



# LAND RESOURCE MANAGEMENT

— Land Evaluation by Land Experts —

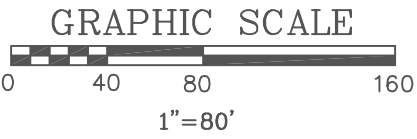
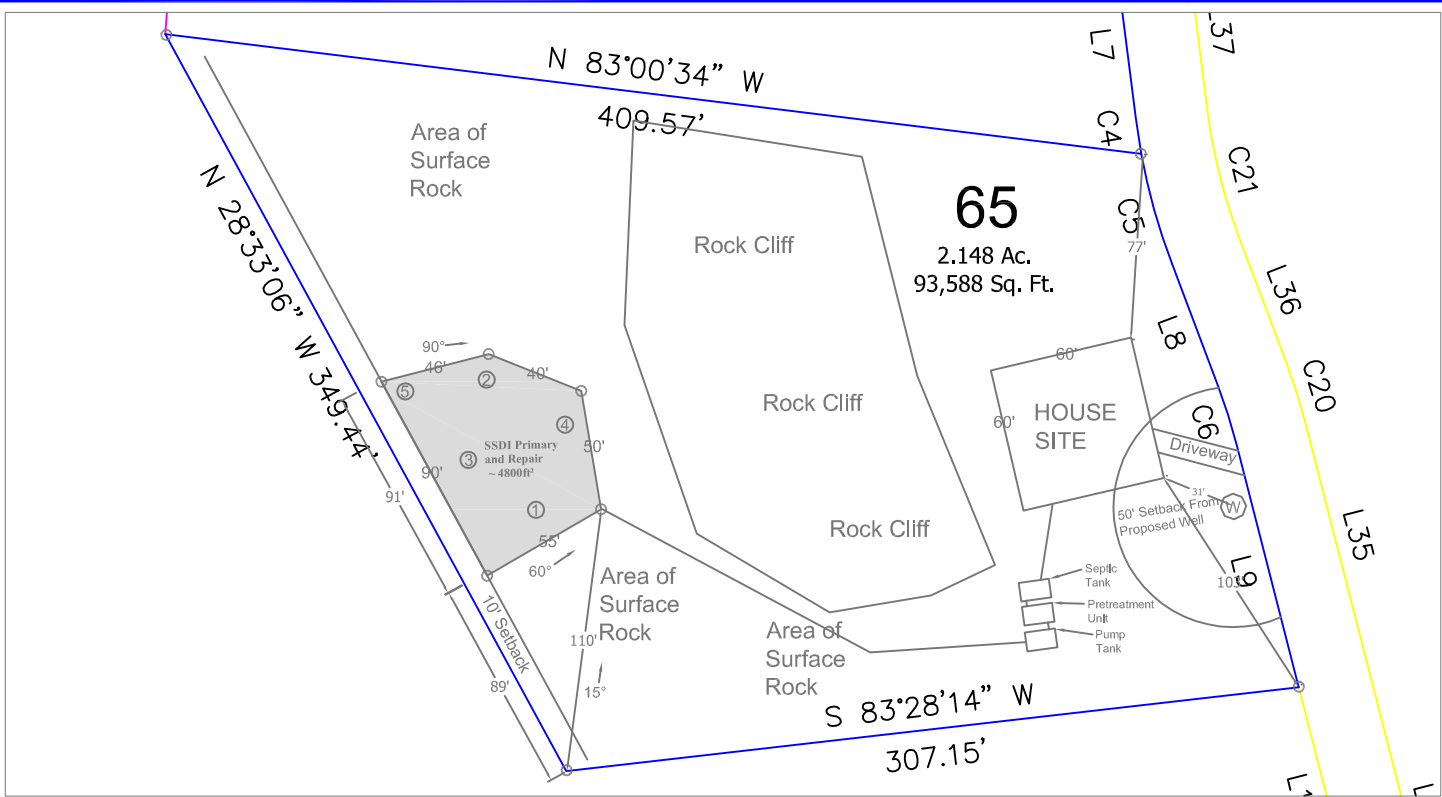
PO BOX 9251, ASHEVILLE, NC 28815 || 828.231.1663 || WWW.LANDRM.COM

**LOT 65**  
**COUCH MOUNTAIN**  
**PIN # 9662-80-4729**  
**HENDERSON COUNTY, NC**

Client: Luna Ridge, LLC  
69 Clark Gap Rd  
Fletcher, N.C 28732

Contact: Andy Baker  
Email: [andy@tfmcarolina.com](mailto:andy@tfmcarolina.com)  
Phone: 1-828-645-8815

Permitting Authority: Henderson County Health Dept.



