

Tree Assessment Report
Morven Solar
Brooks County, Georgia
December 2022

Presented by
PINEGATE RENEWABLES
Prepared by
Kimley-Horn

Kimley-Horn Tree Assessment Report
Morven Solar
Brooks County, Georgia

TABLE OF CONTENTS

1.0 - INTRODUCTION 3
2.0 - PROJECT FIGURES 4
3.0 - PLOT ANALYSIS 6
4.0 - ZONE ANALYSIS 8
5.0 - CONCLUSION 9

APPENDICES

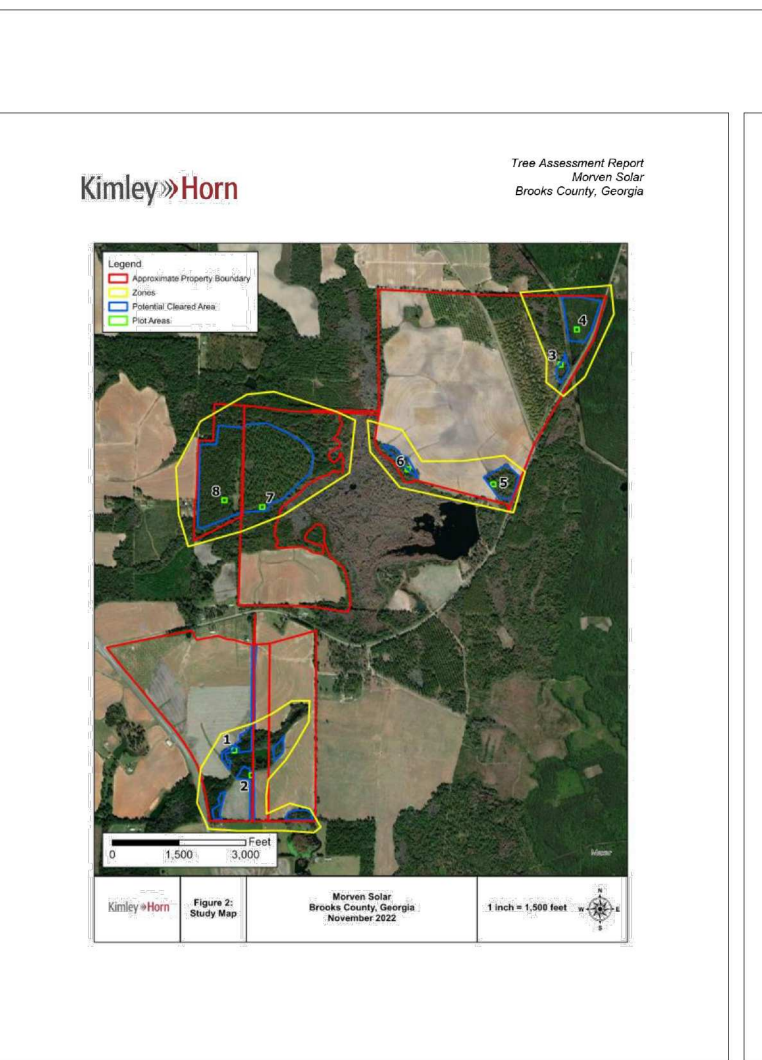
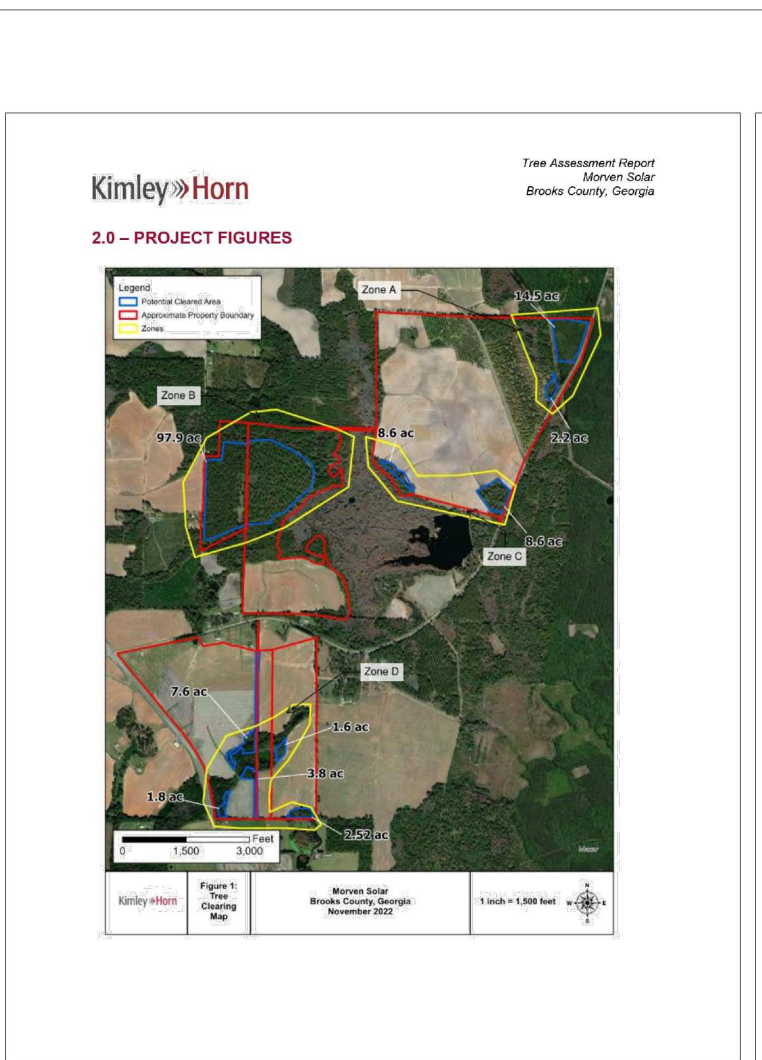
Appendix A: Plot Summary Tables
Appendix B: Arbolist Report

