

**GENERAL NOTES**

1. THE SUBJECT PROPERTY IS ZONED RR-DEO, PER THE 2013 COMPREHENSIVE ZONING PLAN.
2. THE PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED. AT THIS TIME, NO DESIGN MANUAL WAIVERS ARE ANTICIPATED. THERE ARE NO VARIANCES ASSOCIATED WITH THIS PROJECT.
3. THE EXISTING TOPOGRAPHY SHOWN HEREON IS BASED ON HOWARD COUNTY GIS.
4. THE PROJECT BOUNDARY IS BASED ON A ALTA SURVEY PREPARED BY LANDTECH CORPORATION, FIELD DATE AUGUST 2021, PREPARED SEPTEMBER 2021.
5. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM.
6. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE WETLAND AND WETLAND BUFFERS AND STREAM AND STREAM BUFFERS.
7. THERE ARE THREE PERENNIAL STREAMS ON-SITE. THERE IS ONE NON-TIDAL PALUSTRINE FORESTED WETLAND SYSTEM ON-SITE. SEE WETLAND DELINEATION REPORT PREPARED BY WRIGHT ENVIRONMENTAL & LAND SERVICES, LLC (AUGUST 2021).
8. THERE IS NO FEMA 100 YEAR FLOODPLAIN LOCATED ON-SITE.
9. NO PARKS, PRESERVES OR PUBLIC OPEN SPACES ARE LOCATED WITHIN THE PROJECT SITE.
10. NO STEEP SLOPES OVER 20,000SF ARE CONTIGUOUS ON-SITE.
11. FOREST CONSERVATION OBLIGATIONS FOR THIS PROJECT SHALL BE ADDRESSED BY A FOREST CONSERVATION PLAN SUBMITTED WITH THE SITE DEVELOPMENT PLAN.
12. WETLANDS SHOWN ON-SITE ARE BASED ON ENVIRONMENTAL REPORT BY WRIGHT ENVIRONMENTAL & LAND SERVICES, LLC.
13. GEOTECHNICAL INVESTIGATIONS SHALL BE COMPLETED AND SUBMITTED WITH THE FUTURE SITE DEVELOPMENT PLAN.
14. A NOISE STUDY IS NOT REQUIRED FOR THIS SITE.
15. TO THE BEST OF THE OWNERS KNOWLEDGE, THERE ARE NO BURIAL GROUNDS, CEMETERIES, OR HISTORIC STRUCTURES LOCATED ON THIS PROPERTY.
16. STORMWATER MANAGEMENT FOR THE PROJECT IS PROVIDED BY THE USE OF NON-STRUCTURAL PRACTICES IN ACCORDANCE WITH ENVIRONMENTAL SITE DESIGN CRITERIA. NON-STRUCTURAL PRACTICES INCLUDE NON ROOFTOP DISCONNECTION (N-2). THESE FACILITIES WILL BE PRIVATELY OWNED AND MAINTAINED.
17. APPROVAL OF THIS ENVIRONMENTAL CONCEPT PLAN (ECP) DOES NOT CONSTITUTE AN APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED SUBDIVISION PLAN/PLAT AND/OR SITE DEVELOPMENT PLAN AND/OR RED-LINE REVISION PROCESS.
18. APPROVAL OF THIS ENVIRONMENTAL CONCEPT PLAN (ECP) BY THE HOWARD SOIL CONSERVATION DISTRICT DOES NOT GRANT APPROVAL OF THE PROPOSED SEDIMENT CONTROL SCHEME. THE SITE DEVELOPMENT PLAN SHALL INCLUDE A SEQUENCE OF CONSTRUCTION WHICH SHALL DETAIL SEDIMENT AND EROSION CONTROLS AND PHASING AND ADDRESS THE PROJECT TEMPORARY STORMWATER MANAGEMENT REQUIREMENTS.
19. ISOLATED SURFACE SMOOTHING AND/OR FINE GRADING MAY BE REQUIRED TO SUPPORT SOLAR EQUIPMENT INSTALLATION. HOWEVER, NO MASS GRADING WILL BE REQUIRED. ISOLATED FINE GRADES WILL BE PROVIDED WITH THE SITE DEVELOPMENT PLAN SUBMISSION, AS REQUIRED.
20. THIS PLAN INCORPORATES THE LIMIT OF DISTURBANCE FOR THE SOLAR PROJECT. THE AREAS OUTSIDE THE LIMIT OF DISTURBANCE ARE NOT INCLUDED IN THE ECP.
21. THIS PROJECT SITE IS ASSOCIATED WITH THE FOLLOWING DPZ FILES: SDP-96-124, WP-21-018, BA-07-018C, BA-21-006C

# ENVIRONMENTAL CONCEPT PLAN

PREPARED FOR

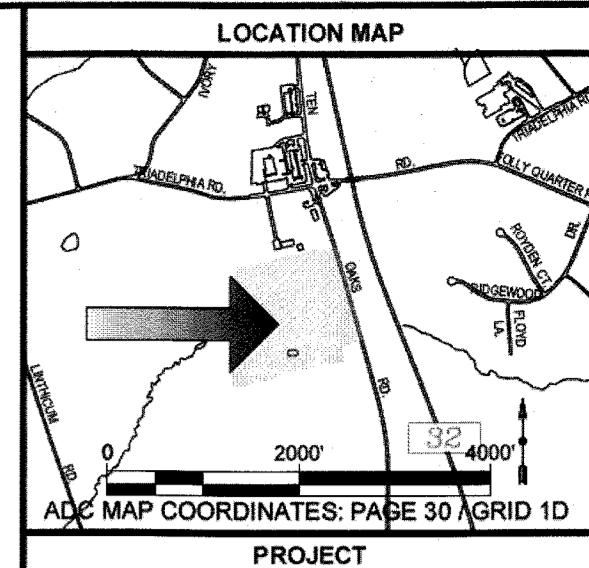
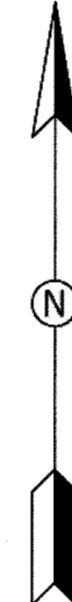
# TEN OAKS SOLAR

## GROUND MOUNT SOLAR COLLECTOR FACILITY

3950 TEN OAKS ROAD  
HOWARD COUNTY, MARYLAND



VICINITY MAP  
SCALE 1" = 600'  
ADC MAP COORDINATES: PAGE 30 / GRID 1D



**TEN OAKS SOLAR**  
1.99MWac

**SITE LOCATION INFORMATION**  
3950 TEN OAKS ROAD  
GLENELG, MD 21737  
HOWARD COUNTY  
PARCEL 201  
TAX MAP 22 BLOCK 14  
5TH ELECTION DISTRICT  
DEED L 2221 F. 618  
ZONED RR-DEO

**SITE OWNER INFORMATION**  
JACK COOGAN FYOCK JR  
13705 TRIADELPHIA ROAD  
GLENELG, MD 21737

**REVISION LIST**

DATE	REVISION
09/29/2021	LAYOUT REVISION
10/06/2021	REVISION PER SITE VISIT
10/27/2021	PER COUNTY COMMENTS
12/27/2021	FINAL COUNTY COMMENTS

**PROJECT INFORMATION**

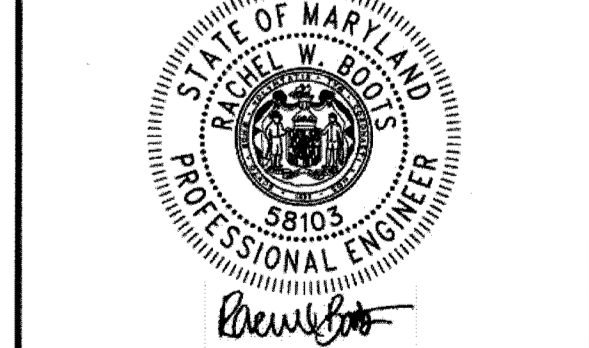
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Project Longitude	-76.984413
Utility Name	BG&E
Min. Ambient Temperature	40°C
Max. Ambient Temperature	0°C
Meter Number	Open

**ARRAY 1**

Module Name	Longi 445W
Inverter	Sungrow 125
Tilt Angle	25
No. of Modules	6240
DC String Length	26
No. of Strings	240



**COMPANY CONTACT INFO**  
COMPANY NAME: Community Power Group  
COMPANY ADDRESS: 5636 Connecticut Ave #42729 Washington, DC 20015  
COMPANY PHONE: 202-844-6423  
EMAIL: mborkowski@communitypowergroup.com



**PROFESSIONAL CERTIFICATE**  
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.  
LICENSE NO. 58103  
EXPIRATION DATE: 08-15-2023  
NAME: RACHEL BOOTS  
ADDRESS: 5636 CONNECTICUT AVE NW #42729 WASHINGTON, DC 20015  
PHONE NUMBER: 202-844-6423

**SHEET NAME**  
**COVER SHEET**  
**C100**  
1 OF 6

**PROJECT NARRATIVE**

THIS PROJECT INCLUDES THE CONSTRUCTION OF A 1.99 MEGAWATT (AC) SOLAR FACILITY IN HOWARD COUNTY, MARYLAND. THE EXISTING SITE IS A CLEARED FIELD, PREVIOUSLY USED AS A TREE FARM. THE PURPOSE OF THIS PLAN IS TO SHOW HOW NATURAL AREAS WILL BE PRESERVED AND HOW ENVIRONMENTAL SITE DESIGN MAY BE ACHIEVED DURING THE CONSTRUCTION AND OPERATION OF THIS PROJECT. FULL SITE DEVELOPMENT PLAN (SDP) TO BE PROVIDED AT A LATER DATE. THIS PLAN SET IS FOR PERMITTING PURPOSES ONLY.

THERE ARE ENVIRONMENTAL FEATURES LOCATED ON THE WESTERN SIDE OF THE SITE, OUTSIDE THE LIMITS OF DISTURBANCE OF THE PROPOSED PROJECT. THE ENVIRONMENTAL FEATURES INCLUDE WETLANDS, WETLAND BUFFERS, STREAMS, STREAM BUFFERS, AND A FOREST STAND. SEE ASSOCIATED WETLAND DELINEATION REPORT AND FOREST STAND DELINEATION REPORT PREPARED BY WRIGHT ENVIRONMENTAL & LAND SERVICES, LLC (DATED AUGUST 2021).

THE SITE NATURALLY SLOPES FROM EAST TO WEST. THE SITE HAS BEEN DESIGNED TO MAINTAIN THE NATURAL DRAINAGE PATTERNS, WITH NO CHANGES TO NATURAL DRAINAGE PATTERN.