**Notes:**

- 1) The LSS Evaluation is being submitted pursuant to and meets the requirements of SL 2018-114 Section 11.(c).
- 2) Per 15A NCAC 18A.1952 (b)(2)(b) the minimum septic tank volume is 1000 gallons.
- 3) A pump tank per 15A. NCAC 18A .1952 (c)(1)(A) will be required. LRM recommends use of a 1250 gallon pump tank.
- 4) Pump plumbing and controls should meet all provisions found in 15A NCAC 18A.1952(c).
- 5) The primary and repair septic systems and pretreatment will need to be designed by a Certified Designer or Professional Engineer (PE) before the Construction Authorization can be issued.
- 6) Due to the rocky nature of the soil additional area was giving in the septic area.
- 7) Due to the dense vegetation the above map is approximate.
- 8) The corners of the SSDI system are marked in the field with pink/orange wire flags with pink/black ribbon.

<b>PRIMARY AND REPAIR:</b>	
System Kind: Aerobic Subsurface Drip Irrigation	
LTAR: 0.35	4-Bedroom Design
Trench Depth (In.) : 6	Trench Width (In.) : N/A
The primary and repair area is flagged in the field and represents approximately 4800ft <sup>2</sup> . The proposed primary and repair system requires a minimum of 2742 ft <sup>2</sup> . Additional area is available if needed.	

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 www.landrm.com



Date:	7-29-21
Scale:	AS NOTED
Proj.#:	56319
Designed:	AGH/JSE
Drawn:	AGH
Checked:	WBF
Reviewed:	WBF

**HENDERSON COUNTY  
 NORTH CAROLINA**

**LOT 65  
 COUCH MOUNTAIN**



# LAND RESOURCE MANAGEMENT

Land Evaluation by Land Experts

PO BOX 9251, COVINGTON, LA 70433 • (504) 835-1855 • WWW.LANDRM.COM

PROJECT NO. AND NAME: Couch

PIT: Bony LOT: 65 COUNTY: Harrison DATE: 7/28/21

PERCENT SLOPE (Rule .1940): 54% GLAY MINERALOGY (Rule .1941): N/A SE MIX EX

LANDSCAPE POSITION (Rule .1940): SS SOIL DEPTH (Rule .1943): 724

TOPOGRAPHY (Rule .1940): Uniform RESTRICTIVE HORIZON (Rule .1944): 24" to SBRF

PARENT MATERIAL: AL CO RE A/C A/R C/R SEASONAL HIGH WATER TABLE (Rule .1942): 724

SOIL GROUP (Rule .1955): 3 TYPE OF WATER TABLE (Rule .1942): NA

SAPROLITE GROUP (Rule .1956): NA CLASSIFICATION (Rule .1948): PS US

NOTES: RECLASSIFIED (Rule .1948): N/A PS

6 inches = trench depth  
 - inches = slope correction soil depth  
 10 inches = regulated soil depth  
 + inches = regulated saprolite depth  
 16 inches total depth needed

Calculated for: SSPE

HORIZON (Rule .1939)	DEPTH (Inches)	MOIST COLOR		TEXTURE (Rule .1941)	STRUCTURE (Rule .1941)	CONSISTENCE (Rule .1941)	CLAY (%)	LTAR	
		MATRIX	MOTTLES					AEROBIC DRIP (Rule .1989)	CONV. (Rule .1955)
A	0-4	10YR3/14	-	SL	G	VFR	-	04	00
Bt	4-24	10YR5/6	-	SCL	B	FR	70	035	0.5
	24-	SBRF							

