

- NOTES**
- EXISTING PROPERTY INFORMATION  
 PIN 18875 OWNER HOYT CLIFTON COLLINS DB/PG 656/39 ZONING R1 ACREAGE 98.54 AC LAND USE RES/OPEN  
 SITE ADDRESS: 151 VICKERS ROAD, CHAPEL HILL, NC  
 RIVER BASIN - CAPE FEAR  
 WATERSHED - WS-IV PA  
 MINIMUM SETBACK REQUIREMENTS:  
 ZONING R1  
 FRONT 100'  
 SIDE 50'  
 REAR 50'  
 PROPOSED PROJECT AREA - 18,021 AC
  - THE PURPOSE OF THIS PLAN IS FOR A CONDITIONAL USE PERMIT APPLICATION FOR REVIEW AND APPROVAL BY THE CHATHAM COUNTY BOARD OF COMMISSIONERS. ALL INFORMATION SHOWN IS FOR PLANNING PURPOSES ONLY.
  - TOPOGRAPHIC DATA & EXISTING IMPROVEMENTS SHOWN ON THIS PLAN IS PER AN ACTUAL FIELD SURVEY PERFORMED BY BALLENTEINE ASSOCIATES, PA ON 07/11/2012.
  - WATERS OF THE US SHOWN PER REPORT BY ECS CAROLINAS, LLP, DATED SEPTEMBER 25, 2012.
  - THE PROPERTY SHOWN HEREON DOES NOT CONTAIN SPECIAL FLOOD HAZARD AREAS (SFHAS) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD (I.E. 100-YR. EVENT) PER FEMA FIRM MAP PANEL NO. 371097500J EFFECTIVE DATE FEBRUARY 2, 2007.
  - ALL RIGHT-OF-WAYS ARE PUBLIC, UNLESS NOTED OTHERWISE.
  - UTILITY LINES AND SERVICES SHOWN HEREON ARE APPROXIMATE PER AERIAL PHOTOGRAPHY OR AS REPORTED BY VARIOUS RESPONSIBLE PARTIES. LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE AND MUST BE FIELD VERIFIED. CALL NC ONE CALL CENTER BEFORE DIGGING AT 811.
  - COPIES OF ALL PERMITS AND APPROVED PLANS MUST BE KEPT ON-SITE IN A PERMIT BOX THAT IS CONSPICUOUSLY LOCATED AND EASILY ACCESSIBLE DURING CONSTRUCTION.
  - A SEDIMENT AND EROSION CONTROL PLAN WILL BE APPROVED BY CHATHAM COUNTY PRIOR TO BEGINNING CONSTRUCTION.
  - A DRIVEWAY PERMIT WILL BE APPROVED BY NCDOT PRIOR TO BEGINNING CONSTRUCTION.
  - PROJECT AREA, INCLUDING CONSTRUCTION STAGING AREAS, WILL BE CLEARED AND GRUBBED AS NECESSARY, RETAINING PRE-DEVELOPMENT DRAINAGE PATTERNS (I.E. NO MASS GRADING). A PORTION OF PROJECT AREAS MAY CONSIST OF TREE CLEARING ONLY (NO GRUBBING) TO ALLEVIATE SHADING OF THE ARRAY, AS INDICATED ON THE SITE PLAN. MINOR GRADING (APPROX. 545 SF) WILL OCCUR AROUND INVERTER AREAS TO DIVERT SURFACE DRAINAGE. CONSTRUCTION STAGING AND AREAS SUBJECT TO RUTTING DURING CONSTRUCTION WILL BE TEMPORARILY STABILIZED WITH LOGGING MATS, WHICH WILL BE REMOVED FOLLOWING CONSTRUCTION. THE ONLY PERMANENT IMPERVIOUS SURFACES WILL BE TWO CONCRETE SLABS, TOTALING LESS THAN 100 SF AT EACH INVERTER.
  - PROPOSED TEMPORARY LAYDOWN YARD/CONSTRUCTION STAGING AREA TO BE USED DURING SITE CONSTRUCTION. A PORTION OF THIS AREA (HATCHED) WILL BE COVERED WITH LOGGING MATS TO ALLOW DELIVERY OF CONSTRUCTION MATERIALS. PRIOR TO CONSTRUCTION, THIS AREA IS COMPACTED BY A SMOOTH DRUM ROLLER TO REDUCE PREVENT RUTTING. FOLLOWING CONSTRUCTION, THE LOGGING MATS ARE REMOVED AND THE ENTIRE AREA IS RESTORED TO PRE-CONSTRUCTION CONDITIONS.
  - ACCESS AISLES SHOWN ON THIS PLAN INDICATE CONSTRUCTION AND MAINTENANCE ACCESS POINTS FOR INGRESS/EGRESS. PRIOR TO CONSTRUCTION, THESE AISLES ARE COMPACTED BY A SMOOTH DRUM ROLLER TO REDUCE/PREVENT RUTTING. LOGGING MATS MAY BE PLACED IN HIGH TRAFFIC OR POORLY DRAINING AREAS DURING CONSTRUCTION ACTIVITIES TO IMPROVE ACCESS. NO PERMANENT IMPROVEMENTS OR IMPERVIOUS SURFACES (I.E. GRAVEL OR ASPHALT) WILL BE INSTALLED IN ACCESS AISLES FOR CONSTRUCTION OR MAINTENANCE ACTIVITIES.
  - PROPOSED 24' ACCESS GATE (TWO 12' SECTIONS) IS 6' TALL CHAIN LINK VINYL COATED (BLACK) WITH 3 STRANDS OF BARBED WIRE. GATE WILL BE LOCKED WITH STANDARD KEYS OR COMBINATION LOCK. EMERGENCY PERSONNEL (AS DESIGNATED BY CHATHAM COUNTY) WILL BE PROVIDED A KEY OR COMBINATION FOR ACCESS.
  - NO LIGHTING IS PROPOSED FOR THIS SITE.
  - ALUMINUM SIGNS ("DANGER - HIGH VOLTAGE" AND "DANGER - NO TRESPASSING") MEASURING 14' X 10" IN SIZE, WILL BE PLACED ON PERMANENT SECURITY FENCING, ALTERNATING EVERY 100' AROUND THE ARRAY.
  - SYSTEMS, EQUIPMENT AND STRUCTURES WILL NOT EXCEED TWENTY-FIVE (25) FEET IN HEIGHT WHEN GROUND MOUNTED. EXCLUDED FROM THIS HEIGHT REQUIREMENT, HOWEVER, ARE ELECTRIC TRANSMISSION LINES AND UTILITY POLES.
  - NOISE LEVELS MEASURED AT THE PROPERTY LINE WILL NOT EXCEED FIFTY (50) DECIBELS WHEN LOCATED ADJACENT TO AN EXISTING RESIDENCE OR RESIDENTIAL DISTRICT.