THE CONCEPTUAL REDUCTION IN IMPERVIOUS AREA THROUGH BETTER SITE DESIGN IS ACHIEVED THROUGH THE ENVIRONMENTAL SITE DESIGN (ESD) FOR THIS PROJECT TO THE MAXIMUM EXTENT PRACTICABLE (MEP). THE RESULTS OF THE ENVIRONMENTAL SITE DESIGN FOR THIS PROJECT WILL REFLECT WOODS IN GOOD CONDITION. THE ESD CONCEPT INCLUDES THE USE OF NON ROOFTOP DISCONNECTION (N-2). THE EXISTING POND (PER SDP-96-124) IS TO REMAIN AND IN NOT IMPACTED BY THESE IMPROVEMENTS. PROPOSED PRACTICES HAVE BEEN MAXIMIZED TO THE EXTENT PRACTICAL. THE CALCULATED RAINFALL TARGET (PE) FOR THIS PROJECT IS 1.0".

SEDIMENT CONTROL FOR THIS SPECIFIC SITE PLAN WILL BE PROVIDED THROUGH THE USE OF PROPOSED SLT FENCE PERIMETER CONTROLS. SEDIMENT CONTROL SHALL BE IN ACCORDANCE WITH CURRENT REQUIREMENTS AND SHALL BE APPROVED BY THE HOWARD SOIL CONSERVATION DISTRICT DURING THE FUTURE SITE DEVELOPMENT PLAN PHASE OF THE PROJECT.

THIS PROJECT SITE IS ASSOCIATED WITH THE FOLLOWING DPZ FILES: SDP-96-124, SDP-07-199, WP-21-018, BA-07-018C, BA-21-006C

**SHEET INDEX**

COVER SHEET	C100	1 OF 6
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PRELIMINARY SWM PLAN	C202	5 OF 6
DETAILS	C203	6 OF 6

**SITE ANALYSIS DATA SHEET**

TOTAL PROJECT AREA	8.8± ACRES
GREEN OPEN AREA (LAWN)	8.83± ACRES
IMPERVIOUS AREA	0.07± ACRES
PROPOSED SITE USES	SOLAR FACILITY (+ EX. TREE FARM TO REMAIN)
TOTAL SITE AREA	33.211 ACRES
WETLANDS AND WETLAND BUFFERS	11,266 SF (0.2584 ACRES); ALL OUTSIDE OF PROJECT LIMITS
STREAMS AND STREAM BUFFERS	2,642 LF; ALL OUTSIDE OF PROJECT LIMITS
FLOODPLAINS	NONE
EXISTING FOREST	5.15 ACRES; ALL OUTSIDE OF PROJECT LIMITS
SLOPES GREATER THAN 15%	7,299± SF
HIGHLY ERODIBLE SOILS	7,299± SF

**LEGEND**

--- PARCEL BOUNDARY	--- EX. CENTERLINE
--- PROJECT ZONING OFFSET	--- OHW EX. OVER-HEAD WIRE
--- STREAM CENTERLINE	--- DRAINAGE AREA BOUNDARY
--- STREAM BUFFER	--- PROPOSED P-1 PAVEMENT
--- CONTOUR	--- SLOPE > 25%
--- EX. METAL FENCE	--- SLOPE > 15%
--- INTERCONNECTION PATH	--- SLOPE > 5%
--- PROPOSED UTILITY POLE	--- SOILS BOUNDARY
--- TRANSFORMER PAD	--- EXISTING TREELINE
--- SOILS BOUNDARY	--- EVERGREEN TREE
--- EXISTING TREELINE	--- DEODOUOUS TREE
--- EXISTING WETLAND	--- WETLAND BUFFER
--- WETLAND BUFFER	--- LIMITS OF DISTURBANCE
--- LIMITS OF DISTURBANCE	--- PROPOSED FENCE
--- PROPOSED FENCE	--- EXISTING FOREST CONSERVATION AREA
--- EXISTING FOREST CONSERVATION AREA	--- EASEMENT



APPROVED: DEPARTMENT OF PLANNING AND ZONING  
  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION *MB* 1/21/22  
 DATE

CHIEF, DIVISION OF LAND DEVELOPMENT *MB* 1/21/22  
 DATE

DEVELOPER/ENGINEER  
COMMUNITY POWER GROUP, LLC  
5636 CONNECTICUT AVENUE NW #42729  
WASHINGTON, DC 20015  
CONTACT: MICHAEL BORKOWSKI  
MBORKOWSKI@COMMUNITYPOWERGROUP.COM

OWNER  
JACK COOGAN FYOCK JR  
13705 TRIADELPHIA ROAD  
GLENELG, MD 21737

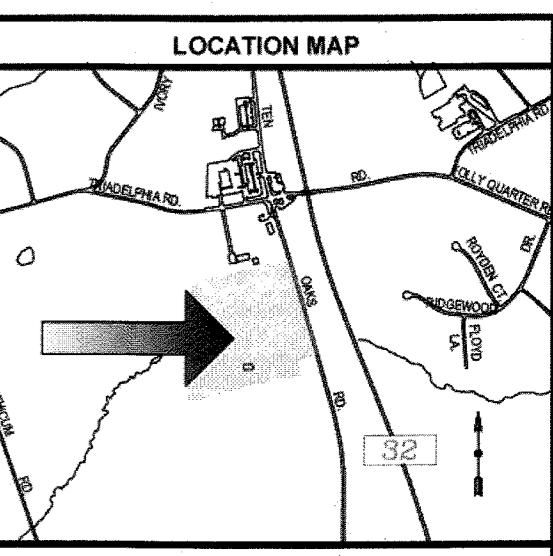
**ECP-22-013**





### LEGEND

--- PARCEL BOUNDARY	--- EX. CENTERLINE
--- PROJECT ZONING OFFSET	--- O-HW EX. OVERHEAD WIRE
--- STREAM CENTERLINE	--- EX. CENTERLINE
--- STREAM BUFFER	--- EX. CENTERLINE
--- CONTOUR	--- EX. CENTERLINE
--- EX. METAL FENCE	--- EX. CENTERLINE
--- INTERCONNECTION PATH	--- EX. CENTERLINE
--- PROPOSED UTILITY POLE	--- EX. CENTERLINE
--- TRANSFORMER PAD	--- EX. CENTERLINE
--- SOILS BOUNDARY	--- EX. CENTERLINE
--- EXISTING TREELINE	--- EX. CENTERLINE
--- EXISTING WETLAND	--- EX. CENTERLINE
--- WETLAND BUFFER	--- EX. CENTERLINE
--- LIMITS OF DISTURBANCE	--- EX. CENTERLINE
--- PROPOSED FENCE	--- EX. CENTERLINE
--- EXISTING FOREST CONSERVATION AREA	--- EX. CENTERLINE
--- EASEMENT	--- EX. CENTERLINE



## TEN OAKS SOLAR 1.99MWac

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 GLENELG, MD 21737  
 HOWARD COUNTY  
 PARCEL 201  
 TAX MAP 22 BLOCK 14  
 5TH ELECTION DISTRICT  
 DEED L. 2221 F. 618  
 ZONED RR-DEO

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### EXISTING CONDITIONS NARRATIVE

THIS PLAN REFERENCES THE ALTA SURVEY PREPARED BY LANDTECH CORPORATION, DATED 8/19/2021. SEE BELOW LEGAL DESCRIPTION AND EXCEPTIONS AS REFERENCED ON THE SURVEY.

### LEGAL DESCRIPTION

SITUATED IN THE STATE OF MARYLAND, COUNTY OF HOWARD, AND IN THE FIFTH ELECTION DISTRICT:  
 BEGINNING FOR THE SAME AT THE CORNERPOST OF THE EXISTING FENCE HERETOFORE SET ON THE WESTERN MARGIN OF THE FORTY-FOOT WIDE RIGHT OF WAY OF THE COUNTY ROAD NOW KNOWN AS THE TEN OAKS ROAD, THE SAID POINT BEING AT 1230.27 FEET ON THE FIRST OR SOUTH 14-1/2' EAST 150 PERCHES LINE OF THAT LAND, THE LAND HEREIN DESCRIBED BEING A PART THEREOF, WHICH BY DEED DATED DECEMBER 29, 1925, AND RECORDED AMONG THE LAND RECORDS OF HOWARD COUNTY IN LIBER NO. 125, FOLIO 518, ETC., WAS GRANTED AND CONVEYED BY CATHERINE E. GRIFFIN AND HUSBAND TO JOHN J. FYOCK AND WIFE, AND RUNNING WITH THE SAID ROAD MARGIN AND WITH A PART OF THE SAID FIRST LINE TO THE END THEREOF, AS NOW SURVEYED,

- (1) SOUTH 07° 41' 55" EAST 1244.73 FEET TO AN IRON PIPE HERETOFORE SET, THENCE LEAVING THE SAID ROAD AND RUNNING WITH THE SECOND, THIRD AND A PART OF THE FOURTH LINES OF THE SAID LAND,
- (2) NORTH 84° 55' 58" WEST 416.35 FEET TO A STONE HERETOFORE SET,
- (3) SOUTH 83° 04' 37" WEST 1036.39 FEET TO A STONE HERETOFORE SET,
- (4) NORTH 10° 04' 54" EAST 1292.57 FEET TO AN IRON PIPE NOW SET, THENCE WITH A LINE OF DIVISION NOW MADE,
- (5) NORTH 85° 13' 12" EAST 792.14 FEET TO AN IRON PIPE HERETOFORE SET AT THE END OF THE FIRST OR SOUTH 81° 55' WEST 289.09 FOOT LINE OF THAT LAND, WHICH BY DEED DATED MAY 23, 1962, AND RECORDED AMONG THE SAID LAND RECORDS IN LIBER NO. 383, FOLIO 500, ETC., WAS GRANTED AND CONVEYED BY JOHN J. FYOCK, ET AL., TO JACK FYOCK, THENCE RUNNING REVERSELY WITH THE SAID FIRST LINE,
- (6) NORTH 85° 13' 12" EAST 289.09 FEET TO THE POINT OF THE BEGINNING, CONTAINING 34.326 ACRES OF LAND, MORE OR LESS.

SAVING AND EXCEPTING:  
 BEGINNING FOR THE SAME AT AN IRON PIPE NOW SET ON THE WESTERN MARGIN OF THE FORTY FOOT WIDE RIGHT OF WAY OF THE COUNTY ROAD KNOWN AS THE TEN OAKS ROAD, THE SAID POINT BEING AT 1233 FEET ON THE SECOND OR SOUTH 12 WEST 150 PERCHES LINE OF THAT LAND, THE LAND HEREIN DESCRIBED BEING A PART THEREOF, WHICH BY DEED DATED DECEMBER 29, 1925, AND RECORDED AMONG THE LAND RECORDS OF HOWARD COUNTY IN LIBER NO. 125, FOLIO 518, WAS GRANTED AND CONVEYED BY CATHERINE E. GRIFFIN AND HUSBAND TO JOHN J. FYOCK AND ETHEL FYOCK, HIS WIFE, AND RUNNING WITH A PART OF THE SAID SECOND LINE, AS NOW SURVEYED,

- (1) NORTH 84 DEGREES 55' 58" WEST 256.37 FEET TO AN IRON PIPE NOW SET, THENCE LEAVING THE SAID OUTLINE AND RUNNING WITH TWO LINES OF DIVISION NOW MADE,
- (2) NORTH 07 DEGREES 41' 55" WEST 166.01 FEET TO AN IRON PIPE NOW SET,
- (3) NORTH 82 DEGREES 18' 05" EAST 250.00 FEET TO AN IRON PIPE NOW SET ON THE AFOREMENTIONED ROAD MARGIN, THENCE RUNNING WITH THE SAID ROAD MARGIN,
- (4) SOUTH 07 DEGREES 41' 55" EAST 222.66 FEET TO THE POINT OF THE BEGINNING, CONTAINING 48,584 SQUARE FEET OF LAND.

