

Case Number: SEP 2018-00952

PIN 9688-93-6187

BUNCOMBE COUNTY DEPARTMENT OF HEALTH
ENVIRONMENTAL HEALTH SERVICES (828-250-5016)
IMPROVEMENT PERMIT FOR WASTEWATER SYSTEM CONSTRUCTION

Applicant Name: Castal LLC Property Location: 1016 Moss Creek Ln Application Date: _____

Property Owner: Same

Directions: I-40 (R) - Exit 59 - Patton Ave Rd (L) onto SUB (R) Moss Creek Ln - #1016 on Rt.

Subdivision: High Hickory Lot# 72 Phase _____

****This permit does not give authority to install any type of septic system****

SYSTEM DESIGN:

Residential Commercial _____ Multiple Unit Dwelling: No. of Units 1 No. Bedrooms/per unit 3
House Mobile Home _____ (Single _____ Double _____)
Basement(s): Yes No _____ Basement Plumbing: Yes No _____

Available Space PS Site Classification: PS Soil Group: See Attached Report
No. Bedrooms/per unit 3 Design Flow 360

Exact Size and location of structure known at this time: _____ yes no

Water Supply: Private Well _____ Shared Well _____ Public/Community _____ Municipal _____ Spring

*****SEE ATTACHED DRAWING FOR SEPTIC SYSTEM***
LOCATION AND DESIGN CRITERIA**

Comments: **NO GRADING OR FILLING IN THE DRAINFIELD AREAS**

_____ This permit is valid only for a structure of this description or smaller

This permit is not limited to a structure of this description; however, no part of the structure shall extend into the designated area for the sewage system treatment.

An Authorization to construct must be obtained when final plans are completed and exact type and location of building are established. For planning purposes, please be aware that building, driveways, excavation, fill dirt, or other obstruction may not be placed or constructed in any part of the area designated for the sewage treatment system. This permit is subject to revocation if the site is altered or the intended use changes from those described above.

A Building permit may not be issued until an Authorization to Construct is obtained

