BLDR 2024-48229

ICHD - ENVIRONMENTAL HEALTH DIVISION

Statesville Office (704) 878-5305 x3456 Mooresville Office (704) 660-3625

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

PERMIT # OSWP OSWP-2024-47498

PIN # 4730 -- 41 -- 3928

APPLICANT/OWNER: Soil & Forestry Services LLC APPLICANT ADDRESS: 813 Davidson Dr NW, Concord, NC 28025

SITE ADDRESS: 135 Bentley Ct, Troutman, NC 28166 PHONE: 980 - 439 - 5007 ALT. PHONE:

SITE DIRECTIONS: N Perth -> L State Park -> L Honeycutt -> L Bentley SAP CONTROLLED: ☐ YES ☑ NO

SUBDIVISION: Honeycutt Flats SECTION: n/a LOT # 11 LOT AREA: 0.69 DESIGN FLOW: 120 L.T.A.R.(Initial): 0.3 L.T.A.R (Repair): 0.3

Septic Tank 1000 (gal) STB Date

Pump Tank (gal) PT Date

Pump Make Model Serial #

Nitrification Fields 1 # Lines 2 Linear Ft: 100

Trench Width 36 *Max. Trench Depth(Initial) 32 *Max. Trench Depth(Repair) 32 Gravel Depth n/a

* Measured on the downhill side of the trench

☑ New System ☐ Repair ☐ Expansion System Type: I II ☑ III IV V VI

System Description: 25% Reduction

Repair System Description: 25% Reduction

Maintenance Agreement Required: ☐ YES ☑ NO

☑ GRAVITY ☐ PRESSURE

Effluent Standard: ☑ DSE ☐ HSE ☐ TS-I ☐ TS-II ☐ RCW ☐ NSF/ANSI 40

Usable Depth to LC (Initial): 48

☑ Residence No. Bedrooms 1

☐ Business No. Persons 2

☐ Other No. Employees

☑ Slab ☐ Crawl Space

☐ Basement w/plumbing ☐ Basement w/o plumbing

Usable Depth to LC (Repair): 48 *Limiting Condition*

Water Supply

☑ Private

☐ Public

☐ Community

Comments / Conditions: Do not pave, grade, drive, park, or bury utilities in drain field.
Divert all drainage.

INITIAL SITE SKETCH

Improvement permit issued pursuant to:
G.S. 130A-335(a2), (a3) & (a4) using signed & sealed LLS/LG Evaluation attached, from:

Wendell Overby

LSS# 1218

Construction authorization issued pursuant to: G.S. 130A-335(a2) & (a5)

AOWE# 10044E

AS BUILT SKETCH

FOR SEPTIC FINAL INSPECTION CALL: 704-664-3703 between 8am-9am the day the inspection is needed. Be sure to speak with an inspector to confirm your time.

See attached as built.

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: Online signature Date:

IMPROVEMENT PERMIT by: D. Wieberg D. Wieberg Date: 2/26/24

AUTHORIZATION TO CONSTRUCT by: D. Wieberg Date: 2/26/24

Installed by: Precision

OPERATION PERMIT by: D. Wieberg Date: 10/10/24

Existing System Inspected by: Date:

As Built Sketch

SHEET 1 OF 1

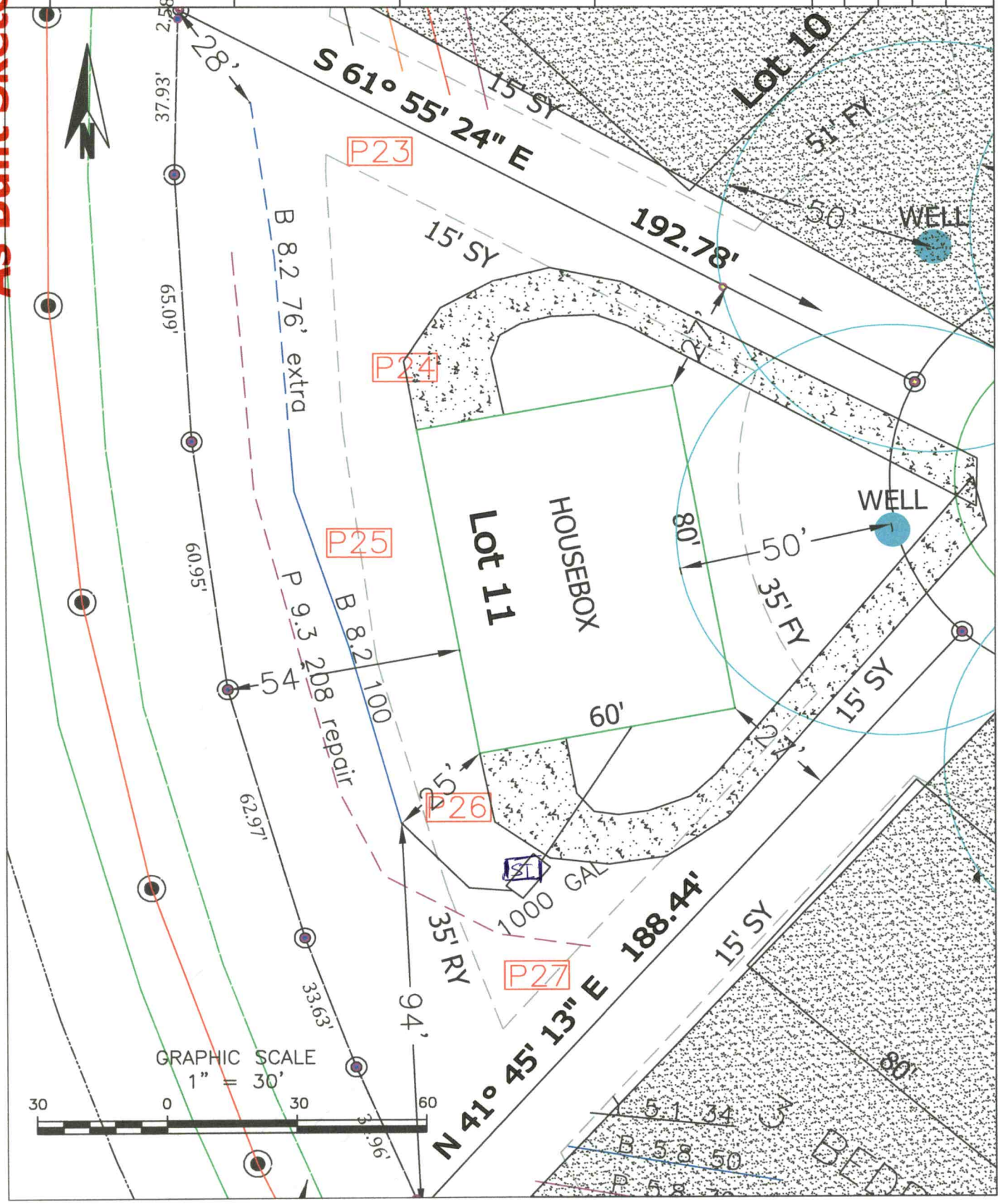
SHEET TITLE:
SEPTIC SYSTEM LAYOUT SKETCH MAP

PROJECT NAME:
SPIVEY CONSTRUCTION
LOT 11
HONEYCUTT RD
IREDELL COUNTY
OCTOBER 2024

SOIL & FORESTRY SERVICES
OF THE CAROLINAS, PA

Soil & Forestry Services of the Carolinas, PA
813 Davidson Dr NW
Concord NC 28025
usablesoil@gmail.com
980-439-5007
soilandforestryservices.com

