James C. Barnett Georgia Registered Forester Mark D. Barnett Georgia Registered Forester



10800 Alpharetta Hwy. Suite 208, #579 Roswell, GA 30076 fallineforestry@gmail.com

February 13, 2023

Mr. Robert E. Stembridge 1141 Seminary Avenue Reno, NV 89503

Re: Gilmer County, Georgia, Rose Garden Road Tract, 137 Acres +/- total

Dear Mr. Stembridge,

We thank you for engaging Fall Line Consultants to inventory, appraise and provide management recommendations for the timber on your 137-acre property (Parcels 3038-002 and 3038-002A) along Rose Garden Road in Gilmer County, Georgia. Your land is very attractive, with gently rolling topography. The property undulates but is rarely steep, and boasts some excellent mountain views.

The property is comprised of 135 acres (deducting 2 acres of non-forested woods roads) of mature Upland Hardwood cover type with occasional patches of mixed Hardwood-Pine. A band of acres in the middle of the property, paralleling (both sides) the east-west internal woods road, clearly suffered a combination of storm/wind damage and possible pine beetle infestation *many* years ago. The timber on these 30-40 acres is less plentiful, and large decaying stems are frequent and apparent on the forest floor.

Timber on the remainder of the property, away from the old storm damage, can be described as park-like in character; large, mature trees mixed with a fewer younger, smaller trees, the timber widely-spaced. Our timber cruise sampling (see the attached Timber Inventory report) showed an average of 31.4 sawtimber trees (pine and hardwood) and 55.7 pulpwood trees per acre; less than 90 trees/acre total. This represents relatively light stocking, and means the soil is underutilized by the current tree cover.

The 135 wooded acres is aesthetically pleasing to traverse, but (from a forester's perspective) less productive for timber growth than it could be. It is a "climax forest" in decline, past the point of economic maturity for forest products. It is very likely that, due to the average age of the trees, annual mortality from natural causes has begun to exceed annual growth. If it is expected for this property to remain forested for another rotation period (about 30-35 years in the Southeast), Fall Line's recommendation is to clear-cut the timber before Mother Nature eliminates it, capture the forest products income, and reforest with nursery-grown, genetically-improved, Longleaf Pine and/or Loblolly Pine, possibly in combination with hardwood seedlings (Oak, Poplar).

Below is a Google Earth image of the property (boundaries in pink/red) from November, 2021. While conducting the timber inventory we sighted no real evidence of property lines or survey markers other than in the southwest section of the far western property line, where a neighboring landowner's lot has been recently surveyed. Property corners as shown on the image utilize GPS coordinates taken from the Gilmer County's Geographic Information System (GIS) mapping web site.



Here is the tract in April, 2008. The mixed Hardwood-Pine acreage is easier to identify (Pine tops are green)



Finally, here is a topographic map of the property with boundaries in red. The contour interval is 20 feet:



Attached to this letter is Fall Line's timber inventory (cruise) report for the property. The inventory report shows *timber volumes and number of stems* by species and diameter for the +/- 135 wooded acres. On Page 1, the first block shows the **Sawtimber volume** in (Green) Tons for the various species. The second block is the

Sawtimber Stem Count for the same species. "*Sawtimber*" trees are those suitable by virtue of their size (diameter) and quality (height, straightness, fewer limbs) to be sawn into lumber. Trees not suitable for Sawtimber are classified as "*Pulpwood*", and used in the pulp and papermaking process, and in evolving biomass and fuel applications. Sawtimber trees (from a forester's perspective) are more valuable than an equivalent-sized Pulpwood trees.

Page 2 of the inventory report shows the same information (volume and tree count) for the **Pulpwood**-quality trees on the 135 wooded acres.

Fall Line Consultants estimate of timber volume and value on the property is summarized below ("stumpage" (standing timber) pricing comes from Timber Mart South for the 4th quarter of 2022 and our personal knowledge of local timber markets):

PRODUCT SUMMARY	VOLUME (TONS)	\$ VALUE PER TON	TOTAL VALUE
Wooded Acres (135.0)	(10110)		
Loblolly Pine Sawtimber	424.8	\$25.00	\$10,620
Virginia Pine / White Pine Sawtimber	233.3	\$22.00	\$ 5,133
Pine Chip-n-Saw (small sawtimber)	127.0	\$18.00	\$ 2,286
Pine Pulpwood	394.3	\$ 8.00	\$ 3,154
Pine Topwood	72.1	\$ 5.50	\$ 397
Oak Sawtimber	1228.1	\$39.50	\$48,510
Misc. Hardwood Sawtimber	697.9	\$29.00	\$20,239
Hardwood Pulpwood	2915.1	\$10.00	\$29,151
TOTAL			\$119,490

The total market value of the timber on the 135 wooded acres of your Gilmer County property, as of February, 2023, is **\$119,490** or **\$885 per (wooded) acre**.