Issued By: [Signature] Date: 6-21-18 Owner/Agent: [Signature] Date: 6/21/18

THIS IMPROVEMENT PERMIT IS VALID FOR 5 YEARS FROM THE DATE OF ISSUANCE

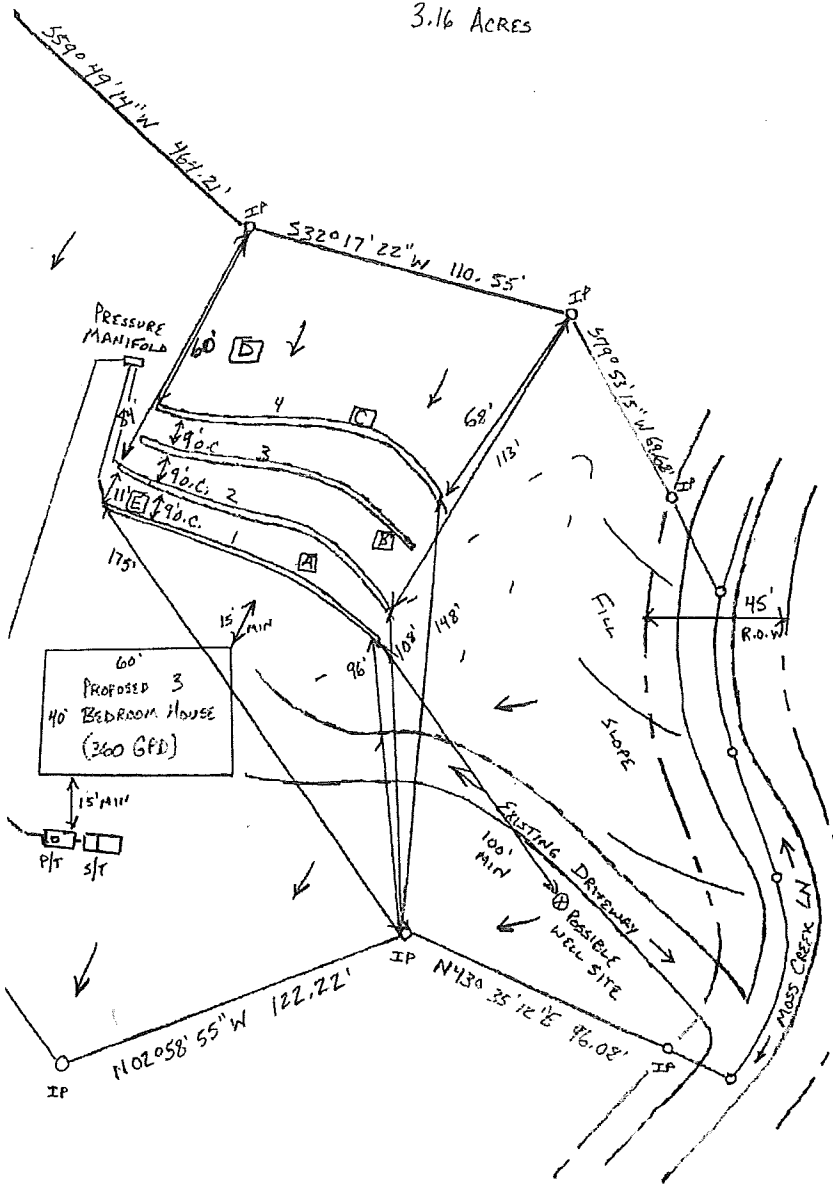


LAND RESOURCE MANAGEMENT

Land Evaluation by Land Experts

PO BOX 9751 ASHEVILLE NC 28815 TEL 828 231 1692 WWW.LANDRM.COM

3.16 ACRES



High Hickory Lot 72 Buncombe County, NC

PRIMARY:

System Kind: 25% Reduction

LTAR: 0.45 3 Bedroom Design

Trench Depth (in.): 20 Trench Width (in.): 36

REPAIR:

System Kind: 25% Reduction

LTAR: 0.45 3 Bedroom Design

Trench Depth (in.): 20 Trench Width (in.): 36

LINES (Down to upslope / 9' centers)

LINE	COLOR	FEET	CUMULATIVE FEET
Initial			
1	orange	100	100
2	pink	100	200
3	orange	100	300
4	pink	100	400

NOTES:

- 1) This is not a septic system permit. Any grading or disturbance in the proposed drainfield area renders this report null and void. All drainfield specifications and soils data is subject to review by the Buncombe County Health Department (BCHD). LRM recommends using this report as the site plan required by the county in the permitting process. LRM also recommends that any soil test pits or borings remain open, and that the drainfield flagging remain in place to assist the BCHD in the review of this report.
- 2) System will require a pump based upon proposed house site.
- 3) Pit D is located above the proposed initial and repair areas and located where the percent slope is greater, but is still PS for 25% Reduction. We recommend installation as proposed to avoid the steeper slopes.

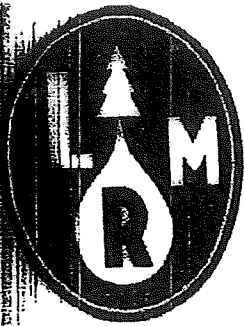
SCALE: 1" ~ 60'



0' 60'



W. [Signature]



Land Resource Management

PO Box 9251, Asheville, NC 28815

828.231.1663

www.landrm.com

PROJECT NO. AND NAME: High Hillory

SECTION: A LOT: 72 COUNTY: BUNCOMBE DATE: 5/24/18

PERCENT SLOPE (Rule .1940): 20% CLAY MINERALOGY (Rule .1941): N/A (SE) MX EX

LANDSCAPE POSITION (Rule .1940): CONVIVAL BENCH SOIL DEPTH (Rule .1943): >61"

TOPOGRAPHY (Rule .1940): Uniform RESTRICTIVE HORIZON (Rule .1944): >61"

DOMINANT MATERIAL: AL CO RE A/C A/R C/R SEASONAL HIGH WATER TABLE (Rule .1942): >61"

SOIL GROUP (Rule .1955): III TYPE OF WATER TABLE (Rule .1942): N/A

SAPROLITE GROUP (Rule .1956): N/A CLASSIFICATION (Rule .1948): (PS) US

NOTES: SOME POCKETS OF SAPROLITE PRESENT IN BT₂ HORIZON. RECLASSIFIED (Rule .1948): (N/A) PS

Calculated for:
25% Permeability

20 inches = trench depth
 8 inches = slope correction soil depth
 12 inches = regulated soil depth
 - inches = regulated saprolite depth
 40 inches total depth needed