SCALE 1" = 30'
FIELD WORK W/O
DRAWN BY W/O
PROJECT MGR. W/O
PROJECT NO. 23-1011



SHEET 1 OF 1

SHEET TITLE:
SEPTIC SYSTEM LAYOUT
SKETCH MAP

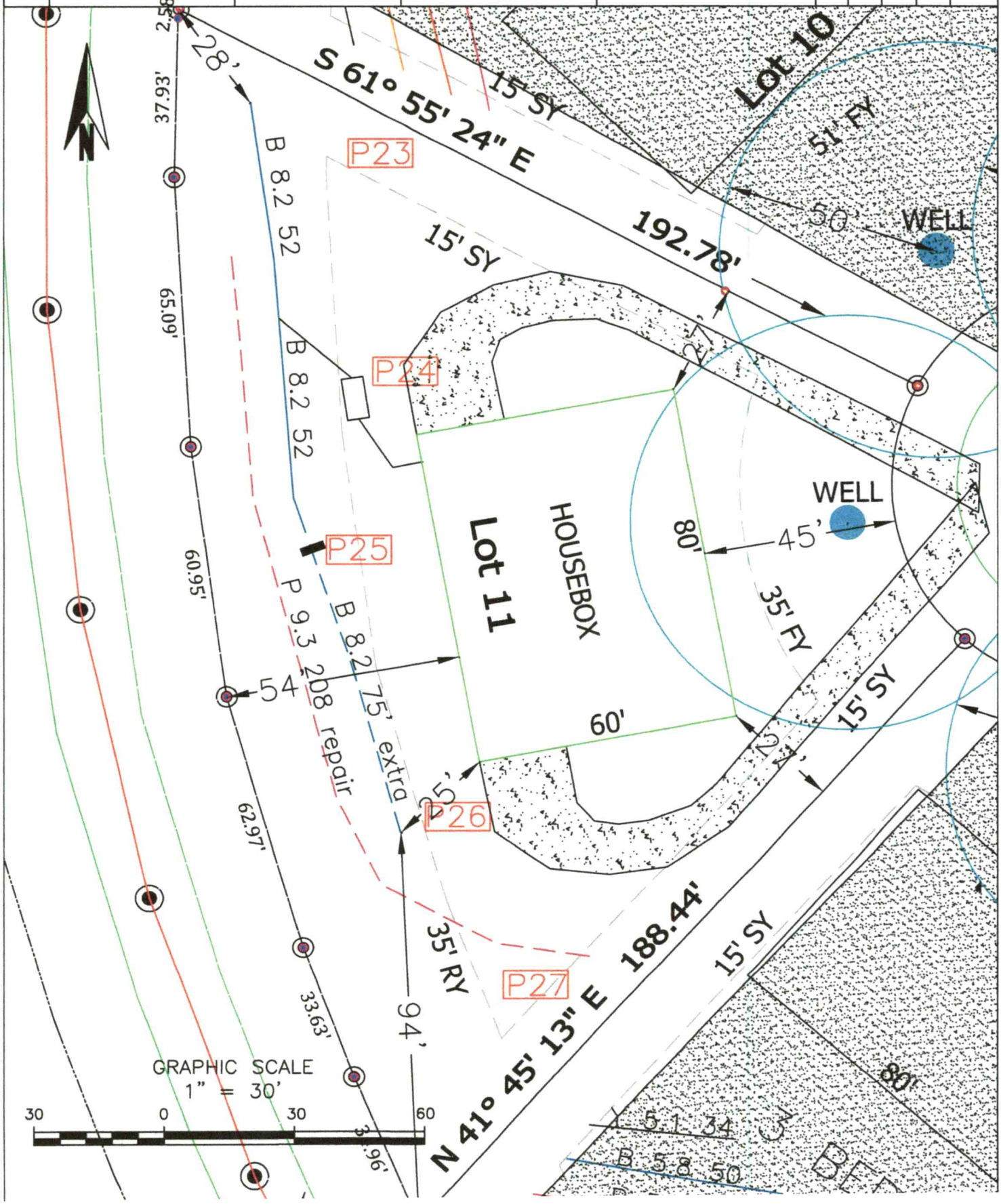
PROJECT NAME:
SPIVEY CONSTRUCTION
LOT 11
HONEYCUTT RD
IREDELL COUNTY
FEBRUARY 2024

SOIL & FORESTRY SERVICES
OF THE CAROLINAS, PA

Soil & Forestry Services
of the Carolinas, PA
813 Davidson Dr NW
Concord NC 28025

usablesoil@gmail.com
980-439-5007
soilandforestryservices.com

SCALE 1" = 30'
FIELD WORK WO
DRAWN BY WO
PROJECT MGR. WO
PROJECT NO. 23-1011



Permit/File #: OSWP-2024-47498

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES

ROY COOPER • Governor
KODY H. KINSLEY • Secretary
MARK BENTON • Deputy Secretary for Health
SUSAN KANSAGRA • Assistant Secretary for Public Health
Division of Public Health

Submittal Includes; [X] (a2) Improvement Permit [X] (a2) Construction Authorization [ ] Fee $ _____

IMPROVEMENT PERMIT FOR G.S. 130A-335(a2)

County: Iredell

PIN/Lot Identifier: 4730413928.000

Issued To: Richard H Lyon // Lyon Holdings, LLC

Property Location: 135 Bentley Ct

Subdivision (if applicable): Honeycutt Flats Lot#: 11 Block: _____ Section: _____

LSS Report Provided: Yes [X] No [ ]

If yes, name and license number of LSS: Wendell Overby #1218

New [X] Expansion [ ] System Relocation [ ] Change of Use [ ]

Facility Type: 1 bedroom house

Number of bedrooms: 1 Number of Occupants: 2 Other: _____

Design Wastewater Strength: [X] Domestic [ ] High Strength [ ] Industrial Process Wastewater

