New Address: 110 Twin Coves Court - Troutman 28166

New Permit # → 206794

IREDELL COUNTY HEALTH DEPARTMENT

Statesville Office (704) 878-5305 Mooresville Office (704) 660-3625 PERMIT # ~~203452~~

IMPROVEMENT PERMIT / AUTHORIZATION TO CONSTRUCT / OPERATION PERMIT / EXISTING SYSTEM

PIN # 4639091331 ✓

APPLICANT: ~~Jim McNiff~~ APPLICANT ADDRESS: 108 Tannerybawm Ct 28117

SITE ADDRESS ~~311 Morrison Farm Rd~~ Troutman NC 28166 PHONE: 704-658-9251 ALT. PHONE: 704-660-1965

SITE DIRECTIONS: 115 to Perth to State Park to Morrison Farm Rd Lot on left

SUBDIVISION: Twin Coves on Morrison SECTION: N/A LOT # 7 LOT AREA: 3.8ac DESIGN FLOW: 600 L.T.A.R.: .3

Septic Tank	1500	(gal)	STB 338-1580	Date 6-8-15	☒ New System	☐ Repair	☐ Expansion	System Type: I II (III) IV V VI	☒ Residence	No. Bedrooms	5	Water Supply			
Pump Tank	1500	(gal)	PT 477-1580	Date 4-20-15	System Description:	Pump .25% Reduction			☐ Business	No. Persons	10	☐ Private			
Pump Make	Goulds	Model	WGS712HU	Serial # CEL4071	Repair System Description:	Low Pressure Panel			☐ Other	No. Employees		☒ Public			
# Nitrification Fields	1	# Lines	4	Linear Ft: 500	Maintenance Agreement Required:	☐ YES	☒ NO		☐ Slab	☐ Crawl Space		☐ Community			
Trench Width	36"	Max. Trench Bottom Depth	30"	Gravel Depth N/A		☐ GRAVITY	☒ PRESSURE		☒ Basement w/plumbing			☐ Basement w/o plumbing			

Comments / Conditions: Install per plan from S+ME

INITIAL SITE SKETCH

See plan from S+ME

AS BUILT SKETCH

- Red Polylok filter installed
- Quick 4 Chambers installed
- Pressure Head Set

	Date	Initials
Drain Lines Checked	7-14-15	JH
Tanks Checked	7-14-15	JH
Pressure Manifold or Valve Box Checked	7-14-15	JH
Pressure Head Set	7-14-15	JH
Electrical Checked		
Floats Set	N/A	
Alarm Checked		
Maintenance Contract Y / N	N/A	

Permit can be suspended or revoked if any false information is supplied toward securing the permit / any unauthorized changes are made to the site / any unauthorized changes are made in the installation of the system. **CONTACT A LOCATOR SERVICE PRIOR TO ANY EXCAVATION**

☐ **IMPROVEMENT PERMIT** *with plat valid without expiration.* ☒ **IMPROVEMENT PERMIT** *with site plan valid for 60 mos.* ☒ **AUTHORIZATION TO CONSTRUCT** *valid for period equal to IMPROVEMENT PERMIT--not to exceed 60 mo.*

Owner / Applicant Signature: Date: 9/24/14 Installed by: Kevin Hallman

IMPROVEMENT PERMIT by: Date: 05/23/14 OPERATION PERMIT by: BHC/O 9-4-15 Date:

AUTHORIZATION TO CONSTRUCT by: Date: 09/23/14 Existing System Inspected by: Date:

Health Dept. Copy - WHITE Applicant (Final Approval) - YELLOW Applicant (Conditional Approval) - PINK

Approx. Pit & Auger Boring Locations

May 16, 2014

Mr. Jim McNiff
108 Tannenbaum Court
Mooresville, North Carolina 28117

Reference: **Technical Assistance with Fast Track Septic Permitting**
Lot 7 – Twin Coves Subdivision
Iredell County, North Carolina
S&ME, Inc. Project No. 4358-14-048

Dear Mr. McNiff:

S&ME, Inc. (S&ME) has provided technical assistance to obtain a possible five bedroom septic Improvement Permit from the Iredell County Health Department (ICHD). The technical assistance was performed in general accordance with S&ME Proposal No. 43-1400407 dated May 5, 2014.