### FEMA FLOOD ZONE NOTE

THE PROPERTY SHOWN HEREON LIES IN ZONE X, AN AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN AS SHOWN ON FIRM PANEL 85 OF 236, COMMUNITY PANEL NUMBER 240270082 WITH AN EFFECTIVE DATE OF NOVEMBER 6, 2013, WHICH IS THE CURRENT F.I.R.M. FOR THE COMMUNITY IN WHICH SAID PROPERTY IS SITUATED.

### SCHEDULE B, PART II EXCEPTIONS

- THE SURVEY WAS PREPARED IN ACCORDANCE WITH A TITLE REPORT PREPARED BY STEWART TITLE GUARANTY COMPANY, COMMITMENT FILE NUMBER 21000330944-01 WITH AN EFFECTIVE DATE OF JULY 1, 2021. WE OFFER THE FOLLOWING RESPONSE TO THE SURVEY RELATED ITEMS IN SCHEDULE B-SECTION 2 THEREOF AS FOLLOWS:
- RIGHT OF WAY IN FAVOR OF THE STATE ROAD COMMISSION OF MARYLAND, ACTING FOR THE STATE OF MARYLAND, RECORDED DECEMBER 28, 1932 IN LIBER NO. 145, FOLIO 41, OFFICIAL RECORDS, HOWARD COUNTY, MARYLAND, PROVIDES THE CURRENT RIGHT OF WAY OF TEN OAKS ROAD.
  - MAINTENANCE AGREEMENT IN FAVOR OF HOWARD COUNTY, MARYLAND, A BODY CORPORATE AND POLITIC, RECORDED MARCH 10, 1997 IN LIBER NO. 3929, FOLIO 49, OFFICIAL RECORDS, HOWARD COUNTY, MARYLAND, EFFECTS SUBJECT PROPERTY STORMWATER MANAGEMENT FACILITY SHOWN HEREON.
  - RIGHT OF WAY AGREEMENT IN FAVOR OF BALTIMORE GAS AND ELECTRIC COMPANY, RECORDED JUNE 6, 2001 IN LIBER NO. 5515, FOLIO 170, OFFICIAL RECORDS, HOWARD COUNTY, MARYLAND, EFFECTS SUBJECT PROPERTY NOT PLOTTABLE (SEE UTILITY LINES ALONG TEN OAKS ROAD).
  - EASEMENT IN FAVOR OF THE STATE ROAD COMMISSION OF MARYLAND, DATED OCTOBER 10, 1932, NOT FOUND OF RECORD IN THE OFFICIAL RECORDS, HOWARD COUNTY, MARYLAND, HOWEVER, IS BEING REFLECTED ON PLAT NO. 538 LOCATED ON THE STATE OF MARYLAND HIGHWAY MAPS WEBSITE PROVIDES THE CURRENT TEN OAKS ROAD RIGHT OF WAY SHOWN HEREON.

**PROJECT INFORMATION**

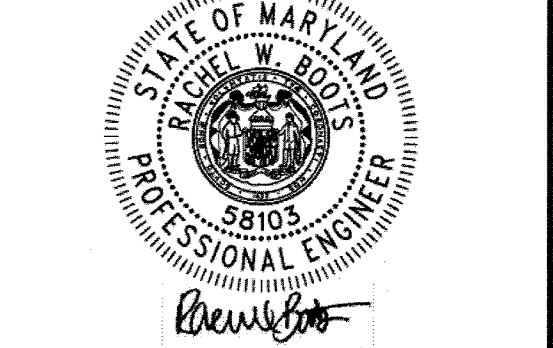
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Project Longitude	-76.984413
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Max. Ambient Temperature	0°C
Meter Number	Open

**ARRAY 1**

Module Name	Longi 445W
Inverter	Sungrow 125
Tilt Angle	25
No. of Modules	6240
DC String Length	26
No. of Strings	240



**COMPANY CONTACT INFO**  
 COMPANY NAME: Community Power Group  
 COMPANY ADDRESS: 5636 Connecticut Ave #42729 Washington, DC 20015  
 COMPANY PHONE: 202-844-6423  
 EMAIL: mborkowski@communitypowergroup.com



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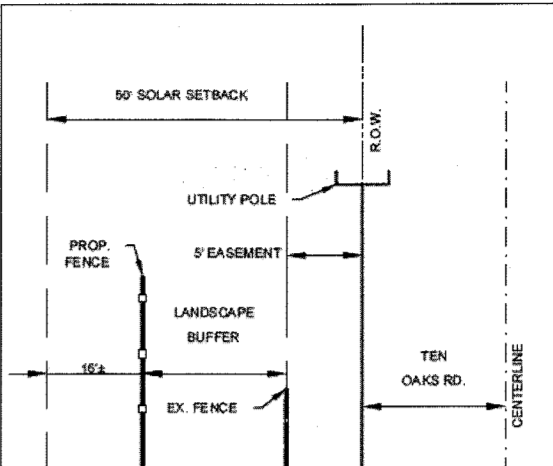
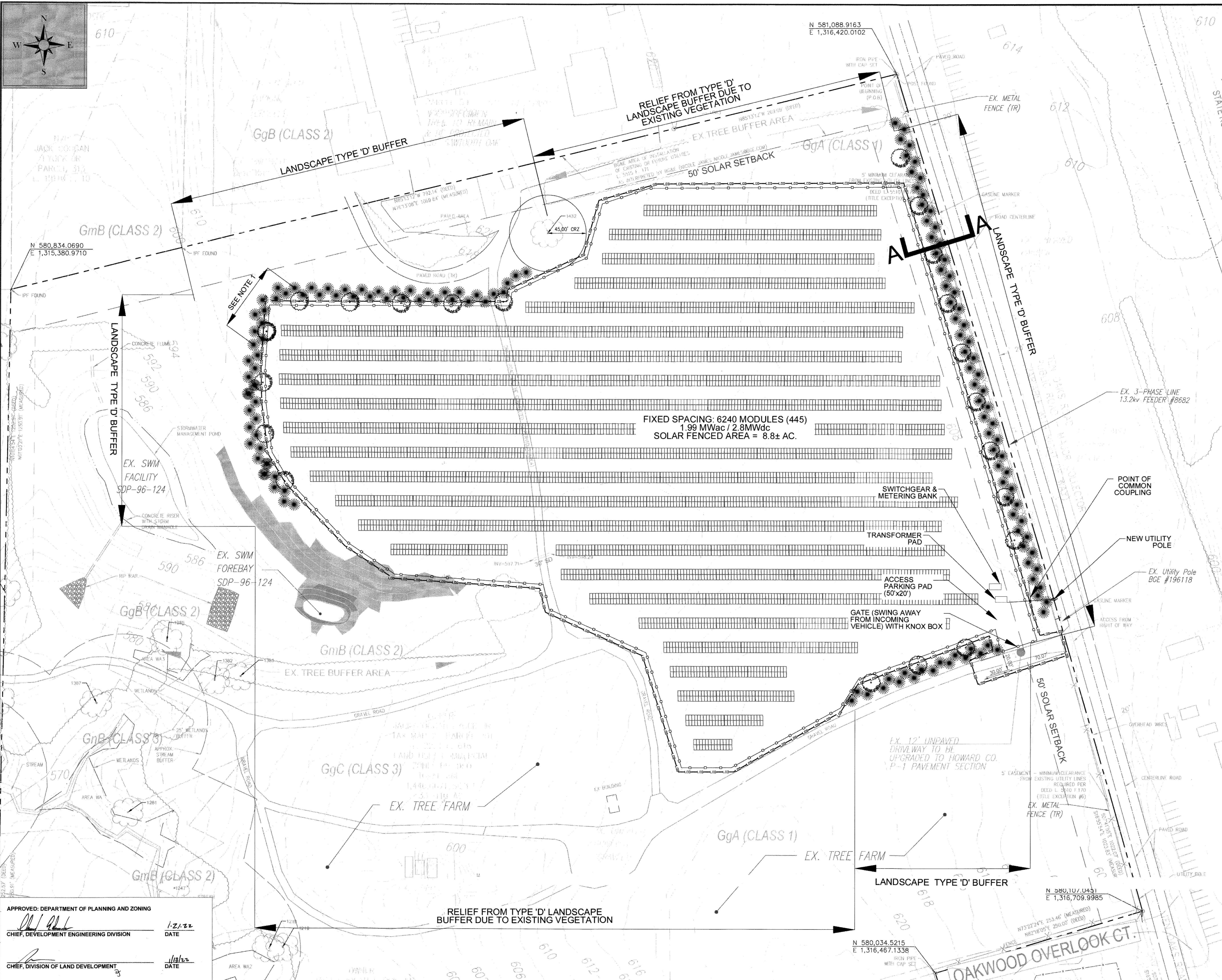
## EXISTING CONDITIONS C101

SCALE 1" = 100' DATE 8/31/2021

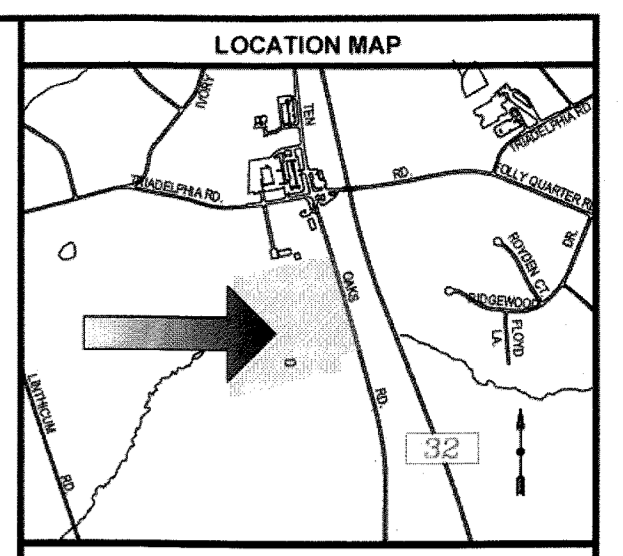
APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 [Signature]  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 DATE 1/21/22  
 [Signature]  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 DATE 1/12/22

ECP-22-013





**CROSS SECTION A-A**  
N.T.S.



**PROJECT**  
**TEN OAKS SOLAR**  
**1.99MWac**

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NAME: RACHEL BOOTS  
 ADDRESS: 8608 CONNECTICUT AVE NW #42729  
 WASHINGTON, DC 20015  
 PHONE NUMBER: 202-844-6423

