

Shenvalee Solar 3 MWac Solar Energy Facility 265 Draft Avenue, Stuarts Draft, VA







To: John Wilkinson, Community Development Director Community Development Department 18 Government Center Lane Verona, VA 24482

Project #: 34124.26

Date: November 1, 2022

	re sending you:	⊠ Attac	hed	☐ Under sep	arate (cover via Regu	ılar Mail, the	following items:
☐ Sho _l	p Drawings 🗆 Print	ss 🗆	Plans	□ DVDs □	Specific	cations \Box Co	opy of Letter	☐ Change Orde
⊠ Othe	er: SUP Application with	Prelim. Site	Plan, fe	e and supporting docume	nts			
Copie	s Date	No.				Description		
3	10/27/22			reliminary Site Plan (full				
3	10/18/22		_	d application with Lease	Option	Agreement		
3	10/31/22			t Narrative				
3	Varies			ort – Decomm. Plan, Glar	_	sis, Visual/Views	hed Renderings	, USACE AJD,
1	11/1/22			al Resources (VCRiS resu o drive with PDF copy of		chments		
1	11/1/22			ation fee – \$1,000.00 ch			of Augusta	
These	are transmitted as ch	ecked belo	w:					
	For approval			Approved as submitted		Resubmit	Copies	for approval
	For your use			Approved as noted		Submit	Copies	for distribution
	As requested			Return for corrections		Return	Correc	ted prints
	For review and comme	ent		For bids due				
	Returned prints on loa	n to VHB						
	les. CLID application	n naskana	for pro	masad Cmall Calar Fn		vators at 265 Du	coft Ava Ctuar	to Droft 1/A
7.000.00				posed Small Solar En				
		contact me	e direct	tly (804.385.9964; <u>squ</u>			ny questions	or if additional
Please						The section		
Please		support tl	nis app	lication for County sta	iff revie	ew. Thank you		
Please	nation is required to			·				
Please inforn	nation is required to	ent stored elec	tronically.	The Client recognizes that da	a, plans, s	specifications, reports		
Please inforn agrees to	nation is required to provide materials to the Clitted as electronic media, incl	ent stored elec	tronically. limit to, C	·	a, plans, s	specifications, reports ocuments") are subje	ect to undetectable	alteration, either
Please inforn agrees to or transmit ntional or uments ar	provide materials to the Clitted as electronic media, inclunintentional, due to, amonge provided to the Client for	ent stored elec luding, but not g other causes,	tronically. limit to, C transmiss	The Client recognizes that da ADD Documents (together, "El	a, plans, sectronic Dation, sof	specifications, reports ocuments") are subje tware error, or humar	ect to undetectable n alteration. Accord	alteration, either ingly, the Electronic
Please inforn agrees to r transmin ntional or uments ar uitability o	provide materials to the Clitted as electronic media, inclumintentional, due to, amonge provided to the Client for of the Electronic Documents.	ent stored elec uding, but not g other causes, informational p	tronically. limit to, C transmiss urposes c	The Client recognizes that da ADD Documents (together, "El sion, conversion, media degrad only and not as an end product	a, plans, s ectronic D ation, soft VHB ma	specifications, reports locuments") are subje tware error, or humar lkes no warranties, eit	ect to undetectable n alteration. Accord ther express or impl	alteration, either ingly, the Electronic ied, regarding the fitn
Please inforn agrees to r transmin intional or uments ar iitability of Electronic out the ex-	provide materials to the Clitted as electronic media, including unintentional, due to, among provided to the Client for of the Electronic Documents. Documents are instruments express written consent of VH the unauthorized alternation	ent stored electuding, but not g other causes, informational per soft professional B and without en, misuse or rec	tronically. limit to, C transmiss urposes c I service, s suitable co	The Client recognizes that da ADD Documents (together, "El sion, conversion, media degrad only and not as an end product and shall not be used, in whole ompensation to VHB. According Electronic Documents, and to a	a, plans, sectronic Detrion, soft VHB ma or in part gly, the Clefend, in	specifications, reports locuments") are subject tware error, or humar likes no warranties, eit t, for any project othe lient agrees to waive demnify, and hold VF	ect to undetectable n alteration. Accord ther express or impl er than that for whice any and all claims a	alteration, either ingly, the Electronic ied, regarding the fitn h they were created, gainst VHB resulting i
Please inforn agrees to r transmin ntional or uments ar uitability of Electronic out the ev way from posts, inclu	provide materials to the Clitted as electronic media, including unintentional, due to, among provided to the Client for of the Electronic Documents. Documents are instruments express written consent of VH the unauthorized alternation	ent stored elec luding, but not g other causes, informational p s of professiona B and without s n, misuse or rec out of the alter	tronically. limit to, C transmiss urposes c I service, s suitable co	The Client recognizes that da ADD Documents (together, "Elsion, conversion, media degradenly and not as an end product and shall not be used, in whole compensation to VHB. According	a, plans, sectronic Detrion, soft VHB ma or in part gly, the Clefend, in	specifications, reports locuments") are subject tware error, or humar likes no warranties, eit t, for any project othe lient agrees to waive demnify, and hold VF	ect to undetectable n alteration. Accord ther express or impl er than that for whice any and all claims a	alteration, either ingly, the Electronic ied, regarding the fitne h they were created, gainst VHB resulting i
Please inforn agrees to r transmin ntional or uments ar uitability of Electronic out the ev way from posts, inclu	provide materials to the Clitted as electronic media, inclumintentional, due to, among provided to the Client for of the Electronic Documents. Documents are instruments express written consent of VH the unauthorized alternation ding attorney's fees, arising the content of the content of the content of very series with the unauthorized alternation ding attorney's fees, arising the content of very series.	ent stored elec luding, but not g other causes, informational p s of professiona B and without s n, misuse or rec out of the alter	tronically. limit to, C transmiss urposes c I service, s suitable co	The Client recognizes that da ADD Documents (together, "El sion, conversion, media degrad only and not as an end product and shall not be used, in whole ompensation to VHB. According Electronic Documents, and to suse or reuse of any Electronic I	a, plans, sectronic Dation, soft VHB mareor in parigly, the Clefend, in	specifications, reports locuments") are subject tware error, or humar likes no warranties, eit t, for any project othe lient agrees to waive demnify, and hold VF	ect to undetectable n alteration. Accord ther express or impl er than that for whice any and all claims a	alteration, either ingly, the Electronic ied, regarding the fitne h they were created, gainst VHB resulting i

AUGUSTA COUNTY

BOARD OF ZONING APPEALS APPLICATION FOR SPECIAL USE PERMIT

DISTF	RICT:	Riverheads	PERMIT NUMBER:
DATE	:	October 18, 2022	RECEIPT NUMBER:
			FEE PAID: \$1,000.00
TO TH	HE AUG	GUSTA COUNTY BOA	ARD OF ZONING APPEALS:
ordina	ırpose ınces, ı	hereinafter set forth. rules and regulations	for a Special Use Permit, in accordance with the description and for This application is made subject to all the County and State laws now in force effecting thereto; and which are hereby agreed to by the hall be deemed a condition entering into the exercise of the permit.
1.		Owner's Name: <u>Bev</u> man Lubarsk <u>y</u>	erly Hockman Broome Drell, Sherry Hockman Sumerline, Marth
2.	Land	Owner's Address:	0004 E. Vogel Ave. Scottsdale, AZ 85258
3.	Occup	oant or User's Name: _	Consolidated Edison Development Inc.
4.	Occup	oant or User's Address	s: <u>100 Summit Lake Drive, Valhalla, NY 10595</u>
5.	Locati	on of Property:2	265 Draft Avenue, Stuarts Draft, VA
6.	Real E	Estate Map & Parcel #	: <u>84-38 (18.541 ac.) & 84-39 (32.819 ac.)</u>
7.	Zonin	g: <u>GA, GB & GI</u>	
8.	Acrea	ge: <u>51.36 acres</u>	
9.	Subdi	vision: N/A	10. Present Use: <u>Agriculture</u>
11.	Section	on(s) of the Zoning Ord	dinance that permit is being applied for:25-70.4
12.	within gravel	approximately 26 acr	st for a 3 MW (alternating current) small scale solar energy facilities of fence enclosed site located on Parcel Tax Map No. 84-39 with ag through the adjacent Parcel Tax Map No. 84-38. Total acreage for 51.36 acres.
	ıl busin		ate County Officials to enter upon the above-described property durin required inspections. I hereby certify, under the penalties of perjury and correct.
SEND	CORF	RESPONDENCE TO:	Lindsey Velson (Signature of Applicant or Agent) 401-787-0849 (Phone Number)
		ACT	ON BY BOARD OF ZONING APPEALS
		Approved:	Disapproved:
Stipula	ations:		
Date o	of Final	Action:	Signed:Secretary, Board of Zoning Appeals

(PLEASE READ BACK OF APPLICATION)

NOTICE

<u>PRE-CONDITIONS</u> - The Board of Zoning Appeals may make your Special Use Permit subject to certain "pre-conditions" which must be satisfied before your permit is issued.

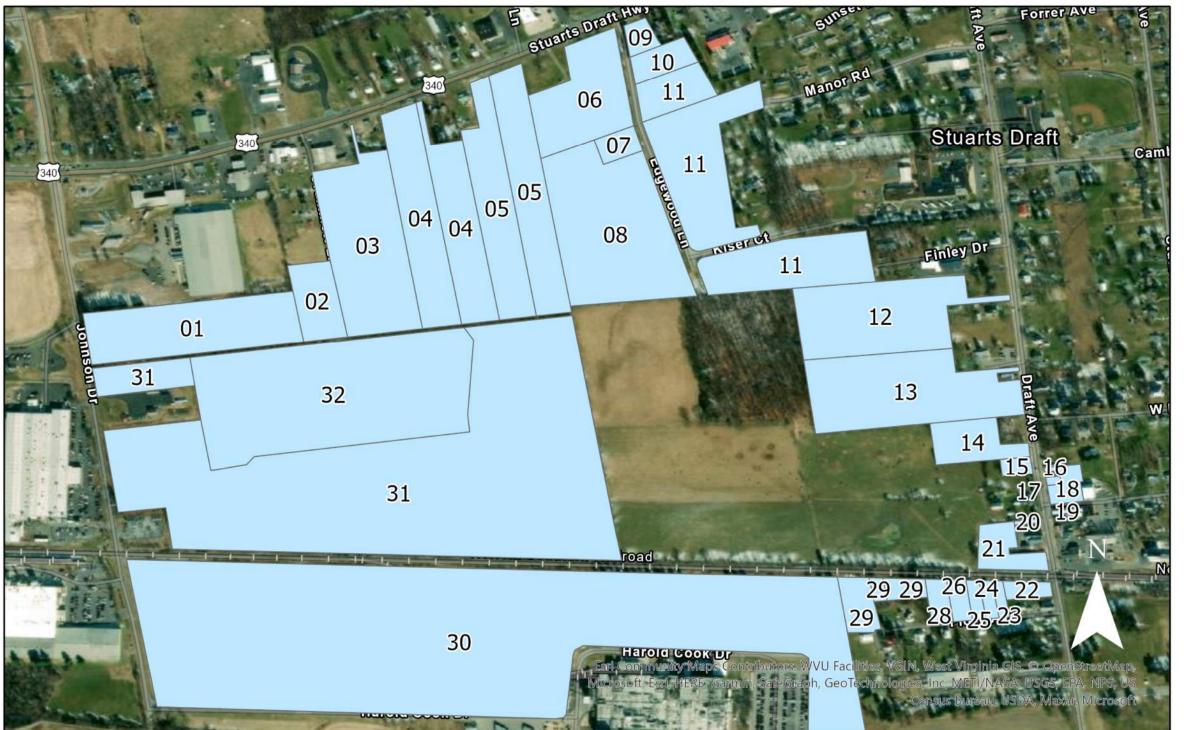
<u>OPERATING CONDITIONS</u> - The Board of Zoning Appeals may make your Special Use Permit subject to certain "operating conditions" with which you must comply so long as you operate your special use. If you fail to comply with one (1) or more of the operating conditions, your permit may be revoked by the Board of Zoning Appeals after a public hearing and advance written notice to you as required by law.

<u>ABANDONMENT</u> - If you should cease the use authorized by your Special Use Permit for two (2) years or more, the Zoning Administrator shall seek revocation of the permit by the Board of Zoning Appeals.

The Augusta County Zoning Ordinance establishes the following requirements of all Special Use Permits:

"Section 25-584. Requirements of Special Use Permits.

- A. A Special Use Permit shall not be issued until all **pre-conditions**, if any, imposed by the Board of Zoning Appeals have been met. Commencement of a Special Use Permit prior to the issuance of the Permit shall be a violation of this chapter. Whenever the Board of Zoning Appeals has required pre-conditions, the pre-conditions shall be established, constructed or diligently pursued within a reasonable time as determined by the Board of Zoning Appeals. If in the opinion of the Zoning Administrator, compliance with the pre-conditions is not diligently pursued within one year or other time as specified by the Board of Zoning Appeals, the approval of the Special Use Permit shall automatically expire without notice and the Special Use Permit will not be issued.
- B. Any BZA review plan submitted to and approved by the Board of Zoning Appeals shall be followed.
- C. Unless otherwise provided by the Board of Zoning Appeals, the Special Use Permit shall be issued to the applicant and shall be non-transferable
- D. All Special Use Permits are subject to and conditioned upon compliance with any applicable federal, state or local licensing or regulatory requirements, and may be revoked upon failure to so comply."



