

# Paulding County Environmental Health

• 120 East Memorial Drive • Dallas, GA 30132 •  
• Phone 770-443-7877 • Fax 770-443-7879 •

March 21, 2006

Russell Shirley  
1895 Mac Road  
Douglasville, GA 30135

Re: Cumberland Falls S/D

Mr. Shirley,

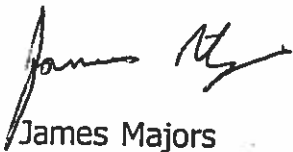
The Cumberland Falls subdivision review has been completed. Issuance of permits will depend on the physical merits of each lot to have an approved installation as based on the rules and regulations and the judgment of the Paulding County Health Department.

After reviewing the level III soil report along with the final plats, lots 7, 8, 12, 14, 16, 17, 19, and 23 will require site plans. Additional site plans may be required after site visits to all lots have been made.

Please be aware that Madison-Stony soils may require additional drainline after installation depending on the amount of rock features encountered. This is based on the suitability code "B" for Madison-Stony soils. Also note that if Saw/Wake soils are used additional soil work in the form of test pits will be required.

Please call if you have any questions.

Sincerely,



James Majors  
Environmental Health Specialist III

**General Notes & Comments:**

This site contains an existing structure which are supported by an existing septic system. This system was not located during this study and is likely not located within limits of units designated as Urdorment (disturbed). Areas that contain existing systems should not be utilized for installation of new systems.

Base Map Source: Carlton Rakestraw & Associates, Dallas, GA

All borings and features on soil map were located using differentially corrected GPS Data.

Delineation of soil unit boundaries were derived from soil characteristics observed at specified boring locations and extrapolated through relationships in landscape position shown on 2' topo map. Soil boring cross section is 2 3/4" wide by 72" deep. Lines delineating soil unit boundaries on soil map should not be considered precise. They should be considered as transitional areas dividing soils with different utilization characteristics.

Alterations or disturbance to the top 2' of the existing soil units that are specified for alternative system or shallow (24"-36") conventional system application should be kept to a minimum. Systems within these units will utilize top soil for effluent dispersal or have minimal separation between the trenches and limiting layers. Alterations, during construction or prior to drain field installation, that result in significant changes to the natural soil profile, render the specifications of those soils inapplicable. Those soils should be reevaluated to determine suitability prior to drain field installation.

When trench lines are dug by installer, every precaution should be taken to ensure that there is minimal disturbance to the soil on the trench walls. Smearing of trench walls or improper installation can lead to system failure. Sides of trench walls should be picked if possible.

Soils in areas labeled **NOT STUDIED** should not be considered for drain field application without a more extensive survey.

Areas that reside in concave landscape positions or channel storm water should not be considered for drain field application without installation of water diversion mechanisms (i.e. curtain drains) or further study.

**TABULITY CODES:**

Profiles observed within units were well drained and free of significant limiting layers. These soils should have ability to accommodate conventional drain fields with proper design, installation, and maintenance.

Soils are well drained but contain lenses of hard parent material and may contain minor components of soils hard rock at depths near 5' to 6'. Some hand auger boring attempts refused on impenetrable material at depths 30" within these units; however, at least one boring attempt was advanced to a minimum depth of 60" at each data point within these units. All profiles observed were well drained. These soils may be considered for conventional system application. Upon system installation, any sections of drain line that are occluded by consolidated rock features should be compensated for in overall drain line length.

Soils have seasonal high water tables within 4' of the soil surface and may reside in low lying landscape positions that are subject to inundation with surface and subsurface water flow. Failure of conventional systems in these soils is probable. These soils may be considered for alternative system application.

Soils have water tables within 30" of the soil surface and reside in areas associated with alluvial activity. These soils are considered unsuitable for drain field application under most circumstances.

Multiple hand auger boring attempts at each data point resulted in refusal on impenetrable material at depths between 20" & 40". This unit may contain consolidated rock features at depths that are limiting to drain field application. Test pits should be considered to determine suitability of soil for septic system application in this area. Profiles observed in these units had seasonal saturation or incipient water table in horizons at or below 60". Soil < 60" was well drained and free of limiting layers but may be subject to slow permeability due to fine textures. These soils may be considered for conventional system application with a shallow installation. Extra care should be taken upon system installation to avoid smearing of trench surfaces or damage to soil structure.