Proposed Design Daily Flow: 120 GPD Proposed LTAR (Initial): 0.3 Proposed LTAR (Repair): 0.3

Proposed Wastewater System Type*: IIb (ACCEPTED) GRAVITY (Initial) Pump Required: [ ] Yes [X] No [ ] May be required

Proposed Wastewater System Type*: IIb (ACCEPTED) GRAVITY (Repair) Pump Required: [ ] Yes [X] No [ ] May be required

**Please include system classification for proposed wastewater system types in accordance with Rule .1301 Table XXXII*

Saprolite System (Initial): [ ] Yes [X] No Saprolite System (Repair): [ ] Yes [X] No

Fill System (Initial): [ ] Yes [X] No If yes, specify: [ ] New [ ] Existing (when adding more than 6 inches of fill to system area provide a fill plan)

Fill System (Repair): [ ] Yes [X] No If yes, specify: [ ] New [ ] Existing (when adding more than 6 inches of fill to system area provide a fill plan)

Usable Depth to LC (Initial)*: 48 Usable Depth to LC (Repair)*: 48 ** Limiting Condition*

Max. Trench Depth (Initial)ǂ: 32 Max. Trench Depth (Repair)ǂ: 32 *ǂ Measured on the downhill side of the trench*

Artificial Drainage Required: [ ] Yes [X] No If yes, please specify details: _____

Type of Water Supply: [X] Private well [ ] Public well [ ] Shared well [ ] Municipal Supply [ ] Spring [ ] Other: _____

Drainfield location meets requirements of Rule .0508: Yes [X] No [ ] Drainfield location meets requirements of Rule .0601: Yes [X] No [ ]

Permit valid for: [X] Five years [site plan submitted pursuant to GS 130A-334(13a)] [ ] No expiration [plat submitted pursuant to GS 130A-334(7a)]

Permit conditions:

See Design

Licensed Soil Scientist Print Name: Wendell Overby

Licensed Soil Scientist Signature: _____ Date: 2/14/2024

The LSS evaluation is being submitted pursuant to and meets the requirements of G.S. 130A-335(a2).

See attached site sketch

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES
Division of Public Health

Permit/File #: OSWP-2024-47498

This Section for Local Health Department Use Only

Initial submittal received: 2/22/24 (*Date*) by DW (*Initials*)

G.S. 130A-335(a3) states the following:

When an applicant for an Improvement Permit submits to a local health department an Improvement Permit application, the permit fee charged by the local health department, the common form developed by the Department, and a soil evaluation pursuant to subsection (a2) of this section, the local health department shall, within five business days of receiving the application, conduct a completeness review of the submittal. A determination of completeness means that the Improvement Permit includes all of the required components. If the local health department determines that the Improvement Permit is incomplete, the local health department shall notify the applicant of the components needed to complete the Improvement Permit. The applicant may submit additional information to the local health department to cure the deficiencies in the Improvement Permit. The local health department shall make a final determination as to whether the Improvement Permit is complete within five business days after the local health department receives the additional information from the applicant. If the local health department fails to act within any period set out in this subsection, the applicant may treat the failure to act as a determination of completeness. The Department shall develop a common form for use as the Improvement Permit.

The review for completeness of this Improvement Permit was conducted in accordance with G.S. 130A-335(a3). This Improvement Permit is determined to be:

☐ Incomplete (If box is checked, information in this section is required.)

The following items are missing:

_____

_____

Copies of this were sent to the LSS and the Applicant on _____ (*Date*)

State Authorized Agent: _____ Date: _____

☒ Complete

State Authorized Agent: D. Wisberg Date: 2/26/24

This Improvement Permit is issued pursuant to G.S. 130A-335 (a2) and (a3) using the signed and sealed LSS/LG evaluation(s) attached here. The issuance of this permit in no way guarantees the issuance of other permits. The permit holder is responsible for checking with appropriate governing bodies in meeting their requirements. *This permit is subject to revocation if the site plan, plat, or the intended use changes.* The Improvement Permit shall not be affected by a change in ownership of the site. This permit is subject to compliance with the provisions of 15A NCAC 18E and to the conditions of this permit.

The Department, the Department's authorized agents, and the local health departments shall be discharged and released from any liabilities, duties, and responsibilities imposed by statute or in common law from any claim arising out of or attributed to evaluations, submittals, or actions from a licensed soil scientist or licensed geologist pursuant to GS 130A-335(a2).