Kimley-Horn Tree Assessment Report
Morven Solar
Brooks County, Georgia

1.0 - INTRODUCTION

On behalf of Pine Gate Renewables, please find the following Tree Assessment Report prepared in accordance with Ordinance 11-2022. The report is prepared to Brooks County to meet the requirements of the Morven Solar Project. This assessment will serve to inform a Site Restoration plan, which will be required as part of the final construction of the solar facility.

The Morven Solar project will be developed primarily on existing agricultural. There will however be the removal of a single mature pine tree. The removal of this tree is necessary to allow for the installation of the solar panels and associated infrastructure. The tree to be removed is located on the east side of the road and is located on the east side of the road. The tree is located on the east side of the road and is located on the east side of the road.



Kimley-Horn Tree Assessment Report
Morven Solar
Brooks County, Georgia

3.0 - PLOT ANALYSIS

The following are summaries of each tree assessment plot:

Plot #1 Analysis

- Total quantity of Good & Fair Trees = 10 Trees
- Total quantity of Good & Fair Trees (at DBH) = 120 inches
- Average DBH = 12 inches
- 100% Trees are in Good Condition
- 0% Trees are in Fair Condition
- 0% Trees are in Poor Condition

Kimley-Horn Tree Assessment Report
Morven Solar
Brooks County, Georgia

Plot #2 Analysis

- Total quantity of Good & Fair Trees = 14 Trees
- Total quantity of Good & Fair Trees (at DBH) = 160 inches
- Average DBH = 11 inches
- 100% Trees are in Good Condition
- 0% Trees are in Fair Condition
- 0% Trees are in Poor Condition

Kimley-Horn Tree Assessment Report
Morven Solar
Brooks County, Georgia

4.0 - ZONE ANALYSIS

Each Zone was evaluated with tree data. The table below provides total volume of trees to be removed within the two plots, and then is multiplied by the total acres of the removal site for each zone. The table below also provides a replacement of mature pine trees with a similar composition as the removal site.

Zone	Total Volume	Total Acres	Total Volume per Acre	Volume to be Replaced	% to be Replaced
Zone 1	362	17.32	20,900	745	3.5%
Zone 2	617	17.32	35,620	1,203	3.4%

Kimley-Horn Tree Assessment Report
Morven Solar
Brooks County, Georgia

5.0 - CONCLUSION

This Tree Assessment Report evaluated the density and species of each proposed cleared area through evaluation of tree composition data for each zone at the site. These density calculations will allow growers to replace trees removed with a similar composition as the removal site.