Soils have seasonal saturation beginning at depths between 50" & 60" below the soil surface with overlying zones of slow permeability beginning at depths near 45". These soils may be considered for robust conventional system application with as shallow an installation as possible and still maintain required separation from the soil surface. Due to slow permeability in the upper portions of the profile and possibility for variability, these soils are poorly suited for system designs that utilize full reduction in drain line length. Areas within units that resided in concave landscape positions should be considered for water diversion mechanisms upgradient from drain field. Extra care should be taken upon system installation to avoid smearing of trench walls and damage to soil structure. Areas within these units have been subject to significant alteration through filling and grading from construction of road beds and existing structures. These areas should not be considered for drain field application until structures are removed and additional testing is performed to evaluate extent of disturbance and suitability for drain fields.



1 inch = 100 ft.  
( IN FEET )



**GRAPHIC SCALE**

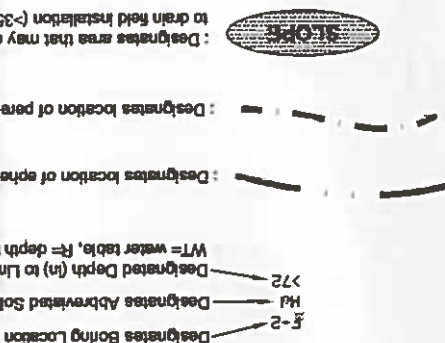
NRCS SERIES	SLOPE RANGES (%)	DEPTH TO ROCK (inches)	DEPTH TO WATER (inches)	TRENCH DEPTH (inches)	PERC/LOADING RATE (min/in)/(gpd/sqft)	CODES
Cecil	5-15	>72	>72	40-45	45	A
Cecil-wet	5-15	>72	60-70	30-35	80	P1
Hard Labor	5-15	>72	30-50	6-12	0.10 G/sft/day	C
Hard Labor-Phase2	5-15	>72	50-60	24	90	P2
Helena	2-8	>72	20-30	N/A	N/A	F
Madison	3-15	>72	>72	40-45	45	A
Madison-stony	5-20	60->72	>72	30-35	60	B
Saw / Wake	5-15	see code	>40	N/A	N/A	I
Wedowee	5-15	>72	>72	35-40	50	A
Urdorment	N/A	N/A	N/A	N/A	N/A	Q

**L DATA TABLE:**

NRCS SERIES, SLOPE RANGES (%), DEPTH TO ROCK (inches), DEPTH TO WATER (inches), TRENCH DEPTH (inches), PERC/LOADING RATE (min/in)/(gpd/sqft), CODES

- Depth to water is defined as the depth to first indication of seasonal saturation.

- Hard rock is defined as material that is consolidated, nonfractured and is impenetrable with a hand auger



Designates area that may be used for drain field installation (<35%)