Improvement Permit Expiration Date: 2/26/29

See attached site sketch

Permit/File #: OSWP-2024-47498

CONSTRUCTION AUTHORIZATION FOR G.S. 130A-335(a2)

County: Iredell Pre-Construction Conference Required: ☐ Yes ☒ No

PIN/Lot Identifier: 4730413928.000

Issued To: Richard H Lyon // Lyon Holdings, LLC

Property Location: 135 Bentley Ct

AOWE/PE Plans/Evaluations Provided: Yes ☒ No ☐ If yes, name and license number of AOWE/PE: Wendell Overby #10044E

Facility Type: 1 bedroom house

Number of bedrooms: 1 Number of Occupants: 2 Other:

☒ New ☐ Expansion ☐ Repair ☐ System Relocation ☐ Change of Use

Basement? ☐ Yes ☒ No Basement Fixtures? ☐ Yes ☐ No

Crawl Space? ☐ Yes ☒ No Slab Foundation? ☒ Yes ☐ No

Type of Wastewater System* IIb (ACCEPTED) GRAVITY (Initial) IIb (ACCEPTED) GRAVITY (Repair)

**Please include system classification for proposed wastewater system types in accordance with Rule .1301 Table XXXII*

Design Daily Flow: 120 GPD Wastewater Strength: ☒ Domestic ☐ High Strength ☐ Industrial Process WW

Session Law 2014-120 Section 53, Engineering Design Utilizing Low-flow Fixtures and Low-flow Technologies? ☐ Yes ☒ No
(if yes, please provide engineering documentation)

Effluent Standard: ☒ DSE ☐ HSE ☐ NSF/ANSI 40 ☐ TS-I ☐ TS-II ☐ RCW

Type of Water Supply: ☒ Private well ☐ Public well ☐ Shared well ☐ Municipal Supply ☐ Spring ☐ Other:

Installation Requirements/Conditions

Septic Tank Size: 1000 gallons Total Trench/Bed Length: 100 feet Trench/Bed Spacing: 9 feet on center

Trench/Bed Width: 36 inches LTAR: 0.3 gpd/ft² Usable Depth to LC (Initial)*: 48 *Limiting condition

Soil Cover: 18+ inches Slope Adjusted Maximum Trench/Bed Depth#: 32 inches *# Measured on the downhill side of the trench*

Pump Tank Size (if applicable): N/A gallons Requires more than 1 pump? ☐ Yes ☒ No

Pump Requirements: N/A ft. TDH vs. N/A GPM Grease Trap Size (if applicable): gallons

Distribution Method: ☒ Serial ☐ D-Box or Parallel ☐ Pressure manifold(s) ☐ LPP ☐ Other

Artificial Drainage Required: Yes ☐ No ☒ If yes, please specify details:

Legal Agreements *(If the answer is "Yes" to any type of legal agreements, please attach a copy of the agreement.)*

Multi-party Agreement Required [.0204(g)]: ☐ Yes ☒ No Declaration of Restrictive Covenants: ☐ Yes ☒ No

Easement, Right-of-Way, or Encroachment Agreement Required [.0301(b)]: ☐ Yes ☒ No

Management Entity Required: Yes ☐ No ☒ Minimum O&M Requirements:

Permit conditions:

See Design

The requirements of 15A NCAC 18E are incorporated by reference into this permit and shall be met. Systems shall be installed in accordance with the attached site sketch. *This Construction Authorization is subject to revocation if the site plan, plat, or the intended use changes.* The Construction Authorization shall not be affected by a change in ownership of the site. This Construction Authorization is subject to compliance with the provisions of 15A NCAC 18E, or 15A NCAC 18A .1900, as applicable, and to the conditions of this permit.

AOWE/PE Print name: Wendell Overby Expiration Date: 2/14/2029

AOWE/PE Signature: Wendell Overby Date: 2/14/2024

This AOWE/PE submittal is pursuant to and meets the requirements of G.S. 130A-335(a2) and (a5).

