit for up to three years. Unless you are within six months of breaking ground, there is no need to issue a zoning permit at this time.

Again, I saw no reason why we wouldn't be able to issue the zoning permit based on the plans provided but unless your company is ready to go to work, it really doesn't make much sense to do so because we will be going through this again in six months. If you are ready to pull all permits and start construction then I'd suggest we go ahead and move forward. Otherwise, it's probably best to wait.

Sincerely,

William Flynn

Northampton County

Code Enforcement Director

william.flynn@nhcnc.net

# NORTHAMPTON COUNTY ZONING DEPARTMENT

ZONING PERMIT # 201703684 PO Box 995 Jackson, NC 27845 (252) 534-1905

Application: Applicant:	9300 SUN ENERGY 1	Application Date:	05/15/2017 06/16/2017					
	Owners: NORWOOD, JACK MUSTIN CAPTIAL MANAGEMENT AND CONSULTING GROUP, LLC							
Mailing Add	ress: 4812 OLD WAKE FOREST ROAD RALEIGH, NC 27609							
Parcel # 010	3664, 0101732, 0101200, 0100879, 010365	3, 0101331						
911 Address:	: 105 CROSSVINE LANE GASTON, NC 27832	610 CHERRY TREE RD GASTON, NC 27832						
Physical Loc	eation of Property: 0103664, 0101732, 010	1200, 0100879, 0103658, 0101331						
Zoning Distr	rict: AR	X.						
Description of Existing Use Proposed Us		HOTOVOLTAIC GEN FACILITY	•					
Permit Expir Setbacks:	ration Date: 06/15/2020 Building Hg							
FRONT ALL SET BA ORDINANCE	RIGHT LEF ACK AND BUFFER REQUIREMENTS SI E HAVE BEEN MET AND ARE SHOWN	ET FORTH IN THE NORTHAMP	TON COUNTY ZONING S ON FILE -W.FLYNN- WEF:					
This permit does not give the permit holder the right to occupy or use the structure, or land, for which the permit has been approved for. Occupancy or use shall only be permitted after a Certificate of Compliance has been issued by the Northampton County Zoning Office. The issuance of a Certificate of Compliance does not negate the requirement of a Certificate of Occupancy from the Northampton County Building Inspections Office when applicable.								
	KATO	7-14-17	_					
Signature of Appl	licant	Date	-					
Signature of Zoni	ing Official	7-16-17 Date	-					

# NORTHAMPTON COUNTY ZONING DEPARTMENT

ZONING PERMIT # 201502631 PO Box 995 Jackson, NC 27845 (252) 534-1905

Application: Applicant:	8677 GASTON GREEN ACRES SOLA	R, LLC	Application Date:	10/10/2016
Owners:	PRICE SOLAR, LLC LEON THOMAS BAIRD	Issue	<b>Date:</b> 10/10/	/2016
Mailing Add	ress: 192 RACEWAY DRIVE MOORESVILLE, NC 2811	17	This is a large project w	vith several parcels
Parcel # 010	9857 207 SUMMIT TRL.	s	involved with several as Therefore there are 5 Es satisfy the ordinance readdresses are as follows	911 addresses to quirements. The
	ation of Property:	1	207 Summit Trail – Gas 131 Oak Grove Church	Road - Gaston, NC
Zoning District: AR  Description of Work: 168 MW D/C - 120 MW A/C SOLAR FARM			172 Oak Grove Church Road – Gaston, NO 922 Oak Grove Church Road – Gaston, NO 1315 Cherry Tree Road – Gaston, NC	
Existing Use Proposed Use	: .	JO BODZIK I ZILIW		
Permit Expir Setbacks: FRONT	0.00 RIGHT 0.00	ling Hgt: N/A	REAR 0.00	
All setbacks	and buffer requirements have been	satisfied and are shown	on the site plan on file	
Occupancy or usissuance of a Ce	s not give the permit holder the right to o se shall only be permitted after a Certifica rtificate of Compliance does not negate the se when applicable.	te of Compliance has been i	issued by the Northampton	County Zoning Office. T.
Signature of Appli	pletatub	) Date	121/16	
Signature of Appli	m Floren 170	Date	T. 13, 2016	

# Cherry Solar, LLC CPCN Application – Merchant Plant NCUC EMP-115, Sub 0

### DESCRIPTION OF THE NEED FOR THE FACILITY Exhibit 3

Forecasts of the quantities of renewable power to be purchased within the PJM market over the next several years, and elsewhere in the southeastern United States, reflect a strong public need for additional utility-scale solar power production. The proposed facility will share an interconnection facility which interconnects with Dominion's transmission grid, providing direct access to all load-serving suppliers participating in PJM, a Regional Transmission Organization ("RTO") in which Dominion participates. PJM coordinates the movement of electricity through all or parts of Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia, and the District of Columbia.