DEVELOPER/CONSULTANTS

PROJECT NAME & ADDRESS  
**VICKERS FARM SOLAR ELECTRIC POWER PLANT**  
 CHAPEL HILL, NC

DATE: 12/02/2013

PROJECT NUMBER: C-033-12-VIC

PROJECT NAME: VICKERS FARM

SYSTEM SIZE: 2.20 MWp - AC

ENGINEER: BTN

CHECKER: BTN

DRAWN BY: RBJ / APL

SCALE: 1" = 100'

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**LEGEND**

- EXISTING IRON PIPE
- ▲ IRON PIPE SET
- COMPUTED POINT
- BOUNDARY LINE NOT SURVEYED
- ☼ EXISTING FIRE HYDRANT
- ☼ EXISTING LIGHT POLE
- ☼ EXISTING POWER UTILITY POLE
- XXX EXISTING BARBED WIRE FENCE
- EXISTING OVERHEAD POWER

VICKERS - 2013/03/20

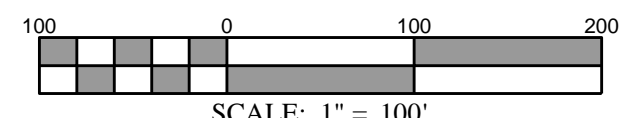
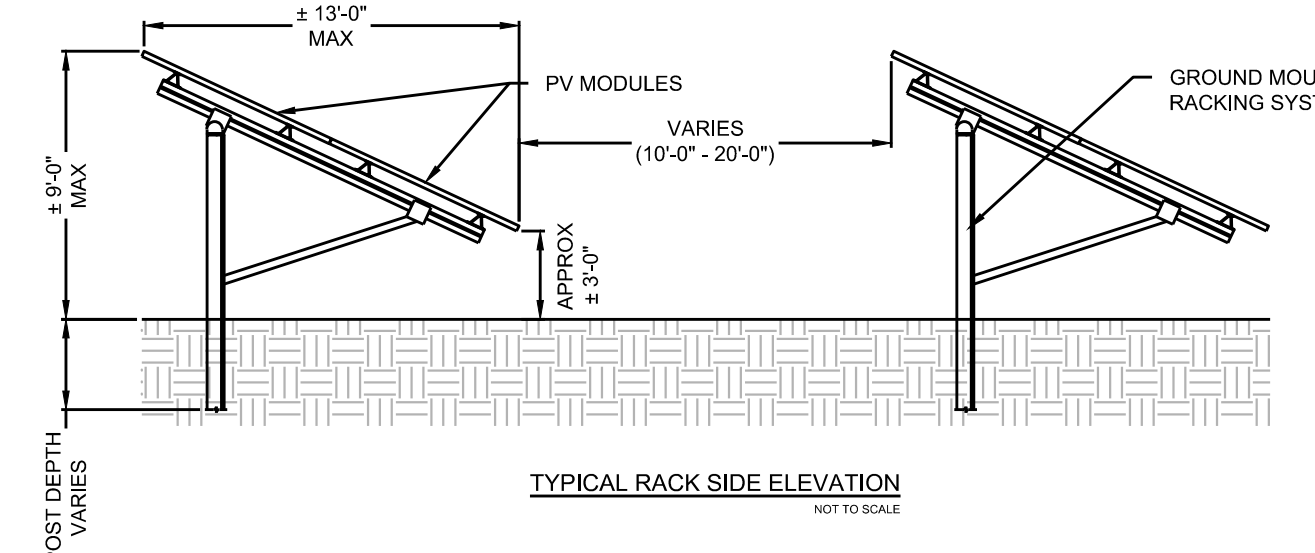