Shenvalee: Adjacent Landowners



Legend

- 01: PRECISION ASSOCIATES LLC
- 02: BROWN LARRY R OR VIRGINIA D
- 03: HARLOW THOMAS E OR ANN M
- 04: WAGNER THOMAS R & RICHARD A WAGNER %T
- 05: EARHART JOHN H OR PATRICIA L
- 06: STUARTS DRAFT BAPTIST CHURCH TRUSTEES
- 07: ALEXANDER E G FAMILY TRUST ABC % HILD
- 08: ALEXANDER DARRELL S1/2 & JENNIFER L A
- 09: PERL ERIC H
- 10: BLAND BARRY R OR HOLLY A
- 11: BOARD OF SUPERVISORS OF THE COUNTY OF AU
- 11: COUNTY OF AUGUSTA BOARD OF SUPERVISORS
- 12: COHRON RICHARD N
- 13: COHRON ELIZABETH JUNE
- 14: COHRON LARRY L OR ELLA H
- 15: KING JOHN KENNETH OR KELLY H
- 16: ELLINGSWORTH M KEITHJR OR DONNA M
- 17: TURNER DAVID D 1/2 & TIMOTHY R TURNER
- 18: ENGLEMAN VIRGINIA M
- 19: EARSIM III LC
- 20: RE & CE PROPERTIES L C
- 21: HUGHES D P LLC
- 22: MULLINS HUEY W & MARY L 1/2 ETAL
- 23: KANE JOHN RAYMOND
- 24: WILLIAMS ALVIN D
- 25: SUMMIT DEVELOPMENT GROUP LLC
- 26: STERRETT JANE M
- 28: MIKELL STEPHEN A OR MARTHA S
- 29: KISER ORVIN H JR
- 29: KISER ORVIN H JR TRUSTEE OF KISER
- 30: HERSHEY CHOCOLATE OF VIRGINIA INC
- 31: PBR ASSOCIATES LLC
- 32: REXNORD INDUSTRIES LLC



Shenvalee Solar Project Narrative

Project Description

Consolidated Edison Development Inc. (Applicant) proposes to construct and operate the Shenvalee Solar facility (Project) at 265 Draft Avenue in Stuarts Draft, Virginia. The Project will be a single-axis tracking, ground-mounted photovoltaic (PV) solar facility, with electricity generating capacity of approximately 3.0 megawatts (MW) of alternating current (ac) and 4.4 MW of direct current (dc) within a fence secured area of approximately 26 acres. The 26-acre fenced development area is located within parcel Tax Map No. 84-39 with a proposed gravel access road extending through the adjacent and participant parcel Tax Map No. 84-38. The total acreage of these two contiguous parcels is approximately 51.4 acres and both are privately owned by Beverly Hockman Broome Drell, Sherry Hockman Sumerlin, and Martha Hockman Lubarsky (Property). The location and orientation of the solar array within the Property was designed so to minimize visibility from nearby residents and public roadways, minimize excavation and grading associated with project construction, and maximize exposure to solar radiation throughout the year. The facility setbacks from Draft Avenue and the residential parcels to the north have been increased to exceed County requirements.

Purpose and Need

The purpose of the proposed Project is to generate local, clean, and renewable solar power, with the electricity generation to be sold to Dominion Energy. The Applicant has already secured a Power Purchase Agreement with Dominion Energy for the sale/purchase of the electricity generated from the Project. The interconnection study is ongoing by Dominion Energy and Applicant expects completion by March 2023. Project site construction is anticipated to occur in 2023. The Project is being proposed in response to the Virginia Clean Economy Act of 2020 (VCEA). As part of the VCEA, Dominion Energy is required to implement significant development of Virginia-based zero-carbon renewable electricity generation (solar, on-shore wind power, off-shore wind power, etc.) on a prescribed schedule through the year 2036. As part of the law's requirements, 1,100 MW of Distributed Energy Resource (DER) solar projects are scheduled for construction by the year 2036. The law defines a DER solar project as less than or equal to 3 MWac (the size of this proposed Project). A portion of those projects (about 80%) will be for DER solar projects that sell power directly to Dominion Energy for general electric grid support and local customer electricity needs. remaining approximately 20% of required DER solar projects will supply electricity to a Community Solar program where Dominion Energy customers will be able to voluntarily purchase a portion of their electricity supply from the solar projects supplying the Community Solar program. Local solar projects are part of the energy mix, reducing the dependence on any single source of electricity generation by providing home-grown electricity. These projects help keep electric costs down by providing a hedge against the rising costs of commodity fuels. These local power generation projects also benefit their host communities by improving the resiliency of the local electric grid, supplying power locally and offsetting power supplies that would otherwise be required from distant power plants.

Based on its commitment to providing renewable energy, the Applicant proposes to develop the site described below to maximize its solar energy potential within the Project's secured fenced area. To best determine optimal location within the site, the following factors have been analyzed:



- Significant solar radiation (insolation)
- Site accessibility for service and construction vehicles
- Avoidance of environmentally sensitive areas
- Limited tree and vegetative clearing
- Limited visibility from offsite locations
- Required setbacks from adjacent properties and public roads

Site Setting

The proposed Project site is located at 265 Draft Avenue in Stuarts Draft, Virginia. The fenced portion of the Project area is approximately 26 acres in size and will be installed within parcel Tax Map No. 84-39 (32.82 acres) with a proposed gravel access road extending through the adjacent and participant parcel Tax Map No. 84-38 (18.54 acres). The total acreage of these two contiguous parcels is approximately 51.36 acres and both are privately owned by Beverly Hockman Broome Drell, Sherry Hockman Sumerlin, and Martha Hockman Lubarsky. The majority of these two parcels, approximately 78% (40 acres) exists as maintained pasture for grazing cattle. Approximately 2.4 acres is dedicated to the existing residential home, unconditioned storage structures/sheds, homestead yard and landscape vegetation, all of which will remain undisturbed with this Project. There is also approximately 9 acres of forested area that occupies the eastern half of parcel Tax Map No. 84-38, which is to be conserved with this Project.

The proposed 26-acre fenced Project site is bordered as follows:

- Bordered to the north by participant parcel Tax Map No. 84-38, which is part of this Property and will
 accommodate a temporary staging/laydown area, and the Project's gravel access road from a
 proposed extension of Edgewood Lane to the north. This parcel provides a setback distance of
 approximately 716 feet from the proposed facility fence north to the next neighboring parcel. This
 parcel is nearly evenly divided into pasture on the western half and forest on the eastern half.
- Bordered in the northeast corner by a single family zoned (SF15) parcel with a residence and small farming operation (Tax Map No. 84A-5-27).
- Bordered to the east by a General Business (GB) zoned parcel with a single-family residence (Tax Map No. 84A-5-26A), and the residential homestead to remain on the balance of the GB zoned participant parcel (Tax Map No. 84-39).
- Bordered to the south by an existing Norfolk-Southern railroad right-of-way.
- Bordered to the west by an industrial zoned property with an established industrial use (Tax Map No. 84-37).

The specific location of the proposed solar array within this Property was carefully designed so to minimize visibility and maximize setbacks from nearby residents to the north and Draft Avenue to the east. The selected location is parallel and adjacent to an existing Norfolk-Southern railroad right-of-way to the south and an industrial zoned property with an established industrial use to the west. Viewshed screening is accomplished to the north by preserving an approximately 9-acre forested area and supplemental landscaping to enhance existing vegetation along the northern boundary of parcel Tax Map No. 84-38. The balance of the proposed solar facility will be screened by a proposed 6-foot-tall pressure treated timber privacy fence to be installed



parallel and exterior to the chain-link security fence along the east side and northeast end.

A wetland delineation was completed by VHB in July 2022 and confirmation via an approved Jurisdictional Determination is pending from the United States Army Corps of Engineers. No waters regulated under Section 404 of the Clean Waters Act were found on the Project site, and therefore no wetland/waters impacts are proposed with this Project.

The Project is to be interconnected to a three-phase line owned by Dominion Energy on the west side of Draft Avenue near 265 Draft Avenue. The Applicant has already secured a Power Purchase Agreement with Dominion Energy for the sale/purchase of the electricity generated from the Project. The interconnection study is ongoing by Dominion Energy and Applicant expects completion by March 2023. Project site construction is anticipated to occur in 2023.

Key Components

The proposed Project will consist of the following key components:

- Solar Modules and Racking
- Underground Electrical Conductors
- Balance of System Equipment
- Gravel Access Road
- Security Fencing & Opaque Privacy Fence

Key components are described in the following subsections:

Solar Modules and Racking

The proposed Project will utilize approximately 8,112 solar modules. The modules are manufactured offsite and will be delivered to the site by truck in wooden crates or cardboard boxes. Each module will measure approximately 3.7 feet by 7.5 feet and will be rated at 545 watts. Solar modules will be mounted onto a single-axis tracker racking system. A single-wide row of solar modules will be mounted to each tracker. The trackers are oriented in rows extending in the North-South direction, and they move slowly from morning to evening to track the sun across the sky from East to West throughout the day. The trackers will be mounted on steel posts, which will be driven or screwed into the ground to a depth between 10 and 15 feet. Support posts will be driven/screwed into the ground about every 28 to 30 feet. The support structure will be designed to withstand both wind and snow loads as required per federal and state building code standards, respective of the region. The posts will be made from galvanized or corrosion-resistant metal to minimize the potential for corrosion over the lifespan of the project. Tracker rows will be spaced approximately 15 feet apart to allow access for operations and maintenance. The maximum height of the solar modules above the ground at the maximum tilt angle (60 degrees) will be less than 10 feet.

Underground Electrical Conductors

Underground electrical conductors will be installed in trenches at a depth in compliance with the National Electric Code. Conductors either will be buried in a polyvinylchloride (PVC) conduit or equivalent.



Balance of System Equipment

Balance of System Equipment including but not limited to inverters, AC combiner boxes, transformers, and/or medium voltage switchgear will be installed near the solar array within the Project's fence line. Balance of System Equipment will be installed on H-Frames and concrete pads and in compliance with equipment manufacturer instructions. Full details of Balance of System Equipment will be included as part of the Project's electrical design plan set submitted for ministerial permits. A single row of power poles will be installed to connect the equipment on the Project's equipment pad to the local electric grid, at an interconnection point specified by Dominion Energy and shown on the Project site plan.

Access Roads

Site access is proposed via an approximately 180 linear foot paved extension of the existing Edgewood Lane, which has right-of-way intersecting the north end of the Project property (Tax Map No. 84-38). The balance of the proposed access road onsite will be a gravel roadway section to prevent vehicle rutting, erosion and minimize dust. The road will be wide enough to accommodate emergency vehicles and designed in compliance with County standards. The improved entrance from Edgewood Lane will be designed in compliance with VDOT's low-volume commercial entrance standard. The road will have a hammerhead turnaround located adjacent to the temporary construction staging/laydown area just north of the fenced array, and a second hammerhead turnaround will be located inside the security fence on the far east end of the array.

Fencing

The solar array and all balance of system equipment will be enclosed in a seven-foot-tall chain link security fence in compliance with the National Electric Code. The security fence will have at least one vehicle access gate on each end of the array boundary, which will always remain locked except during operations and maintenance activities. There will also be a 6-foot-tall opaque pressure treated timber privacy fence located in parallel with the security fence along the east side and extending around the northeast corner up to the existing forested stand to be conserved.

Summary of Construction Activities

Initial site construction will consist of installing erosion control measures, improving the access road, minimal site grading, and establishing the temporary staging/laydown area. Following this initial site preparation, the installation of the support piles, racking equipment, modules, security fencing and balance of system equipment will proceed through completion. Assuming site construction will commence by Summer 2023, then installation of supplemental buffer plantings will be scheduled for Fall 2023. The perimeter erosion control measures will not be converted to permanent stormwater management measures until the disturbed project interior has become stabilized with permanent vegetative cover.

Erosion Control

The Project's erosion and sediment control will be designed per state and County requirements. The first phase of site construction will be the installation of the temporary construction entrance and the minimum disturbance necessary to install silt fence along the project perimeter. Next will be the construction of the



perimeter drainage ditch and the sediment basin. Land disturbance to develop the proposed facility will not begin until after the installation and operation of these erosion control measures. The perimeter erosion control measures will not be converted to permanent stormwater management measures until the disturbed project interior has become stabilized with permanent vegetative cover. This will include permanent vegetative groundcover between rows and under the solar modules.

Site Grading

Construction equipment such as tractors, backhoes, dozers, and graders may be utilized to grade the proposed perimeter drainage ditch and sediment/stormwater basin. Stripped and excavated soils are to be spread out adjacent to the fenced project area upgradient of silt fence and immediately seeded and mulched. This soil will then be available in the future to accommodate filling of these excavated stormwater measures and regrading back to a predevelopment condition with decommissioning. The selected facility location has existing slopes that are expected to accommodate the proposed tracking rack system and may require minimal regrading. Site grading design is endeavoring for minimal disturbance of the existing surface soil to ensure prompt establishment of permanent stabilizing grasses following installation of equipment.

Staging Area

A temporary staging area will be located on the Project's northwest end near the proposed gravel access road. This area will only be temporarily disturbed to accommodate construction personnel parking, laydown for staging construction materials, equipment, and portable sanitation station(s). This location will have limited visibility from Edgewood Lane, and the combination of existing vegetation and topography will obstruct the view from Draft Avenue.