The Applicant has entered into a long-term Power Purchase Agreement with a Fortune 100 company for the output of the renewable power production and the associated Renewable Energy Certificates (RECs"). A copy of the PPA has been attached as **Confidential Schedule 3-1**. Demand for renewable energy is expected to increase in the southeast over the expected lifetime of the proposed facility. The Applicant respectfully submits that this Power Purchase Agreement is substantial evidence of a need for the proposed solar production facilities for which it is seeking certification.

Additionally, load growth for the PJM RTO as a whole, and more specifically for the Dominion zone, which serves parts of Eastern North Carolina where the Facility is located, is expected to increase over the next ten to fifteen years as described both for winter and summer months. Summer peak load is expected to grow by 1.2.% per year over the next ten years, and by 1.0% over the next fifteen years. (PJM Load Forecast Report (Jan. 2020), available at.https://www.pjm.com/-/media/library/reports-notices/load-forecast/2020-load-report.ashx). Winter peak load growth in the Dominion zone is expected to grow by 1.4% per year over the next ten years, and 1.2% per year over the next fifteen years. Finally, the annual net energy in Dominion zone is expected to grow by 1.5% per year over the next ten years, and 1.3% per year over year over the next fifteen years. Therefore, the Applicant believes that there are strong market conditions and needs for renewable energy projects such as this Applicant's proposed facility.

### Schedule 3-1

### **CONFIDENTIAL**

# SEE CONFIDENTIAL EXHIBITS SUBMITTED WITH APPLICATION

Cherry Solar PPA

#### VERIFICATION

NOW COMES Linda Nwadike, being first duly sworn, and deposes and says that I am duly authorized to act on behalf of Cherry Solar, LLC as Director of Permitting and Community Relations for SunEnergy 1, LLC, the parent and affiliate of the Applicant; that I have read the foregoing Cherry Solar, LLC's Application For a Certificate of Public Convenience and Necessity For Merchant Plant incorporated therein, and that the statements and information therein are true and accurate to my personal knowledge and belief, except where otherwise indicated, and in those instances, I believe the statements and information to be true. Signed this 12 day of November, 2020.

Linda Nwadike

Director of Permitting and Community

Relations

SunEnergy1, LLC

SIGNED AND SEALED BEFORE ME THIS 12 day of November, 2020.

Sworn to and subscribed to before me this 12 day of November, 2020.

Ahelly F. Smithwick
Notary Public (Signature)

Shelby F. Smithwick
Notary Public (Printed)

My Commission Expires: March 27, 2023.

#### CERTIFICATE OF SERVICE

The undersigned certifies that the foregoing Cherry Solar LLC's Application For A Certificate of Public Convenience and Necessity For Merchant Plant was served upon the following by electronic mail:

Christopher Ayers, Esq.
Executive Director, NC Public Staff
Chris.Ayers@psncuc.gov

Nadia Luhr NC Public Staff Legal Division Nadia.Luhr@psncuc.gov

This the 12 day of November, 2020.

Joseph W. Rason

#### **BEFORE THE**

#### NORTH CAROLINA UTILITIES COMMISSION

CHERRY SOLAR, LLC

DOCKET NO. EMP-115, SUB 0

PRE-FILED DIRECT TESTIMONY

OF

LINDA NWADIKE

November <u>12</u>, 2020

## 1 INTRODUCTION

A.

# 2 Q. PLEASE STATE YOUR NAME, TITLE, AND BUSINESS ADDRESS.

A. My name is Linda Nwadike. I am the Director of Permitting and Community Relations for SunEnergy1, LLC ("SunEnergy1" or the "Company"), the parent and an affiliate of the Applicant Cherry Solar, LLC ("Cherry Solar" or "Applicant"). Cherry Solar is a North Carolina limited liability company that was formed on September 24, 2020. My business address is 192 Raceway Drive, Mooresville, North Carolina 28117.