**SHEET NAME**  
**CONCEPT PLAN C200**  
 SCALE: 1" = 50'  
 DATE: 8/31/2021  
**ECP-22-013** 3 OF 6

**APPROVED: DEPARTMENT OF PLANNING AND ZONING**

DATE: 1/21/22

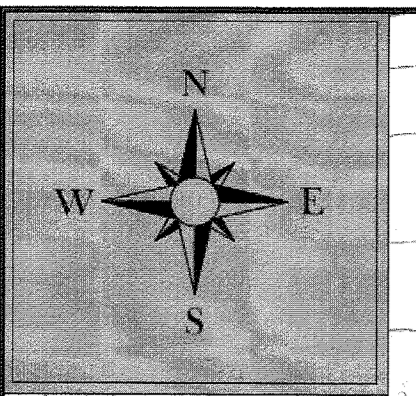
DATE: 1/18/22

**LEGEND**

(Symbol)	PROJECT ZONE BOUNDARY	(Symbol)	EX. CONCRETE
(Symbol)	EXISTING UTILITY	(Symbol)	EX. METAL FENCE (TR)
(Symbol)	PROPOSED UTILITY	(Symbol)	EX. FENCE
(Symbol)	EXISTING ROAD	(Symbol)	EXISTING ROAD
(Symbol)	PROPOSED ROAD	(Symbol)	EXISTING ROAD
(Symbol)	EXISTING ROAD	(Symbol)	EXISTING ROAD
(Symbol)	EXISTING ROAD	(Symbol)	EXISTING ROAD
(Symbol)	EXISTING ROAD	(Symbol)	EXISTING ROAD

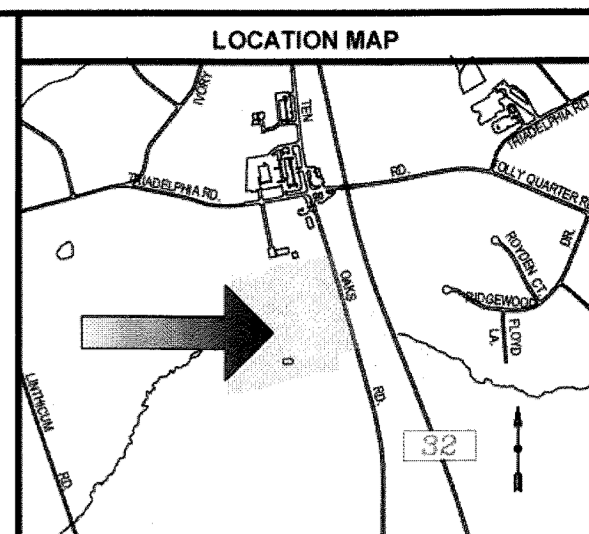
**ECP-22-013**





SOILS LEGEND				
SYMBOL	NAME/DESCRIPTION	GROUP	K FACTOR	PERCENT OF SITE
GgA	Glenn loam, 0 to 3 percent slopes	B	0.3700	19.70%
GgB	Glenn loam, 3 to 8 percent slopes	B	0.3700	69.50%
GgC	Glenn loam, 8 to 15 percent slopes	B	0.3700	7.70%
GmB	Greenville silt loam, 3 to 6 percent slopes	C/D	0.5500	3.10%

Notes:  
 1. SOIL INFORMATION HAS BEEN TAKEN FROM THE USDA NRCS WEB SOIL SERVICE  
 2. HIGHLY ERODIBLE SOILS ARE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR 'K' GREATER THAN 0.35 AND A SLOPE GREATER THAN 5 PERCENT.



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10/27/2021	PER COUNTY COMMENTS
12/27/2021	FINAL COUNTY COMMENTS

**PROJECT INFORMATION**

Project Latitude	39.259388
Project Longitude	-76.984413
Utility Name	BG&E
Min. Ambient Temperature	40°C
Max. Ambient Temperature	0°C
Meter Number	Open

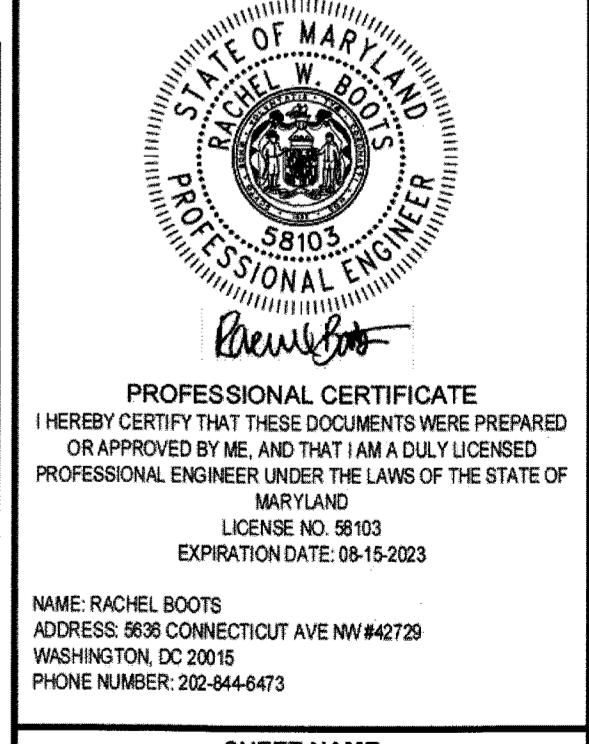
**ARRAY 1**

Module Name	Longi 445W
Inverter	Sungrow 125
Tilt Angle	25
No. of Modules	6240
DC String Length	26
No. of Strings	240

**COMPANY LOGO**

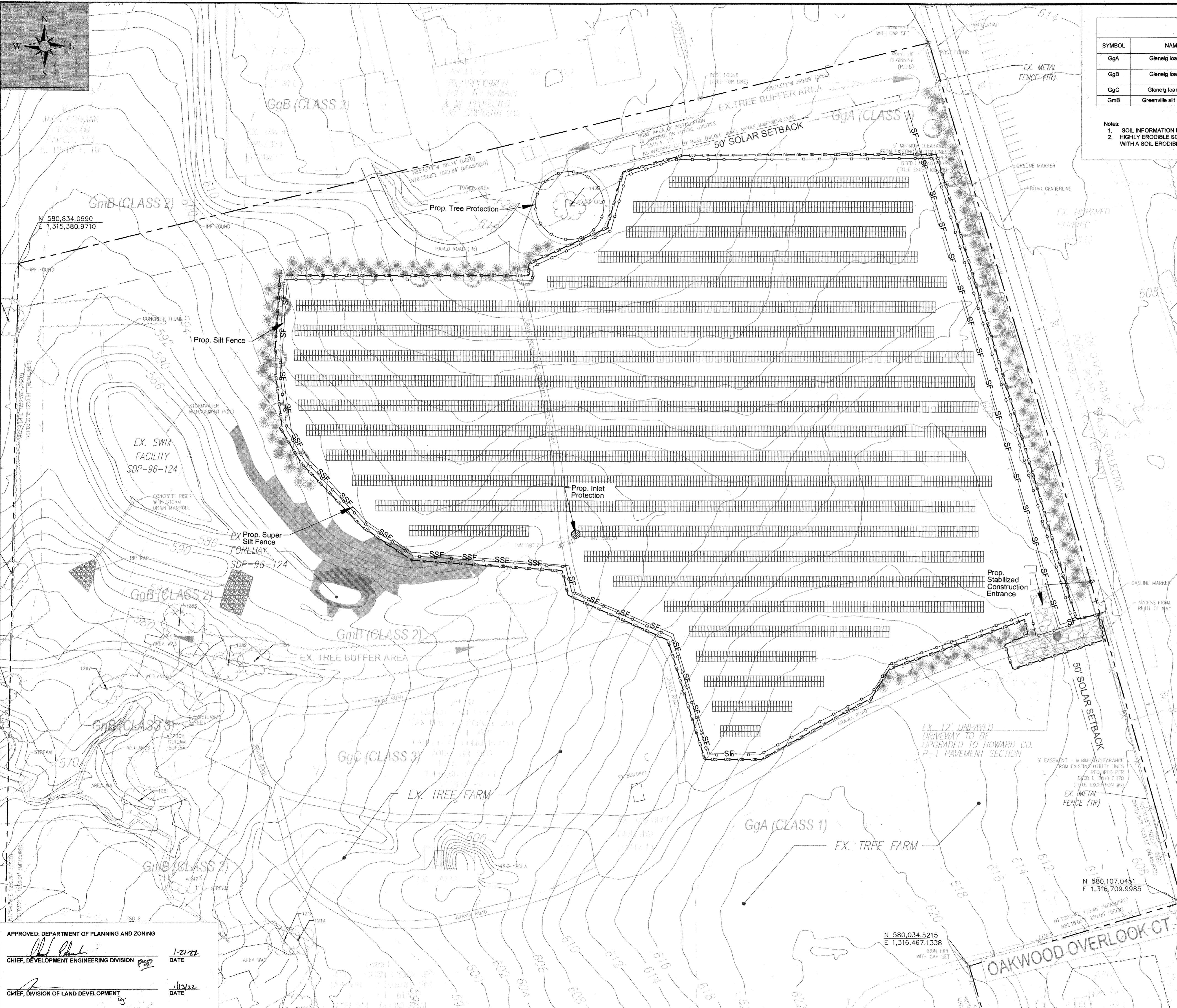
**COMPANY CONTACT INFO**  
 COMPANY NAME: Community Power Group  
 COMPANY ADDRESS: 5636 Connecticut Ave #42729 Washington, DC 20015  
 COMPANY PHONE: 202-844-6423  
 EMAIL: mborkowski@communitypowergroup.com

**PROFESSIONAL CERTIFICATE**  
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND  
 LICENSE NO. 58103  
 EXPIRATION DATE: 08-15-2023  
 NAME: RACHEL BOOTS  
 ADDRESS: 8638 CONNECTICUT AVE NW #42729 WASHINGTON, DC 20015  
 PHONE NUMBER: 202-844-6423



## PRELIMINARY ESC PLAN C201

SCALE 1" = 50' DATE 8/31/2021



- EROSION AND SEDIMENT CONTROL NOTES:**
- SILT FENCE IS TO BE REPLACED WITH SUPER SILT FENCE AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR.
  - SILT FENCE SHALL BE CURLED UPHILL NO MORE THAN 35 FEET APART.
  - DOUBLE ROWS OF SUPER SILT FENCE SHALL BE INSTALLED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR.
  - THE EXISTING GRAVEL ROAD WITHIN THE PROJECT AREA IS TO BE REMOVED. CONTRACTOR TO SCARIFY THE EXISTING SURFACE. CONTRACTOR TO UNIFORMLY DISTRIBUTE THE PROPOSED GROUND COVER OVER THIS AREA TO SUPPORT THE CONVERSION OF THIS AREA TO PVIOUS COVER.