Transportation and Traffic

Materials for the proposed Project including but not limited to gravel, riprap, stormwater structures, PV modules, tracking equipment, support racks/piles, inverters, transformers, wiring and equipment pads will be delivered to the site via trucks during construction. All construction traffic will access the project property from the proposed extension of Edgewood Lane. The routing of construction truck traffic to Edgewood Lane will be limited to interstate, arterial and major collector classified roadways so not to negatively impact existing traffic patterns. A Maintenance of Traffic (MOT) Plan will be developed in accordance with VDOT Work Area Protection Manual (WAPM), the Manual on Uniform Traffic Control Devices (MUTCD) and submitted with the site plan for approval. Following the completion of site construction, vehicular access to the site will be limited to semi-annual operation/maintenance activities and continued agricultural use of Parcel Tax Map No. 84-38.

Employment

A typical construction workforce for a solar facility of this size consists of approximately 80 workers during the construction period, which should last approximately 6 months. Construction personnel will be divided between civil and electrical services, respective of construction phasing. Not all workers will be present on site at the same time. Workers will be transported to the site via construction trucks and will park in an established temporary staging area near the north end of the Project.



Water Use

No permanent potable water service will be required for the solar facility, and therefore no water infrastructure is proposed with the Project. During construction water use will be accommodated by water trucks with use limited as necessary for moisture conditioning of soil, hydro-mulching, dust control and irrigating new buffer plantings.

Sewer and Solid Waste

No permanent sanitary sewer or solid waste services will be required for the solar facility, and therefore no sewer or solid waste infrastructure is proposed with the Project. During construction temporary sanitary facilities will be accommodated via portables and the limited solid waste will be handled via temporary dumpster(s). Both temporary measures will be serviced at regular intervals to prevent nuisance.

Compliance with Augusta County Comprehensive Plan

Policy 1: Economy

Recognize the employment opportunities, especially for distributed solar, and economic diversification opportunities that utility scale solar provide.

The Project will serve to benefit the local economy in several ways. Construction of the project will create a need for materials such as gravel, riprap, plantings, and seed that can be sourced from the local area to the greatest extent practical. Once the facility is operational, seasonal maintenance services such as vegetation management (mowing) will be required, which can similarly be serviced by a local contractor.

If developed this Project will be part of the Community Solar Program where Dominion Energy customers will be able to voluntarily purchase a portion of their electricity supply from the solar projects supplying the Community Solar program. Local solar projects are part of the energy mix, reducing the dependence on any single source of electricity generation by providing home-grown electricity. These projects help keep electric costs down by providing a hedge against the rising costs of commodity fuels. These local power generation projects also benefit their host communities by improving the resiliency of the local electric grid, supplying power locally and offsetting power supplies that would otherwise be required from distant power plants.

Policy 2: Rural Viewsheds

Desire to maintain rural viewsheds and agriculture as a predominant component of our economy but sees synergy among agricultural and rural land development and utility scale solar development so long as the clustering, size, or fragmentation of such facilities does not have undue adverse impact on the surrounding neighborhoods.

The solar array location was carefully designed so to minimize visibility and maximize setbacks from nearby residents to the north and Draft Avenue to the east. The selected location is parallel and adjacent to an existing Norfolk-Southern railroad right-of-way to the south and an industrial zoned property with an established industrial use to the west. Viewshed screening is accomplished to the north by preserving an



approximately 9-acre forested area and supplemental landscaping to enhance existing vegetation along the northern boundary of parcel Tax Map No. 84-38. The balance of the proposed solar facility will be screened by a proposed 6-foot-tall pressure treated timber privacy fence to be installed parallel and exterior to the chain-link security fence along the east side and northeast end. The proposed supplemental landscape buffer and privacy fencing shall be designed in accordance with Zoning Ordinance Article VI.D Section 25-70.4.C.9.

The proposed Project is to be part of Dominion Energy's Community Solar program and as such is 3MWac in capacity size and proposed within a fenced area of approximately 26 acres. This relatively small scale allows for efficient micro siting with generous setbacks, vegetative buffering and without impact to the character of the surrounding neighborhoods. The proposed Project is compact, contiguous and will not result in clustering or fragmentation of neighborhoods.

Policy 3: Agricultural Landscape and Economy

Siting of projects should evaluate the agricultural landscape of the project area and surrounding area to assess the effects of a project on the agricultural economy.

The fenced portion of the Project area is approximately 26 acres in size and will be installed within parcel Tax Map No. 84-39 (32.82 acres) with a proposed gravel access road extending through the adjacent and participant parcel Tax Map No. 84-38 (18.54 acres). The total acreage of these two contiguous parcels is approximately 51.36 acres and both are privately owned by Beverly Hockman Broome Drell, Sherry Hockman Sumerlin, and Martha Hockman Lubarsky. The majority of these two parcels, approximately 78% (40 acres) exists as maintained pasture for grazing cattle. The proposed Project is designed so to minimize disturbance of the existing agricultural use, and the intent is for the remaining approximately 14 acres of pastureland, beyond the solar facility fence, be available for continued agriculture use for grazing livestock or seasonal crops.

This community scale solar project has a minimal development impact and upon decommissioning returns the affected land back to an agricultural land use. The Project will financially benefit the landowner by providing fixed revenue over the lease period. Unlike commercial and residential development, the proposed solar facility development requires minimal land disturbance and impervious surfaces are limited to gravel access road, small concrete equipment pads and pile supported racks. The use of driven steel piles for support of the racking system significantly reduces impacts to surface soils when compared to the affected footprint of structural concrete foundations associated with most commercial and residential development. Therefore, the proposed development results in minimal land disturbance and leave surface soils largely intact.

Following construction, the ground underneath the panels will be reseeded using low growth, native pollinator species. Throughout the operation of the Project this native meadow will be maintained and serve not only to stabilize the soils but also to provide ample foraging habitat for native pollinators such as butterflies and bees, benefiting the surrounding farms and gardens.



Policy 4: Prime Farmland and Agricultural and Forestal Districts

Siting of projects in Agricultural and Rural Planning Policy Areas should consider the presence of prime farmland producing soils and/or adjacent Agricultural and Forestal Districts.

The United States Department of Agriculture Natural Resource Conservation Service (USDA NRCS) Web Soil Survey was used to determine the extent of Prime Farmland within an Area of Interest (AOI) consisting of the proposed Project footprint (fenced area). The following soils were identified:

Map Unit Symbol	Map Unit Name	Acres in AOI	Percentage of AOI	Farmland Classification
3B	Allegheny-Cotaco fine sandy loams, 1 to 7 percent slopes	8.8	34.5%	Prime Farmland
3C	Allegheny-Cotaco fine sandy loams, 7 to 15 percent slopes		2.7%	Farmland of statewide importance
11A	Buchanan fine sandy loam, 0 to 2 percent slopes	8.5	33.3%	Not prime farmland
11B	Buchanan fine sandy loam, 2 to 7 percent sloeps	5.6	22.0%	Not prime farmland
86C2	Unison fine sandy loam, 7 to 15 percent slopes, eroded	1.9	7.5%	Farmland of statewide importance
	Total	25.5	100.0%	

The proposed siting of the Project minimizes the overlap into soils designated as Prime Farmland to approximately 34.5%. As previously mentioned in "Site Grading", the Stripped and excavated soils are to be spread out adjacent to the fenced project area upgradient of silt fence and immediately seeded and mulched. This soil will then be available in the future to accommodate filling of these excavated stormwater measures and regrading back to a predevelopment condition with decommissioning. Also, site grading design is endeavoring for minimal disturbance of the existing surface soil to ensure prompt establishment of permanent stabilizing grasses following installation of equipment.

Policy 5: Visual Impact

Siting of projects should take into consideration surrounding neighborhood developments and how visual impacts to those neighborhoods can be mitigated through appropriate buffers. Siting and design of projects should strive to utilize existing vegetation and buffers that exist naturally when adjacent to public rights of way or other adjacent property.

The solar array location was carefully designed so to minimize visibility and maximize setbacks from nearby residents to the north and Draft Avenue to the east. The selected location is parallel and adjacent to an existing Norfolk-Southern railroad right-of-way to the south and an industrial zoned property with an



established industrial use to the west. Viewshed screening is accomplished to the north by preserving an approximately 9-acre forested area and supplemental landscaping to enhance existing vegetation along the northern boundary of parcel Tax Map No. 84-38. The balance of the proposed solar facility will be screened by a proposed 6-foot-tall pressure treated timber privacy fence to be installed parallel and exterior to the chain-link security fence along the east side and northeast end. The proposed supplemental landscape buffer and privacy fencing shall be designed in accordance with Zoning Ordinance Article VI.D Section 25-70.4.C.9.

Policy 6: Balanced Land Uses

Desire to balance the utility scale solar land use with other important and valuable land uses for our citizens. The size/extent of projects should be considered in proximity to other developed land uses so as not to have undue adverse impacts on the existence of nearby developed residential, commercial, or mixed- use communities. Consideration of existing Augusta County Service Authority infrastructure be made.

Due to its scale and compact design, Community solar is the most compatible land use that can be deployed in this area without impacting the character of the surrounding community. The acreage of land required for development is substantially less than utility scale solar, allowing the project to be designed in compliance with all County setback requirements and sited as far away from parcel boundaries and neighboring properties as possible. In comparison to traditional commercial or community scale residential development, a community solar project is far less intensive on the land. The project will require no major grading, limited land disturbance and minimal new impervious surface. The ground cover underneath the solar panels will be planted with low-growing native pollinator species, and the existing land surrounding the fenced solar facility may continue to be used for agriculture such as seasonal crops and grazing.

As compared to alternate forms of development, a community solar project will not be invasive or bothersome to the existing character of the community. Once constructed, the Project will be naturally buffered/screened from view and create no noise above existing background levels. The Project will also create no strain on County services such as water, sewer, waste, schools, and emergency services. Once operational the site will be monitored remotely, require limited operational inspections, seasonal maintenance, and have no real impact to local traffic. The applicant believes this solar project can be considered a low-intensive land use, appropriately combining the community scale power generation with continued agricultural land use.

Policy 7: Compact, Interconnected Development

Projects within Urban Service and Community Development Areas should not detract from the compact, interconnected, pedestrian-oriented development pattern.

The proposed Project is compact in design and carefully designed so to minimize visibility and maximize setbacks from nearby residents to the north and Draft Avenue to the east. The selected location was purposely located parallel and adjacent to an existing Norfolk-Southern railroad right-of-way to the south and an industrial zoned property with an established industrial use to the west. Development of this Project will not interfere with or impact pedestrian use of the surrounding commercial areas.



Policy 8: Open Space

Support projects that seek to actively create opportunities and partnerships that provide for natural open spaces and outdoor recreational activities such as pedestrian corridors, wildlife watching areas, and fishing areas, especially in publicly accessible land and rights-of-ways.

The proposed Project is to be developed on private property with the intent to continue agricultural use of the property beyond the fenced solar facility. Therefore, the project's property is not publicly accessible, nor will it be following development of the solar project. A benefit of Community Scale Solar is a low impact development approach can be accommodated with land use that encourages natural landscapes and effectively preserves the space for future use. The proposed Project will include various types of native buffer plantings, including canopy trees, evergreen trees, understory trees, shrubs, and native grass species. This additional variety of native vegetation will create a more diverse foraging habitat for wildlife beyond the existing site conditions.

As opposed to more intensive forms of land development, community solar projects leave the underlying landscape relatively unchanged. The Project's Decommissioning Plan specifies adequate removal of the facility at the end of project life, ensuring the land will be returned to predevelopment conditions. After the Project is decommissioned, the land can then either revert to continued agricultural use or developed for other purposes, which could include potential outdoor recreational uses.

Policy 9: Interconnectivity

For projects that are adjacent to public spaces or other planned developments, encourage projects that provide for trails and linkages to adjacent land planned for or already developed.

The Project is not located adjacent to public spaces or planned developments. The approximately 26-acre fenced project area is located within privately owned property with significant setbacks from neighboring residential properties and public roadways. It is not adjacent to existing public spaces or planned developments to warrant trails through these two privately owned parcels.

Policy 10: Resource Considerations

Projects should be designed, sited, and constructed in a way that protects and preserves the County's natural, scenic, and cultural resources including:

- a. Streams, rivers, wetlands
- b. Fertile soils
- c. Habitats
- d. Native vegetation
- e. Forests
- f. Historic and archaeological resources

A wetland delineation was completed by VHB in July 2022 and confirmation via an approved Jurisdictional Determination is pending from the United States Army Corps of Engineers. No waters regulated under Section 404 of the Clean Waters Act were found on the Project site, and therefore no wetland/waters



impacts are proposed with this Project.

The USDA NRCS Web Soil Survey was analyzed during the project's due diligence to assess the site for Prime Farmland. Within the approximately 25.5 acres of proposed project development area there is approximately 8.8 acres (34.5%) designated as Prime Farmland soil. There is also approximately 2.6 acres (10.2%) of this area designated as Farmland of statewide importance. However, this impact is minimal considering approximately 50% of the contiguous Property will remain undisturbed.

The existing use for the site is predominantly agriculture and offers limited habitat and native vegetation. Approximately 9 acres (18%) of the 51.4 acres of contiguous project Property is forested with the balance being managed pasture and a residential homestead. Vegetative clearing to accommodate the proposed 26-acre project is limited to the site access from Edgewood Lane, and the disturbance of the pasture turf within the facility footprint. The proposed vegetative buffer plantings along the northern boundary, will mitigate for the minimal impact to habitat and native vegetation while preserving the existing pasture areas for continued agricultural use. The approximately 9 acres of existing forested area within the project property will be impacted by 160 feet of proposed access road but otherwise will have no disturbance by the proposed project.

A cultural resources assessment was performed using the Virginia Department of Historic Resources statewide electronic cultural resources GIS and database (VCRiS) for the Property and the proposed Project area. A copy of the VCRiS results map and database search of potential architectural resources in the area are included as an attachment with this SUP application. As proposed, the Project will have no adverse impact to cultural or architectural resources.