### Q. PLEASE DESCRIBE YOUR EDUCATION AND PROFESSIONAL EXPERIENCE.

I obtained a Bachelor of Science degree in Chemical Engineering with a concentration in Biological Technology, and I am a licensed project manager professional.

Prior to joining SunEnergy1, I worked in the nuclear energy industry as a project manager and instrumentation and controls engineer. I worked with many large-scale utility providers, including Duke Energy Progress, LLC, Duke Energy Carolinas, LLC, Virginia Electric and Power Company d/b/a Dominion Energy North Carolina ("Dominion"), Florida Power & Light Company, and NextEra Energy, Inc. on various projects. I have also conducted or overseen material procurement and logistics on various oil and gas projects.

At SunEnergy1, I conduct project development and oversee permitting activities for utility-scale solar renewable energy facilities. I often am the liaison between SunEnergy1 and local community and government officials. I present information about projects to local government officials at quasi-judicial public hearings and to adjacent property owners at community meetings. I obtain federal, state, and local permits necessary for the solar facilities, and I coordinate and lead the SunEnergy1's project development team and sub-contractors in relation to achieving project goals.

#### 1 Q. PLEASE SUMMARIZE YOUR CURRENT RESPONSIBILITIES WITH SUNENERGY1. 2 Α. My current employment responsibilities are as follows: 3 4 Conduct and oversee project development and permitting activities on utility-scale 5 solar renewable energy facilities. 6 Lobby and act as the liaison between SunEnergy1 and local community and 7 government officials. 8 Present SunEnergy1 projects at quasi-judicial public hearings and community 9 10 Communicate and perform required activities needed to obtain federal, state, and 11 local permits. 12 Work with federal, state, and local governmental agencies, including mayors, county 13 managers, boards of commissioners, and planning boards on solar projects. 14 Coordinate and lead internal project development team and sub-contractors across 15 broad technical, financial, and business disciples to achieve project goals. 16 Focus team on project objectives, and track progress against objectives to ensure 17 project milestones are completed on time, on budget, and with the desired outcome. 18 Anticipate and manage changes effectively in a rapidly evolving business environment. 19 Report and escalate issues to upper management and stakeholders as needed. 20 Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION? 21 A. Yes, I provided testimony in support of the application for a Certificate of Public 22 Convenience and Necessity ("CPCN") for Merchant Plant and filed Construction Progress 23 Reports for the applicant for that project, Albemarle Beach Solar, LLC (NCUC Docket EMP-24 103). 25 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY? 26 Α. To satisfy the requirements of Commission Rule R8-63 under which this Application for a 27 Certificate of Public Convenience and Necessity ("CPCN") for a proposed merchant plant is 28 being requested.

PLEASE STATE THE PARENT COMPANY OF THE APPLICANT.

SunEnergy1 is the parent company of the Applicant, Cherry Solar, LLC

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### COMPANY BACKGROUND AND PROJECT FINANCE

Q. PLEASE DESCRIBE THE COMPANY'S PERSONNEL, TECHNICAL EXPERIENCE, AND FINANCIAL
 CAPABILITY TO OWN AND OPERATE THE PROJECT.

Α.

SunEnergy1 is a top U.S. solar developer, owner, and operator of utility-scale solar projects with over 1 GW of installed solar power. SunEnergy1 has pioneered large-scale solar power on the East Coast for nearly a decade and has developed numerous record-breaking solar projects in the Southeast region. SunEnergy1 is vertically integrated and controls all stages of development in-house.

SunEnergy1's professional team works closely with manufacturers, utilities, and industry groups to ensure the safety, performance, and cost efficiency of its projects. The Company's employees work closely with sponsors of the National Electric Code (NEC), members of the National Fire Protection Association (NFPA) 70E, and with pertinent government agencies to ensure that safety standards and compliance activities used in the solar industry continues to improve.