The value of \$119,490 represents the likely *gross* revenue from a lump-sum, sealed bid <u>clearcut</u> timber sale offering in 2023. A small proportion of this potential harvest value, along stream and creek banks, must be preserved in any future harvest operation to comply with Georgia's "Best Management Practices" (aka BMPs) as promulgated by the Georgia Forestry Commission. Within most SMZs, up to 50% of the crown cover may be harvested (about ½ of the trees) on an even spacing.

MANAGEMENT RECOMMENDATIONS

Fall Line Consultants has no knowledge of Mr. Stembridge's (or future owner if the land is sold) timetable for higher-better-use development of the property, so will base our timber management recommendations under the assumption that timber will be grown, in an economically-productive manner, for an additional rotation length (generally 30-35 years in the Southeastern U.S.) or beyond. A well-managed forest will generate a 7-10% internal rate of return over the rotation length. Utilizing genetically-improved and/or clonal varietal pine seedlings when replanting clear-cut areas can boost the rate of return to 12-14%.

Fall Line, if engaged to help market future timber sales and oversee reforestation, will modify recommendations as necessary to accommodate development.



As mentioned earlier, the timber on the Stembridge tract is fully mature and the forest is in decline. In the normal course of good timber management, it is now time to harvest this mature timber. Revenue generated by this proposed clear-cut harvest should be in line with the appraised value of \$119,490 or \$885 per acre.



Pine Plantations are typically established with seedlings planted 6 feet apart in rows 10 feet apart. This works out to 720 trees per acre planted initially. These trees will average approximately 7% volume growth per year, or more, and should be ready for a first thinning in 12-15 years which could generate (roughly) \$700/acre income at that time (in today's dollars). A second thinning 6-7 years later, and a final harvest 30-32 years from establishment will be more lucrative as the trees become larger and grow into more valuable product classes.

In a first thinning, trees of lesser value (smaller diameters, forked, crooked, diseased, damaged) are harvested, retaining healthy stems on a relatively even spacing. The water, sunlight and soil nutrients previously used by the harvested trees are then freed up for the "leave" trees, boosting their growth until the second thinning, where the process is repeated. The first thinning will be almost exclusively pulpwood, a lower-value product. The second thinning is typically a mix of pulpwood and chip-n-saw (small diameter sawtimber), while the final harvest is weighted toward higher-value larger-diameter sawlogs.



Finally, the Rose Garden Road property is obviously a wildlife haven. We saw deer, turkeys, rabbits, and other game/non-game species while inventorying the forest. It appears the property is leased for hunting (it is certainly being hunted in any case). To promote the health of whitetail deer, turkey, and other wildlife populations, future harvests should retain some distribution of White and Red Oak trees. These species produce mast (acorns), nutrient-rich food sources for deer and turkeys. The property also has its share of vines and berries in the storm and wind-damaged acreage, which while making walking more challenging, are a boon for both game and non-game wildlife and birds.



We appreciate the opportunity to serve you. Please call if you have any questions about this report.

Very truly yours,

MARK D. BAMIT

Mark Barnett Georgia Registered Forester #1794 Alabama Registered Forester #1236

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James Barnett Georgia Registered Forester #1634