Policy 11: Natural Resource Benefits

The County sees value in projects that create additional natural resource benefits through the use of native vegetation, the creation of wildlife corridors, and the use of pollinator species in buffer areas and underneath panels.

The Project will use a combination of landscape buffer, conserved wooded area (9+ acres) and opaque privacy fence to buffer the solar facility view from adjacent property owners to the north and along Draft Avenue to the east for adherence to Zoning Ordinance Article VI.D Section 25-70.4.C.9. Additionally, the solar facility will be seeded with low-growing native pollinator species for between array rows, along fence and underneath the solar panels. The proposed vegetative buffer along the north property boundary will provide an improved wildlife corridor from the conserved wooded area west in comparison to existing conditions. The use of low-growing native pollinator plantings within the facility will also provide foraging habitat for local native pollinators, which will have an overall positive impact on surrounding natural resources.

The Community Scale solar project provides a source of locally produced, clean, renewable electricity, and an opportunity for community subscribers to become stewards of their environment, protecting natural resources both locally and globally.

Policy 12: Clustering and Colocation

Support projects that site on contiguous parcels. Strong consideration should also be given to siting projects



a reasonable distance away from existing solar facilities so as not to significantly alter existing community character or create undue adverse impact on nearby neighborhood development. Solar facilities that are sited on the same parcel or contiguous parcels, but are constructed in distinct phases, should be considered to be separate facilities for purposes of fully and accurately evaluating the potential impact on the surrounding community.

The proposed Shenvalee Solar is to be developed in a single phase. The approximately 26-acre fenced project area is located within parcel Tax Map No. 84-39 (32.82 acres) with a proposed gravel access road extending through the adjacent and participant parcel Tax Map No. 84-38 (18.54 acres). The total acreage of these two contiguous parcels is approximately 51.36 acres and both are privately owned by Beverly Hockman Broome Drell, Sherry Hockman Sumerlin, and Martha Hockman Lubarsky. The location of the proposed solar array was carefully designed so to minimize visibility and maximize setbacks from nearby residents to the north and Draft Avenue. The Project will use a combination of landscape buffer, conserved wooded area (9+ acres) and opaque privacy fence to buffer the solar facility view from adjacent property owners to the north and along Draft Avenue to the east for adherence to Zoning Ordinance Article VI.D Section 25-70.4.C.9.

No buffering is proposed along the south and west sides of the project site property boundary per the alternative compliance specified in zoning ordinance article VI.D section 25-70.4.F. The south side of the project property is parallel and adjacent to an existing railroad right-of-way, and the west side is adjacent to industrial zoned property with an established industrial use.

The nearest known solar facility is Wayne Avenue East, which is located approximately 0.6 mile to the east, near the intersection of Wayne Avenue and Princess Lane, adjacent to the south side of the railroad. Shenvalee Solar and the Wayne Avenue East project are not visible from one another due to existing development, vegetation and topographic conditions.

Site Plans

Issued for	Review
Date Issued	October 27, 2022
Latest Issue	October 27, 2022

SHENVALEE SOLAR SPECIAL USE PERMIT

APPLICATION #: TBD

265 Draft Ave Stuarts Draft, VA 24477



Beverley Hockman Broome Drell, Sherry Hockman Sumerlin, Martha Hockman Lubarsky 265 Draft Avenue, Augusta County, Virginia 24477 Tax Maps No: 84-38, 84-39

Applicant / Developer:

Consolidated Edison Development Inc. 100 Summit Lake Drive, Valhalla, NY 10595 Attn: Lindsey Nelson NelsonL@conedceb.com (401) 787-0849





Shee	et Index	
No.	Drawing Title	Latest Issue
C100	NOTES AND DETAILS	October 27, 2022
C200	EXISTING CONDITIONS	October 27, 2022
C300	SITE PLAN	October 27, 2022



Civil Engineer & Landscape Architect:

VHB

115 South 15th Street, Suite 200 Richmond, VA 23219 Attn: Stephen Quina, PE (804) 441-7440 squina@vhb.com

Environmental Consultant

VHF

351 McLaws Circle, Suite 3 Williamsburg, VA 23185 Attn: Kimberly Blossom (757) 279-2828 kblossom@vhb.com

Electrical Engineer

Antares Group Inc.
57 South Main Street, Suite 506
Harrisonburg, VA 22801
Attn: Kevin Comer
(540) 227-8866
kcomer@antaresgroupinc.com



PROJECT NOTES:

- THE APPLICANT REQUESTS THE GRANTING OF A SPECIAL USE PERMIT (SUP) TO ALLOW FOR THE INSTALLATION OF A SMALL SOLAR ENERGY SYSTEM ON THE SUBJECT PROPERTY PER ARTICLE VI.D OF
- THE AUGUSTA COUNTY ZONING ORDINANCE.

 THE SUBJECT PROPERTY IS IDENTIFIED AS THE FOLLOWING PARCEL TAX MAP NUMBERS PER THE AUGUSTA COUNTY ASSESSOR: 84-38 AND 84-39. THESE TWO (2) PARCELS TOTAL 51.36 ACRES PER THE COUNTY TAX RECORDS.
- 3. THE APPLICANT IS CONSOLIDATED EDISON DEVELOPMENT INC., 100 SUMMIT LAKE DRIVE, VALHALLA,
- 4. THE DEPICTED SUBJECT PROPERTY BOUNDARY AND EASEMENT INFORMATION TAKEN FROM A FIELD RUN SURVEY PREPARED BY VHB AND COURT RECORDS. ADDITIONAL ADJOINER LINES AND EXISTING
- CONDITIONS INFORMATION WAS OBTAINED FROM AUGUSTA COUNTY GIS DATA.

 TOPOGRAPHY, EXISTING BUILDINGS AND DRIVEWAYS ARE DERIVED FROM A PHOTOGRAMMETRIC SURVEY PREPARED BY NV5 DATED SEPTEMBER 5, 2022. THE CONTOUR INTERVAL IS ONE (1) FOOT.
- WETLANDS INFORMATION OBTAINED FROM A WATERS OF THE U.S. DELINEATION PREPARED BY VHB AND CONFIRMATION VIA AN APPROVED JURISDICTIONAL DETERMINATION IS PENDING FROM THE UNITED STATES ARMY CORPS OF ENGINEERS. NO WATERS REGULATED UNDER SECTION 404 OF THE CLEAN WATERS ACT WERE FOUND ON THIS SITE.
- PER FEMA FLOOD INSURANCE RATE MAP (FIRM) COMMUNITY PANEL 51015C0518D, WITH AN EFFECTIVE DATE OF 9/28/2007, THERE ARE NO SPECIAL FLOOD HAZARD AREAS. THE PROPERTY IS LOCATED IN ZONE X, AREA OF MINIMAL FLOOD HAZARD.
- 8. TO THE BEST KNOWLEDGE OF THE ENGINEER AND APPLICANT THIS APPLICATION CONFORMS TO ALL APPLICABLE ORDINANCES, REGULATIONS AND ADOPTED STANDARDS, UNLESS OTHERWISE SPECIFICALLY NOTED.
- 9. TO THE BEST KNOWLEDGE OF THE ENGINEER AND DEVELOPER THERE ARE NO GRAVES OR BURIAL SITES LOCATED ON THE PROPERTY.
- 10. TO THE BEST KNOWLEDGE OF THE ENGINEER AND THE DEVELOPER THERE ARE NO HAZARDOUS OR TOXIC SUBSTANCES ON THE PROPERTY.
- 11. THIS DEVELOPMENT PROPOSAL IS COMPATIBLE WITH THE EXISTING DEVELOPMENT IN THE VICINITY OF THIS SITE IN TERMS OF USE, TYPE, AND INTENSITY.
- 12. THE SOLAR PANEL LAYOUT PROVIDED ON THIS SPECIAL USE PERMIT PLAN IS APPROXIMATE AND THE FINAL LOCATION OF THE PROPOSED SOLAR PANELS SHALL BE DETERMINED AT THE TIME OF SITE PLAN SUPPLIES.
- 13. PROJECT SIGNAGE SHALL COMPLY WITH ALL APPLICABLE AUGUSTA COUNTY SIGN REGULATIONS.
- REQUIRED WARNING SIGNAGE SHALL BE PROVIDED AS REQUIRED BY THE ZONING ORDINANCE.

 14. NOISE LEVELS FROM THE SOLAR ENERGY FACILITY WILL COMPLY WITH ALL APPLICABLE AUGUSTA COUNTY NOISE REGULATIONS.
- 15. EROSION CONTROL AND STORMWATER MANAGEMENT SHALL BE PROVIDED IN ACCORDANCE WITH LOCAL AND STATE REQUIREMENTS.

PROJECT NARRATIVE:

CONSOLIDATED EDISON DEVELOPMENT INC. (APPLICANT) PROPOSES TO CONSTRUCT AND OPERATE THE SHENVALEE SOLAR FACILITY (PROJECT) AT 265 DRAFT AVENUE IN STUARTS DRAFT, VIRGINIA. THE PROJECT WILL BE A SINGLE-AXIS TRACKING, GROUND-MOUNTED PHOTOVOLTAIC (PV) SOLAR FACILITY, WITH ELECTRICITY GENERATING CAPACITY OF APPROXIMATELY 3.0 MEGAWATTS (MW) OF ALTERNATING CURRENT (AC) AND 4.4 MW OF DIRECT CURRENT (DC) WITHIN A FENCE SECURED AREA OF APPROXIMATELY 26 ACRES. THE 26-ACRE FENCED DEVELOPMENT AREA IS LOCATED WITHIN PARCEL TAX MAP NO. 84-39 WITH A PROPOSED GRAVEL ACCESS ROAD EXTENDING THROUGH THE ADJACENT AND PARTICIPANT PARCEL TAX MAP NO. 84-38. THE TOTAL ACREAGE OF THESE TWO CONTIGUOUS PARCELS IS APPROXIMATELY 51.4 ACRES AND BOTH ARE PRIVATELY OWNED BY BEVERLY HOCKMAN BROOME DRELL, SHERRY HOCKMAN SUMERLIN, AND MARTHA HOCKMAN LUBARSKY (PROPERTY). THE LOCATION AND ORIENTATION OF THE SOLAR ARRAY WITHIN THE PROPERTY WAS DESIGNED SO TO MINIMIZE VISIBILITY FROM NEARBY RESIDENTS AND PUBLIC ROADWAYS, MINIMIZE EXCAVATION AND GRADING ASSOCIATED WITH PROJECT CONSTRUCTION, AND MAXIMIZE EXPOSURE TO SOLAR RADIATION THROUGHOUT THE YEAR. THE FACILITY SETBACKS FROM DRAFT AVENUE AND THE RESIDENTIAL PARCELS TO THE NORTH HAVE BEEN INCREASED TO EXCEED COUNTY REQUIREMENTS.

PURPOSE AND NEED

THE PURPOSE OF THE PROPOSED PROJECT IS TO GENERATE LOCAL, CLEAN, AND RENEWABLE SOLAR POWER, WITH THE ELECTRICITY GENERATION TO BE SOLD TO DOMINION ENERGY. THE APPLICANT HAS ALREADY SECURED A POWER PURCHASE AGREEMENT WITH DOMINION ENERGY FOR THE SALE/PURCHASE OF THE ELECTRICITY GENERATED FROM THE PROJECT. THE INTERCONNECTION STUDY IS ONGOING BY DOMINION ENERGY AND APPLICANT EXPECTS COMPLETION BY MARCH 2023. IF THE COUNTY APPROVES THIS PROJECT, SITE CONSTRUCTION IS ANTICIPATED TO OCCUR IN 2023. THE PROJECT IS BEING PROPOSED IN RESPONSE TO THE VIRGINIA CLEAN ECONOMY ACT OF 2020 (VCEA). AS PART OF THE VCEA, DOMINION ENERGY IS REQUIRED TO IMPLEMENT SIGNIFICANT DEVELOPMENT OF VIRGINIA-BASED ZERO-CARBON RENEWABLE ELECTRICITY GENERATION (SOLAR, ON-SHORE WIND POWER, OFF-SHORE WIND POWER, ETC.) ON A PRESCRIBED SCHEDULE THROUGH THE YEAR 2036. AS PART OF THE LAW'S REQUIREMENTS. 1.100 MW OF DISTRIBUTED ENERGY RESOURCE (DER) SOLAR PROJECTS ARE SCHEDULED FOR CONSTRUCTION BY THE YEAR 2036. THE LAW DEFINES A DER SOLAR PROJECT AS LESS THAN OR EQUAL TO 3 MWAC (THE SIZE OF THIS PROPOSED PROJECT). A PORTION OF THOSE PROJECTS (ABOUT 80%) WILL BE FOR DER SOLAR PROJECTS THAT SELL POWER DIRECTLY TO DOMINION ENERGY FOR GENERAL ELECTRIC GRID SUPPORT AND LOCAL CUSTOMER ELECTRICITY NEEDS. THE REMAINING APPROXIMATELY 20% OF REQUIRED DER SOLAR PROJECTS WILL SUPPLY ELECTRICITY TO A COMMUNITY SOLAR PROGRAM WHERE DOMINION ENERGY CUSTOMERS WILL BE ABLE TO VOLUNTARILY PURCHASE A PORTION OF THEIR ELECTRICITY SUPPLY FROM THE SOLAR PROJECTS SUPPLYING THE COMMUNITY SOLAR PROGRAM. LOCAL SOLAR PROJECTS ARE PART OF THE ENERGY MIX, REDUCING THE DEPENDENCE ON ANY SINGLE SOURCE OF ELECTRICITY GENERATION BY PROVIDING HOME-GROWN ELECTRICITY. THESE PROJECTS HELP KEEP ELECTRIC COSTS DOWN BY PROVIDING A HEDGE AGAINST THE RISING COSTS OF COMMODITY FUELS. THESE LOCAL POWER GENERATION PROJECTS ALSO BENEFIT THEIR HOST COMMUNITIES BY IMPROVING THE RESILIENCY OF THE LOCAL ELECTRIC GRID, SUPPLYING POWER LOCALLY AND OFFSETTING POWER SUPPLIES THAT WOULD OTHERWISE BE REQUIRED FROM DISTANT POWER PLANTS.