LRM- NC Revised 10/2012

MCA = Multicolored Alluvium  
 MCC = Multicolored colluvium  
 MCS = Multicolored saprolite

LTAR = Long Term Acceptance Rate in gallons per square foot per day  
 RF = Rock fragments

RLHB = Restrictive layer - Hard bedrock  
 RLWB = Restrictive layer - Weathered bedrock  
 SBRF = Stopped by rock fragments

DESCRIBED BY:

CHECKED BY:



# LAND RESOURCE MANAGEMENT

Land Evaluation by Land Experts

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PROJECT NO. AND NAME: *Couch Mountain*

PIT: <i>Boring #2</i>	LOT: <i>65</i>	COUNTY: <i>HENDERSON</i>	DATE: <i>7/28/2021</i>
PERCENT SLOPE (Rule .1940): <i>52%</i>		CLAY MINERALOGY (Rule .1941): <i>N/A</i> (SE) MX EX	
LANDSCAPE POSITION (Rule .1940): <i>Side Slope</i>		SOIL DEPTH (Rule .1943): <i>25"</i>	
TOPOGRAPHY (Rule .1940): <i>Uniform</i>		RESTRICTIVE HORIZON (Rule .1944): <i>25" SBRF</i>	
PARENT MATERIAL: AL CO (RE) A/C A/R C/R		SEASONAL HIGH WATER TABLE (Rule .1942): <i>25"</i>	
SOIL GROUP (Rule .1955): <i>III</i>		TYPE OF WATER TABLE (Rule .1942): <i>N/A</i>	
SAPROLITE GROUP (Rule .1956): <i>N/A</i>		CLASSIFICATION (Rule .1948): PS (US)	
NOTES: <i>SBRF @ 25", RESISTS AUGER</i>		RECLASSIFIED (Rule .1948): <i>N/A</i> (PS)	

6 inches = trench depth - inches = slope correction soil depth 12 inches = regulated soil depth + - inches = regulated saprolite depth 18 inches total depth needed	Calculated for :  <i>SSDT</i>
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HORIZON (Rule .1939)	DEPTH (inches)	MOIST COLOR		FIELD ESTIMATES					LTAR	
		MATRIX	MOTTLES	TEXTURE (Rule .1941)	STRUCTURE (Rule .1941)	CONSISTENCE (Rule .1941)	CLAY (%)	AEROBIC DRIP (Rule .1969)	CONV. (Rule .1955)	
<i>A</i>	<i>0"-3"</i>	<i>10yr 3/4</i>	<i>—</i>	<i>SL</i>	<i>Gr</i>	<i>VFR</i>	<i>—</i>	<i>0.4</i>	<i>0.6</i>	
<i>BT1</i>	<i>3"-7"</i>	<i>10yr 4/6</i>	<i>—</i>	<i>SCL</i>	<i>B</i>	<i>FR</i>	<i>20%</i>	<i>0.4</i>	<i>0.55</i>	
<i>BT2</i>	<i>7"-25"</i>	<i>10yr 5/6</i>	<i>—</i>	<i>SCL</i>	<i>B</i>	<i>FR</i>	<i>25%</i>	<i>0.35</i>	<i>0.5</i>	
<i>Cr</i>	<i>25"</i>	<i>SBRF</i>	<i>RESISTS</i>	<i>AUGER</i>	<i>—————</i>					

LRM- NC Revised 10/2012

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LTAR = Long Term Acceptance Rate in gallons per square foot per day  
 RF = Rock fragments

RLHB = Restrictive layer – Hard bedrock  
 RLWB = Restrictive layer – Weathered bedrock  
 SBRF = Stopped by rock fragments

DESCRIBED BY: *JSE*

CHECKED BY: *WBF*



# LAND RESOURCE MANAGEMENT

— Land Evaluation by Land Experts —

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PROJECT NO. AND NAME: Couch MA