- In Zone A, 122 inches to be replaced per acre, 17% Pine and 83% Hardwood
- In Zone B, 122 inches to be replaced per acre, 17% Pine and 83% Hardwood
- In Zone C, 122 inches to be replaced per acre, 17% Pine and 83% Hardwood
- In Zone D, 122 inches to be replaced per acre, 17% Pine and 83% Hardwood

Kimley-Horn Tree Assessment Report
Morven Solar
Brooks County, Georgia

Appendix A: Plot Tables

Tree Number	Species	DBH	Rating	Comment
1	Pine	10	Good	
2	Pine	10	Good	
3	Pine	10	Good	
4	Pine	10	Good	
5	Pine	10	Good	
6	Pine	10	Good	
7	Pine	10	Good	
8	Pine	10	Good	
9	Pine	10	Good	
10	Pine	10	Good	
11	Pine	10	Good	
12	Pine	10	Good	
13	Pine	10	Good	
14	Pine	10	Good	
15	Pine	10	Good	
16	Pine	10	Good	
17	Pine	10	Good	
18	Pine	10	Good	
19	Pine	10	Good	
20	Pine	10	Good	
21	Pine	10	Good	
22	Pine	10	Good	
23	Pine	10	Good	
24	Pine	10	Good	
25	Pine	10	Good	
26	Pine	10	Good	
27	Pine	10	Good	
28	Pine	10	Good	
29	Pine	10	Good	
30	Pine	10	Good	
31	Pine	10	Good	
32	Pine	10	Good	
33	Pine	10	Good	
34	Pine	10	Good	
35	Pine	10	Good	
36	Pine	10	Good	
37	Pine	10	Good	

Kimley-Horn Tree Assessment Report
Morven Solar
Brooks County, Georgia

Tree Number	Species	DBH	Rating	Comment
38	Pine	10	Good	
39	Pine	10	Good	
40	Pine	10	Good	
41	Pine	10	Good	
42	Pine	10	Good	
43	Pine	10	Good	
44	Pine	10	Good	
45	Pine	10	Good	
46	Pine	10	Good	
47	Pine	10	Good	
48	Pine	10	Good	
49	Pine	10	Good	
50	Pine	10	Good	
51	Pine	10	Good	
52	Pine	10	Good	
53	Pine	10	Good	
54	Pine	10	Good	
55	Pine	10	Good	
56	Pine	10	Good	
57	Pine	10	Good	
58	Pine	10	Good	
59	Pine	10	Good	
60	Pine	10	Good	
61	Pine	10	Good	
62	Pine	10	Good	
63	Pine	10	Good	
64	Pine	10	Good	
65	Pine	10	Good	
66	Pine	10	Good	
67	Pine	10	Good	
68	Pine	10	Good	
69	Pine	10	Good	
70	Pine	10	Good	
71	Pine	10	Good	
72	Pine	10	Good	
73	Pine	10	Good	
74	Pine	10	Good	
75	Pine	10	Good	
76	Pine	10	Good	
77	Pine	10	Good	
78	Pine	10	Good	
79	Pine	10	Good	
80	Pine	10	Good	
81	Pine	10	Good	
82	Pine	10	Good	
83	Pine	10	Good	
84	Pine	10	Good	
85	Pine	10	Good	
86	Pine	10	Good	
87	Pine	10	Good	
88	Pine	10	Good	
89	Pine	10	Good	
90	Pine	10	Good	
91	Pine	10	Good	
92	Pine	10	Good	
93	Pine	10	Good	
94	Pine	10	Good	
95	Pine	10	Good	
96	Pine	10	Good	
97	Pine	10	Good	
98	Pine	10	Good	
99	Pine	10	Good	
100	Pine	10	Good	