See attached site sketch

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES
Division of Public Health

Permit/File #: OSWP-2024-47498

This Section for Local Health Department Use Only

Initial submittal received: 2/22/24 (*Date*) by ONLINE (*Initials*)

G.S. 130A-335(a5) states the following:

When an applicant for a Construction Authorization, or an Improvement Permit and Construction Authorization together, submits a Construction Authorization, or an Improvement Permit and Construction Authorization application together, the permit fee charged by the local health department, the common form developed by the Department, and any necessary signed and sealed plans or evaluations conducted by a person licensed pursuant to Chapter 89C of the General Statutes as a licensed engineer or a person certified pursuant to Article 5 of Chapter 90A of the General Statutes as an Authorized On-Site Wastewater Evaluator, the local health department shall, within five business days of receiving the application, conduct a completeness review of the submittal. A determination of completeness means that the Construction Authorization or Improvement Permit and Construction Authorization includes all of the required components. If the local health department determines that the Construction Authorization or Improvement Permit and Construction Authorization is incomplete, the local health department shall notify the applicant of the components needed to complete the Construction Authorization or Improvement Permit and Construction Authorization. The applicant may submit additional information to the local health department to cure the deficiencies in the Construction Authorization or Improvement Permit and Construction Authorization. The local health department shall make a final determination as to whether the Construction Authorization or Improvement Permit and Construction Authorization is complete within five business days after the local health department receives the additional information from the applicant. If the local health department fails to act within any period set out in this subsection, the applicant may treat the failure to act as a determination of completeness. The applicant may apply for the building permit for the project upon the decision of completeness of the Construction Authorization or Improvement Permit and Construction Authorization by the local health department or if the local health department fails to act within five business days. The Authorized On-Site Wastewater Evaluator or licensed engineer submitting the evaluation pursuant to this subsection may request that the local health department revoke or suspend the Construction Authorization or Improvement Permit and Construction Authorization for cause. Upon written request of the Authorized On-Site Wastewater Evaluator or licensed engineer, the local health department shall suspend or revoke the Construction Authorization or Improvement Permit and Construction Authorization pursuant to G.S. 130A-23. The Department shall develop a common form for use as the Construction Authorization.

The review for completeness of this Construction Authorization was conducted in accordance with G.S. 130A-335(a5). This Construction Authorization is determined to be:

☐ Incomplete (If box is checked, information in this section is required.)

The following items are missing: _____

_____

Copies of this were sent to the AOWE/PE and the Applicant on _____ (*Date*)

State Authorized Agent: _____ Date: _____

☒ Complete

State Authorized Agent: D. Wisberg Date of Issuance: 2/26/24

This Construction Authorization is issued pursuant to G.S. 130A-335(a2) and (a5) using the signed and sealed plans or evaluations attached here. This Construction Authorization is subject to revocation if the site plan, plat, or the intended use changes. The Construction Authorization shall not be affected by a change in ownership of the site. This Construction Authorization is subject to compliance with the provisions of the Laws and Rules for Sewage Treatment and Disposal and to the conditions of this permit.

The Department, the Department's authorized agents, and the local health departments shall be discharged and released from any liabilities, duties, and responsibilities imposed by statute or in common law from any claim arising out of or attributed to plans, evaluations, preconstruction conference findings, submittals, or actions from a person licensed pursuant to Chapter 89C of the General Statutes as a licensed engineer or a person certified pursuant to Article 5 of Chapter 90A of the General Statutes as an Authorized On-Site Wastewater Evaluator in GS 130A-335(a2), (a5), and (a7). The Department, the Department's authorized agents, and the local health departments shall be responsible and bear liability for their actions and evaluations and other obligations under State law or rule, including the issuance of the operations permit pursuant to GS 130A-337.

Construction Authorization Expiration Date: 2/26/29

See attached site sketch

SOIL & FORESTRY SERVICES
OF THE CAROLINAS, PA

2/14/2024

Iredell County Environmental Health
Attn: Heath Snow
349 N Center Street
Statesville, NC 28677

Re: Improvement Permit & CA Submittal for 135 Bentley Ct (Lot #11)

Mr. Snow,

Attached please find sealed soil notes as well as site plans and design related data for a 1 bedroom ACCEPTED system using GRAVITY distribution.

"The LSS evaluation attached to this application is to be used to issue an Improvement Permit in accordance with G.S. 130A-335(a2) and (a3)."

"The plans or evaluations attached to this application are to be used to issue a Construction Authorization in accordance with G.S. 130A-335(a2), (a5) and (a6)."

Owner/Applicant: Richard H Lyon // Lyon Holdings, LLC

Signature: Richard H Lyon // Lyon Holdings LLC

Date: 2/14/24

"The LSS Evaluation is being submitted pursuant to and meets requirements of GS 130A-335(a2)." This Improvement Permit is issued pursuant to G.S. 130A-335(a2),(a3), and (a4) using the signed and sealed LSS evaluation attached here". "This AOWE submittal is pursuant to and meets the requirements of G.S. 130A-335(a2) and (a5)"

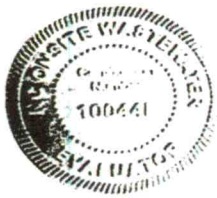
"This Construction Authorization is issued pursuant to G.S. 130A-335 (a2), and (a5) and (a6) using the signed and sealed plans or evaluations attached here."