PIT: <u>Boring 3</u>	LOT: <u>65</u>	COUNTY: <u>Hood</u>	DATE: <u>7/28/21</u>
PERCENT SLOPE (Rule .1940): <u>486</u>	GLAY MINERALOGY (Rule .1941): <u>N/A</u> (SE) MX EX		
LANDSCAPE POSITION (Rule .1940): <u>SS</u>	SOIL DEPTH (Rule .1943): <u>79"</u>		
TOPOGRAPHY (Rule .1940): <u>Uniform</u>	RESTRICTIVE HORIZON (Rule .1944): <u>22" LSHB</u>		
PARENT MATERIAL: AL <u>CO</u> RE A/C A/R C/R	SEASONAL HIGH WATER TABLE (Rule .1942): <u>722</u>		
SOIL GROUP (Rule .1955): <u>3</u>	TYPE OF WATER TABLE (Rule .1942): <u>nt</u>		
SAPROLITE GROUP (Rule .1956): <u>nt</u>	CLASSIFICATION (Rule .1948): (PS) <u>US</u>		
NOTES:	RECLASSIFIED (Rule .1948): <u>N/A</u> PS		

6 inches = trench depth	Calculated for:
12 inches = slope correction soil depth	
12 inches = regulated soil depth	
+ 1 inches = regulated saprolite depth	
15 inches total depth needed	

HORIZON (Rule .1939)	DEPTH (Inches)	MOIST COLOR		TEXTURE (Rule .1941)	STRUCTURE (Rule .1941)	CONSISTENCE (Rule .1941)	CLAY (%)	LTAR	
		MATRIX	MOTTLES					AEROBIC DRIP (Rule .1989)	CONV. (Rule .1955)
<u>A</u>	<u>0-3</u>	<u>10YR3/3</u>	<u>-</u>	<u>SL</u>	<u>G</u>	<u>VFA</u>	<u>-</u>	<u>0.4</u>	<u>0.6</u>
<u>B1</u>	<u>3-18</u>	<u>10YR4/6</u>	<u>-</u>	<u>SCL</u>	<u>B</u>	<u>FR</u>	<u>25</u>	<u>0.35</u>	<u>0.5</u>
<u>B2</u>	<u>18-72</u>	<u>10YR5/6</u>	<u>-</u>	<u>SCL</u>	<u>B</u>	<u>FR</u>	<u>20</u>	<u>0.35</u>	<u>0.5</u>
	<u>72</u>	<u>SBRK</u>							

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RLWB = Restrictive layer - Weathered bedrock  
SBRF = Stopped by rock fragments

DESCRIBED BY:

CHECKED BY:

\*MAP ON BACK



# LAND RESOURCE MANAGEMENT

Land Evaluation by Land Experts

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PROJECT NO. AND NAME: <u>Couch Mountain</u>			
PIT: <u>BORING #4</u>	LOT: <u>65</u>		
COUNTY: <u>HENDERSON</u>	DATE: <u>7/28/2021</u>		
PERCENT SLOPE (Rule .1940): <u>47%</u>	CLAY MINERALOGY (Rule .1941): <u>N/A</u> (SE) MX: EX		
LANDSCAPE POSITION (Rule .1940): <u>SIDE SLOPE</u>	SOIL DEPTH (Rule .1943): <u>30"</u>		
TOPOGRAPHY (Rule .1940): <u>Uniform</u>	RESTRICTIVE HORIZON (Rule .1944): <u>30" SBRF</u>		
PARENT MATERIAL: AL CO <u>(RE)</u> A/C A/R C/R	SEASONAL HIGH WATER TABLE (Rule .1942): <u>&gt;30"</u>		
SOIL GROUP (Rule .1955): <u>III</u>	TYPE OF WATER TABLE (Rule .1942): <u>N/A</u>		
SAPROLITE GROUP (Rule .1956): <u>N/A</u>	CLASSIFICATION (Rule .1948): PS <u>(US)</u>		
NOTES: <u>SBRF@ 30", RESISTS AUGER</u>	RECLASSIFIED (Rule .1948): <u>N/A (PS)</u>		
<table border="0"> <tr> <td style="border: none;">                 6 inches = trench depth                  - inches = slope correction soil depth                  /2 inches = regulated soil depth                  + - inches = regulated saprolite depth                  18 inches total depth needed             </td> <td style="border: none; vertical-align: top;">                 Calculated for :   <u>SSDT</u> </td> </tr> </table>		6 inches = trench depth - inches = slope correction soil depth /2 inches = regulated soil depth + - inches = regulated saprolite depth 18 inches total depth needed	Calculated for :  <u>SSDT</u>
6 inches = trench depth - inches = slope correction soil depth /2 inches = regulated soil depth + - inches = regulated saprolite depth 18 inches total depth needed	Calculated for :  <u>SSDT</u>		