**LEVEL III SOIL SURVEY**  
for PERMITTING OF ON-SITE WASTEWATER SYSTEMS

4350 HAMPTON MILL PARKWAY  
DOUGLASVILLE, GA 30135  
(770) 485-3695

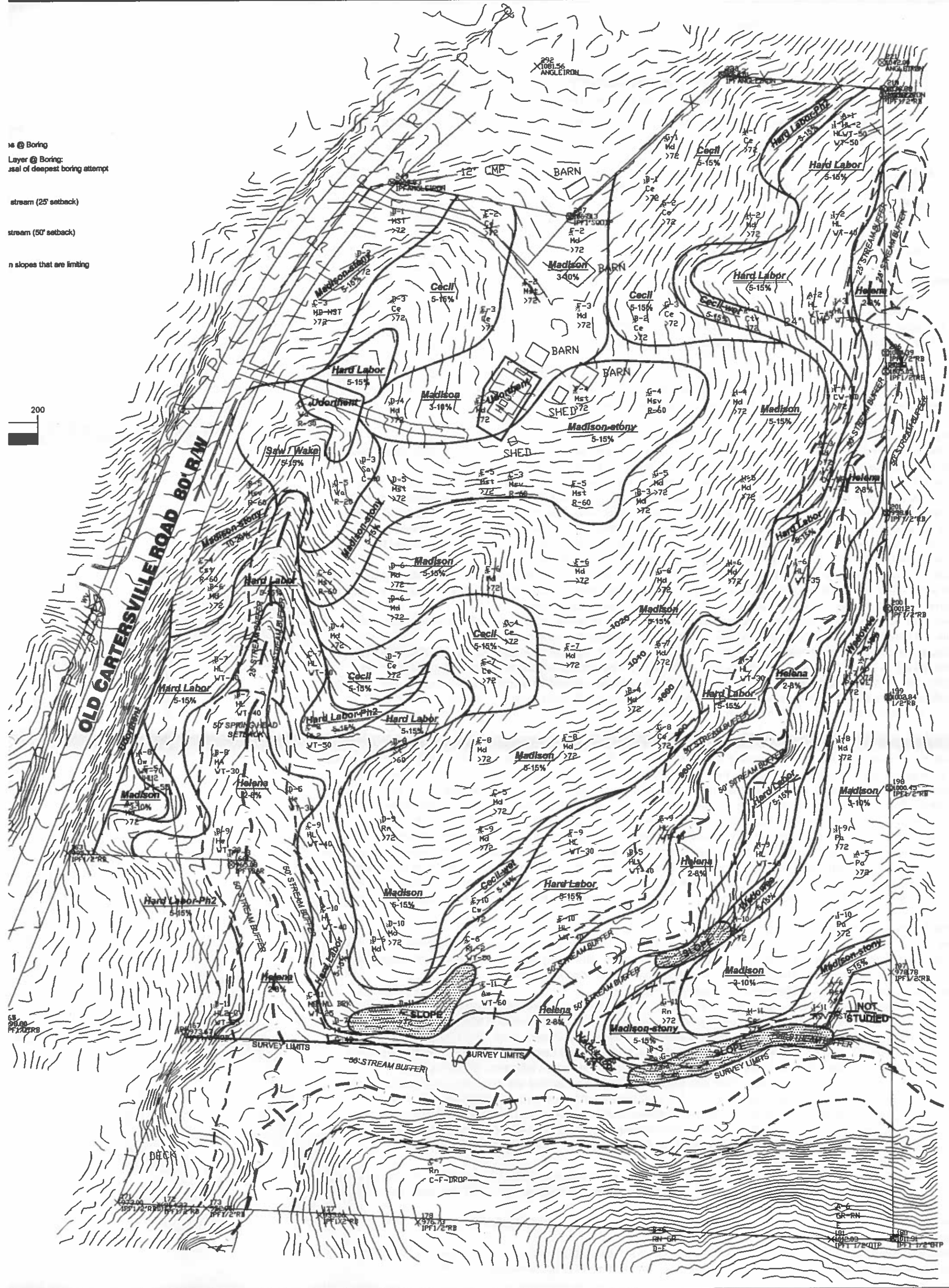
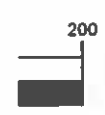
**LANDTEC SOUTHEAST, INC.**

