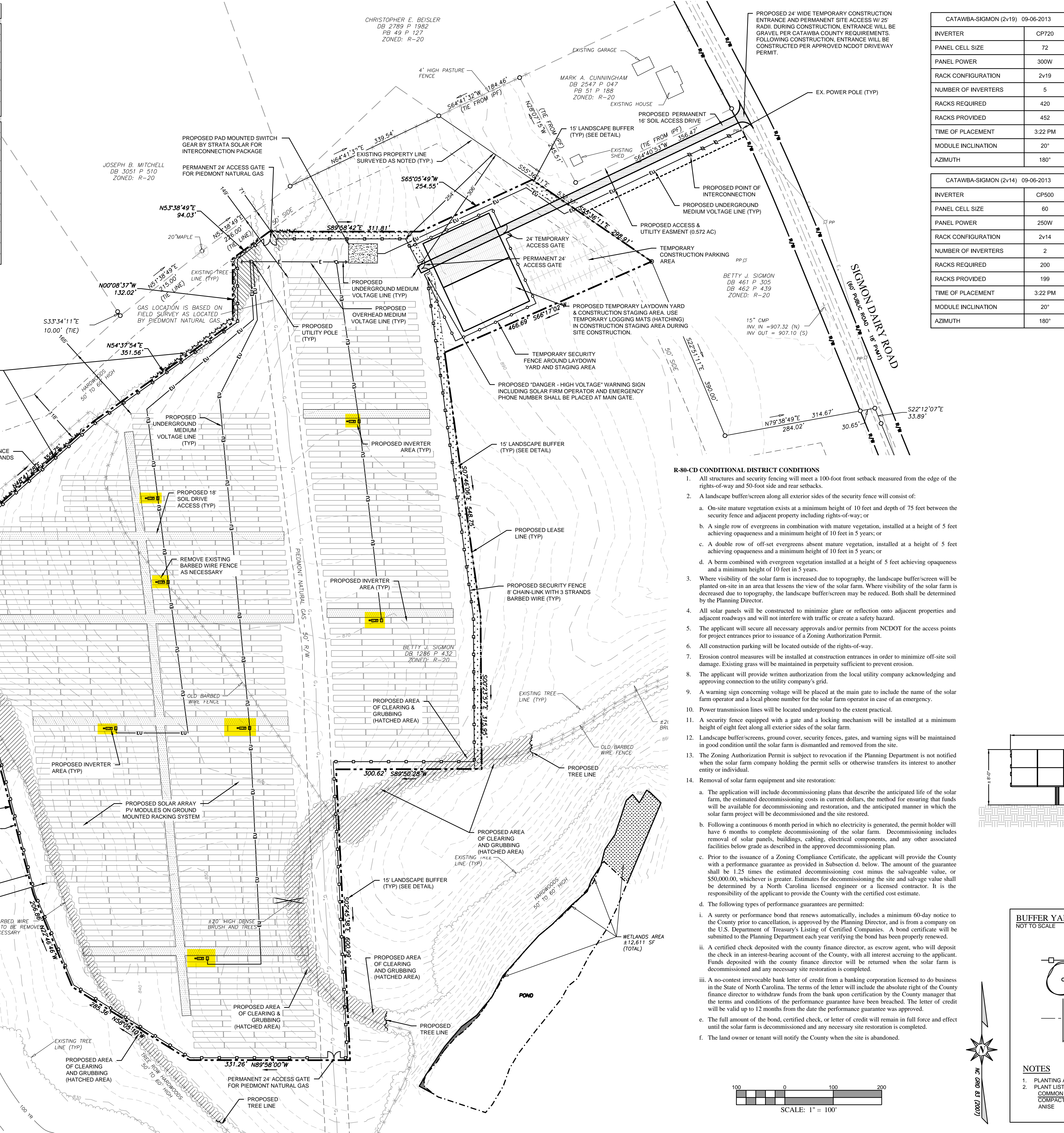
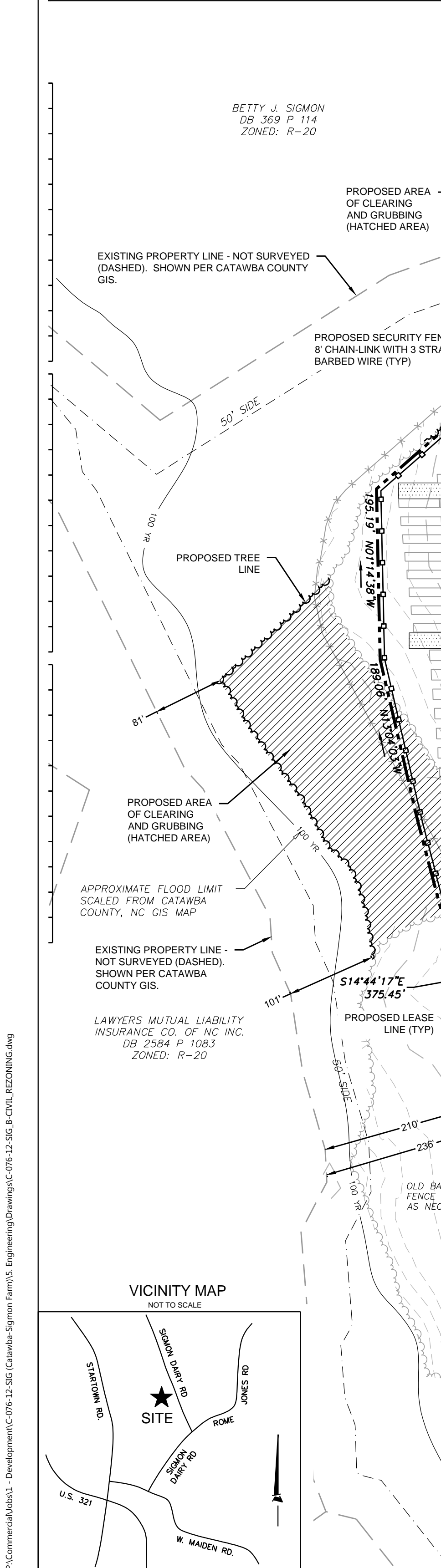