- HSCD NOTES:**
- APPROVAL OF THIS ENVIRONMENTAL CONCEPT PLAN (ECP) BY THE HOWARD SOIL CONSERVATION DISTRICT DOES NOT GRANT APPROVAL OF THE PROPOSED SEDIMENT CONTROL SCHEME.
- THE SITE DEVELOPMENT PLAN SHALL INCLUDE A SEQUENCE OF CONSTRUCTION WHICH SHALL DETAIL SEDIMENT AND EROSION CONTROLS AND PHASING.
  - THE PROJECT SHALL ADDRESS ANY TEMPORARY STORMWATER MANAGEMENT REQUIREMENTS.
  - THE FINAL PLAN SUBMISSION SHALL PROVIDE A DRAINAGE AREA MAP SPECIFIC TO THE CHOSEN SEDIMENT CONTROLS.
  - NO MASS GRADING PROPOSED WITHIN PROJECT BOUNDARY.

**ESC LEGEND**

SSF	SSF	SUPER SILT FENCE
SF	SF	SILT FENCE
[Tree Symbol]	[Tree Symbol]	TREE PROTECTION
[Diagonal Lines]	[Diagonal Lines]	INLET PROTECTION
[Stippled Area]	[Stippled Area]	STABILIZED CONSTRUCTION ENTRANCE

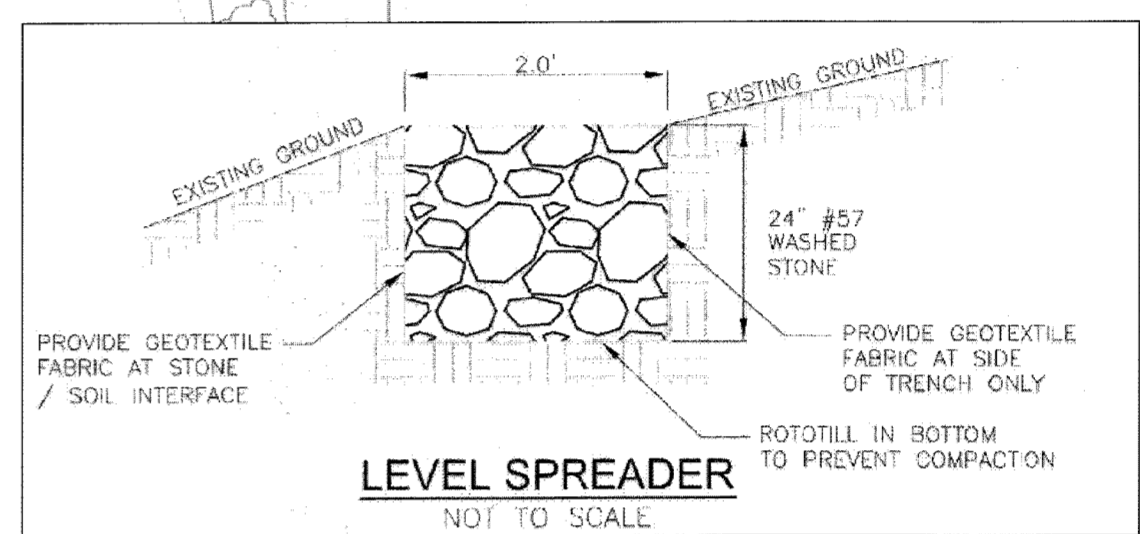
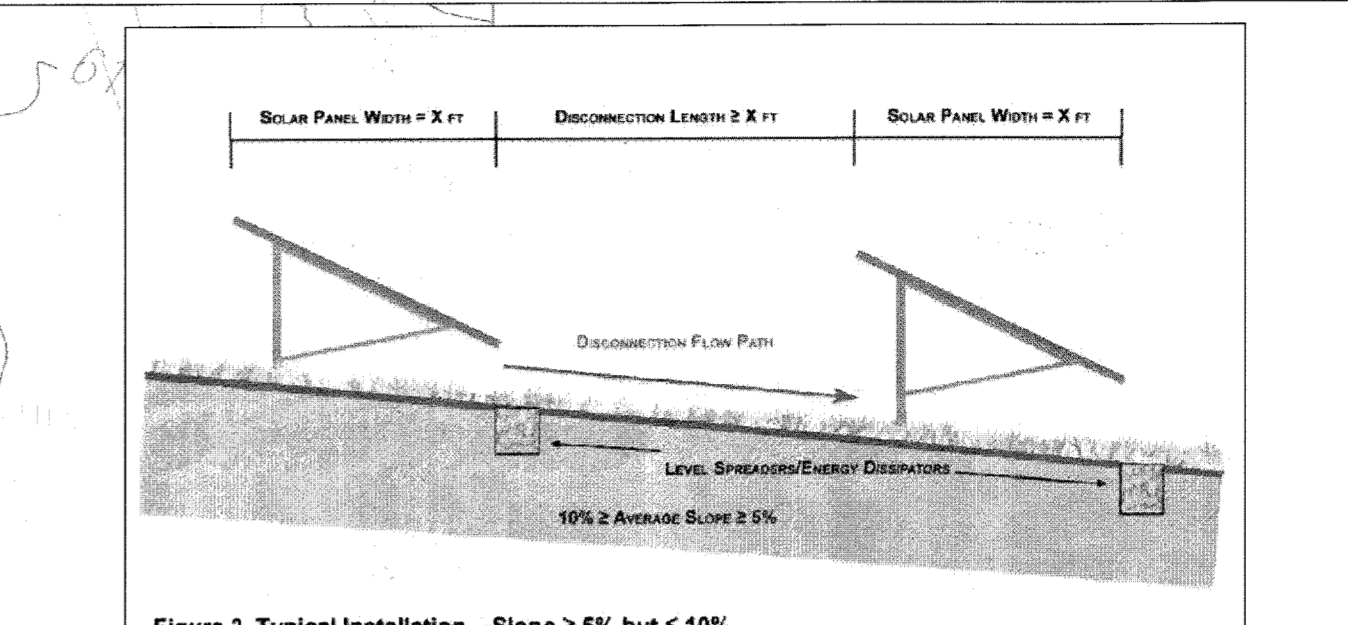
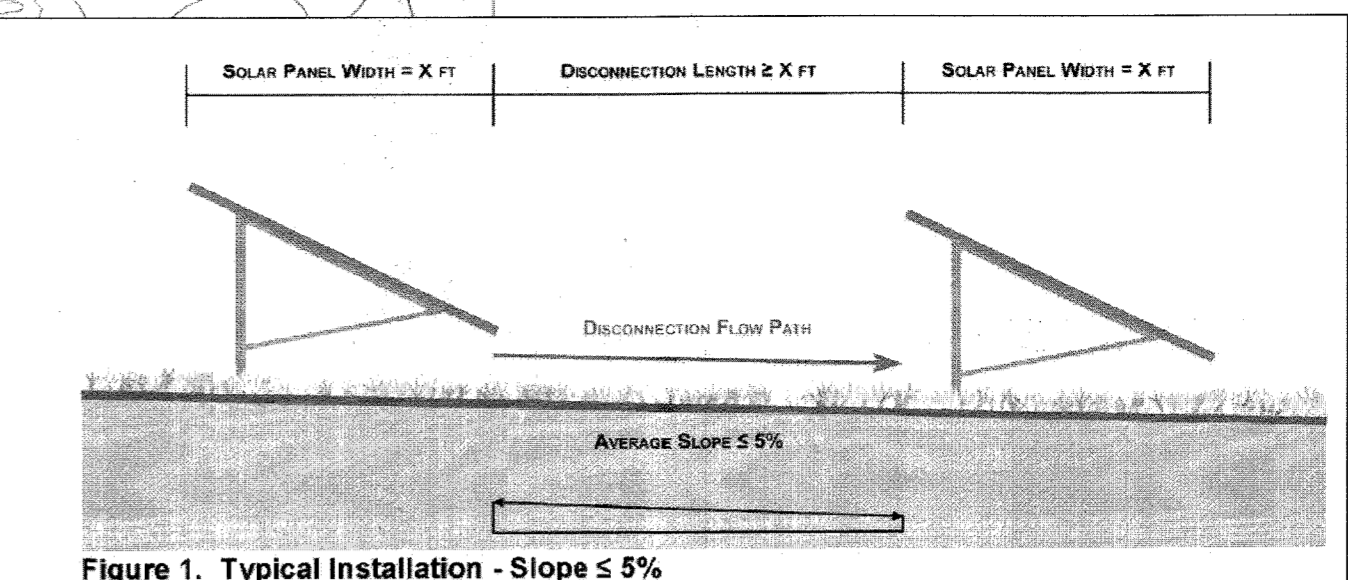
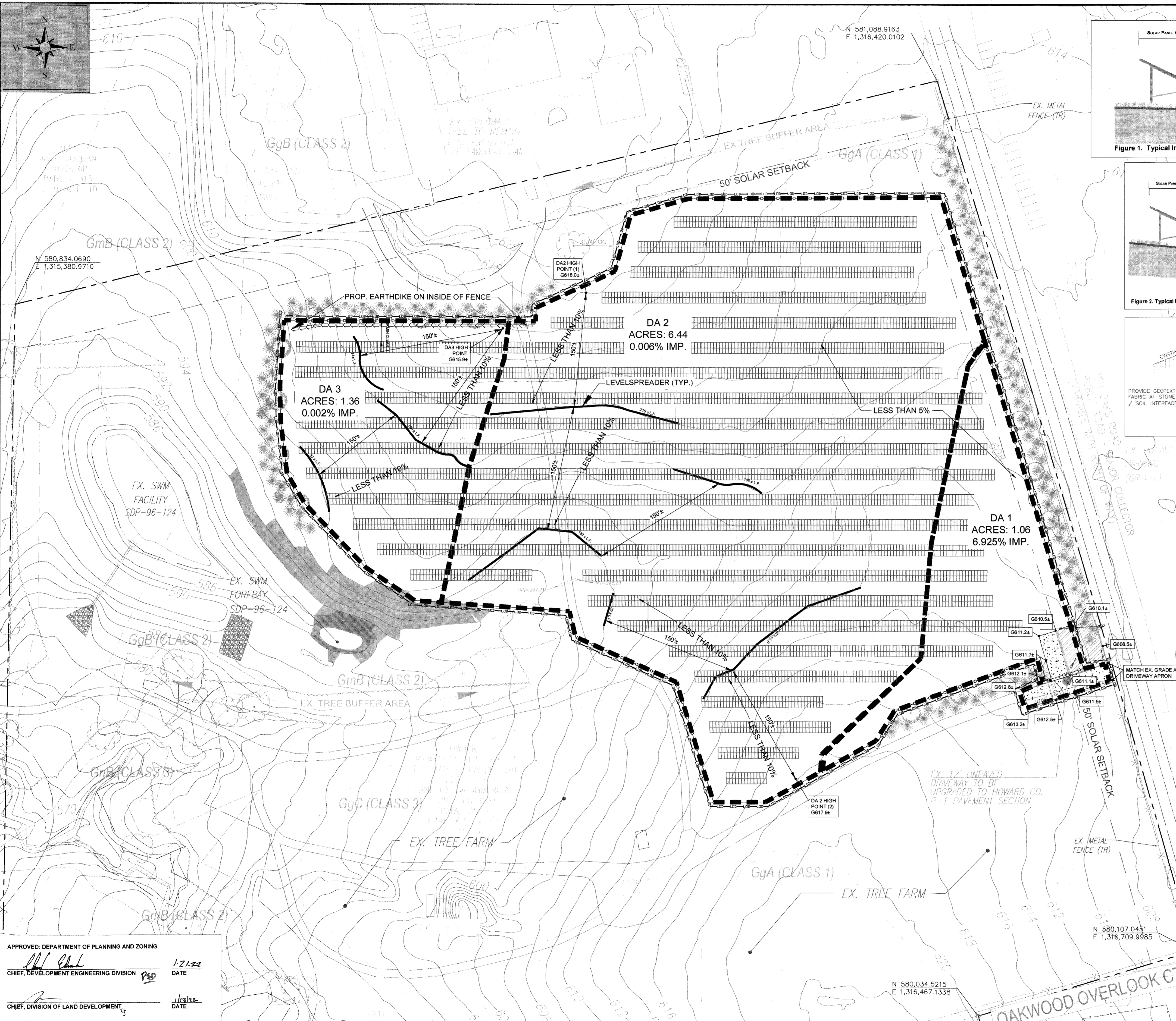
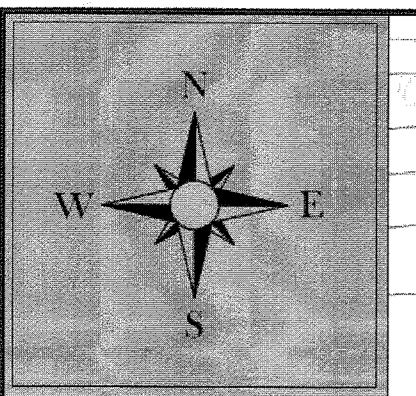
**LEGEND**