Kenny Habul, SunEnergy1's CEO and President, has been involved in the development of photovoltaic ("PV") solar and solar thermal technologies since 1996, and has established himself as a leader in the field of sustainable construction technologies. Prior to forming SunEnergy1, Mr. Habul was a partner in Habul Brothers Luxury Home Construction, one of the most prominent and innovative builders in Queensland, Australia. Mr. Habul has vast experience in commercial and residential construction and has a passion for sustainable construction practices and solar energy. He holds a Bachelor of Laws degree from Bond University in Australia.

Bradley Fite is SunEnergy1's Chief Operations Officer, and he holds an Unlimited/Master Electrical License in multiple states. He is certified through the Underwriter's Laboratory (UL) as a professional PV installer and holds several certifications through the North American Board of Certified Energy Practitioners (NABCEP). He is an active member of the Institute of Electrical and Electronics Engineers Association (IEEE) and NFPA, and he works closely with utilities and manufacturers to stay on the leading edge of the PV industry. Mr. Fite is directly involved with all aspects of the Company and oversees projects from the initial development through construction, operations and maintenance. He has over 20 years of construction experience and has built more than 500 MW AC of solar PV projects.

Kevin Chen is SunEnergy1's Chief Commercial Officer. Prior to joining

SunEnergy1, he had several leadership positions in the power industry. He has worked in
the business from leading global technology and equipment supply provision, large utility
transmission and distribution operations, and generation project development. His solar
development experience has grown from 250 MW of DG portfolio to community solar
projects and utility-scale projects. Mr. Chen received his master's degree in electric
power from lowa State University and his MBA from University of California at Los
Angeles.

Brian Kennedy is SunEnergy1's Chief Development Officer, he brings over 25 years of energy industry experience to SunEnergy1. Prior to joining the Company, Mr. Kennedy initiated and established the solar enterprise for one of the largest utility company in the country. As such, he was directly responsible for the development of dozens of utility-scale solar projects across the country, totaling nearly 1 GW of installed

1 capacity and representing over \$1 billion worth of investment. Mr. Kennedy holds an 2 MBA from Xavier University. 3 4 SITE AND FACILITY DESCRIPTION 5 Q. WHERE IS THE PROJECT THAT IS THE SUBJECT OF THE APLLICATION LOCATED? 6 As shown by Schedule 2-2 attached to the Application, the project is located on 922 oak A. 7 grove church rd., 1315 oak grove church rd., 105 crossvine lane, 610 cherry tree rd., in the 8 Town of Gaston, Northampton County, North Carolina. I herewith reference and 9 incorporate the Application and its exhibits, as well as all other materials supplied by the 10 Applicant, in support of the Application for a CPCN for a merchant plant. 11 Q. WHAT IS THE CURRENT LAND USE AND ANTICIPATED USE? 12 Α. The project will be located on several parcels in Northampton County, North Carolina at 13 the address described above and as shown on layout map attached to the Application as 14 Schedule 2-2. The site is comprised of rural land, some of which is utilized for agricultural 15 purposes. PECM, LLC, Mustin Capital Management and Consulting Group, LLC, Jack 16 Norwood, Michael Wray, Harold & Shirley Wray, Everette & Wanda Hasty, and Sue & 17 Stanley Allen, each own portions of the project site. The above-mentioned landowners 18 have provided Cherry Solar with the right to develop and use the property for solar energy 19 purposes, including the installation of solar panels, inverters, transformers, and other 20 elements of the facility described in this Application. 21 Q. WHAT IS THE FACILITY'S ANTICIPATED ELECTRICITY PRODUCTION CAPACITY? 22 Α. The maximum gross power production capacity of the facility is 180 MW.

PLEASE DESCRIBE THE BASIC COMPONENTS OF THE FACILITY.