← 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)
A	0'-8"	10YR ^{3/3}	-	L	Gr	VEE	-	0.4	0.6
BT ₁	8'-23"	10YR ^{3/6}	-	SCL	1M ^{SBK}	FR	25%	0.35	0.45
BT ₂	23'-50"	10YR ^{4/6}	MCS	SCL	1M ^{SBK}	FR	20%	0.35	0.5
BC	50'-61"	10YR ^{4/6}	MCS	(SL)	Gr	FR	-	0.4	0.6

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: JSE

CHECKED BY: WBF



Land Resource Management

PO Box 9251, Asheville, NC 28815

828.231.1663

www.landrm.com

PROJECT NO. AND NAME: High Hickory

LOT: 72 COUNTY: Buncombe DATE: 5/24/18

PERCENT SLOPE (Rule .1940): 22% CLAY MINERALOGY (Rule .1941): N/A (SE) MX EX

LANDSCAPE POSITION (Rule .1940): Colluvial Bench SOIL DEPTH (Rule .1943): 363"

TOPOGRAPHY (Rule .1940): Uniform RESTRICTIVE HORIZON (Rule .1944): 363"

DOMINANT MATERIAL: AL (CO) RE A/C A/R C/R SEASONAL HIGH WATER TABLE (Rule .1942): 363"

SOIL GROUP (Rule .1955): III TYPE OF WATER TABLE (Rule .1942): N/A

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

NOTES: SOME SAPROLITE PRESENT IN BT₂ HORIZON RECLASSIFIED (Rule .1948): (N/A) PS

20 inches = trench depth
 8 inches = slope correction soil depth
 12 inches = regulated soil depth
 + - inches = regulated saprolite depth
 40 inches total depth needed

Calculated for:
25% Reduction

← 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)
A	0'-6"	10YR 3/3	-	L	GE	VFR	-	0.4	0.6
BT ₁	6'-13"	10YR 4/4	-	SCL	1MSEK	FR	25%	0.35	0.45
BT ₂	13'-63"	10YR 4/4	MCS	SCL	1MSEK	FR	25%	1.35	0.45

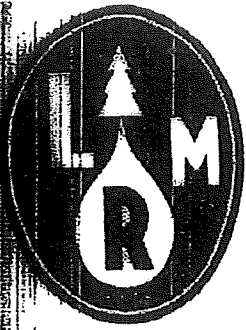
LRM- NC Revised 10/2012
 MCA = Multicolored Alluvium
 MCC = Multicolored colluvium
 MCS = Multicolored saprolite

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: JSE

CHECKED BY: WBF



Land Resource Management

PO Box 9251, Asheville, NC 28815

828.231.1663

www.landrm.com

PROJECT NO. AND NAME: 1134 Hickory

PT: C	LOT: 72	COUNTY: Buncombe	DATE: 5/24/18
PERCENT SLOPE (Rule .1940): 27%		CLAY MINERALOGY (Rule .1941): N/A (SE) MX EX	
LANDSCAPE POSITION (Rule .1940): Side Slope		SOIL DEPTH (Rule .1943): 264"	
TOPOGRAPHY (Rule .1940): Uniform		RESTRICTIVE HORIZON (Rule .1944): 264"	
PARENT MATERIAL: AL (CO) RE A/C A/R C/R		SEASONAL HIGH WATER TABLE (Rule .1942): 264"	
SOIL GROUP (Rule .1955): TII		TYPE OF WATER TABLE (Rule .1942): N/A	
SAPROLITE GROUP (Rule .1956): N/A		CLASSIFICATION (Rule .1948): (PS) US	
NOTES: Soils Saprolite Present in B ₂ Horizon.		RECLASSIFIED (Rule .1948): (N/A) PS	
		20 inches = trench depth 10 inches = slope correction soil depth 12 inches = regulated soil depth + - inches = regulated saprolite depth 42 inches total depth needed	
		Calculated for: 25% Reduction	

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)
A	0-8"	10YR 7/2	—	L	GR	VFR	—	0.4	0.6
B _{T1}	8-44"	10YR 3/6	—	SCL	IMSBK	FR		0.35	0.45
B _{T2}	44-64"	7.5YR 4/6	MCS	SCL	IMSBK	FR	25%	0.35	0.45

LRM- NC Revised 10/2012

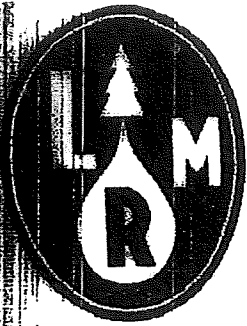
- MCA = Multicolored Alluvium
- MCC = Multicolored colluvium
- MCS = Multicolored saprolite