Attached is the Application for the Septic Improvement Permit, the Environmental Health Requirements form, and the ICHD Fast Track requirements presented to the ICHD on your behalf. We discussed with you this application would request a five bedroom 25 Percent Reduction primary system located near the backhoe pits previously dug on the lot near intersection of Morrison Farm Road and Twin Coves Court. You requested showing a proposed future pool area behind the house.

The property corners, proposed house, and lot lines were flagged by others. S&ME flagged the proposed primary and repair septic drainfield and provided four soil profile descriptions in the proposed septic area on May 12, 2014. The soil profile descriptions were from two new hand auger borings and from excavating part of the existing pits with a shovel. The proposed septic lines and hand auger borings/pits were approximately located on the attached Iredell County GIS site plan.

Once the septic area is permitted, it should be fenced off for protection during home construction. Access to the lot should only be by the proposed drive. There shall not be cuts of 2 feet or greater within 15 feet of any part of the permitted septic system or repair area. The attached information is not an Improvement Permit or Authorization to Construct, and is only to assist you and the ICHD with the Fast Track site evaluation. The attached plan is not intended to be a Professional Engineer plan. The ICHD must approve each lot and only the ICHD can issue these permits. The ICHD should verify all soils and system specifications, required setbacks, and whether a professional engineer plan is required before permitting and/or septic system installation. The ICHD may make

any changes they deem necessary (tank locations, distribution device, etc.) to the proposed system on the Improvement Permit or the attached information /site plan. Soil evaluations and system layouts are done based on interpretations of the rules governing wastewater treatment and disposal systems and are not guarantees for site approval or future septic system performance.

If you have any questions or require additional information please contact us at your convenience.

Sincerely,

S&ME, Inc.

Paul G. Penninger, L.S.S.
Soil Scientist

Rob Willcox, L.S.S.
Senior Project Manager

Attachments:

1. ICHD Improvement Permit Application and Health Department Requirements
2. Site Plan and System Specifications
3. Soil Profile Descriptions

Copy: ICHD

S:\2430 Greensboro Environmental\Projects\4358-14-048 Jim McNiff - Twin Cove\Twin Coves Lot 7 Summary Letter.doc

Twin Coves Lot 7 Fast Track System Information

Jim McNiff - S&ME Project No. 4358-14-048

Number of Bedrooms	**5**
Basement or Crawl	**Basement w/ Plumbing**
Design Flow (gpd)	**600**
Primary System LTAR (gpd/ft2)	**0.3**
Primary System Type	**25% Reduction**
No. Lines	4 (See Table)
Total Linear Feet	500
Trench Width	3' min.
Trench Spacing	9' min.
Pump Required	Yes
Distribution Device	Pressure Manifold or other county specified device
Maintenance Agreement Required	No
Length and Diameter of Supply Pipe	~280' of 2" SCH 40 PVC
Flow Rate through the system	22 gpm
Elevation head	*Approx. 34'
Pressure head	2.0'
Friction head	Approx. 4'
20% Contingency	8'
Total Head	48'
Pump Requirements	22 gpm @ 48' of head* *To be verified by installer. after site grading and final tank placement
Maximum Dosing Volume	240 gal - 2.5 doses/day @ design flow
Volume of water pumped per dose	Calculated to specific tank by measure or dealer engineering specifications (1 cubic ft. of water equals 7.48 gal.)
Pump Run per dose	approx. 10.9 min.
Check Valve	Yes
Siphon Break hole	Yes
Repair System	**T&J Panel**
System Size	334 ft required (350 ft shown)
Repair Loading Rate (gpd/ft2)	0.3

Twin Coves Lot 7 Fast Track System Information

Jim McNiff, S&ME Job No. 4358-14-048

Summary of Primary Nitrification Line Specifications

Line No.	Use	Line Color	System Type	Line Length (Ft.)	Rod Reading (Ft.)
1	System	pink	25% Reduction	125	4 (*elev. approx. 862')
2	System	orange	25% Reduction	125	4.6
3	System	red	25% Reduction	125	5
4	System	white	25% Reduction	125	5.8
				Total System: 500'	

Tank	white	1500 gal (2 compartment)	*Elevation (ft)
Pump Tank	white	1500 gal.	836.0
House		Rightr Rear Corner	844.0

Manifold Information	
Tap Size (In.)	1/2
Tap Material	SCH 80 PVC
No. Taps	4
Barrel Size (In.)	4
Barrel Material	SCH 80 PVC
Flow (gpm)/Tap	5.5

NOTES:

***Approximate elevations taken from topo map only & must be verified by installer or surveyor at installation and final tank placement.**

Heath Snow

From: Paul Penninger <PPenninger@smeinc.com>
Sent: Thursday, May 22, 2014 9:54 AM
To: Heath Snow
Subject: Twin Coves Lot 7.