HORIZON (Rule .1939)	DEPTH (inches)	MOIST COLOR		TEXTURE (Rule .1941)	FIELD ESTIMATES			LTAR	
		MATRIX	MOTTLES		STRUCTURE (Rule .1941)	CONSIST-ENCE (Rule .1941)	CLAY (%)	AEROBIC DRIP (Rule .1969)	CONV. (Rule .1955)
A	0"-4"	10yr 4/4	-	SL	GR	VFR	-	0.4	0.6
BT	4"-23"	10yr 5/6	-	SCL	B	FR	25%	0.35	0.5
BC	23"-30"	10yr 5/8	MCS	SCL	B	FR	20%	0.35	0.5
CR	30"	SBRF	RESISTS	AUGER					

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CHECKED BY: WBF



# LAND RESOURCE MANAGEMENT

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PROJECT NO. AND NAME: COUGH MOUNTAIN

PIT: <u>BORING #5</u>	LOT: <u>GS</u>	COUNTY: <u>HENDERSON</u>	DATE: <u>7/28/2021</u>
PERCENT SLOPE (Rule .1940): <u>54%</u>	CLAY MINERALOGY (Rule .1941): N/A <u>(SE)</u> MX EX		
LANDSCAPE POSITION (Rule .1940): <u>SIDE SLOPE</u>	SOIL DEPTH (Rule .1943): <u>29"</u>		
TOPOGRAPHY (Rule .1940): <u>Uniform</u>	RESTRICTIVE HORIZON (Rule .1944): <u>29" SBRF</u>		
PARENT MATERIAL: AL CO <u>(RE)</u> A/C A/R C/R	SEASONAL HIGH WATER TABLE (Rule .1942): <u>&gt; 29"</u>		
SOIL GROUP (Rule .1955): <u>III</u>	TYPE OF WATER TABLE (Rule .1942): <u>N/A</u>		
SAPROLITE GROUP (Rule .1956): <u>N/A</u>	CLASSIFICATION (Rule .1948): PS <u>(US)</u>		
NOTES: <u>SBRF @ 29", RESISTS AUGER</u>	RECLASSIFIED (Rule .1948): N/A <u>(PS)</u>		
		6 inches = trench depth - inches = slope correction soil depth 12 inches = regulated soil depth - inches = regulated saprolite depth 18 inches total depth needed	Calculated for :  <u>SSDI</u>

FIELD ESTIMATES

HORIZON (Rule .1939)	DEPTH (inches)	MOIST COLOR		TEXTURE (Rule .1941)	STRUCTURE (Rule .1941)	CONSISTENCE (Rule .1941)	CLAY (%)	LTAR	
		MATRIX	MOTTLES					AEROBIC DRIP (Rule .1969)	CONV. (Rule .1955)
<u>A</u>	<u>0"-3"</u>	<u>10yr 3/4</u>	<u>-</u>	<u>SL</u>	<u>GR</u>	<u>VFR</u>	<u>-</u>	<u>0.4</u>	<u>0.6</u>
<u>BT</u>	<u>3"-24"</u>	<u>10yr 5/6</u>	<u>-</u>	<u>SCL</u>	<u>B</u>	<u>FR</u>	<u>25%</u>	<u>0.35</u>	<u>0.5</u>
<u>BC</u>	<u>24"-29"</u>	<u>10yr 5/8</u>	<u>MCS</u>	<u>SCL</u>	<u>B</u>	<u>FR</u>	<u>20%</u>	<u>0.35</u>	<u>0.5</u>
<u>CR</u>	<u>29"</u>	<u>SBRF</u>	<u>RESISTS</u>	<u>AUGER</u>	<u>—————</u>				

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