Wendell Overby, LSS

Signature: Wendell Overby

Date: 2/14/2024 Seal:





NC DEPARTMENT OF HEALTH AND HUMAN SERVICES

ROY COOPER • Governor
KODY H. KINSLEY • Secretary
MARK BENTON • Deputy Secretary for Health
SUSAN KANSAGRA • Assistant Secretary for Public Health
Division of Public Health

Application for Services

This application, in conjunction with the common form established in G.S. 130A-335(a3) and (a5), is optional for local health departments to be used for applications submited in accordance with G.S. 130A-335(a2), (a3), and (a5).
[hereinafter, G.S. 130A-335(a3) and (a5) permits referred to as (a2) Improvement Permit and (a2) Construction Authorization]

Applying for:

[X] (a2) Improvement Permit [X] (a2) Construction Authorization [ ] (a2) Repair/Construction Authorization

If applying for a Construction Authorization, please indicate desired system type(s):

[X] Accepted [ ] Conventional [ ] Innovative [ ] Other _____ [ ] Any

[X] New Construction [ ] Expansion [ ] System Relocation [ ] Change of Use [ ] Repair

[X] 5 Year Expiration Requested (site plan provided) [ ] Non-Expiring Permit Requested (plat provided, as defined in G.S. 130A-334(7a)

Requesting DHHS review? (systems >3000 GPD or IPWW) [ ] Yes [X] No

Applicant:	Wendell Overby // Soil & Forestry Services, PA
Mailing Address:	813 Davidson Dr NW
City:	Concord
State:	North Carolina
Zip:	28025
Phone #:	980-439-5007
Email:	usablesoil@gmail.com

Owner:	Richard H Lyon // Lyon Holdings, LLC
Mailing Address:	PO Box 1106
City:	Mooresville
State:	North Carolina
Zip:	28115
Phone #:	704 660-0995
Email:	donna_denardo@lyonfinancial.net

If the answer to any of the following questions is "yes", applicant must attach supporting documentation.

[ ] Yes	[X] No	Does the site contain any jurisdictional wetlands?
[ ] Yes	[X] No	Is any wastewater going to be generated on the site other than domestic sewage?
[ ] Yes	[X] No	Is the site subject to approval by any other public agency?
[ ] Yes	[X] No	Are there any easements or right of ways on this property?

I understand that the documentation and fees, as required in G.S. 130A-335(a2), (a3), (a5), and (a6), attached to this application are to be used to issue an Improvement Permit and/or Construction Authorization pursuant to G.S. 130A-335(a2),(a3), and (a5). I understand that authorized county and state officials are granted right of entry to the property indicated on this application to conduct necessary inspections to determine compliance with applicable laws and rules. ***I understand that if the information in the application for an Improvements Permit and/or Construction Authorization is falsified, changed, or the site is altered, then the Improvement Permit and Construction Authorization shall become invalid.***

Applicant Signature: _____ Date: 2/14/2024

Owner's Signature: _____ Date: 2/14/24

SOIL & FORESTRY SERVICES
OF THE CAROLINAS, PA

usablesoil@gmail.com
980-439-5007
813 Davidson Dr NW
Concord NC 28025
SoilAndForestryServices.com

Project# 23-1011

Septic System Design for a 1 Bedroom House
ACCEPTED using GRAVITY distribution
Site location: 135 Bentley Ct, Lot # 11

Contents	**Page**
Information for the Installer	1
Design Specifications	2
Layout Specifications	3
Site Plan	4
Calculations	5
Soil Descriptions	6
Floor Plans	7