Catawba-Sigmon Farm - Impervious Percentage Calculation			
Existing Conditions	Area (sf)	Area (ac)	% of Total
Impervious			
Drives (Gravel Conc. Asphalt)	5,000	0.115	0.1%
Structures	3,600	0.083	0.1%
Previous			
Wooded Areas	1,868,190	42.888	27.1%
Agricultural Fields/Lawns	5,010,046	115.915	72.7%
Total Area =	6,886,836	158.100	100.0%
Existing % Impervious =			0.1%
Proposed Conditions	Area (sf)	Area (ac)	% of Total
Impervious			
Existing Drives to Remain	5,000	0.115	0.1%
Existing Structures to Remain	3,600	0.083	0.1%
Proposed Drives (Gravel Conc. Asphalt)	0	0.000	0.0%
Inverter Areas (Assumes entire graded area)	# of Inverters: 7 Area/Inverter (sf): 545 Inverter Total: 3,815	0.088	0.1%
Rack Posts	# of Racks: 684 Area/Post (sf): 2.3 Rack Posts Total: 66	0.002	0.0%
Previous			
Wooded Areas	1,733,490	39.795	23.2%
Agricultural Fields/Lawns	5,140,865	118.018	74.4%
Total Area =	6,886,836	158.100	100.0%
Proposed % Impervious =			0.2%



NOTES

1. EXISTING PROPERTY INFORMATION

OWNER	DB/PG	ZONING	ACREAGE	LAND USE
363814344192 BETTY J. SIGMON	1286/432	R-20	158.10 AC	VACANT

SITE ADDRESS: 2819 SIGMON DAIRY RD, NEWTON, CATAWBA COUNTY, NC

PROPOSED ZONING: R-80- CD

MINIMUM SETBACK REQUIREMENTS:

ZONING	R-80	R-80-CD
FRONT	30'	100'
SIDE	15'	50'
REAR	30'	50'

PROPOSED LEASE AREA: 31.00 ACRES

2. THE PURPOSE OF THIS PLAN IS FOR A CONDITIONAL DISTRICT REZONING PLAN FOR REVIEW AND APPROVAL BY THE CATAWBA COUNTY BOARD OF COMMISSIONERS TO CONSTRUCT A SOLAR ELECTRIC POWER PLANT. ALL INFORMATION SHOWN IS FOR PLANNING PURPOSES ONLY.