OTENDETROE TRACT	BAB651 0000			
SIEMBRIDGE IRACI,	PARCEL 3038	3-002 and 3038-002A	, ROSE GARDEN ROAD,	GILMER COUNTY, GA

TOTAL ACRES = 137 +/-, WOODED ACRES = 135 +/-

REPORT-TYPE: STAND PER: STAND		TMENT: STE ALL	EMRIDGE		STAND: ST UTLV: BOT			PRODUCT: SAWTIMBER ACRE : 135.0			VOLUME-UNIT: TONGRN			UME-UNIT:			
GROUP	2 in	4 in	6 in	8 in	10 in	12 in	14 in	16 in	18 in	20 in	22 in	24 in	26 in	28 in	30 in	TOTAL	TOPWD
Loblolly Pine	.0	.0	.0	.0	.0	.0	194.4	20.8	60.0	117.0	.0	32.6	.0	.0	.0	424.8	44.7
Virginia Pine	.0	.0	.0	.0	.0	. 0	.0	150.5	30.5	.0	.0	.0	.0	27.8	.0	208.8	25.7
White Pine	.0	.0	. 0	.0	.0	.0	24.5	.0	. 0	.0	.0	.0	.0	.0	.0	24.5	1.7
White Oak	.0	.0	.0	.0	.0	. 0	92.8	177.5	103.5	95.4	51.7	32.7	.0	.0	.0	553.5	217.2
Red Oak	.0	.0	. 0	.0	.0	18.3	96.0	33.1	238.4	93.5	78.0	.0	43.8	14.5	59.0	674.6	244.2
Yellow Poplar	.0	.0	.0	.0	.0	. 0	34.0	102.6	101.9	73.4	33.9	23.3	.0	. 0	.0	369.0	86.2
Sweetgum/Tupelo	.0	.0	.0	.0	.0	. 0	18.4	.0	.0	30.4	. 0	.0	.0	.0	.0	48.7	14.6
Hickory	.0	.0	.0	.0	.0	.0	.0	114.1	73.9	23.3	68.8	.0	.0	.0	.0	280.2	94.5
TOTALS	.0	.0	.0	.0	.0	18.3	460.1	598.7	608.1	433.0	232.4	88.5	43.8	42.3	59.0	2584.2	728.8

TIPS (v 3.03) Date: 2-10-2023 Time: 12: 2:44 REGISTERED USER> Fall Line Consultants, LLC / 10800 Alpharetta Hwy., Suite 208, #579, Roswell, GA 30076 (404) 271-2573 or (404) 310-1427

REPORT-TYPE: STAND PER: STAND		TMENT: STE ALL	EMBRIDGE	C	STAND: STEMBRIDGE 137AC PRODUCT: SAWTIMBER VOLUME-UNIT: #STEMS TO CUTLV: BOTH ACRE : 135.0								TOPWD-VOLUME-UNIT: TONGRN						
GROUP	2 in	4 in	6 in	8 in	10 in	12 in	14 in	16 in	18 in	20 in	22 in	24 in	26 in	28 in	30 in	TOTAL	TOPWD		
Loblolly Pine	.0	.0	.0	.0	.0	.0	263.2	28.1	50.1	79.3	.0	14.1	.0	.0	.0	434.7	.0		
Virginia Pine	. 0	.0	.0	.0	.0	.0	.0	154.9	25.0	.0	.0	.0	.0	10.4	.0	190.3	.0		
White Pine	. 0	.0	.0	.0	.0	.0	36.1	.0	.0	.0	.0	.0	. 0	.0	.0	36.1	.0		
White Oak	.0	.0	.0	.0	.0	.0	149.6	207.4	97.6	59.0	33.5	14.1	.0	.0	.0	561.3	.0		
Red Oak	. 0	.0	.0	.0	.0	48.0	154.9	63.4	192.7	79.3	50.3	.0	23.1	9.6	26.5	647.9	.0		
Yellow Poplar	. 0	.0	.0	.0	.0	.0	82.8	151.3	117.5	59.0	32.1	14.1	. 0	.0	.0	456.8	.0		
Sweetgum/Tupelo	. 0	.0	.0	.0	.0	.0	41.4	.0	.0	18.4	.0	.0	.0	.0	.0	59.8	.0		
Hickory	.0	.0	.0	.0	.0	.0	.0	87.9	50.1	20.3	33.5	.0	.0	.0	.0	191.8	.0		
TOTALS	.0	.0	.0	.0	.0	48.0	728.0	692.9	533.1	315.2	149.5	42.3	23.1	20.0	26.5	2578.5	.0		