Heath, per our conversation this morning this email is to confirm that the Provisionally Suitable saprolite in Pit 3 of our Jim McNiff Lot 7 Twin Coves fast track proposal was evaluated to approximately 56 inches below the existing ground surface with you on May 21, 2014 by excavating the bottom of the pit with a shovel.

Based on our site review, we discussed a trench bottom of approximately 24 to 30 inches below the ground surface for the primary, 25 percent reductions system. The T&J Panel repair can be installed with a 30 inch trench bottom.

Please call if you need any additional information for the improvement permit.

Per our conversation this morning, I will let the applicant know that his Improvement Permit may be ready tomorrow morning.

Thanks,

Paul

Paul G. Penninger
Senior Soil Scientist

S&ME
ENGINEERING INTEGRITY.

Mooresville, NC
Ph:704-996-6330
ppenninger@smeinc.com

3718 Old Battleground Road
Greensboro NC 27410 Map
Ph: 336-288-7180
Fax: 336-288-8980
Mobile: 704-996-6330
www.smeinc.com

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S&ME, INC.
SITE/SOIL EVALUATION

Project No. 4358-14-050 Phone No. _____ Date: 5-12-14
Location Twin Cove - Lot 3 Pin _____ County: _____ Property Size _____
Proposed Facility: SFD Water Supply: On-Site Well ☐ Community ☐ Public ☒ Evaluation: Auger Boring ☒ Pit ☒ Cut ☐
Described By: Rep - must by Approved by LCHD
Weather: Hot Antecedent Moisture moist Surface Water: NA / Sandy

FACTORS	PROFILE 1	PROFILE 2	PROFILE 3	PROFILE 4
Landscape Position %	65-1-2	1-10R	R-3	
Horizon Depth I	0-2	0-2	0-4	0-3
Color Munsell	br			
Texture	scl			
Structure	sg	sand	s	s
Consistence	fr			
Boundary				
Horizon Depth II	2-17	7-28	4-28	3-24
Color – Munsell	ml			
Texture	c			
Mottles		s	s	s
Structure	m-f sbk			
Consistence	fr ss/sp			
Boundary				
Horizon Depth III	17-27	28-48	28-40	24-40
Color – Munsell	ml	4 m 2	ml	ml
Texture	c	cl	cl	cl
Mottles	f sho	c sho	f-c sho	f sho
Structure	m-w sbk	w sbk	w sbk	w sbk
Consistence	fr ss/sp	fr ss/sp	fr ss/sp	fr ss/sp
Boundary				
Horizon Depth IV	27-42		40-48	42-48
Color – Munsell	4ml 4ml		4ml 4gl	4ml 4gl
Texture	cl-c		f-c sc	cl-sc
Mottles	c sho		f-c cl	c sho
Structure	w sbk		w ss/s	w sbk
Consistence	fr ss/sp		fr ss/sp	fr ss/sp
Boundary				
Soil Wetness	—	—	—	—
Restrictive Horizon	—	—	—	—
Saprolite	—	—	40+	—
LTAR	.3	.3	.3	.3
Classification	PS	PS	PS	PS

LEGEND

LANDSCAPE POSITION

R	Ridge Interfluve
S	Shoulder
L	Linear Slope
S	Foot Slope
N	Nose Slope
H	Head Slope
Cc	Concave Slope
Cv	Convex Slope
T	Terrace
P	Flood Plain

TEXTURE

s	sand
ls	loamy sand
sl	sandy loam
l	loam
si	silt
sil	silt loam
sicl	silty clay loam
cl	clay loam
scl	sandy clay loam
sc	sandy clay
sic	silty clay
c	clay

CONSISTENCE WET

Ns	non-sticky
Ss	slightly sticky
S	sticky
Vs	very sticky
Np	non-plastic
Sp	slightly plastic
P	plastic
Vp	very plastic