PROJECT: LANIER PROPERTY RESOURCES, LLC  
COUNTY: PAULDING CO.  
LOCATION: OLD CARTERSVILLE RD

DRAWING SCALE: 1"=100'  
AREA SURVEYED: +/- 18 AC  
INTENSITY: +/- 5.7 BORINGS/ACRE

E: 4/11/05

16 @ Boring  
 Layer @ Boring:  
 usual of deepest boring attempt  
  
 stream (25' setback)  
 stream (50' setback)  
 n slopes that are limiting



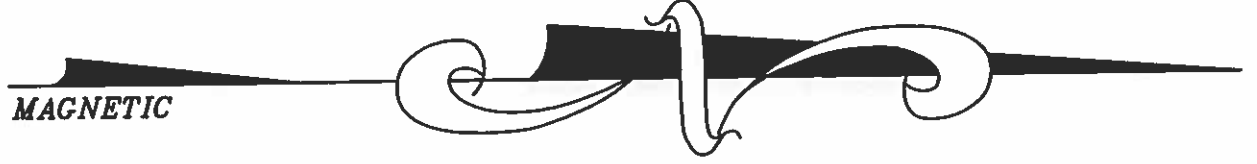
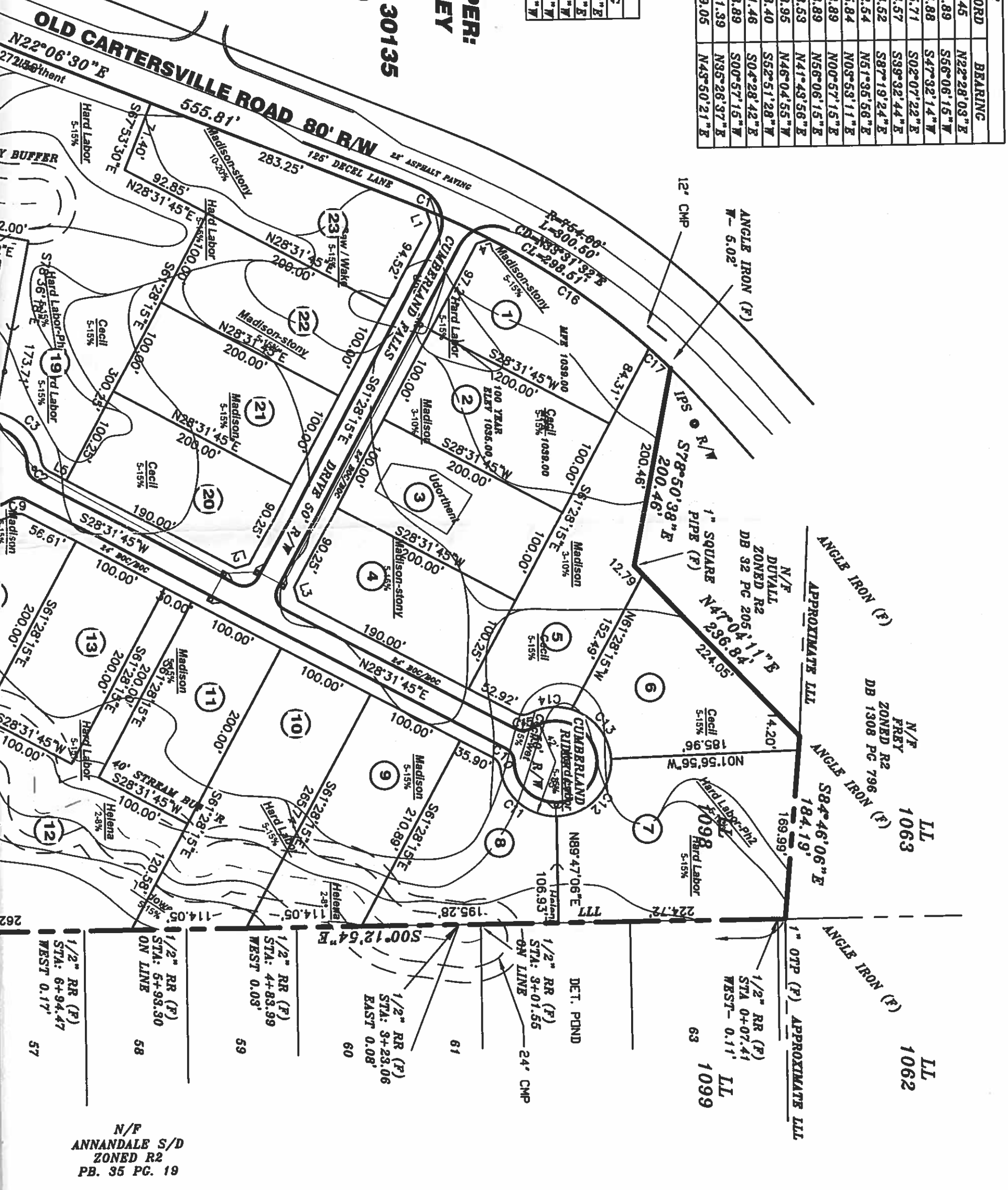
SYSTEMS	DATE: 4/11/05	GENERAL NOTES:  THIS DRAWING AND ALL COPIES THEREOF ARE PROPRIETARY AND ARE THE PROPERTY OF LANDTEC SOUTHEAST INC., AND ARE SUBJECT TO RETURN ON DEMAND.  BASE MAP SOURCE: CRA, INC	REV.	DATE	DESCRIPTION	
	SHEET 1 OF 1					
	DRAWING SCALE : 1" = 100'					
	CAD PLOT SCALE : 1: 100					