REPORT-TYPE: STAND PER: STAND	COMPARTMENT: STEMBRIDGE GRADE: ALL			STAND: STEMBRIDGE CUTLV: BOTH			137AC PRODUCT: PULPWOOD ACRE : 135.0			VOLUME-UNIT: TONGRN			TOPWD-VO				
GROUP	2 in	4 in	6 in	8 in	10 in	12 in	14 in	16 in	18 in	20 in	22 in	24 in	26 in	28 in	30 in	TOTAL	TOPWD
Loblolly Pine	.0	26.0	36.2	128.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	190.2	. 0
Virginia Pine	.0	.0	.0	108.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	108.4	.0
White Pine	.0	.0	.0	13.1	15.2	21.6	.0	45.8	.0	.0	.0	.0	.0	.0	.0	95.7	.0
Pine Chip-n-Saw	.0	.0	.0	.0	63.4	63.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	127.0	.0
White Oak	.0	14.0	36.9	119.5	263.7	154.6	111.6	20.3	20.3	20.3	.0	.0	27.1	.0	.0	788.3	.0
Red Oak	.0	42.6	97.2	64.3	260.6	184.7	84.0	66.5	31.6	31.6	.0	.0	14.2	.0	.0	877.2	.0
Yellow Poplar	.0	.0	.0	.0	167.7	72.0	.0	20.6	20.6	.0	.0	.0	.0	.0	.0	280.9	.0
Sweetgum/Tupelo	.0	.0	25.4	36.4	.0	21.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	83.0	.0
Misc Hard Hdwd	.0	46.8	107.5	140.0	82.6	16.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	393.2	.0
Maple/Elm/Birch	.0	11.5	89.9	35.3	16.7	31.2	16.5	.0	.0	.0	.0	.0	.0	.0	.0	201.1	.0
Hickory	.0	35.9	12.7	77.2	90.0	61.7	.0	.0	.0	.0	13.8	.0	.0	.0	.0	291.3	.0
TOTALS	.0	176.7	405.7	722.3	960.0	626.9	212.1	153.1	72.4	51.9	13.8	.0	41.3	.0	.0	3436.4	. 0

REPORT-TYPE: STAND COMPARTMENT: ST PER: STAND GRADE: ALL			TEMBRIDGE	(STAND: S CUTLV: BO	STEMBRIDGE FH	E 137AC ACRE		PULPW00D 35.0	VOLUME-UNIT: #STEMS			TOPWD-VC	LUME-UNIT			
GROUP	2 in	4 in	6 in	8 in	10 in	12 in	14 in	16 in	18 in	20 in	22 in	24 in	26 in	28 in	30 in	TOTAL	TOPWD
Loblolly Pine	901.7	649.2	391.0	734.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2676.2	.0
Virginia Pine	.0	507.2	.0	507.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1014.4	.0
White Pine	.0	.0	.0	126.8	81.2	48.0	.0	59.8	.0	.0	.0	.0	.0	.0	.0	315.8	.0
Pine Chip-n-Saw	.0	.0	.0	.0	134.1	112.7	.0	. 0	. 0	.0	.0	.0	.0	.0	.0	246.9	.0
White Oak	.0	831.8	391.0	607.4	794.1	321.5	154.9	28.1	22.5	20.3	.0	.0	11.1	.0	.0	3182.8	.0
Red Oak	.0	973.8	1113.3	327.2	836.3	329.8	118.9	59.8	25.0	20.3	.0	.0	12.0	.0	.0	3816.5	.0
Yellow Poplar	.0	.0	.0	.0	607.0	225.4	.0	28.1	25.0	.0	.0	.0	.0	.0	.0	885.5	.0
Sweetgum/Tupelo	.0	.0	331.2	227.0	.0	48.0	.0	. 0	. 0	.0	.0	.0	.0	.0	.0	606.2	.0
Misc Hard Hdwd	2705.1	2637.5	2120.8	1488.8	458.8	48.0	.0	.0	. 0	.0	.0	.0	.0	.0	.0	9459.0	.0
Maple/Elm/Birch	.0	831.8	1564.2	353.8	81.2	160.7	41.4	. 0	. 0	.0	.0	.0	.0	.0	.0	3033.1	.0
Hickory	901.7	973.8	225.4	454.0	335.3	169.1	.0	.0	.0	.0	16.8	.0	.0	.0	.0	3076.1	.0
ΤΟΤΑΙS	4508.5	7405.3	6137.1	4826.3	3328.0	1463.3	315.2	175.7	72.6	40.6	16.8	.0	23.1	.0	.0	28312.4	.0