MOIST

vfr	Very friable
fr	friable
fi	firm
vfi	Very firm

STRUCTURE

sg	single grain
m	massive
cr	crumb
gr	granular
sab	subangular blocky
ab	angular blocky
pl	platy
pr	prismatic

IREDELL COUNTY HEALTH DEPARTMENT

Application For Improvement Permit and/or Authorization To Construct, Existing System Inspection

(THE ABOVE PERMIT DOCUMENTS WILL BECOME INVALID IF INFORMATION PROVIDED ON THIS APPLICATION IS FALSIFIED OR CHANGED, OR IF THE SITE IS ALTERED. THE IMPROVEMENT PERMIT IS VALID FOR EITHER 60 MONTHS OR WITHOUT EXPIRATION DEPENDING UPON DOCUMENTATION SUBMITTED - APPLICATION WITH SITE PLAN 60 MONTHS, APPLICATION WITH COMPLETE, SCALED PLAT WITHOUT EXPIRATION. SEE 15A NCAC 18A .1937(f) FOR DETAILS)

1. APPLICATION FOR: X Improvement Permit ___Authorization To Construct ___BOTH ___Existing System Inspection

2. Page 2: *Site Plan Worksheet* Form MUST Accompany This Application
   The following optional attachments may also be submitted: ___ Survey Plat, Scaled no more than 1 Inch = 60 Feet
   Place check ( ) beside whichever is submitted if applicable X Custom Site Plan, Scaled no more than 1 Inch = 60 Feet

3. **Applicant Information:**

Applicant Name	Mailing Address	Home Phone	Work Phone
Jim McNiff	108 Tamarack Dr. Mooresville NC 28117	704-660-1965	
Lake Norman Water Ski Club	6738 E NC Hwy 150 Sherrills Ford NC		
Owner Name	Mailing Address	Home Phone	Work Phone

4. **Property Information:**

Street Address	Subdivision Name	Section/Phase and Lot Number
Twin Coves Ct	Twin Coves	7

Driving Directions: State Park Rd
TL Morrison Farm
TL Twin Coves, On Rt

****

5. **RESIDENTIAL Site Development Information:** *(Check or Complete ALL that apply)*

- X New, Single Family Residence
- ( ) New, Multi-Family Residence
- ( ) Expansion of Existing Septic System
- ( ) Repair To Failing Septic System

Maximum Number of Bedrooms 5
Maximum Number of Occupants 10
If Expansion, Current Number of Bedrooms ___

- ( ) Crawl Space Foundation?
- ( ) Concrete Slab Foundation?
- X Basement w/Plumbing?
- ( ) Basement w/out Plumbing?

IF Non- Residential Site Development:
Type of Business ___
Square Footage of Building ___
Maximum Number of Employees ___
Maximum Number of Seats ___

****

6. **Proposed Water Supply:**

( ) New Well ( ) Existing Well ( ) Community Well X City Water ( ) Other Public Water

****

7. **Desired Septic System Type:** *(You may rank in order of preference, if any)*

( ) Alternative ( ) Conventional ( ) Innovative ( ) Modified Conventional ( ) Other 2 ( ) No Preference