Kimley-Horn Tree Assessment Report
Morven Solar
Brooks County, Georgia

Tree Number	Species	DBH	Rating	Comment
1	Quercus nigra	20	Fair	2x trunk
2	Quercus nigra	20	Fair	2x trunk
3	Quercus nigra	20	Fair	2x trunk
4	Quercus nigra	20	Fair	2x trunk
5	Quercus nigra	20	Fair	2x trunk
6	Quercus nigra	20	Fair	2x trunk
7	Quercus nigra	20	Fair	2x trunk
8	Quercus nigra	20	Fair	2x trunk
9	Quercus nigra	20	Fair	2x trunk
10	Quercus nigra	20	Fair	2x trunk
11	Quercus nigra	20	Fair	2x trunk
12	Quercus nigra	20	Fair	2x trunk
13	Quercus nigra	20	Fair	2x trunk
14	Quercus nigra	20	Fair	2x trunk
15	Quercus nigra	20	Fair	2x trunk
16	Quercus nigra	20	Fair	2x trunk
17	Quercus nigra	20	Fair	2x trunk
18	Quercus nigra	20	Fair	2x trunk
19	Quercus nigra	20	Fair	2x trunk
20	Quercus nigra	20	Fair	2x trunk
21	Quercus nigra	20	Fair	2x trunk
22	Quercus nigra	20	Fair	2x trunk
23	Quercus nigra	20	Fair	2x trunk
24	Quercus nigra	20	Fair	2x trunk
25	Quercus nigra	20	Fair	2x trunk
26	Quercus nigra	20	Fair	2x trunk
27	Quercus nigra	20	Fair	2x trunk
28	Quercus nigra	20	Fair	2x trunk
29	Quercus nigra	20	Fair	2x trunk
30	Quercus nigra	20	Fair	2x trunk
31	Quercus nigra	20	Fair	2x trunk
32	Quercus nigra	20	Fair	2x trunk
33	Quercus nigra	20	Fair	2x trunk
34	Quercus nigra	20	Fair	2x trunk
35	Quercus nigra	20	Fair	2x trunk
36	Quercus nigra	20	Fair	2x trunk
37	Quercus nigra	20	Fair	2x trunk
38	Quercus nigra	20	Fair	2x trunk
39	Quercus nigra	20	Fair	2x trunk
40	Quercus nigra	20	Fair	2x trunk
41	Quercus nigra	20	Fair	2x trunk
42	Quercus nigra	20	Fair	2x trunk
43	Quercus nigra	20	Fair	2x trunk
44	Quercus nigra	20	Fair	2x trunk
45	Quercus nigra	20	Fair	2x trunk
46	Quercus nigra	20	Fair	2x trunk
47	Quercus nigra	20	Fair	2x trunk
48	Quercus nigra	20	Fair	2x trunk
49	Quercus nigra	20	Fair	2x trunk
50	Quercus nigra	20	Fair	2x trunk
51	Quercus nigra	20	Fair	2x trunk
52	Quercus nigra	20	Fair	2x trunk
53	Quercus nigra	20	Fair	2x trunk
54	Quercus nigra	20	Fair	2x trunk
55	Quercus nigra	20	Fair	2x trunk
56	Quercus nigra	20	Fair	2x trunk
57	Quercus nigra	20	Fair	2x trunk
58	Quercus nigra	20	Fair	2x trunk
59	Quercus nigra	20	Fair	2x trunk
60	Quercus nigra	20	Fair	2x trunk
61	Quercus nigra	20	Fair	2x trunk
62	Quercus nigra	20	Fair	2x trunk
63	Quercus nigra	20	Fair	2x trunk
64	Quercus nigra	20	Fair	2x trunk
65	Quercus nigra	20	Fair	2x trunk
66	Quercus nigra	20	Fair	2x trunk
67	Quercus nigra	20	Fair	2x trunk
68	Quercus nigra	20	Fair	2x trunk
69	Quercus nigra	20	Fair	2x trunk
70	Quercus nigra	20	Fair	2x trunk
71	Quercus nigra	20	Fair	2x trunk
72	Quercus nigra	20	Fair	2x trunk
73	Quercus nigra	20	Fair	2x trunk
74	Quercus nigra	20	Fair	2x trunk
75	Quercus nigra	20	Fair	2x trunk
76	Quercus nigra	20	Fair	2x trunk
77	Quercus nigra	20	Fair	2x trunk
78	Quercus nigra	20	Fair	2x trunk
79	Quercus nigra	20	Fair	2x trunk
80	Quercus nigra	20	Fair	2x trunk
81	Quercus nigra	20	Fair	2x trunk
82	Quercus nigra	20	Fair	2x trunk
83	Quercus nigra	20	Fair	2x trunk
84	Quercus nigra	20	Fair	2x trunk
85	Quercus nigra	20	Fair	2x trunk
86	Quercus nigra	20	Fair	2x trunk
87	Quercus nigra	20	Fair	2x trunk
88	Quercus nigra	20	Fair	2x trunk
89	Quercus nigra	20	Fair	2x trunk
90	Quercus nigra	20	Fair	2x trunk
91	Quercus nigra	20	Fair	2x trunk
92	Quercus nigra	20	Fair	2x trunk
93	Quercus nigra	20	Fair	2x trunk
94	Quercus nigra	20	Fair	2x trunk
95	Quercus nigra	20	Fair	2x trunk
96	Quercus nigra	20	Fair	2x trunk
97	Quercus nigra	20	Fair	2x trunk
98	Quercus nigra	20	Fair	2x trunk
99	Quercus nigra	20	Fair	2x trunk
100	Quercus nigra	20	Fair	2x trunk