[Dashed Line]	PARCEL BOUNDARY	[Dashed Line]	EX. CENTERLINE
[Dotted Line]	PROJECT ZONING OFFSET	[Dashed Line]	EX. OVERHEAD WIRE
[Solid Line]	STREAM CENTERLINE	[Hatched Area]	DRAINAGE AREA BOUNDARY
[Dotted Line]	STREAM BUFFER	[Hatched Area]	PROPOSED P-1 PAVEMENT
[Dashed Line]	EX. METAL FENCE	[Hatched Area]	SLOPE > 25%
[Dashed Line]	INTERCONNECTION PATH	[Hatched Area]	SLOPE > 15%
[Circle]	PROPOSED UTILITY POLE	[Hatched Area]	SLOPE > 5%
[Square]	TRANSFORMER PAD	[Star Symbol]	EVERGREEN TREE
[Dotted Line]	SOILS BOUNDARY	[Circle]	DECIDUOUS TREE
[Dotted Line]	EXISTING TREELINE	[Circle]	EASEMENT
[Dotted Line]	EXISTING WETLAND		
[Dotted Line]	WETLAND BUFFER		
[Dotted Line]	LIMITS OF DISTURBANCE		
[Dotted Line]	PROPOSED FENCE		
[Dotted Line]	EXISTING FOREST CONSERVATION AREA		

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 DATE 1/21/22  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 DATE 1/31/22

ECP-22-013



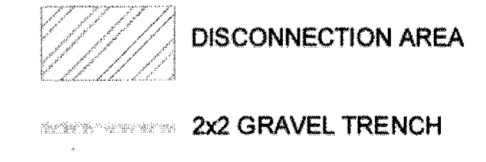


IMPERVIOUS AREA (SF)	DA	Soils
Driveway	3000.00	DA1 Soils A/B
Pads	196.00	DA1 Soils A/B
Poles	22.00	see chart
<b>Total</b>	<b>3218.00</b>	

Soil	Pole Area per DA (SF)		
	DA1	DA2	DA3
A/B	3.30	16.81	1.38
C/D	0.00	0.52	0.00

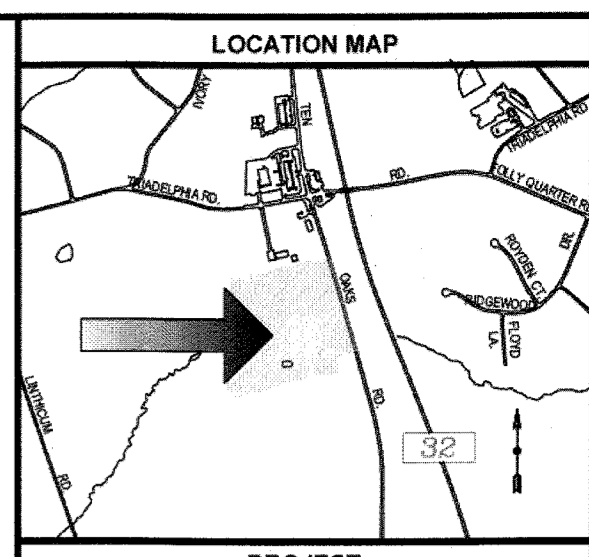
**STORMWATER MANAGEMENT NOTES AND DESIGN NARRATIVE**  
 BELOW IS A LIST TO DESCRIBE THE STORMWATER MANAGEMENT REQUIREMENTS AND ACHIEVEMENTS FOR THE SITE PER THE 2000 MARYLAND STORMWATER DESIGN MANUAL, VOLUMES I AND II AS AMENDED BY THE STORMWATER MANAGEMENT ACT OF 2007.

1. ENVIRONMENTALLY SENSITIVE AREAS HAVE BEEN AVOIDED.
2. THE NATURAL FLOW PATTERNS OF THE SITE HAVE BEEN MAINTAINED.
3. THE DESIGN INCORPORATES THE LEAST IMPERVIOUS AREA POSSIBLE.
4. ESD PLANNING TECHNIQUES AND PRACTICES HAVE BEEN IMPLEMENTED TO THE MAXIMUM EXTENT PRACTICABLE THROUGH THE USE OF NON-ROOFTOP (N-2) DISCONNECTS INCLUDING LEVEL SPREADERS IN AREAS EXCEEDING 5%.
5. NO DESIGN MANUAL WAIVERS OR WAIVER PETITIONS ARE BEING REQUESTED.
6. THE PROPOSED SOLAR AREAS WILL UTILIZE GRASSES, MEADOWS, OR APPROVED EQUIVALENT GROUND COVER SUCH THAT RUNOFF FROM THE SOLAR PANELS WILL FLOW INTO THE GRASSES.
7. ALL SOLAR EQUIPMENT IMPERVIOUS AREAS (CUMULATIVE SOLAR PANEL POLES), THE CONCRETE PADS, AND PAVED ACCESS DRIVEWAYS WILL BE TREATED VIA NON-ROOFTOP DISCONNECT (N-2).
8. GRADE SHOTS SHOWN FOR REFERENCE ONLY. MINIMUM 2% CROSSLOPE ON PROPOSED DRIVEWAY SURFACE DIRECTING RUNOFF TO DISCONNECTION AREA. NON-ROOFTOP DISCONNECT AREA TO MAINTAIN EXISTING SLOPES AS SHOWN (UNDER 5%).



**LEGEND**

---	PARCEL BOUNDARY	---	EX. CENTERLINE
---	PROJECT ZONING OFFSET	---	EX. OVERHEAD WIRE
---	STREAM CENTERLINE	---	EX. EXHAUST
---	STREAM BUFFER	---	EX. EXHAUST
---	DRAINAGE AREA BOUNDARY	---	EX. EXHAUST
---	CONTOUR	---	EX. EXHAUST
---	EX. METAL FENCE	---	EX. EXHAUST
---	INTERCONNECTION PATH	---	EX. EXHAUST
---	PROPOSED UTILITY POLE	---	EX. EXHAUST
---	TRANSFORMER PAD	---	EX. EXHAUST
---	SOILS BOUNDARY	---	EX. EXHAUST
---	EXISTING TRELIN	---	EX. EXHAUST
---	EXISTING WETLAND	---	EX. EXHAUST
---	WETLAND BUFFER	---	EX. EXHAUST
---	LIMITS OF DISTURBANCE	---	EX. EXHAUST
---	PROPOSED FENCE	---	EX. EXHAUST
---	EXISTING FOREST CONSERVATION AREA	---	EX. EXHAUST
---	EVERGREEN TREE	---	EX. EXHAUST
---	DECIDUOUS TREE	---	EX. EXHAUST
---	EASEMENT	---	EX. EXHAUST



**TEN OAKS SOLAR**  
**1.99MWac**

**SITE LOCATION INFORMATION**  
 3950 TEN OAKS ROAD  
 GLENELG, MD 21737  
 HOWARD COUNTY  
 PARCEL 201  
 TAX MAP 22 BLOCK 14  
 5TH ELECTION DISTRICT  
 DEED L. 2221 F. 618  
 ZONED RR-DEO

**SITE OWNER INFORMATION**  
 JACK COOGAN FYOCK JR  
 13706 TRIADAPHA ROAD  
 GLENELG, MD 21737

**REVISION LIST**

DATE	REVISION
09/29/2021	LAYOUT REVISION
10/06/2021	REVISION PER SITE VISIT
10/27/2021	PER COUNTY COMMENTS
11/17/2021	SLIP SHEET
11/24/2021	SLIP SHEET FOR APPROVAL
12/27/2021	FINAL COUNTY COMMENTS

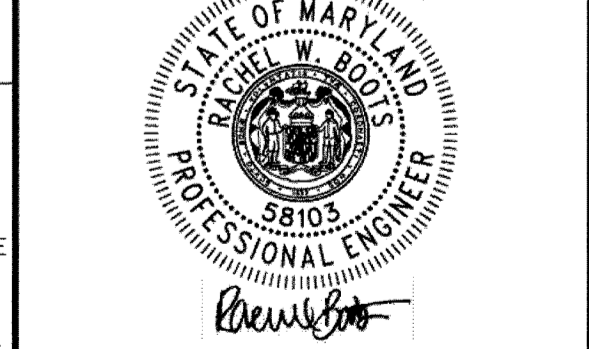
**PROJECT INFORMATION**  
 Project Latitude: 39.259388  
 Project Longitude: -76.984413  
 Utility Name: BG&E  
 Min. Ambient Temperature: 40°C  
 Max. Ambient Temperature: 0°C  
 Meter Number: Open

**ARRAY 1**

Module Name	Longi 445W
Inverter	Sungrow 125
Tilt Angle	25
No. of Modules	6240
DC String Length	26
No. of Strings	240



**COMPANY CONTACT INFO**  
 COMPANY NAME: Community Power Group  
 COMPANY ADDRESS: 5636 Connecticut Ave #42729 Washington, DC 20015  
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**PROFESSIONAL CERTIFICATE**  
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 LICENSE NO. 98103  
 EXPIRATION DATE: 08-15-2023  
 NAME: RACHEL BOOTS  
 ADDRESS: 5636 CONNECTICUT AVE NW #42729 WASHINGTON, DC 20015  
 PHONE NUMBER: 202-844-6423