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1 A. 2 facility will be a single-axis tracking, ground-mounted solar PV system, and the facility will 3 be comprised of solar arrays, inverters, generator step-up ("GSU") transformers, racking, 4 posts, wiring, utility poles, communication poles, security camera, and accessories. A color 5 map showing the proposed site boundary, layout with all major equipment, roads, and 6 electric facilities is attached to Exhibit 2 of the Application as Schedule 2-2. 7 Q. PLEASE DESCRIBE THE TRANSMISSION FACILITIES TO WHICH THE FACILITY WILL 8 INTERCONNECT AND HOW THE PROJECT WILL BE INTERCONNECTED TO THE GRID? 9 A. Cherry Solar will enter into a shared facility agreement with an adjacent solar generating 10 facility, Oak Solar, LLC in order to use the interconnection facilities that are built to 11 accommodate Oak Solar, LLC. Note that Oak Solar LLC is affiliated with the Applicant's 12 parent company SunEnergy1, LLC. 13 Oak solar, LLC will construct a new 230kV attachment transmission line between its solar 14 site and the Virginia Electric and Power Company, d/b/a Dominion Energy North Carolina 15 ("Dominion Energy" or "Dominion") Thelma substation. This new transmission line will 16 be approximately 1 mile long and will be located in a new right of way adjacent to the 17 existing Dominion 500kV transmission line. The transmission line will connect into a new 18 substation at the generation site and will feed into the existing Dominion Thelma 19 substation. An easement will be required from Dominion for the right of way leaving 20 Thelma substation and crossing Clements and Baker Islands. Continuing north the line 21 goes directly into the parcel utilized for the Oak solar generating facility.

Cherry solar is a 180-MW PV array, and the sole source of its power is solar energy. The

1 The GSU transformers will connect the solar inverters to the newly constructed collector 2 station. A diagram showing the location of the collector station and the Thelma 3 substation/ point of interconnection is attached to the Application as Schedule 2-2. 4 5 6 **NEED FOR THE FACILITY** 7 Q. PLEASE EXPLAIN THE NEED FOR THE FACILITY. 8 Α. Cherry Solar will share an interconnecting facility with an adjacent solar facility which 9 interconnects with the Dominion Energy Transmission grid, providing the merchant plant 10 with direct access to PJM, a Regional Transmission Organization ("RTO") in which Dominion 11 participates. PJM coordinates the movement of electricity through all or parts of Delaware, 12 Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, 13 Pennsylvania, Tennessee, Virginia, West Virginia, and the District of Columbia. 14 15 Cherry Solar has entered into a long-term Power Purchase Agreement with a Fortune 100 16 company for the output of the renewable power production and the associated Renewable 17 Energy Certificates (RECs"). Demand for renewable energy is expected to increase in the 18 southeast over the expected lifetime of the proposed facility. 19 20 Additionally, load growth for the PJM RTO as a whole, and more specifically for the 21 Dominion zone, which serves parts of Eastern North Carolina where the Facility is located, 22 is expected to increase over the next ten to fifteen years as described both for winter and 23 summer months. Summer peak load is expected to grow by 1.2.% per year over the next

ten years, and by 1.0% over the next fifteen years. (PJM Load Forecast Report (Jan. 2020), at.https://www.pim.com/-/media/library/reports-notices/load-forecast/2020load-report.ashx ). Winter peak load growth in the Dominion zone is expected to grow by 1.4% per year over the next ten years, and 1.2% per year over the next fifteen years. Finally, the annual net energy in Dominion zone is expected to grow by 1.5% per year over the next ten years, and 1.3% per year over year over the next fifteen years. Therefore, the Applicant believes that there are strong market conditions and needs for renewable energy projects such as this facility. DESCRIBE THE OFF-TAKE PLANS FOR THE PROJECT. Cherry Solar has entered into a long-term power purchase agreement ("PPA") with a Fortune 100 company (See Confidential Schedule 3-1 of the confidential documents submitted with this Application). **REGULATORY APPROVALS AND PERMITS** DOES NORTHAMPTON COUNTY HAVE A SOLAR ENERGY ORDINANCE? Yes. Northampton County adopted its Solar Power Generation Facilities for commercial power generation portion of its Ordinance on January 1, 2016 as part of Article II entitled District Regulation of the Zoning Ordinance for Northampton County. The Solar Development Ordinance was adopted by the Northampton County Board of Commissioners pursuant to the authority and provisions of N.C. Gen. Stat. § 153A-121 (general ordinance-making power), N.C. Gen. Stat. § 153A-340 (grant of power), and other applicable law, provided nothing shall be interpreted to conflict with or supersede

any provision of N.C. Gen. Stat. § 153A-144 (limitations on regulating solar collectors).