CURVE TABLE				
CURVE	LENGTH	RADIUS	CHORD	BEARING
C1	9.45	754.00	9.45	N22°28'03"E
C2	14.44	15.00	13.89	S66°06'15"W
C3	69.39	55.00	64.88	S47°32'14"W
C4	25.95	55.00	25.71	S02°07'22"E
C5	45.89	55.00	44.57	S39°32'44"E
C6	45.83	55.00	44.52	S87°19'24"E
C7	39.03	55.00	32.54	N51°35'56"E
C8	58.57	55.00	55.84	N03°53'11"E
C9	14.44	15.00	13.89	N00°57'15"E
C10	14.44	15.00	13.89	N56°06'15"E
C11	80.53	55.00	73.53	N41°43'56"E
C12	88.06	55.00	78.95	N46°04'55"W
C13	67.57	55.00	63.40	S52°51'28"W
C14	42.51	55.00	41.46	S04°28'42"E
C15	14.44	15.00	13.89	S00°57'15"W
C16	191.91	754.00	191.39	N35°26'37"E
C17	29.05	754.00	29.05	N43°50'21"E

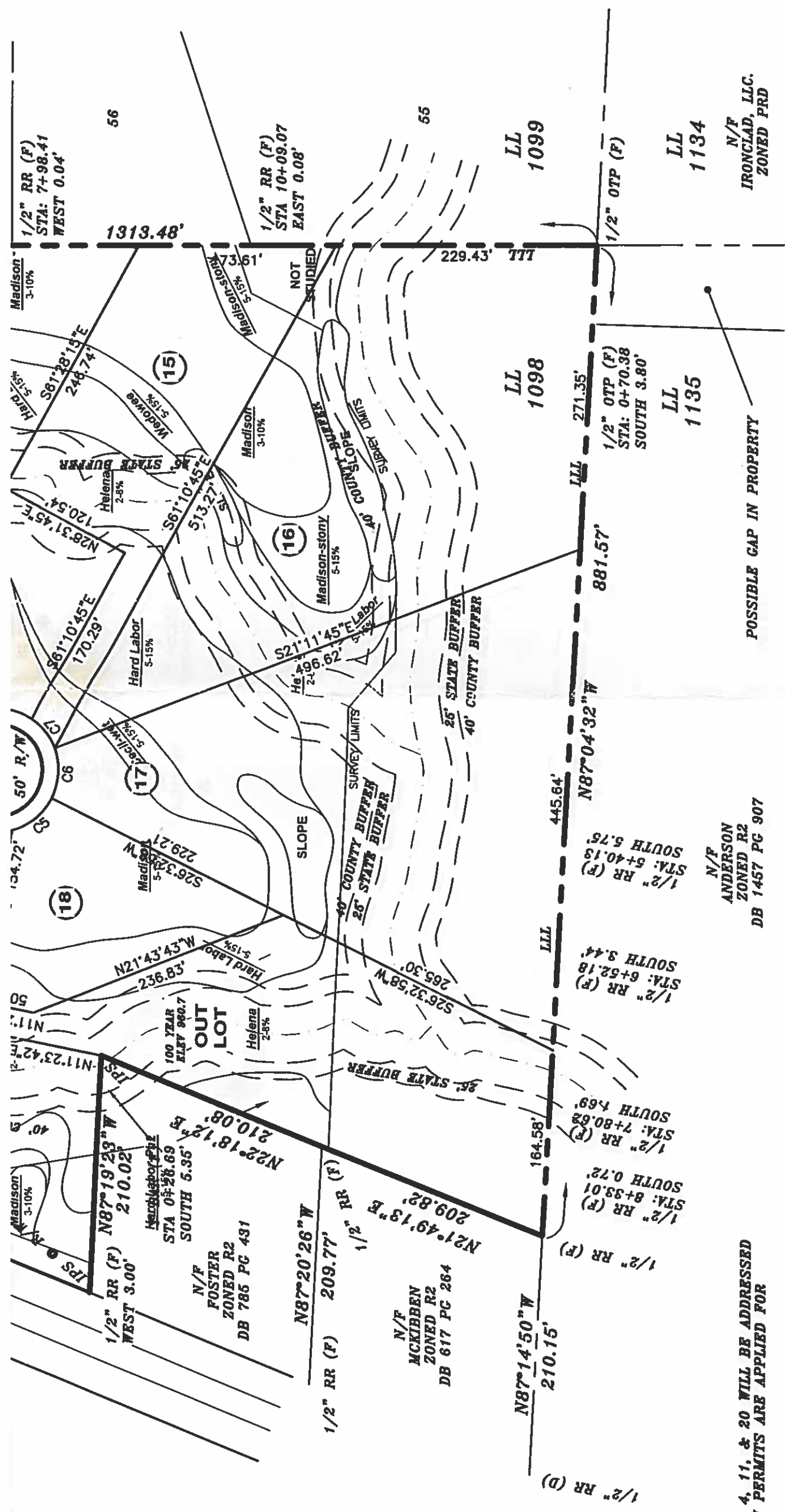
LINE TABLE		
LINE	LENGTH	BEARING
L1	13.50	N70°58'36"E
L2	14.14	S16°28'15"E
L3	14.14	S73°31'45"W
L4	14.24	N16°51'09"W
L5	19.58	S28°31'45"W