****

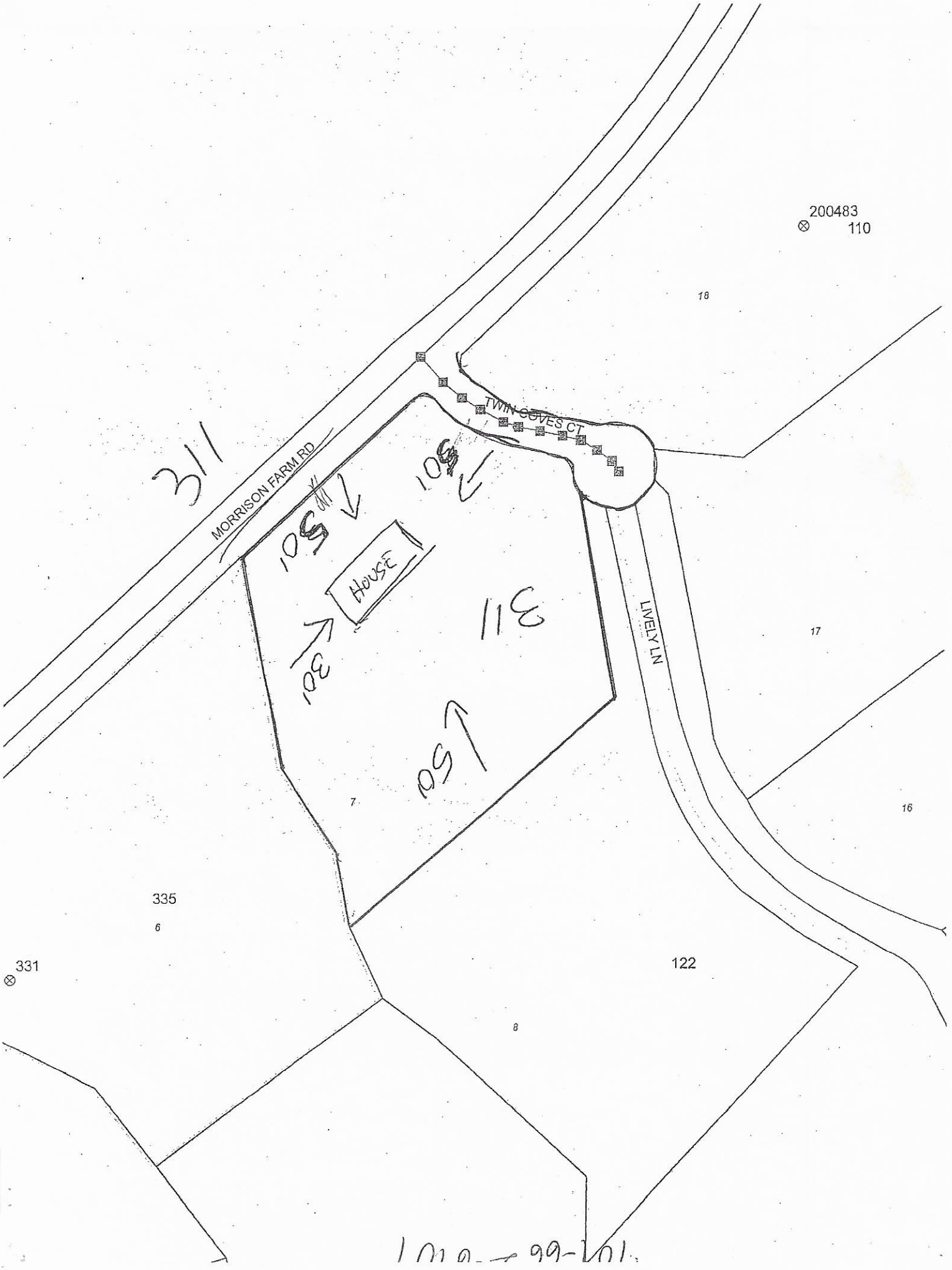
8. **Please Answer The Following To The Best of Your Ability:**