BASED ON ITS COMMITMENT TO PROVIDING RENEWABLE ENERGY, THE APPLICANT PROPOSES TO DEVELOP THE SITE DESCRIBED BELOW TO MAXIMIZE ITS SOLAR ENERGY POTENTIAL WITHIN THE PROJECT'S SECURED FENCED AREA. TO BEST DETERMINE OPTIMAL LOCATION WITHIN THE SITE, THE FOLLOWING FACTORS HAVE BEEN ANALYZED:

- SIGNIFICANT SOLAR RADIATION (INSOLATION)
- SITE ACCESSIBILITY FOR SERVICE AND CONSTRUCTION VEHICLES
 AVOIDANCE OF ENVIRONMENTALLY SENSITIVE AREAS
- LIMITED TREE AND VEGETATIVE CLEARING
 LIMITED VIGIBILITY SPORT OF THE PROPERTY OF THE
- LIMITED VISIBILITY FROM OFFSITE LOCATIONS

 PEOULDED OFFSAULO FROM A DIAGRAT PROPERTY.

 PEOULDE OFFSAULO FROM A DIAGRAT PROPERTY.

 PEOULD FROM A DIAGRAT PROPERTY.

 PEOULD FROM A DIAGRAT PROPERTY.

 PEOULD FROM A
- REQUIRED SETBACKS FROM ADJACENT PROPERTIES AND PUBLIC ROADS

SITE SETTING

THE PROPOSED PROJECT SITE IS LOCATED AT 265 DRAFT AVENUE IN STUARTS DRAFT, VIRGINIA. THE FENCED PORTION OF THE PROJECT AREA IS APPROXIMATELY 26 ACRES IN SIZE AND WILL BE INSTALLED WITHIN PARCEL TAX MAP NO. 84-39 (32.82 ACRES) WITH A PROPOSED GRAVEL ACCESS ROAD EXTENDING THROUGH THE ADJACENT AND PARTICIPANT PARCEL TAX MAP NO. 84-38 (18.54 ACRES). THE TOTAL ACREAGE OF THESE TWO CONTIGUOUS PARCELS IS APPROXIMATELY 51.36 ACRES AND BOTH ARE PRIVATELY OWNED BY BEVERLY HOCKMAN BROOME DRELL, SHERRY HOCKMAN SUMERLIN, AND MARTHA HOCKMAN LUBARSKY. THE MAJORITY OF THESE TWO PARCELS, APPROXIMATELY 78% (40 ACRES) EXISTS AS MAINTAINED PASTURE FOR GRAZING CATTLE. APPROXIMATELY 2 ACRES IS DEDICATED TO THE EXISTING RESIDENTIAL HOME, UNCONDITIONED STORAGE STRUCTURES/SHEDS, HOMESTEAD YARD AND LANDSCAPE VEGETATION, ALL OF WHICH WILL REMAIN UNDISTURBED WITH THIS PROJECT. THERE IS ALSO APPROXIMATELY 9 ACRES OF FORESTED AREA THAT OCCUPIES THE EASTERN HALF OF PARCEL TAX MAP NO. 84-38, WHICH IS TO BE PRESERVED WITH THIS PROJECT.

THE PROPOSED 26-ACRE FENCED PROJECT SITE IS BORDERED AS FOLLOWS:

- BORDERED TO THE NORTH BY PARTICIPANT PARCEL TAX MAP NO. 84-38, WHICH IS PART OF THIS PROPERTY AND WILL ACCOMMODATE A TEMPORARY STAGING/LAYDOWN AREA, AND THE PROJECT'S GRAVEL ACCESS ROAD FROM A PROPOSED EXTENSION OF EDGEWOOD LANE TO THE NORTH. THIS PARCEL PROVIDES A SETBACK DISTANCE OF APPROXIMATELY 716 FEET FROM THE PROPOSED FACILITY FENCE NORTH TO THE NEXT NEIGHBORING PARCEL. THIS PARCEL IS NEARLY EVENLY DIVIDED INTO PASTURE ON THE WESTERN HALF AND FOREST ON THE EASTERN HALF.
- BORDERED IN THE NORTHEAST CORNER BY A SINGLE FAMILY ZONED (SF15) PARCEL WITH A
- RESIDENCE AND SMALL FARMING OPERATION (TAX MAP NO. 84A-5-27).

 BORDERED TO THE EAST BY A GENERAL BUSINESS (GB) ZONED PARCEL WITH A SINGLE-FAMILY RESIDENCE (TAX MAP NO. 84A-5-26A), AND THE RESIDENTIAL HOMESTEAD TO DEMAIN ON THE RAI ANCE OF THE GR ZONED PARTICIPANT PARCEL (TAX MAP NO. 84 39).
- REMAIN ON THE BALANCE OF THE GB ZONED PARTICIPANT PARCEL (TAX MAP NO. 84-39).

 BORDERED TO THE SOUTH BY AN EXISTING NORFOLK-SOUTHERN RAILROAD RIGHT-OF-WAY.
- BORDERED TO THE WEST BY AN INDUSTRIAL ZONED PROPERTY WITH AN ESTABLISHED INDUSTRIAL USE (TAX MAP NO. 84-37).

THE SPECIFIC LOCATION OF THE PROPOSED SOLAR ARRAY WITHIN THIS PROPERTY WAS CAREFULLY DESIGNED SO TO MINIMIZE VISIBILITY AND MAXIMIZE SETBACKS FROM NEARBY RESIDENTS TO THE NORTH AND DRAFT AVENUE TO THE EAST. THE SELECTED LOCATION IS PARALLEL AND ADJACENT TO AN EXISTING NORFOLK-SOUTHERN RAILROAD RIGHT-OF-WAY TO THE SOUTH AND AN INDUSTRIAL ZONED PROPERTY WITH AN ESTABLISHED INDUSTRIAL USE TO THE WEST. VIEWSHED SCREENING IS ACCOMPLISHED TO THE NORTH BY PRESERVING AN APPROXIMATELY 9-ACRE FORESTED AREA AND SUPPLEMENTAL LANDSCAPING TO ENHANCE EXISTING VEGETATION ALONG THE NORTHERN BOUNDARY OF PARCEL TAX MAP NO. 84-38. THE BALANCE OF THE PROPOSED SOLAR FACILITY WILL BE SCREENED BY A PROPOSED 6-FOOT TALL PRESSURE TREATED TIMBER PRIVACY FENCE TO BE INSTALLED PARALLEL AND EXTERIOR TO THE CHAIN-LINK SECURITY FENCE ALONG THE EAST SIDE AND NORTHEAST END.

A WETLAND DELINEATION WAS COMPLETED BY VHB IN JULY 2022 AND CONFIRMATION VIA AN APPROVED JURISDICTIONAL DETERMINATION IS PENDING FROM THE UNITED STATES ARMY CORPS OF ENGINEERS. NO WATERS REGULATED UNDER SECTION 404 OF THE CLEAN WATERS ACT WERE FOUND ON THE PROJECT SITE, AND THEREFORE NO WETLAND/WATERS IMPACTS ARE PROPOSED WITH THIS PROJECT.

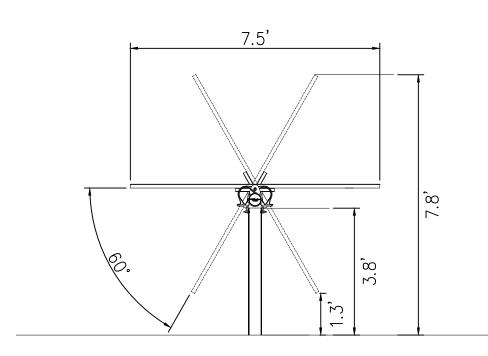
THE PROJECT IS TO BE INTERCONNECTED TO A THREE-PHASE LINE OWNED BY DOMINION ENERGY ON THE WEST SIDE OF DRAFT AVENUE NEAR 265 DRAFT AVENUE. THE APPLICANT HAS ALREADY SECURED A POWER PURCHASE AGREEMENT WITH DOMINION ENERGY FOR THE SALE/PURCHASE OF THE ELECTRICITY GENERATED FROM THE PROJECT. THE INTERCONNECTION STUDY IS ONGOING BY DOMINION ENERGY AND APPLICANT EXPECTS COMPLETION BY MARCH 2023.

KEY COMPONENTS

THE PROPOSED PROJECT WILL CONSIST OF THE FOLLOWING KEY COMPONENTS:

- SOLAR MODULES AND RACKING
- UNDERGROUND ELECTRICAL CONDUCTORS
- BALANCE OF SYSTEM EQUIPMENT
- GRAVEL ACCESS ROAD
- SECURITY FENCING & OPAQUE PRIVACY FENCE

FOR ADDITIONAL INFORMATION PLEASE REFERENCE THE COMPLETE PROJECT NARRATIVE AND OTHER SUPPORTING DOCUMENTS THAT ACCOMPANY THIS PRELIMINARY SITE PLAN AND SUP APPLICATION.



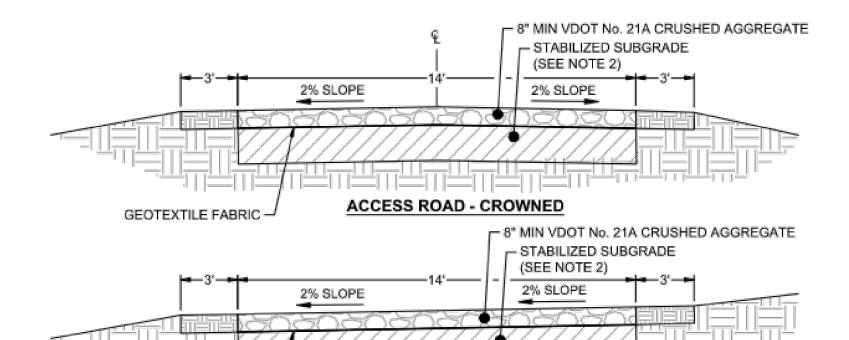
$\underbrace{\mathsf{SINGLE}\text{-}\mathsf{AXIS}\;\mathsf{TRACKER}\;\mathsf{WITH}\;\mathsf{PV}\;\mathsf{MODULE}\;\text{-}\;\mathsf{TYPICAL}\;\mathsf{SECTION}}_{\mathsf{NTS}}$

NOTE: TYPICAL SECTION DETAIL REPRESENTATIVE OF A SINGLE-AXIS TRACKING SYSTEM FOR GROUND MOUNTED PV. THE SELECTED TRACKER SYSTEM WILL BE SPECIFIED WITH THE FINAL SITE PLAN SUBMITTAL TO THE COUNTY.

ZONING TABULATIONS

•	ZUNING TABULAT	10143
	REQUIREMENT / EXISTING	PROPOSED / PROVDED
ZONING DISTRICT	GENERAL AGRICULTURE (GA); GENERAL BUSINESS (GB); GENERAL INDUSTRIAL (GI) (SEE NOTE #1)	NO CHANGE
LAND USE	SINGLE-FAMILY DETACHED HOME / AGRICULTURE	SMALL SOLAR ENERGY SYSTEM (SEE NOTE #2)
MINIMUM LOT AREA (CONVENTIONAL)	ONE (1) ACRE	±51.36 ACRES (±34.86 ACRES ZONED GA; ±15.48 ACRES ZONED GB; ±1.02 ACRES ZONED GI)
MINIMUM LOT WIDTH (CONVENTIONAL)	150 FEET	NO CHANGE
MINIMUM LOT FRONTAGE	50 FEET	NO CHANGE
MINIMUM SETBACKS (SEE NOTE	#2)	
RIGHT-OF-WAY	50 FEET	50 FEET (±474 FEET TO SECURITY FENCE)
SIDE / REAR	25 FEET	25 FEET
MAXIMUM HEIGHT	75 FEET	15 FEET
MINIMUM BUFFER (SEE NOTE #3)	BUFFER ALTERNATIVES 1 & 2 PER SECTION 25-70.4.C.9; ALTERNATIVE COMPLIANCE PER SECTION 25-70.4.F	BUFFER ALTERNATIVE 1 ON EASTERN SIDE OF PROJECT; BUFFER ALTERNATIVE 1 & 2 ON NORTHERN SIDE OF PROJECT; ALTERNATIVE COMPLIANCE ON WESTERN & SOUTHERN SIDES OF PROJECT. SEE SHEET C300 AND NOTE #3 BELOW.
	1. APPROXIMATELY 15.48 ACRES OF PARCEL #84-39 IS ZONED GB AND APPROXIMATELY 10.70 ACRES (69%) OF THIS GB ZONED AREA WILL BE UTILIZED BY THE PROPOSED SOLAR FACILITY. THE BALANCE OF THE SOLAR FACILITY IS LOCATED WITHIN THE GA ZONED PORTION OF PARCEL #84-39.	
	2. SETBACKS MAY VARY WITH FINAL MINIMUM DISTANCES AS REQUIRED	

3. NO BUFFERING IS PROPOSED ALONG THE SOUTH AND WEST SIDES OF THE PROJECT SITE PROPERTY BOUNDARY PER THE ALTERNATIVE COMPLIANCE SPECIFIED IN ZONING ORDINANCE ARTICLE VI.D SECTION 25-70.4.F. THE SOUTH SIDE OF THE PROJECT PROPERTY IS PARALLEL AND ADJACENT TO AN EXISTING RAILROAD RIGHT-OF-WAY, AND THE WEST SIDE IS ADJACENT TO INDUSTRIAL ZONED PROPERTY WITH AN ESTABLISHED INDUSTRIAL USE.