**OWNER/DEVELOPER:**  
**RUSSELL SHIRLEY**  
**1895 MAC RD**  
**DOUGLASVILLE, GA 30135**  
**770-489-4210**

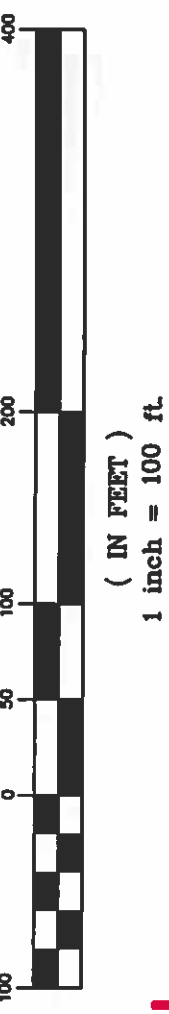
AREA  
**21.820 ACRES**



N/F  
 ANNANDALE S/D  
 ZONED R2  
 PB. 35 PG. 19



SETBACKS  
 FRONT- 36'  
 SIDE- 15' (25')  
 REAR- 25'



LOTS 4, 11, & 20 WILL BE ADDRESSED WHEN PERMITS ARE APPLIED FOR

ALL CORNERS ARE 1/2" REINFORCING RODS UNLESS OTHERWISE STATED.

N/F ANDERSON  
 ZONED R2  
 DB 1457 PG 907

POSSIBLE GAP IN PROPERTY

N/F IRONCLAD, LLC.  
 ZONED PRD

NOTE FOR LOTS 12, 15, & 16 DRIVEWAY CULVERTS TO BE MIN 42" CMP @ 1% WITH 5' HW TO CONTROL 100 YEAR EVENT.

\* INDICATES HOUSE LOCATION PLAN TO BE SUBMITTED TO PAULDING COUNTY ENGINEERING DIVISION PRIOR TO OBTAINING BUILDING PERMIT.

*File Copy*

FINAL PLAT WITH SOILS  
**CUMBERLAND FALLS**

LOCATED IN LAND LOT(S) - 1098  
 3rd DISTRICT, 3rd SECTION  
 PAULDING COUNTY, GEORGIA

PROJECT NO. 04-128  
 PLOT FILE # 041280b  
 DATE: 1/3/06  
 DRAWN BY: W.C.R.3  
 APPROVED BY: W.C.R.

SHEET TWO OF TWO

**CRA**  
 CRA, INC.  
**CARLTON RAKESTRAW & ASSOCIATES**  
 REGISTERED LAND SURVEYORS  
 2203 MARIETTA HWY DALLAS, GEORGIA 30157  
 PHONE: 770-443-2200 FAX: 770-443-2300