3. TOPOGRAPHIC DATA & EXISTING IMPROVEMENTS SHOWN ON THIS PLAN IS PER AN ACTUAL FIELD SURVEY PERFORMED BY GRAY SURVEYING CO., INC.

4. WATERS OF THE US SHOWN PER REPORT BY ECS CAROLINAS, LLP.

5. THE PROPERTY SHOWN HEREON DOES 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. 3710363800J EFFECTIVE DATE SEPTEMBER 7, 2007.

6. ALL RIGHT-OF-WAYS ARE PUBLIC, UNLESS NOTED OTHERWISE.

7. 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.

8. 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.

9. A SEDIMENT AND EROSION CONTROL PLAN WILL BE APPROVED BY CATAWBA COUNTY PRIOR TO BEGINNING CONSTRUCTION.

10. A DRIVEWAY PERMIT WILL BE APPROVED BY NCDOT PRIOR TO BEGINNING CONSTRUCTION.

11. PROJECT AREA WITHIN PROPOSED PERMANENT AND TEMPORARY FENCE AND CONSTRUCTION STAGING AREAS WILL BE CLEARED AND GRUBBED AS NECESSARY. RETAINING PRE-DEVELOPMENT DRAINAGE PATTERNS (I.E. NO MASS GRADING). REMAINING PROJECT AREAS (OUTSIDE FENCE AND STAGING AREAS) WILL CONSIST OF TREE CLEARING ONLY (NO GRUBBING) TO ALLEVIATE SHADING OF THE ARRAY. 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 IMPROVED SURFACES WILL BE TWO CONCRETE SLABS, TOTALING LESS THAN 100 SF AT EACH INVERTER.

12. 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.

13. 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.

14. PROPOSED 24' ACCESS GATE (TWO 12' SECTIONS) IS 8' TALL CHAIN LINK WITH 3 STRANDS OF BARBED WIRE. GATE WILL BE LOCKED WITH STANDARD KEYED OR COMBINATION LOCK. EMERGENCY PERSONNEL (AS DESIGNATED BY CATAWBA COUNTY) WILL BE PROVIDED A KEY OR COMBINATION FOR ACCESS.

15. NO LIGHTING IS PROPOSED FOR THIS SITE.

16. ALUMINUM SIGNS ("DANGER - HIGH VOLTAGE" AND "DANGER - NO TRESPASSING") MEASURING 14" X 10" IN SIZE, WILL BE PLACED ON PERMANENT SECURITY FENCING, ALTERNATING EVERY 10' AROUND THE ARRAY.

17. 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.

18. NOISE LEVELS MEASURED AT THE PROPERTY LINE WILL NOT EXCEED FIFTY (50) DECIBELS WHEN LOCATED ADJACENT TO AN EXISTING RESIDENCE OR RESIDENTIAL DISTRICT.

TYPICAL RACK SIDE ELEVATION

NOT TO SCALE

TYPICAL RACK FRONT ELEVATION

NOT TO SCALE

BUFFER YARD SCREENING DETAIL

NOT TO SCALE

NOTES

1. PLANTING AREA WILL BE APPROXIMATELY 15' WIDE

2. PLANT LIST - LARGE EVERGREEN SHRUBS

COMMON NAME	BOTANICAL NAME	HEIGHT
COMPACT BURFORD HOLLY	ILEX CORNUTA 'BURFORD'	6'
ANISE	ILICUM PARVIFOLIUM	6'

REVISIONS

NO.	DATE	DESCRIPTION
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

DRAWING DESCRIPTION

CONDITIONAL DISTRICT REZONING PLAN

SCALE

1" = 100'

C 2.1

P:\Comm\cat\Jobs\1 - Development\C-076-12-205, Catawba-Sigmon Farm\5. Engineering\Drawings\C-076-12-205, B-Civil, REZONING.dwg