NOTES:

- NOTES:

 1. GEOTEXTILE FABRIC SHALL BE MIRAFI HP370 OR PROJECT ENGINEER APPROVED EQUIVALENT.
- SUBGRADE MATERIALS SHALL CONFORM TO VDOT "ROAD AND BRIDGE SPECIFICATIONS". SUBGRADE SHALL BE PLACED IN 8" MAXIMUM LIFTS AND COMPACTED TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY. SOIL MOISTURE CONTENT DURING COMPACTION SHALL BE MAINTAINED WITHIN 3% OF THE OPTIMUM MOISTURE CONTENT.

ACCESS ROAD - CROSS SLOPE

SHOULDERS SHALL BE COMPACTED NATIVE SOIL.

GEOTEXTILE FABRIC

4. ROAD GRAVEL WIDTH MAY BE EXPANDED TO 20 FEET WIDE AT ENTRANCE OR WHERE SPECIFIED ON PLAN.

ACCESS ROAD TYPICAL SECTION



Suite 200 Richmond, VA 23219 804.343.7100

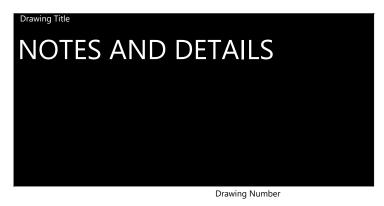




Shenvalee Solar

265 Draft Ave Stuarts Draft, VA 24477

Designed by JN	Checked by SQ
Special Use Permit	Date 10/27/2022

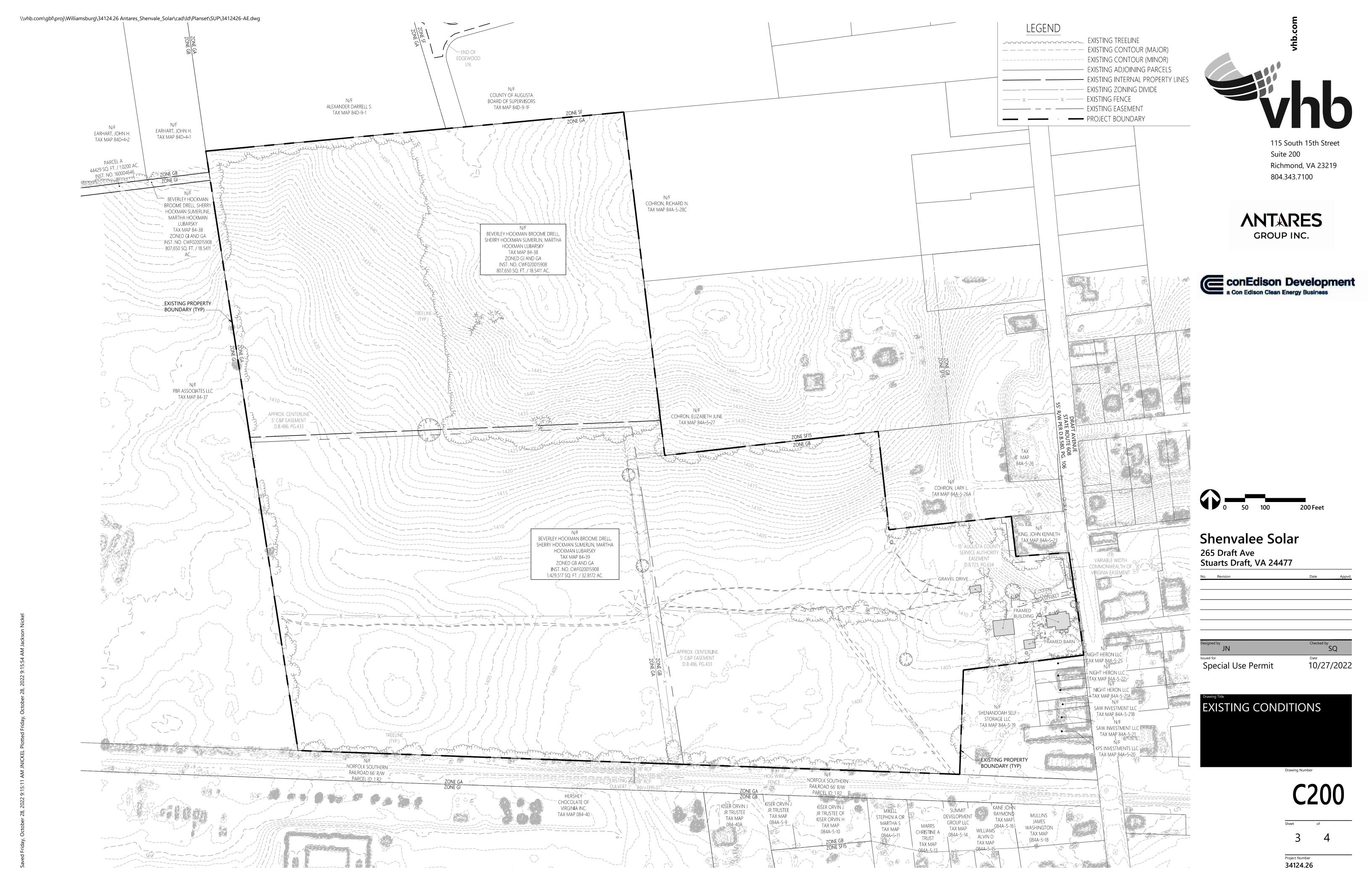


C100

2

Project Number

34124.26





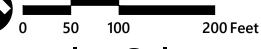
115 South 15th Street Suite 200 Richmond, VA 23219

804.343.7100

GROUP INC.



- 1. THIS PLAN IS PRELIMINARY AND SUBJECT TO MINOR REVISIONS TO BE COORDINATED WITH SITE PLAN REVIEW.
- EXISTING TREELINE VEGETATION ALONG NORTHERN PROPERTY BOUNDARY, EAST OF THE PROJECT PRIVACY FENCE AND THE SHADED WOODED STAND IN THE NORTHEAST CORNER OF WILL BE PRESERVED TO THE GREATEST EXTENT POSSIBLE.
- A 6-FOOT TALL OPAQUE PRESSURE TREATED TIMBER PRIVACY FENCE IS PROPOSED ALONG THE EASTERN SIDE OF THE PROJECT SITE TO SATISFY THE ALTERNATIVE 1 BUFFERING REQUIREMENT IN ZONING ORDINANCE ARTICLE VI.D SECTION 25-70.4.C.9.
- NO BUFFERING IS PROPOSED ALONG THE SOUTH AND WEST SIDES OF THE PROJECT SITE PROPERTY BOUNDARY PER THE ALTERNATIVE COMPLIANCE SPECIFIED IN ZONING ORDINANCE ARTICLE VI.D SECTION 25-70.4.F. THE SOUTH SIDE OF THE PROJECT PROPERTY IS PARALLEL AND ADJACENT TO AN EXISTING RAILROAD RIGHT-OF-WAY, AND THE WEST SIDE IS ADJACENT TO INDUSTRIAL ZONED PROPERTY WITH AN ESTABLISHED
- FOOT PAVED EXTENSION OF THE EXISTING EDGEWOOD LANE, WHICH HAS RIGHT-OF-WAY INTERSECTING THE NORTH END OF THE PROJECT'S PROPERTY BOUNDARY. THE BALANCE OF THE PROPOSED ACCESS ROAD ONSITE WILL BE A GRAVEL ROADWAY SECTION TO PREVENT VEHICLE RUTTING, EROSION AND MINIMIZE



Shenvalee Solar

Stuarts Draft, VA 24477

Checked by SQ

Special Use Permit

10/27/2022

SITE PLAN



34124.26

LEASE OPTION AGREEMENT

This LEASE OPTION AGREEMENT (hereinafter "Agreement) is made effective as of March 18, 2022, between Beverley Hockman Drell, Sherry Hockman Sumerlin and Martha Hockman Lubarsky (hereinafter "Landlord"), and Consolidated Edison Development, Inc. (hereinafter "Developer"). Landlord and Developer are collectively referred to as the "Parties" in this Agreement.

In consideration of the mutual promises and covenants hereinafter stipulated, the Parties hereby agree as follows:

- 1. DESCRIPTION. Landlord and Developer agree to enter into an option agreement for Developer to lease property and operate a solar power generation facility (hereinafter "Generating Facility") on land (50 acres) owned and/or controlled by Landlord and located 265 Draft Avenue, Stuarts Draft, Virginia 24477 (hereinafter, "the Property").
- 2. TERM. The terms of this Agreement shall be effective upon execution and shall run through the period ending 31 December 2022 during which period the Developer may enter upon the Property and conduct tests and evaluations thereon as more fully described in section 4. During the Evaluation period, the Developer shall have an exclusive option (hereinafter, the "Option") to lease up to 40 acres of the Property, EXHIBIT A, from Landlord under the terms of the proposed lease agreement, EXHIBIT B. The Developer may exercise the Option by giving Landlord written notice thereof, unless the Developer gives notice to the Landlord of its intent to terminate this Agreement, by mailing a written notice to the last provided address of the Landlord. Liability for payment will not extend beyond notice to terminate this Agreement. If the developer elects to exercise the Option to lease, the lease shall be completed and executed within 14 days of the developer receiving final approval to proceed with construction. Developer will have the right under this Agreement to extend this lease option term by 12 months, through the period ending 31 December 2023.
- 3. OPTION PAYMENT. Developer has paid the Landlord, the sum of Option Agreement.
- 4. COVENANT OF LANDLORD. Commencing with and during the term of this Agreement, including any extensions, Landlord hereby covenants and agrees as follows:
 - a. Landlord is the fee simple owner of 50 acres of real property at 265 Draft Avenue, Stuarts Draft, Virginia 24477 in the County of Augusta, Commonwealth of Virginia (hereinafter "Property") described more particularly in EXHIBIT "A", attached hereto and incorporated herein;
 - b. Landlord owns, free of encumbrances, the Property in fee simple, and represents and warrants to Developer that Landlord has the full and unrestricted power and authority to execute and deliver this Agreement and grant the interests herein granted. All persons having any possessory interest in the Property (including spouses) are signing this Agreement;

			Developer may (i) ass	igı
Agreement security in co	o an Affiliate of Develo	per; or (ii) assig	in this Agreement as co	igi
Agreement security in co	o an Affiliate of Develo	per; or (ii) assig	in this Agreement as co	igr
Agreement security in co	o an Affiliate of Develo	per; or (ii) assig	in this Agreement as co	igr
Agreement security in co	o an Affiliate of Develo	per; or (ii) assig	in this Agreement as co	igr
Agreement security in co	o an Affiliate of Develo	per; or (ii) assig	in this Agreement as co	igr
Agreement security in co	o an Affiliate of Develo	per; or (ii) assig	in this Agreement as co	igrolli
Agreement security in co	o an Affiliate of Develo	per; or (ii) assig	in this Agreement as co	igi

b.		
_		

- 10. EFFECT OF AGREEMENT; INTEREST IN REAL PROPERTY. The Parties intend that this Agreement creates a valid and present interest in the Property in favor of Developer. Therefore, this Agreement shall be deemed an interest in and encumbrance upon the Property which will be reflected in a separate instrument to be recorded among the land records of the county. Landlord covenants and agrees that during the Agreement Period, Landlord shall not convey the Property or any interest therein or permit any lien or encumbrance to attach to the Property unless the transferee or lien holder, as the case may be, shall agree, in writing, tobe bound by this Agreement.
- 11. AKNOWLEDGMENTS. The Parties are executing this Agreement voluntarily and without any duress or undue influence. The Parties have carefully read this Agreement andhave asked any questions needed to understand its terms, consequences, and binding effect and fully understand them and have been given an executed copy. The Parties have sought the advice of an attorney of their respective choice if so desired prior to signing this Agreement. Landlord agrees to keep all terms of this Agreement confidential and shall not disclose any terms of this Agreement to any third parties without prior written consent of the Developer.

12.	

- 25. BINDING AGREEMENT. This Agreement shall become legally binding upon full execution of this Agreement.
- 26. GOVERNING LAW. This Agreement shall be governed, construed and interpreted by, through and under the Laws of the Commonwealth of Virginia.
- 27. COUNTERPARTS. This Agreement may be executed in any number of counterparts: each of which shall be an original and all, when taken together, shall constitute one and the same document. Transmission by facsimile or electronic mail of an executed counterpart of this Agreement shall be deemed to constitute due and sufficient delivery of such counterpart.
- 28. ENTIRE AGREEMENT; MODIFICATION. This document sets forth the entire agreement and understanding between the Parties relating to the subject matter herein and supersedes all prior discussions between the Parties. No modification of or amendment to this Agreement, nor any waiver of any rights under this Agreement, will be effective unless in writing and signed by each of the Parties.