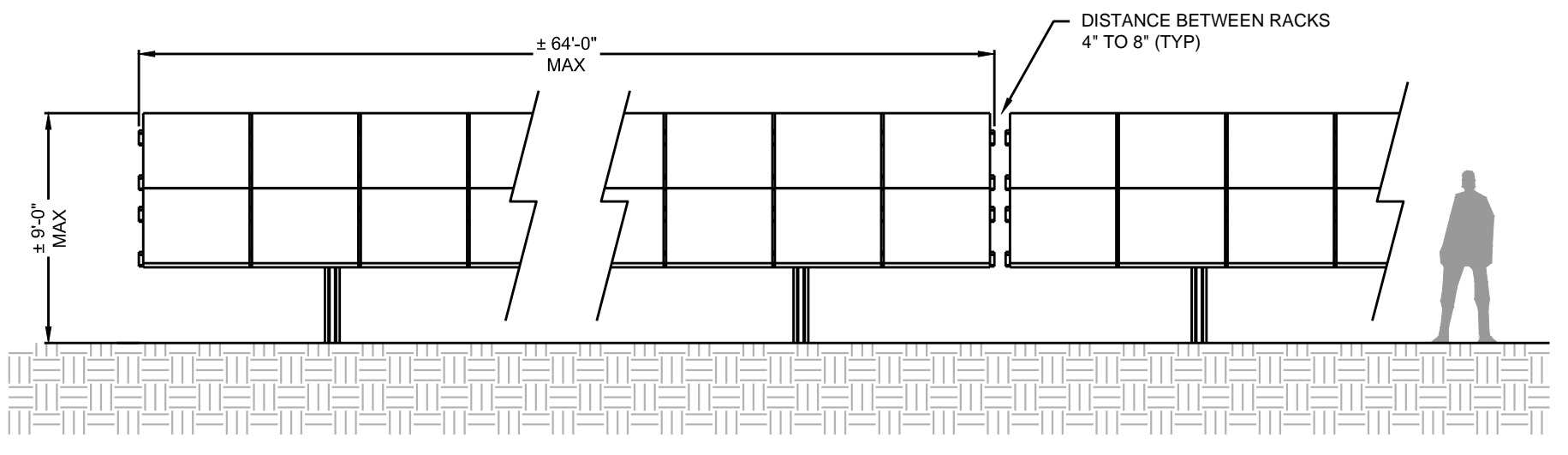
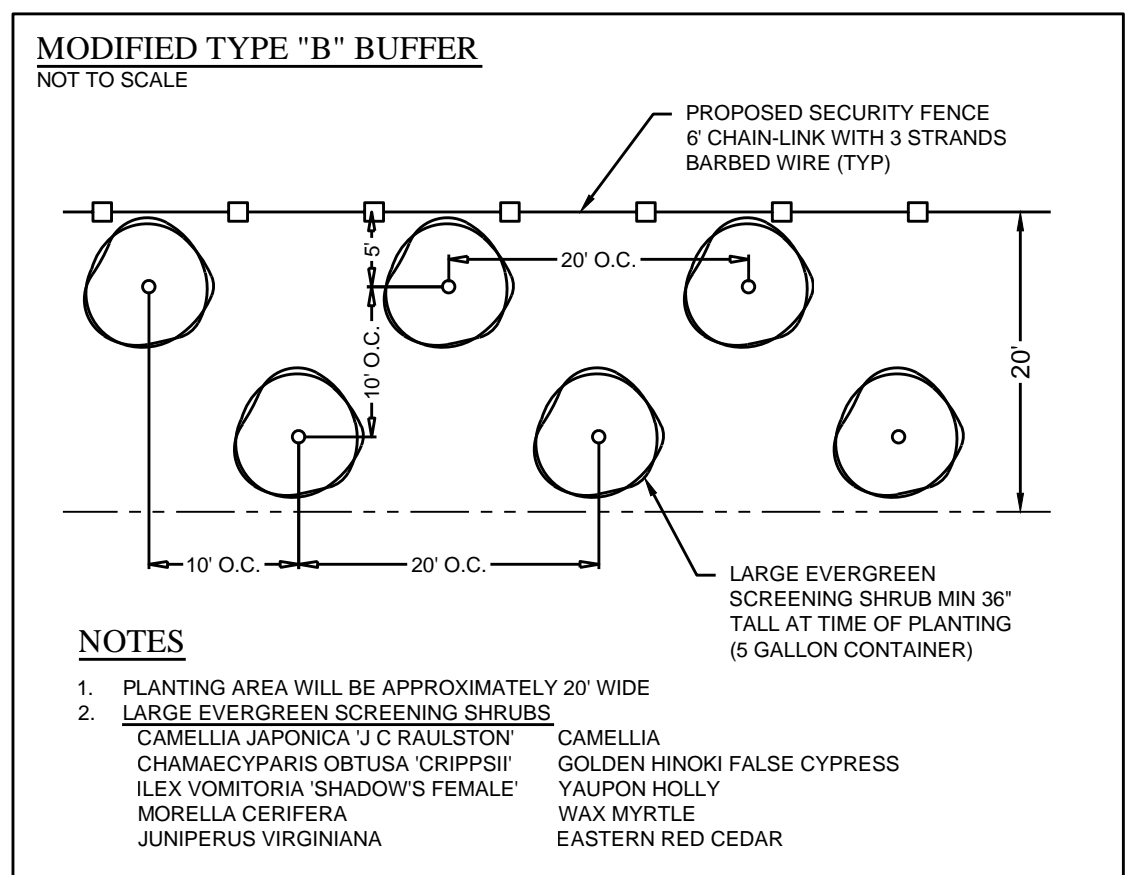
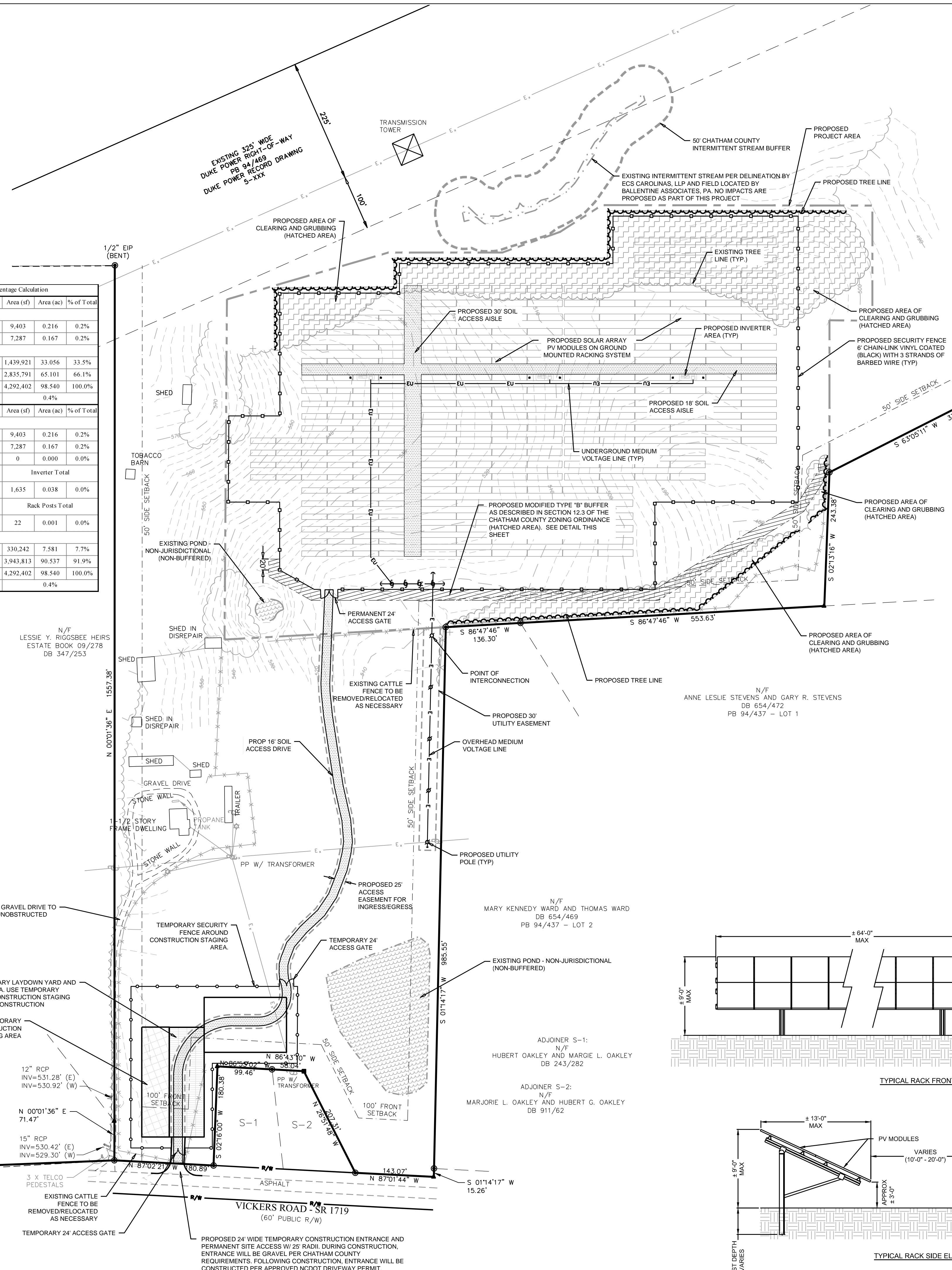
INVERTER	CP 500
PANEL CELL SIZE	60
PANEL POWER	245
RACK CONFIGURATION	2v14
NUMBER OF INVERTERS	1
RACKS REQUIRED	84
RACKS PROVIDED	84
TIME OF PLACEMENT	9:14 AM
MODULE INCLINATION	20°
AZIMUTH	180°