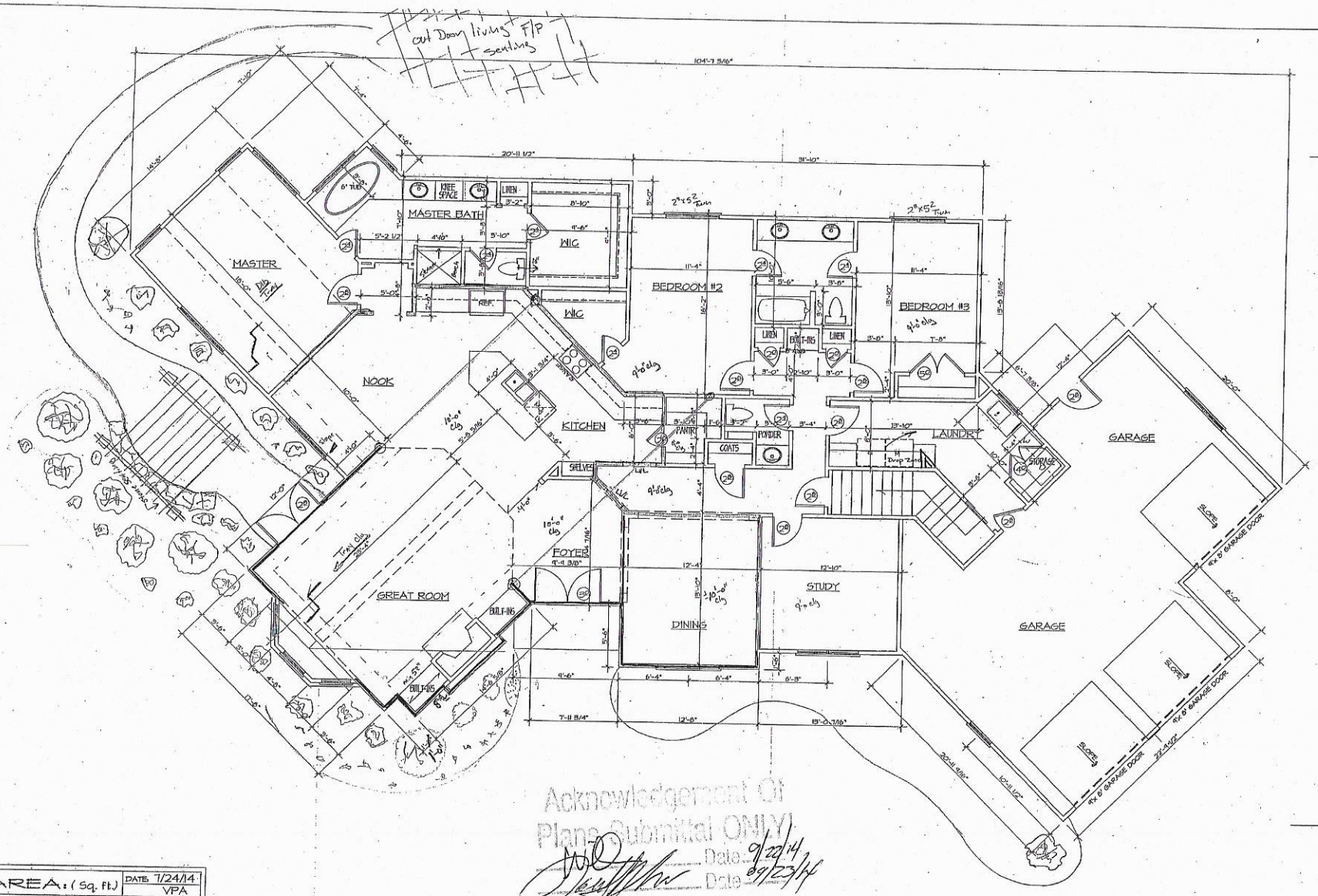
( ) Yes X No Does the site contain any jurisdictional wetlands? Mtn. Drainage
( ) Yes X No Is any non-domestic sewage (i.e. industry) to be generated?
( ) Yes X No Is the site subject to approval by any other public agency?

****

I have read this application and certify that the information provided herein is true, complete, and correct. Authorized county and state officials are granted right of entry to conduct necessary inspections to determine compliance with applicable laws and rules. I understand that I am solely responsible for the proper identification and labeling of all property lines and corners and making the site accessible so that a complete site evaluation can be performed.

9. Signature: _____ 5-16-14
Property owner or owner's legal representative signature (SIGNATURE REQUIRED) DATE


200483
110
18
TWIN COVES CT
311
MORRISON FARM RD
105
105
HOUSE
311
301
150
LIVELY LN
17
16
7
335
6
331
122
8
99-101



Acknowledgement Of Plans Submitted ONLY

Date 9/22/14

Date 9/23/14

AREA: (Sq. Ft.)	DATE: 7/24/14 VPA
1ST. FLOOR HEATED	2796
BASEMENT	1030
UNHEATED BONUS ROOM	437
**TOTAL HEATED AREA	9000
GARAGE	833
***TOTAL AREA	0000
OPEN AREA	000

2796 + 1030 = 1134 sq ft

FIRST FLOOR PLAN

SCALE: 1/4"=1'-0"

117"

105" studs with Clg Bkhd. + 3 Plates to equal 117" Plate

load points

rough in Plu attic drama + bath drain waste + make floor/Clg. mm 2x10 for Future use/flush #