[Signatures on following page]

LANDLORD: Beverley Hockman Drell, Sherry Hockman Sumerlin and Martha Hockman Lubarsky

	DocuSigned by:		
Sign:_	Beverly Hockman	_Date:_	3/24/2022
Print: _	Beverly Hockman		
Sign:_	Martha Hockman Lubarsky	_Date:_	3/24/2022
Print: _	Martha Hockman Lubarsky		
Sign:_	Sherry Sumerlin	Date:_	3/24/2022
Print: _	Sherry Sumerlin		
	g Address:and Email:		
DEVE	LOPER: Consolidated Edison	n Devel	opment, Inc.
Sign:_	Mark Noyes		3/24/2022
Print: _	Mark Noyes		
Mailin	g Address:		
Dhone	and Email:		

EXHIBIT A Property Description

Situated at 265 Draft Avenue, Stuarts Draft, Virginia 24477 (Parcel #s 084 38 & 084 39 - 17.5 and 32.5 acres respectively) in the County of Augusta, State of Virginia (the "Property"). The parcels are outlined in red below and the proposed site is outlined in white. Project lease area to be revised with a Metes and Bounds Survey to be completed by Developer for the selected project site.





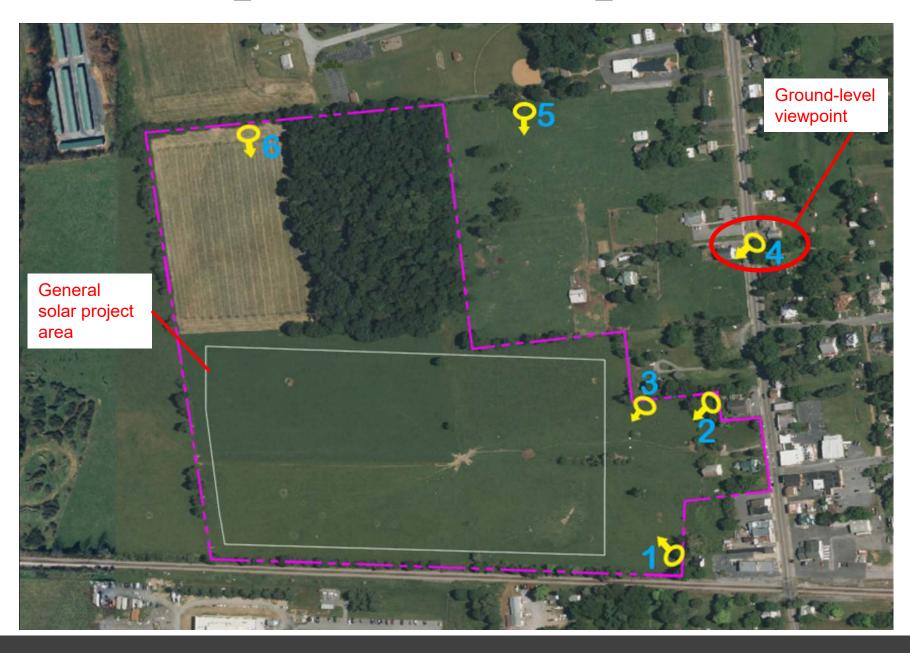
Shenvalee Solar Preliminary Visual Renderings

Kevin Comer kcomer@antaresgroupinc.com (540) 421-2254

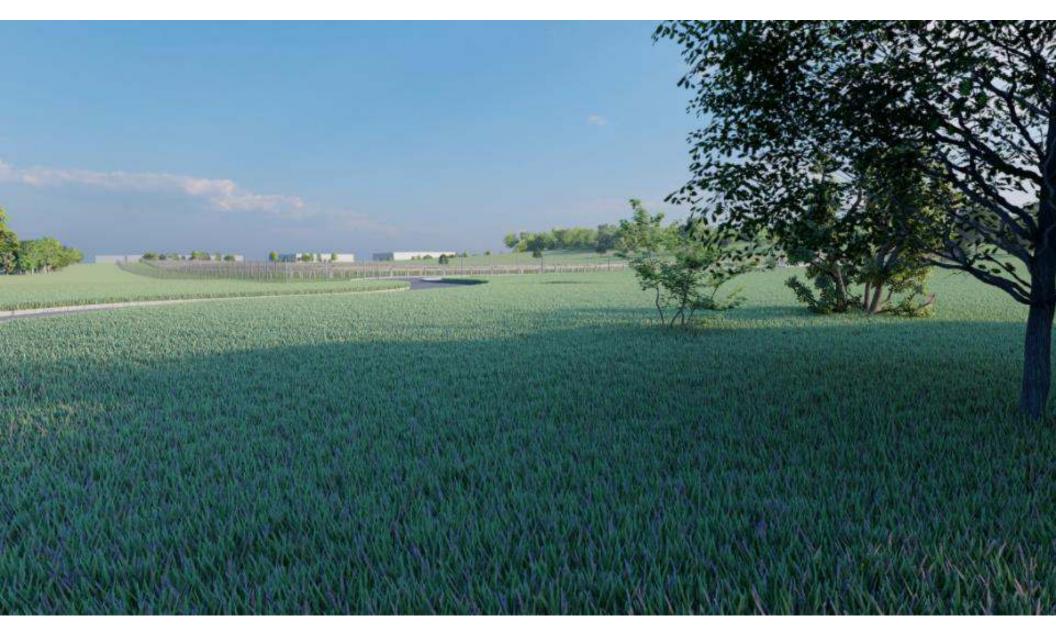
October 31, 2022



Area Map with "Viewpoints"



Viewpoint #1, Existing Vegetation Only



Viewpoint #2, Existing Vegetation Only



Viewpoint #3, Existing Vegetation Only



Viewpoint #4, Existing Vegetation Only



Viewpoint #5, Existing Vegetation Only



Viewpoint #6, Existing Vegetation Only



Facility Decommissioning Plan

Shenvalee Solar Project

Augusta County, VA



Prepared for:
Augusta County
Community Development Department
18 Government Center Lane
Verona, VA 24482

Prepared by:
ConEdison Clean Energy Businesses
100 Summit Lake Drive, Suite 210
Valhalla, NY 10595

Preparation Date: 10/31/2022

Contents

Introduction	:
Project Components	
Access	4
Fencing and Racking	
Decommissioning Plan	[
Planning and Permitting	
Removal of PV Equipment	
Site Restoration	
Decommissioning Schedule	
Decommissioning Cost Breakdown	
Project Decommissioning Costs and Guarantee	

Introduction

ConEdison Clean Energy Businesses is developing a 3MWac solar photovoltaic (PV) power generating facility on two contiguous privately owned parcels (Tax Map No. 84-38 & 84-39), with an approximate project area of 26 acres. The project site is located at 265 Draft Avenue in Stuarts Draft, Augusta County, VA. The project is being developed under a Special Use Permit through Augusta County. The following decommissioning plan is proposed for compliance with the *Augusta County Zoning Ordinance, Article VI.D Section 25-70.10 for Small Solar Energy Systems*:

- 1. The applicant shall provide a detailed decommissioning plan that provides procedures and requirements for removal of all parts of the solar energy generation facility and its various structures at the end of the useful life of the facility or if it is deemed abandoned or unsafe. The plan shall include the anticipated life of the facility, the estimated overall cost of decommissioning the facility in current dollars, the methodology for determining such estimate, and the manner in which the project will be decommissioned. The decommissioning plan and the estimated decommissioning cost shall be updated every five (5) years, from the date of the certificate of occupancy or upon request of the Zoning Administrator; however, the updated costs shall be no more than twice every ten (10) years.
- 2. Prior to receiving a certificate of occupancy to begin operation, the applicant must provide security in the amount of the estimated cost of the decommissioning. Options for security shall include a cash escrow, a performance surety bond, or an irrevocable letter of credit. The security must remain valid until the decommissioning obligations have been met. The security may be adjusted up or down by the county if the estimated cost of decommissioning the facility changes. The security must be renewed or replaced, if necessary, to account for any changes in the total estimated cost of decommissioning if deemed by the updated estimates. Security is a mandatory condition of all conditional use permits for utility scale solar energy farms.
- 3. The decommissioning plan, cost estimates, and all updates to plans and estimates shall be sealed by a professional engineer licensed to do business in the Commonwealth of Virginia.

§19.6-97.6 Unsafe or Abandoned Projects; Decommissioning

If the utility scale solar energy facility is determined to be unsafe by the Building Official, then the facility shall be required to be repaired by the facility owner, site owner, or operator. Repairs shall be made in a timely manner as established by the Building Official. Should the repairs not be completed in the timeframe provided, then the owners or operators will be instructed to commence decommissioning in accordance with the approved decommissioning plan.

If the facility is not operated for a continuous period of twelve (12) months, then the county may notify the owner/operator by registered mail and provide forty-five (45) days for the owner/operator to respond. If no response is provided, then the owner/operator will be instructed to commence decommissioning in accordance with the approved decommissioning plan.

If the facility is abandoned, the owner/operator is required to notify the Zoning Administrator in writing.

Within one (1) year of the date of said notification, or if determined to be abandoned by the Zoning Administrator in accordance with the above subsections, then the county may pursue legal action to have the facility removed at the expense of the facility owner, site owner, or operator, each of whom shall be jointly and severally liable for the expense of removing or repairing the facility. The county may also call upon the decommissioning security to remove the facility.

This plan will outline the responsible party, timeframes, and an estimated cost for decommissioning and removal of the project facility in accordance with the Augusta County Zoning Ordinance. The cost estimate will be used to identify the guarantee shown in item 2, above.

Project Components

Photovoltaic power generating facilities consist of arrays of solar panels that convert solar radiation into direct current (DC) electricity. The Shenvalee Solar facility utilizes inverters to convert direct current into alternating current, which is then transferred to the power grid.

The Shenvalee Solar project will consist of solar photovoltaic modules. These modules will be attached to a low-profile, single-axis, tracking system. The racking system for the modules consists of "rammed post" techniques that allows for the installation of steel posts directly into the ground, which will eliminate the need for concrete footings. The facility will utilize different cabling techniques which include affixing to the underside of the PV panels, running cable tray or above ground cable systems, and utilizing direct buried conduit that connects the solar panels to the grid.

All of the PV modules will be mounted on their associated racking along the north/south axis, where the drive system will be utilized to rotate the panels based upon the orientation of the sun. Other electrical components on site, including inverters and transformers, are grouped in various sections of the arrays. Inverters are utilized to convert the direct current (DC) electricity to alternating current (AC) electricity. The transformers are utilized to step up the voltage of the alternating current electricity to match the electrical grid voltage. A medium voltage, underground AC circuit will connect the project transformers to the electrical grid.

Access

The proposed site access is via an approximately 180 linear foot paved extension of the existing Edgewood Lane, which has right-of-way intersecting the north end of the Project property (Tax Map No. 84-38). The balance of the proposed access road onsite will be a gravel roadway section to prevent vehicle rutting, erosion and minimize dust. This proposed access road will be a 20 feet wide gravel surface from entrance through the first hammerhead turnaround, and beyond into the array filed will narrow to a proposed 14 feet wide gravel surface. The access road will consist of gravel placed over a woven geotextile. The site access road provides access to the entire site and includes large radii to facilitate movement of vehicles and equipment. The perimeter of the site will contain fencing that will have access gates located at the entrance of the site along the access road.

The Shenvalee Solar facility will be unmanned locally—performance and project operations will be monitored daily from remote locations. The internal roads are designed to accommodate a vehicular load of 75,000 pounds and will be finished with an all-weather gravel surface.

Fencing and Racking

The proposed solar array racking will include rammed galvanized steel piles embedded into the ground. The steel piles will typically be embedded approximately 7 feet into the ground. The proposed access fence will be seven feet tall to ensure public safety and security. Access gates will be provided for vehicular access to the site.

Decommissioning Plan

When the project permanently ceases to operate, ConEdison Clean Energy Businesses (the "Owner") will perform decommissioning activities to remove all equipment and materials related to the operation of the solar energy facility to restore the property to its condition prior to construction of the facility.

Planning and Permitting

Given the timeframe for decommissioning and lifetime of the facility, government regulations at the time may require specific plans and permits to be in place prior to decommissioning of the solar energy facility. The owner will develop a comprehensive plan based upon this decommissioning plan to follow during decommissioning. The owner will be responsible for identifying and acquiring all local, state, and federal permits required for this work. The owner will identify subcontractor(s) and waste / recycling companies during the planning phase.

Removal of PV Equipment

- All PV modules will be removed and disposed of at a licensed disposal facility that recycles or safely deconstructs PV modules, if such a facility is available at the time or will be returned to the PV module supplier via any available take-back or manufacturer recycling program. If such recycling facility or take-back program is not available, PV modules will be disposed of according to all applicable laws and environmental standards.
- Above ground racking and support structures will be removed. All below ground piles will be removed entirely where practical. Any piles that cannot be practically pulled out will be cut three feet below grade, left in place, and covered. This will facilitate an agricultural use over top of the material.
- 3. All power collection equipment including cabling, combiner boxes, inverters, transformers, control cabinets, and switchgear will be removed from the site and disposed of at a licensed disposal facility or recycling facility.
- 4. Any underground cables buried at least 30" below grade will remain in place. All above ground cable will be removed from the site. This will allow any agricultural activities to resume on site.
- 5. All concrete foundation will be broken up and debris removed from the site.

Site Restoration

- 1. The site fence will be pulled out and removed from the site.
- Gravel access roads and staging areas will remain until all other materials have been removed from the site to facilitate decommissioning activities. Once equipment removal is concluded the road material will be removed from the site and replaced with fill. The fill will be graded to follow the contours of the site.
- 3. All stormwater management facilities will be returned to existing grade.
- 4. Any disturbed areas will be covered with a minimum of 2 inches of topsoil, which is consistent with the composition of the soil prior to construction of the project. Topsoil will be treated with fertilizers needed for establishment of vegetation and will be covered with grass seed and straw mulch.