VICKERS - 2013/03/20

INVERTER	CP 750
PANEL CELL SIZE	72
PANEL POWER	300
RACK CONFIGURATION	2v19
NUMBER OF INVERTERS	2
RACKS REQUIRED	192
RACKS PROVIDED	192
TIME OF PLACEMENT	9:14 AM
MODULE INCLINATION	20°
AZIMUTH	180°

Vickers Farm - Impervious Percentage Calculation

Existing Conditions	Area (sf)	Area (ac)	% of Total		
Impervious					
Drives (Gravel/Conc./Asphalt)	9,403	0.216	0.2%		
Structures	7,287	0.167	0.2%		
Pervious					
Wooded Areas	1,439,921	33.056	33.5%		
Agricultural Fields/Lawns	2,835,791	65.101	66.1%		
<b>Total Area =</b>	<b>4,292,402</b>	<b>98.540</b>	<b>100.0%</b>		
Existing % Impervious =			0.4%		
Proposed Conditions					
Impervious					
Existing Drives to Remain	9,403	0.216	0.2%		
Existing Structures to Remain	7,287	0.167	0.2%		
Proposed Drives (Gravel/Conc./Asphalt)	0	0.000	0.0%		
Inverter Areas (Assumes entire graded area)					
# of Inverters	3	545	1.635	0.038	0.0%
Inverter Total					
Rack Posts/Rack	# of Racks	Area/Post (sq ft)	Rack Posts Total		
5	276	2.3	22	0.001	0.0%
Pervious					
Wooded Areas	330,242	7.581	7.7%		
Agricultural Fields/Lawns	3,943,813	90.537	91.9%		
<b>Total Area =</b>	<b>4,292,402</b>	<b>98.540</b>	<b>100.0%</b>		
Proposed % Impervious =			0.4%		



**REVISIONS**

NO.	DATE	DESCRIPTION
1		
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3		
4		
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10		

CONDITIONAL USE SITE PLAN

SCALE: 1" = 100'

C 2.1

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