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 [Signature]  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 DATE: 1/21/22  
 [Signature]  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 DATE: 1/21/22



SECTION NUMBER	ROAD AND STREET CLASSIFICATION	CALIFORNIA BEARING RATIO (CBR)												
		3 TO <3		5 TO <7		2.7		3 TO <5		5 TO <7		2.7		
P-1	PARKING DRIVE ASIDES: RESIDENTIAL AND NON-RESIDENTIAL PARKING DRIVE ASIDES: RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 2 HEAVY TRUCKS PER DAY	PAVEMENT MATERIAL (INCHES)		MIN. SUPERPAVE ASPHALT MIX WITH GAB		SUPERPAVE ASPHALT MIX WITH CONSTANT GAB								
		SUPERPAVE ASPHALT MIX FINAL SURFACE 9.5 MM PG 64-22S, LEVEL 1 (ESAL)		1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
		SUPERPAVE ASPHALT MIX INTERMEDIATE SURFACE (NA)		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		SUPERPAVE ASPHALT MIX BASE 18.0 MM PG 64-22S, LEVEL 1 (ESAL)		2.0	2.0	2.0	3.5	3.0	2.5	2.5	2.5	2.5	2.5	2.5
P-2	PARKING DRIVE ASIDES: RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 10 HEAVY TRUCKS PER DAY LOCAL ROADS: ACCESS PLACE, ACCESS STREET CUL-DE-SACS	SUPERPAVE ASPHALT MIX FINAL SURFACE 9.5 MM PG 64-22S, LEVEL 1 (ESAL)		1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		
		SUPERPAVE ASPHALT MIX INTERMEDIATE SURFACE 9.5 MM PG 64-22S, LEVEL 1 (ESAL)		1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	
		SUPERPAVE ASPHALT MIX BASE 18.0 MM PG 64-22S, LEVEL 1 (ESAL)		2.0	2.0	2.0	3.5	3.0	2.0	2.0	2.0	2.0	2.0	
		GRADED AGGREGATE BASE (GAB)		8.0	4.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
P-3	PARKING DRIVE ASIDES: RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 10 HEAVY TRUCKS PER DAY LOCAL ROADS: ACCESS PLACE, ACCESS STREET CUL-DE-SACS	SUPERPAVE ASPHALT MIX FINAL SURFACE 9.5 MM PG 64-22S, LEVEL 1 (ESAL)		1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		
		SUPERPAVE ASPHALT MIX INTERMEDIATE SURFACE 9.5 MM PG 64-22S, LEVEL 1 (ESAL)		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
		SUPERPAVE ASPHALT MIX BASE 18.0 MM PG 64-22S, LEVEL 1 (ESAL)		3.0	3.0	3.0	4.5	3.0	2.0	2.0	2.0	2.0	2.0	
		GRADED AGGREGATE BASE (GAB)		10.0	6.0	3.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
P-4	MINOR COLLECTORS: NON-RESIDENTIAL MAJOR COLLECTORS	SUPERPAVE ASPHALT MIX FINAL SURFACE 12.5 MM PG 64-22S, LEVEL 2 (LOW ESAL)		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		
		SUPERPAVE ASPHALT MIX INTERMEDIATE SURFACE 12.5 MM PG 64-22S, LEVEL 2 (LOW ESAL)		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		
		SUPERPAVE ASPHALT MIX BASE 19.0 MM PG 64-22S, LEVEL 2 (LOW ESAL)		4.0	4.0	3.0	6.0	5.0	3.0	3.0	3.0	3.0	3.0	
		GRADED AGGREGATE BASE (GAB)		13.0	7.0	4.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	

**NOTES**

- HEAVY TRUCKS ARE DEFINED AS THOSE WITH SIX (6) WHEELS OR MORE INCLUDING GARBAGE TRUCKS.
- SUPERPAVE ASPHALT MIX LAYERS SHALL BE PLACED IN APPROPRIATE COMPACTED LIFT THICKNESS: 19.0 MM BASE (2.0" MIN. TO 4.0" MAX.), 12.5 MM SURFACE (1.0" MIN. TO 3.0" MAX.), AND 9.5 MM SURFACE (1.0" MIN. TO 2.0" MAX.).
- GRADED AGGREGATE BASE (GAB) TO BE PLACED AND COMPACTED IN 4" MAX. COMPACTED THICKNESS LAYERS.
- THE INTERMEDIATE SURFACE COURSE LAYER MUST BE PLACED WITHIN 2 WEEKS OF PLACEMENT OF BASE COURSE, AND IS REQUIRED PRIOR TO SUBSTANTIAL COMPLETION INSPECTION AND BOND REDUCTION.
- IN LIEU OF PLACING THE INTERMEDIATE SURFACE COURSE LAYER FOR COMMERCIAL/INDUSTRIAL ENTRANCE APRONS WITHIN THE COUNTY RIGHT-OF-WAY WHERE AUXILIARY LANES ARE NOT REQUIRED, THE THICKNESS OF THE INTERMEDIATE PAVEMENT LAYER CAN BE ADDED TO THE REQUIRED THICKNESS OF THE BASE ASPHALT LAYER.
- THE CONSTRUCTION DRAWINGS SHALL SHOW THE PAVING SECTION, ROAD CLASSIFICATION AND CBR VALUE FOR EACH ROADWAY.

Howard County, Maryland  
Department of Public Works  
PAVING SECTIONS  
P-1 to P-4  
Detail  
R-2.01

**NOTE: GAB TO BE DETERMINED PRIOR TO CONSTRUCTION WITH RECEIPT OF THE GEOTECHNICAL REPORT.**

**MDE** Maryland Department of the Environment

**Stormwater Design Guidance – Solar Panel Installations**

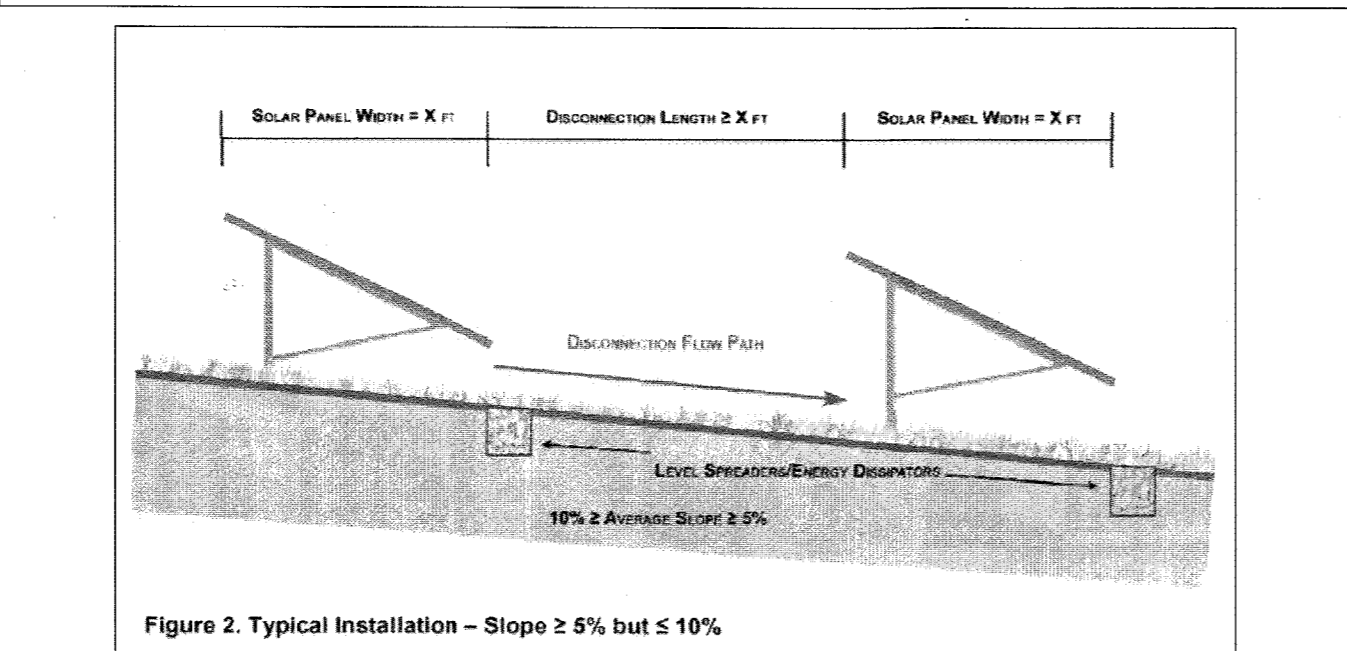
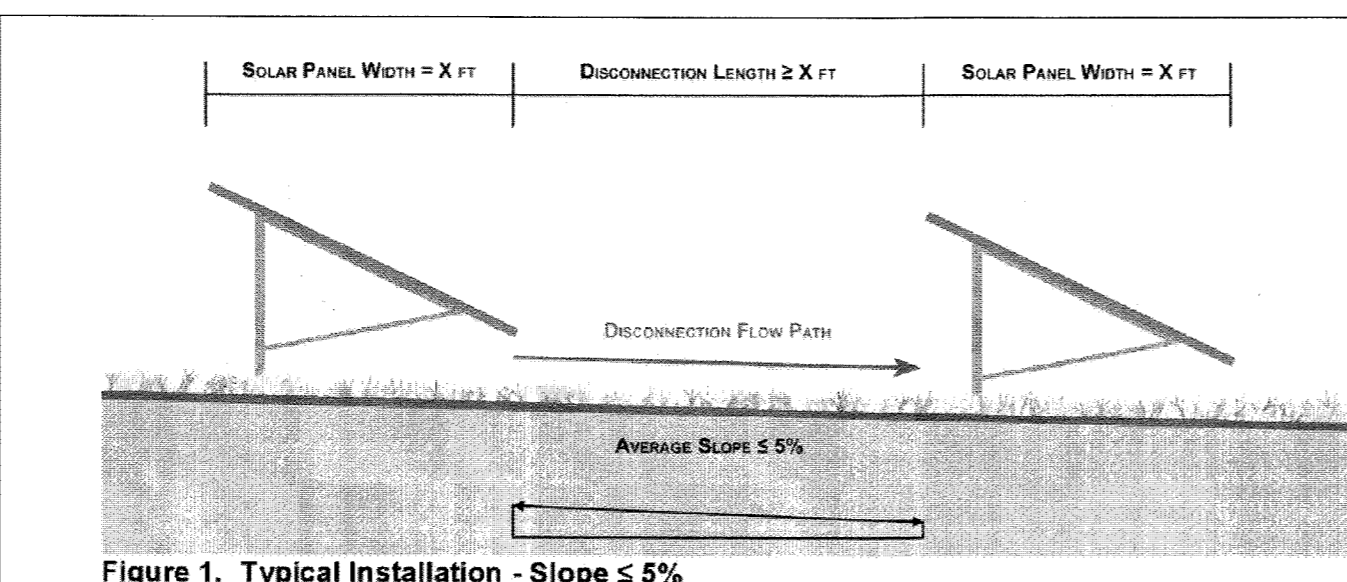
Revisions to Maryland's stormwater management regulations in 2010 require that environmental site design (ESD) be used to the maximum extent practicable (MEP) to mimic natural hydrology, reduce runoff to reflect forested wooded conditions, and minimize the impact of land development on water resources. This applies to any residential, commercial, industrial, or institutional development where more than 5,000 square feet of land area is disturbed. Consequently, stormwater management must be addressed even when permeable features like solar panel installations exceed 5,000 square feet of land disturbance.