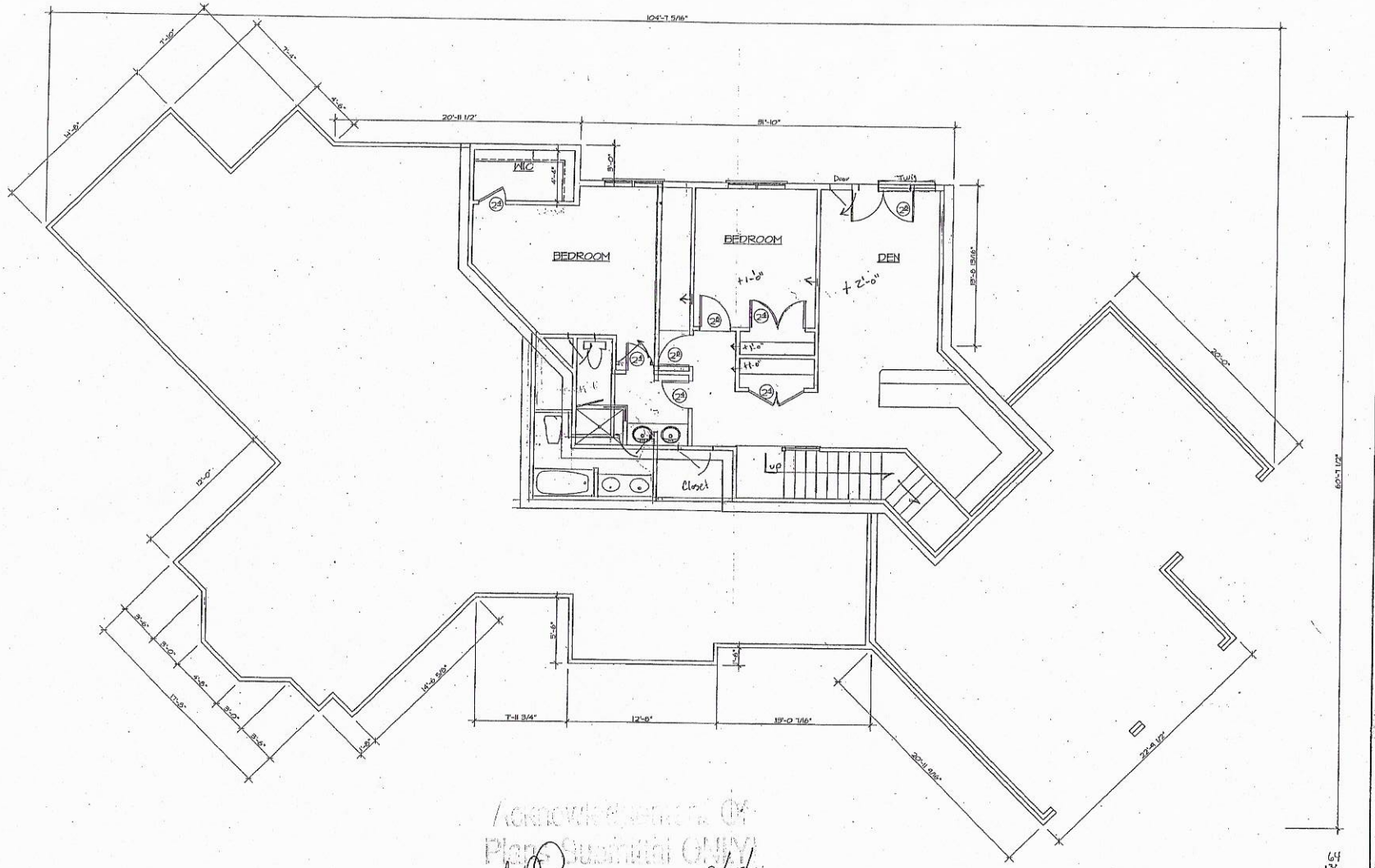
ADD steam shower to master #

WHITLEY & CO.
PHONE: 704-587-1700
HARRISBURG N.C. 28075

VPA DESIGN

PLAN NUMBER:
MCNIFF_PLAN
FIRST_FLOOR_PLAN

Date: 7/24/14
Scale: 1/4"=1'
Drawn: VPA
Checked: ***
Sheet: 2



Approved, Director of Planning, Guilford County
Date 9/22/14
Date 06/23/19

BASEMENT PLAN
SCALE: 1/4"=1'-0"

WHITLEY & CO.
PHONE: 704-567-1700
HARRISBURG N.C. 28075

VPA DESIGN

PLAN NUMBER :
MGNIFF_PLAN
BASEMENT_PLAN

Date:	7/24/14
Scale:	1/4"=1'
Drawn:	VPA
Checked:	***
Sheet:	2