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1	Q.	DESCRIBE THE PERMITS AND APPROVALS YOU ANTICIPATE WILL BE NECESSARY TO
2		COMMENCE CONSTRUCTION OF THE FACILITY.
3	A.	Cherry Solar has obtained some of the Zoning Permits (201502631 & 201703684) as
4		required by the Northampton County zoning requirements ( Note, the permits obtained
5		are under an entity name Gaston Green Acres; the current permit will be revised as
6		applicable to the correct name). The Planning and Zoning Director has final authority to
7		approve the Zoning Permits, and copies of the approved Zoning Permits are attached and
8		included in Schedule 2-3. In addition to the Zoning Permits, Cherry solar will also obtain a
9		Building Permit from Northampton County.
10		From the State of North Carolina, the facility will require driveway permit(s) from
11		the North Carolina Department of Transportation, and approval of an erosion and
12		sedimentation control plan from the NC Department of Environmental Quality
13		("NCDEQ"). The project also will require a Certificate of Public Convenience and
14		Necessity for its Construction.
15		In regard to federal permits and approvals, a wetland delineation for the entire
16		site will be submitted to the US Army Corps of Engineers ("USACE"). Additionally, Cherry
17		Solar may apply for a Market-Based Rate Authorization from the Federal Energy
18		Regulatory Commission ("FERC"), pursuant to Sections 205 and 206 of the Federal Power
19		Act. The facility will also be registered as a Generator-Owner with the North American
20		Electric Reliability Corporation ("NERC").
21		<u>COMMUNITY</u>
22	Q.	PLEASE DESCRIBE THE ANTICIPATED BENEFITS OF THE FACILITY TO THE LOCAL
23		COMMUNITY.

Α. The Cherry Solar facility brings a variety of financial benefits to Northampton County. Cherry Solar anticipates that the County will realize property and real estate tax revenues from the project. Aside from these financial benefits, Cherry Solar will also create community benefits. Cherry Solar will enhance the County's reputation as an attractive and friendly environment for advanced manufacturing, technology, and related jobs. Local contractors and businesses such as installation, fencing, landscaping, and machine rental companies will receive sales opportunities from the facility construction and during its post-construction operations. During the approximately year-long construction process, the facility will offer full-time construction jobs. Cherry Solar expects to hire up to 1,000 workers for the duration of the construction. Increased economic activity in the area is expected to increase revenue for local hotels, restaurants, service stores, and other vendors. Q. WHAT ARE THE EXPECTED ENVIRONMENTAL IMPACTS OF THE FACILITY? Α. By design and by its nature as a solar PV facility, the facility will provide clean renewable power with minimal environmental impacts. The facility will create no air or water emissions and no environmental contamination. There will be no noise impact outside of the fence line. At the end of the facility's useful life, materials can be recycled or sold for scrap, and the land can be returned to agricultural use. OFF-TAKE PLANS Q. WHAT ARE THE LONG-TERM PLANS FOR OWNERSHIP OF THE PROJECT? Α. Currently, Cherry Solar has entered into a long-term power purchase agreement with a Fortune 100 Company. However, in the event of any change in ownership interest, the Applicant will notify the Commission.

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- 1 Q. DOES THIS CONCLUDE YOUR TESTIMONY?
- 2 A. Yes.

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2	STATE OF NORTH CAROLINA
3 4	COUNTY OF IREDELL
5	VERIFICATION
6 7	I, Linda Nwadike, being first duly sworn, depose and say that I am duly authorized to act
8	on behalf of Cherry Solar, LLC as Director of Permitting and Community Relations for SunEnergy1,
9	LLC, the parent and an affiliate of the Petitioner; that I have read the foregoing Pre-Filed Direct
10	Testimony and that the same is true and accurate to my personal knowledge and belief except
11	where otherwise indicated, and n those instances, I believe my answers to be true
12	This <u>12</u> day of November 2020.
13	
14	for the
15	Linda Nwadike
16	SunEnergy1, LLC
17	5,77
18	
19	Sworn to and subscribed to before me
20	this 12 day of November 2020.
21	All I A It.
22	Thelly J. Dhuller (Seat. > 0 :3:
23	Notary Public (Signature) (Seath A V T R NOTARY Public (Signature)
24	
25	Shelby F. Smithwick
26	Notary Public (Printed)
27 28	My Commission Expires: 3/27/23
29	
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