Depending on local soil conditions and proposed imperviousness, the amount of rainfall that stormwater requirements are based on varies from 1.0 to 2.6 inches. However, addressing stormwater management does not mean that structural or micro-scale practices must be constructed to capture and treat large volumes of runoff. Using nonstructural techniques like disconnecting impervious cover reduces runoff by promoting overland filtering and infiltration. Commonly used with smaller or narrower impervious areas like driveways or open roads, the Disconnection of Non-Rooftop Runoff technique (see pp. 5.61 to 5.65 of the 2000 Maryland Stormwater Design Manual) is a low cost alternative for treating runoff in situations like rows of solar panels.

When non-rooftop disconnection is used to treat runoff, the following factors should be considered:

- The vegetated area receiving runoff must be equal to or greater in length than the disconnected surface (e.g., width of the row of solar panels)
- Runoff must sheet flow onto and across vegetated areas to maintain the disconnection
- Disconnections should be located on gradual slopes (≤ 5%) to maintain sheetflow. Level spreaders, terraces, or berms may be used to maintain sheetflow conditions if the average slope is steeper than 5%. However, installations on slopes greater than 10% will require an engineered plan that ensures adequate treatment and the safe and non-erosive conveyance of runoff to the property line or downstream stormwater management practice.
- Disconnecting impervious surfaces works best in undisturbed soils. To minimize disturbance and compaction, construction vehicles and equipment should avoid areas used for disconnection during installation of the solar panels.
- Groundcover vegetation must be maintained in good condition in those areas receiving disconnected runoff. Typically this maintenance is no different than other lawn or landscaped areas. However, areas receiving runoff should be protected (e.g., planting shrubs or trees along the perimeter) from future compaction.

Depending on the layout and number of panels installed, the disconnection of non-rooftop runoff technique may address some or all of the stormwater management requirements for an individual project. Where the imperviousness is high or there is other infrastructure (e.g., access roads, transformers), additional runoff may need to be treated. In these situations, other ESD techniques or micro-scale practices may be needed to provide stormwater management for these features.



**DETAIL E-3 SUPER SILT FENCE**

STANDARD SYMBOL: SSF

**CONSTRUCTION SPECIFICATIONS**

- INSTALL 2 3/8 INCH DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART. DRIVE THE POSTS A MINIMUM OF 36 INCHES INTO THE GROUND.
- FASTEN 9 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2 1/2 INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR HUG RINGS.
- FASTEN WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, SECURELY TO THE UPSLOPE SIDE OF CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 8 INCHES INTO THE GROUND.
- WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED TO PREVENT SEDIMENT BY PASS.
- EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SUPER SILT FENCE.
- PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
- REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN, IF UNDERMINING OCCURS, REINSTALL CHAIN LINK FENCING AND GEOTEXTILE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL  
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE 2011 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

**DETAIL E-1 SILT FENCE**

STANDARD SYMBOL: SF

**CONSTRUCTION SPECIFICATIONS**

- USE WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS AND FASTEN GEOTEXTILE SECURELY TO UPSLOPE SIDE OF FENCE POSTS WITH WIRE TIES OR STAPLES AT TOP AND MID-SECTION.
- PROVIDE MANUFACTURER CERTIFICATION TO THE AUTHORIZED REPRESENTATIVE OF THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT THE GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
- WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN: OVERLAP, TWIST, AND STAPLE TO POST IN ACCORDANCE WITH THIS DETAIL.
- EXTEND BOTH ENDS OF THE SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SILT FENCE.
- REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN, IF UNDERMINING OCCURS, REINSTALL FENCE.

**JOINING TWO ADJACENT SILT FENCE SECTIONS (TOP VIEW)**

- POSTS
- STAPLE
- FINAL CONFIGURATION

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL  
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE 2011 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

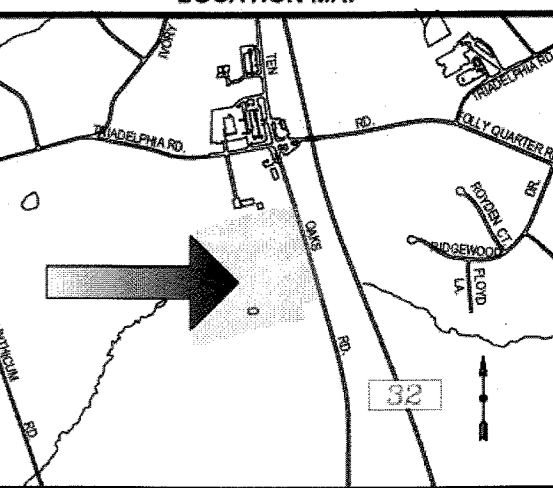
**DETAIL E-1 SILT FENCE**

STANDARD SYMBOL: SF

**CONSTRUCTION SPECIFICATIONS**

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- PROVIDE MANUFACTURER CERTIFICATION TO THE AUTHORIZED REPRESENTATIVE OF THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT THE GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
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- REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN, IF UNDERMINING OCCURS, REINSTALL FENCE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL  
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE 2011 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION



**PROJECT**

**TEN OAKS SOLAR**  
1.99MWac

**SITE LOCATION INFORMATION**

3950 TEN OAKS ROAD  
GLENELG, MD 21737  
HOWARD COUNTY  
PARCEL 201  
TAX MAP 22 BLOCK 14  
5TH ELECTION DISTRICT  
DEED L 2221 F 618  
ZONED RR-DEO

**SITE OWNER INFORMATION**

JACK COOGAN FYOOCK JR  
13705 TRIADLEPHIA ROAD  
GLENELG, MD 21737

**REVISION LIST**

09/29/2021	LAYOUT REVISION
10/06/2021	REVISION PER SITE VISIT
10/27/2021	PER COUNTY COMMENTS

**PROJECT INFORMATION**

Project Latitude	39.259388
Project Longitude	-76.984413
Utility Name	BG&E
Min. Ambient Temperature	40°C
Max. Ambient Temperature	0°C
Meter Number	Open

**ARRAY 1**

Module Name	Longi 445W
Inverter	Sungrow 125
Tilt Angle	25
No. of Modules	6240
DC String Length	26
No. of Strings	240

**COMPANY LOGO**

**Community POWER GROUP**

**COMPANY CONTACT INFO**

COMPANY NAME: Community Power Group  
COMPANY ADDRESS: 5636 Connecticut Ave #4729 Washington, DC 20015  
COMPANY PHONE: 202-844-6423  
EMAIL: mborkowski@communitypowergroup.com



**PROFESSIONAL CERTIFICATE**

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.  
LICENSE NO. 98103  
EXPIRATION DATE: 09-15-2023

**SHEET NAME**

**DETAILS C203**

SCALE: N.T.S. DATE: 8/31/2021

**DETAIL C-1 EARTH DIKE**

STANDARD SYMBOL: A-1

**DIKE TYPE**

a - DIKE HEIGHT	18 IN. MIN.	30 IN. MIN.
b - DIKE WIDTH	24 IN. MIN.	36 IN. MIN.
c - FLOW WIDTH	4 FT. MIN.	6 FT. MIN.
d - FLOW DEPTH	12 IN. MIN.	24 IN. MIN.

**FLOW CHANNEL STABILIZATION**

- A-1 SEED WITH STRAW MULCH AND TACK. (NOT ALLOWED FOR CLEAR WATER DIVERSION.)
- A-2/B-2 SEED WITH SOIL STABILIZATION MATTING OR LINE WITH SOD.
- A-3/B-3 4 TO 7 INCH STONE OR EQUIVALENT RECYCLED CONCRETE PRESSED INTO SOIL A MINIMUM OF 7 INCHES AND FLUSH WITH GROUND.

**CONSTRUCTION SPECIFICATIONS**

- REMOVE AND DISPOSE OF ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SO AS NOT TO INTERFERE WITH PROPER FUNCTION OF EARTHDIKE.
- EXCAVATE OR SHAPE EARTH DIKE TO LINE, GRADE, AND CROSS SECTION AS SPECIFIED. BANK PROJECTIONS OR OTHER IRREGULARITIES ARE NOT ALLOWED.
- COMPACT FILL.
- CONSTRUCT FLOW CHANNEL ON AN UNINTERRUPTED, CONTINUOUS GRADE, ADJUSTING THE LOCATION DUE TO FIELD CONDITIONS AS NECESSARY TO MAINTAIN POSITIVE DRAINAGE.
- PROVIDE OUTLET PROTECTION AS REQUIRED ON APPROVED PLAN.
- STABILIZE EARTH DIKE WITHIN THREE DAYS OF INSTALLATION. STABILIZE FLOW CHANNEL FOR CLEAR WATER DIVERSION WITHIN 24 HOURS OF INSTALLATION.
- MAINTAIN LINE, GRADE, AND CROSS SECTION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS, AND MAINTAIN POSITIVE DRAINAGE. KEEP EARTH DIKE AND POINT OF DISCHARGE FREE OF EROSION, AND CONTINUOUSLY MEET REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION.
- UPON REMOVAL OF EARTH DIKE, GRADE AREA FLUSH WITH EXISTING GROUND. WITHIN 24 HOURS OF REMOVAL STABILIZE DISTURBED AREA WITH TOPSOIL, SEED, AND MULCH, OR AS SPECIFIED ON APPROVED PLAN.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL  
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE 2011 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

**DETAIL B-2 WASH RACK OPTION**

STANDARD SYMBOL: WR

**CONSTRUCTION SPECIFICATIONS**

- USE A WASH RACK DESIGNED AND CONSTRUCTED/MANUFACTURED FOR THE ANTICIPATED TRAFFIC LOADS. CONCRETE, STEEL, OR OTHER MATERIALS ARE ACCEPTABLE. PRE-FABRICATED UNITS SUCH AS CATTLE GUARDS ARE ACCEPTABLE. USE MINIMUM DIMENSION OF 6 FEET x 10 FEET. ORIENT DIRECTION OF RIBS AS SHOWN ON THE DETAIL.
- INSTALL PRIOR TO, ALONG SIDE OF, OR AS PART OF THE SCE.
- DIRECT WASH WATER TO AN APPROVED SEDIMENT TRAPPING DEVICE.
- KEEP AREA UNDER WASH RACK FREE OF ACCUMULATED SEDIMENT. IF DAMAGED, REPAIR OR REPLACE WASH RACK.

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**NOTE: FUTURE SITE DEVELOPMENT PLAN TO INCLUDE TREE PROTECTION AND INLET PROTECTION DETAILS.**

**ECP-22-013**