Decommissioning Schedule

The intent of the project is to operate for 30-40 years. The project will lease the property for a term of up to 40 years. At the end of the lease term or if the facility does not generate electricity for a period of twelve (12) consecutive months, the owner will cease operation of the project and execute this decommissioning plan in accordance with the Augusta County Zoning Ordinance. The approximate duration of decommissioning will be three months.

Decommissioning Cost Breakdown

	Decomissio	ning Cost B	real	kdown	
Item	Quantity Units Unit Cost		Total		
	Disassemb	ly / Remov	al /	Demo	
Road Base Material	5,464	SY	\$	0.50	\$ 2,732.00
Concrete Pads	2	#	\$	1,050.00	\$ 2,100.00
Posts	1144	#	\$	8.00	\$ 9,152.00
Racking	104	# of rows	\$	11.00	\$ 1,144.00
Modules	8112	#	\$	1.00	\$ 8,112.00
Cable	118800	ft	\$	0.25	\$ 29,700.00
Transformers	2	#	\$	425.00	\$ 850.00
Inverters	24	#	\$	425.00	\$ 10,200.00
Pond Removal	1	#	\$	6,000.00	\$ 6,000.00
Seeding/Grading	1	LS	\$1	00.000.00	\$ 100,000.00
	Trucking	/ Hauling /	Disp	osal	
Road Base Material	81	Trucks	\$	700.00	\$ 56,700.00
Concrete	6	Trucks	\$	1,400.00	\$ 8,400.00
Posts	6	Trucks	\$	500.00	\$ 3,000.00
Racking	3	Trucks	\$	500.00	\$ 1,500.00
Modules	14	Trucks	\$	1,400.00	\$ 19,600.00
Cable	1	Trucks	\$	475.00	\$ 475.00
Transformers	2	Trucks	\$	500.00	\$ 1,000.00
Inverters	2	Trucks	\$	1,400.00	\$ 2,800.00
		Salvage			
Steel	125	Tons	\$	100.00	\$ 12,500.00
		Net Cost			
Disassembly / Removal / Demo			\$		169,990.00
Trucking / Hauling / Disposal			\$		93,475.00
Decomissioning Management (10%)					26,346.50
Salv	age		\$		(12,500.00)
To	tal		\$		277,311.50

Project Decommissioning Costs and Guarantee

The Augusta County Zoning Ordinance requires a financial assurance guarantee to be put into place prior to the issuance of a building permit for decommissioning. The guarantee must be comprised of one or more of the following: a cash escrow, a performance surety bond, or an irrevocable letter of credit. The cost estimate for decommissioning shall be updated every five years by the owner of the Shenvalee Solar facility to adjust for inflation and current market prices. When this estimate is updated, the amount of the guarantee will be adjusted for the revised cost. The county may adjust the security based on changes to the estimated decommissioning cost.

ForgeSolar Cookie Policy

This site uses cookies to enable tool usage and functionality, to collect anonymous information regarding site usage, and to recognize your repeat visits and preferences.

To learn more about our policies, view the ForgeSolar Privacy Policy. By clicking "I Accept" on this banner, or by using this site, you

consent to the use of cookies unless you have disabled them.

I Accept



ForgeSolar

Shenvalee SV-Layout_R2

Created Oct. 13, 2022 Updated Oct. 13, 2022 Time-step 1 minute Timezone offset UTC-5 Site ID 77534.13599

Project type Advanced Project status: active Category 1 MW to 5 MW



Misc. Analysis Settings

DNI: varies (1,000.0 W/m^2 peak)
Ocular transmission coefficient: 0.5
Pupil diameter: 0.002 m Eye focal length: 0.017 m Sun subtended angle: 9.3 mrad

Analysis Methodology: **Version 2**Enhanced subtended angle calculation: **On**

Summary of Results No glare predicted!

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
PV array 1	SA tracking	SA tracking	0	0	-

Component Data

PV Array(s)

Total PV footprint area: 21.6 acres

Name: PV array 1 Footprint area: 21.6 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 0.0 deg
Ground Coverage Ratio: 0.4

Rated power: -

Panel material: Smooth glass without AR coating Vary reflectivity with sun position? Yes Correlate slope error with surface type? Yes Slope error: 6.55 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.026014	-79.040437	1405.13	0.00	1405.13
2	38.025954	-79.035609	1420.13	0.00	1420.13
3	38.024015	-79.035582	1398.53	0.00	1398.53
4	38.024091	-79.040072	1403.75	0.00	1403.75

Route Receptor(s)

Name: Flory Ave Route type Two-way View angle: 50.0 deg



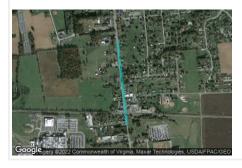
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.023163	-79.033185	1396.89	0.00	1396.89
2	38.022899	-79.035969	1396.02	0.00	1396.02
3	38.022910	-79.036036	1394.62	0.00	1394.62
4	38.022954	-79.036092	1393.74	0.00	1393.74
5	38.023046	-79.036193	1393.59	0.00	1393.59

Name: Harold Cook Dr Route type Two-way View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.019984	-79.032701	1380.08	0.00	1380.08
2	38.019861	-79.033782	1378.71	0.00	1378.71
3	38.019842	-79.034112	1380.40	0.00	1380.40
4	38.019855	-79.035059	1387.19	0.00	1387.19
5	38.019847	-79.035418	1385.96	0.00	1385.96
6	38.019814	-79.035749	1385.74	0.00	1385.74
7	38.019814	-79.036082	1385.09	0.00	1385.09
8	38.019906	-79.036866	1381.30	0.00	1381.30
9	38.019929	-79.037506	1382.10	0.00	1382.10
10	38.020043	-79.037778	1381.86	0.00	1381.86
11	38.020433	-79.037759	1383.05	0.00	1383.05
12	38.020471	-79.037590	1381.91	0.00	1381.91
13	38.020472	-79.037186	1378.58	0.00	1378.58
14	38.020600	-79.036975	1381.75	0.00	1381.75
15	38.020805	-79.036890	1382.45	0.00	1382.45
16	38.022241	-79.036870	1396.41	0.00	1396.41
17	38.022404	-79.037015	1393.16	0.00	1393.16
18	38.022480	-79.037270	1394.52	0.00	1394.52
19	38.022543	-79.040614	1388.46	0.00	1388.46
20	38.022467	-79.040783	1386.75	0.00	1386.75
21	38.022307	-79.040855	1385.98	0.00	1385.98
22	38.021533	-79.040893	1387.62	0.00	1387.62
23	38.021479	-79.041027	1386.98	0.00	1386.98
24	38.021518	-79.043072	1389.49	0.00	1389.49
25	38.021597	-79.046008	1388.87	0.00	1388.87
26	38.021616	-79.047563	1388.30	0.00	1388.30
27	38.021758	-79.047794	1387.44	0.00	1387.44

Name: Rt 608 - Draft Ave Route type Two-way View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.028773	-79.033945	1419.81	0.00	1419.81
2	38.023821	-79.033241	1400.01	0.00	1400.01
3	38 023122	-79 N33132	1394 96	0.00	1394 96

Obstruction Components

Name: Ex. Building - NE of project area Upper edge height: 25.0 ft



Vertex	Latitude	Longitude	Ground elevation
	deg	deg	ft
1	38.027098	-79.033865	1403.13
2	38.026895	-79.033829	1403.34

Name: Ex. tree line and Bldg - South of railroad Upper edge height: 25.0 ft



Vertex	Latitude	Longitude	Ground elevation
	deg	deg	ft
1	38.023726	-79.034040	1399.75
2	38.023694	-79.033324	1401.42
3	38.023199	-79.033244	1399.02

Name: Ex. Tree line - North Upper edge height: 30.0 ft



Vertex	Latitude	Longitude	Ground elevation
	deg	deg	ft
1	38.028412	-79.037453	1441.26
2	38.026050	-79.037072	1419.14
3	38.026160	-79.035763	1427.58

Name: Ex. Trees and building - NE of project area Upper edge height: 25.0 ft



Vertex	Latitude	Longitude	Ground elevation
	deg	deg	ft
1	38.027451	-79.033866	1408.38
2	38.027393	-79.034459	1415.50
3	38.027317	-79.034556	1416.82
4	38.027041	-79.034494	1412.05
5	38.026943	-79.035570	1433.95
6	38.026819	-79.035570	1434.82
7	38.026648	-79.035436	1433.14
8	38.026468	-79.035328	1429.52
9	38.026506	-79.034966	1426.47
10	38.026696	-79.034832	1423.07

Name: Ex. Trees and Buildings - East of Project area Upper edge height: 25.0 ft



Vertex	Latitude	Longitude	Ground elevation
	deg	deg	ft
1	38.025295	-79.034371	1408.41
2	38.024809	-79.034272	1407.60
3	38.024843	-79.034068	1406.54
4	38.024724	-79.033988	1407.42
5	38.024640	-79.033969	1407.14
6	38.024703	-79.033468	1404.05
7	38.023913	-79.033352	1399.80
8	38.023970	-79.034425	1403.01
9	38.024646	-79.034264	1405.10

Name: Ex. Trees and Dwellings - East of Project Area Upper edge height: 25.0 ft



Vertex	Latitude	Longitude	Ground elevation
	deg	deg	ft
1	38.026337	-79.033953	1409.22
2	38.026282	-79.034562	1405.11
3	38.026282	-79.034256	1403.07
4	38.025887	-79.034149	1405.12
5	38.025775	-79.034954	1409.73
6	38.025597	-79.034945	1409.11
7	38.025534	-79.035114	1408.42
8	38.025633	-79.034025	1406.85
9	38.025344	-79.033999	1404.16
10	38.025358	-79.033586	1403.35

Name: Ex. Trees - South of project area Upper edge height: 20.0 ft



Vertex	Latitude	Longitude	Ground elevation	
	deg	deg	ft	
1	38.024150	-79.046700	1405.38	
2	38.023893	-79.034630	1401.59	

Summary of PV Glare Analysis

PV configuration and total predicted glare

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced	Data File
	deg	deg	min	min	kWh	
PV array 1	SA tracking	SA tracking	0	0	-	

PV & Receptor Analysis Results

Results for each PV array and receptor

PV array 1 no glare found

Component	Green glare (min)	Yellow glare (min)
Route: Flory Ave	0	0
Route: Harold Cook Dr	0	0
Route: Rt 608 - Draft Ave	0	0

No glare found

Assumptions

- Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
- Glare analyses do not automatically account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographic obstructions.
- Detailed system geometry is not rigorously simulated.
- The glare hazard determination relies on several approximations including observer eye characteristics, angle of view, and typical blink response time. Actual values and results may vary.

 The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling
- methods.
 Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints
- Additional analyses of array sub-sections can provide additional information on expected glare.
- The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent subarrays can provide more information on potential glare hazards. (See previous point on related limitations.)
- Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.

 Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
- · Refer to the Help page for detailed assumptions and limitations not listed here.



LEGEND

Project Area (51 acres)

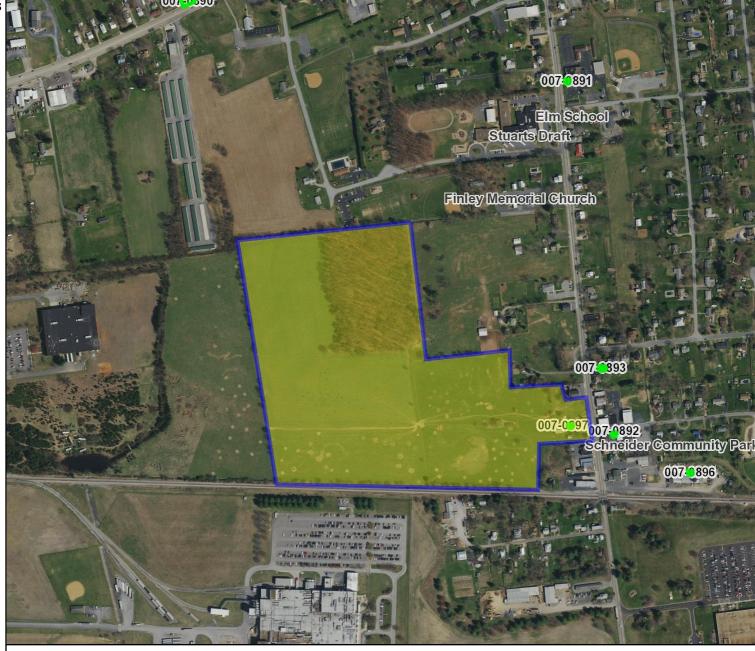
- Culvert
- Data Point
- Non-Jurisdictional Ditch (15 linear feet)

Virginia Dept. of Historic Resources

Virginia Cultural Resource Information System

Legend

- Architecture Resources Architecture Labels
- **Individual Historic District Properties**
- Archaeological Resources Archaeology Labels
- **DHR** Easements
- **USGS GIS Place names**
- **County Boundaries**





Feet

200 400 600 800 1:9,028 / 1"=752 Feet

Title: Date: 1/11/2021

DISCLAIMER:Records of the Virginia Department of Historic Resources (DHR) have been gathered over many years from a variety of sources and the representation depicted is a cumulative view of field observations over time and may not reflect current ground conditions. The map is for general information purposes and is not intended for engineering, legal or other site-specific uses. Map may contain errors and is provided "as-is". More information is available in the DHR Archives located at DHR's Richmond office.

Notice if AE sites: Locations of archaeological sites may be sensitive the National Historic Preservation Act (NHPA), and the Archaeological Resources Protection Act (ARPA) and Code of Virginia §2.2-3705.7 (10). Release of precise locations may threaten archaeological sites and historic resources.