Kimley-Horn Tree Assessment Report
Morven Solar
Brooks County, Georgia

Appendix B: Arbolist Report

Arbolist Report Prepared for:
Kimley-Horn for submit to the Brooks County, GA

Prepared by:
T.J. Roberts, LLC
Landscaping & Horticulture
2085 County Parkway, Suite 422
Marietta, GA 30067
tjroberts@tjroberts.com
770-426-2218

Terrell H. Edwards, P.S., ISA
ISA 000-54424
November 16, 2022

Arbolist Report for Pine Condition Trees within the sample areas
Visual inspection only

Trees rated as Poor are not included in the average values per acre tables shown above. The Arbolist Report includes notes and specific recommendations (ratings) of the trees designated as being in Poor Condition (i.e., similar to a 4 or 5) (table for reference) in order to comply with the local intent of the Ordinance (i.e., ISA 000-54424).

Please note that all trees will fall at some point and many factors can impact the health of a tree within its life cycle. This Arbolist Report includes the condition of the trees sampled on the day of fieldwork.

Kimley-Horn Tree Assessment Report
Morven Solar
Brooks County, Georgia

Table #	Tree Number	Species	DBH	Rating	Comment
Table #1	1	Pine	10	Good	
Table #1	2	Pine	10	Good	
Table #1	3	Pine	10	Good	
Table #1	4	Pine	10	Good	
Table #1	5	Pine	10	Good	
Table #1	6	Pine	10	Good	
Table #1	7	Pine	10	Good	
Table #1	8	Pine	10	Good	
Table #1	9	Pine	10	Good	
Table #1	10	Pine	10	Good	
Table #1	11	Pine	10	Good	
Table #1	12	Pine	10	Good	
Table #1	13	Pine	10	Good	
Table #1	14	Pine	10	Good	
Table #1	15	Pine	10	Good	
Table #1	16	Pine	10	Good	
Table #1	17	Pine	10	Good	
Table #1	18	Pine	10	Good	
Table #1	19	Pine	10	Good	
Table #1	20	Pine	10	Good	
Table #1	21	Pine	10	Good	
Table #1	22	Pine	10	Good	
Table #1	23	Pine	10	Good	
Table #1	24	Pine	10	Good	
Table #1	25	Pine	10	Good	
Table #1	26	Pine	10	Good	
Table #1	27	Pine	10	Good	
Table #1	28	Pine	10	Good	
Table #1	29	Pine	10	Good	
Table #1	30	Pine	10	Good	
Table #1	31	Pine	10	Good	
Table #1	32	Pine	10	Good	
Table #1	33	Pine	10	Good	
Table #1	34	Pine	10	Good	
Table #1	35	Pine	10	Good	
Table #1	36	Pine	10	Good	
Table #1	37	Pine	10	Good	
Table #1	38	Pine	10	Good	
Table #1	39	Pine	10	Good	
Table #1	40	Pine	10	Good	
Table #1	41	Pine	10	Good	
Table #1	42	Pine	10	Good	
Table #1	43	Pine	10	Good	
Table #1	44	Pine	10	Good	
Table #1	45	Pine			