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: JSE

CHECKED BY: WBF



Land Resource Management

PO Box 9251, Asheville, NC 28815

828.231.1663

www.landrm.com

PROJECT NO. AND NAME: High Hierarchy

REF: D	LOT: 72	COUNTY: Buncombe	DATE: 5/22/18
PERCENT SLOPE (Rule .1940): 45%		CLAY MINERALOGY (Rule .1941): N/A (SE) MX EX	
LANDSCAPE POSITION (Rule .1940): Side Slope		SOIL DEPTH (Rule .1943): >70"	
TOPOGRAPHY (Rule .1940): (Uniform)		RESTRICTIVE HORIZON (Rule .1944): >70'	
PERCENT MATERIAL: AL (CO) RE A/C A/R C/R		SEASONAL HIGH WATER TABLE (Rule .1942): >75'	
SOIL GROUP (Rule .1955): III		TYPE OF WATER TABLE (Rule .1942): N/A	
SAPROLITE GROUP (Rule .1956): N/A		CLASSIFICATION (Rule .1948): (PS) US	
NOTES: Some Saprolite Present in BT ₂ Horizon		RECLASSIFIED (Rule .1948): (N/A) PS	
		27 inches = trench depth inches = slope correction soil depth 17 inches = regulated soil depth + - inches = regulated saprolite depth inches total depth needed	
		Calculated for:	

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)
A	0"-13"	10YR 3/3	-	L	Gr	Very	-	0.4	0.6
B	13"-41"	10YR 3/6	-	SCL	Med	FR	20%	0.5	0.5
BT ₂	41"-75"	10YR 4/4	MCS	SCL	Med	FR	25%	0.5	0.45

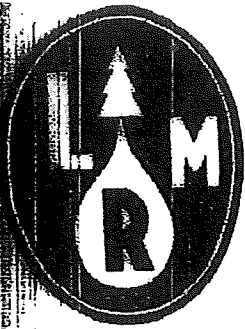
LRM- NC Revised 10/2012
 MCA = Multicolored Alluvium
 MCC = Multicolored colluvium
 MCS = Multicolored saprolite

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: JSE

CHECKED BY: WBF



Land Resource Management

PO Box 9251, Asheville, NC 28815
828.231.1663 www.landrm.com

PROJECT NO. AND NAME: High Hickory

LOT: 72 COUNTY: BUNCOMBE DATE: 5/24/18

PERCENT SLOPE (Rule .1940): 22% CLAY MINERALOGY (Rule .1941): N/A (SE) MX EX

LANDSCAPE POSITION (Rule .1940): COLLUVIAL BENCH SOIL DEPTH (Rule .1943): 52"

TOPOGRAPHY (Rule .1940): Uniform RESTRICTIVE HORIZON (Rule .1944): 52"

PARENT MATERIAL: AL (CO) RE A/C A/R C/R SEASONAL HIGH WATER TABLE (Rule .1942): >52"

SOIL GROUP (Rule .1955): III TYPE OF WATER TABLE (Rule .1942): N/A

SAPROLITE GROUP (Rule .1956): N/A CLASSIFICATION (Rule .1948): (PS) US

NOTES: SOME SAPROLITE PRESENT IN BT₁ HORIZON RECLASSIFIED (Rule .1948): (N/A) PS
ROCK FRAGMENTS BELIEVED TO REPRESENT >50%
OF P₁ SUFFICIENT @ 52"

70 inches = trench depth
 8 inches = slope correction soil depth
 12 inches = regulated soil depth
 + inches = regulated saprolite depth
 40 inches total depth needed

Calculated for:
25% Reduction

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"-7"	10YR 2/2	—	L	GR	VFR	—	0.11	0.6
BT ₁	7"-23"	10YR 3/6	—	SCL	W/SEC	FR	20%	0.35	0.5
BT ₂	23"-44"	10YR 4/4	—	SCL	W/SEC	FR	25%	0.35	0.45
BT ₃	44"-52"	10YR 4/6	W/SEC	SCL	W/SEC	FR	25%	0.35	0.45
OX	52"	ROCK FRAGMENTS > 50%			—	—	—	—	—
	> 52"								

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: TSE

CHECKED BY: WBF