Jan 2024
Design By: Overby

ACCEPTED using GRAVITY distribution
Site location: 135 Bentley Ct, Lot # 11

* **CALL 811 BEFORE DIGGING**
* The permit should be read very carefully prior to bidding. The following are details that must be considered along with all other considerations.
* Tanks shall be approved by DHHS, and certification supplied by the that must be considered along with all other considerations.
* The installer shall be responsible to the owner for placement of the tanks and to insure that final grades are returned to the original natural grade, with exception of added structural features.
* The supply trench shall be compacted to eliminate cavities left during initial fill placement.
* Installation of the system shall be during dry conditions in order to protect the soil
* All fittings shall be pressure rated fittings.
* All joints shall be cleaned with PVC pipe cleaner and a heavy bodied glue applied to weld all joints.
* Where required by the county health department, post installation inspections by the designer must be scheduled 5 week days in advance.
* Trenches shall be carefully excavated so the bottom is within 2" from the highest to the lowest points of elevation within the trench. If the bottom elevation needs adjusting after it has been trenched, it will be done by removing high points rather than filling low points. It is extremely important to insure that trenches are not over excavated during initial trenching. All fine grading within the trench will be hand done with a shovel. No loose material will be left in the trench
* All pipe openings in the tanks shall be properly grouted. This also applies to the joints around the riser.
* All tanks shall be properly back filled and compacted to prevent slump at a later date.
* Earth dams, constructed of relatively impervious material, shall be installed at the beginning and end of each lateral.
* No heavy equipment shall be used on the field during or after installation. The use of a small loader (i.e. Bobcat) or a trencher (i.e. Ditch Witch 2300/2310) may be used.
* Elevations at pinflag locations should be checked by the installer prior to beginning
* Septic tank riser shall be a minimum of 6" above finished grade.

* **System specified as ACCEPTED type using GRAVITY distribution**
* **Repair specified as ACCEPTED type using GRAVITY distribution**
* **System trench depth specified at 32"**
* **System trenches installed on 9' minimum; 36" wide trenches**
* **Installation does not require a soil cap**

Page 2	DESIGN SPECIFICATIONS	Project #23-1011

ACCEPTED using GRAVITY distribution
Site location: 135 Bentley Ct, Lot # 11

Business (if applicable):	Lyon Holdings, LLC
Contact:	Richard H Lyon
Phone:	704 660-0995
Email:	donna_denardo@lyonfinancial.net
County:	Iredell
Location:	135 Bentley Ct

Source of Wastewater Flow:	1	bedroom home
Estimated Daily Wastewater Production:	120	gpd
Drain field Size:	100	lf
Loading Rate:	0.3	gpd/ft.^{2}
Trench Depth:	32	in
Trench Width:	36	in
Soil Cap:	0	in
Septic Tank Size:	1000	gal

Page 3	LAYOUT SPECIFICATIONS	Project #23-1011

ACCEPTED using GRAVITY distribution
Site location: 135 Bentley Ct, Lot # 11

Daily Flow (gpd) 120 **Jan 2024**

LINE #	FLAG COLOR	BS	HI	FS	ELEV	FLAGGED LENGTH	DESIGN LENGTH
TBM		0.0			100.0		
INSTR. 1			100.0				
			SYSTEM				
1	Blue			8.2	91.8	180	100
			REPAIR				
2	Pink			9.3	90.7	208	100

	LINE LENGTH	LTAR GPD/FT^2	SYSTEM TYPE	REDUCTION TYPE	DIST	TRENCH DEPTH	SOIL CAP
SYSTEM	100	0.300	ACCEPTED	25%	GRAVITY	32	0
REPAIR	100	0.300	ACCEPTED	25%	GRAVITY	32	0

Notes:
**TBM is assumed to be 100'
**All measures in feet
**Nitrification lines are demonstrated on contour via colored pin flags
**BS and FS indicate rod readings

CALCULATIONS	Project #23-1011

ACCEPTED using GRAVITY distribution
Site location: 135 Bentley Ct, Lot # 11

PROJECT INFO	Designer	Overby
	Project #	23-1011
	Project MM YYYY	Jan 2024
	County	Iredell
	Project Location	135 Bentley Ct
	Lot # (if applicable)	11
	Subdivision (if applicable)	Honeycutt Flats
	Parcel #	4730413928.000
	Lot size (acres)	0.69
	Business (if applicable)	Lyon Holdings, LLC
	Name (Owner)	Richard H Lyon
	Mailing Address (Owner)	PO Box 1106
	City (Owner)	Mooresville
	State (Owner)	North Carolina
	Zip (Owner)	28115
	Phone (Owner)	704 660-0995
	Email (Owner)	donna_denardo@lyonfinancial.net
	Bedrooms	1
	Water Source	Private Well
	Foundation Type	Slab
	Daily Flow (gallons)	120
SYSTEM	System LTAR	0.3
	System Type	ACCEPTED
	System Distribution	GRAVITY
	System Trench Center Distance (feet)	9
	System Trench Width (inches)	36
	System Trench Depth (inches)	32
	Soil Cap (inches)	0
	Usable Soil Depth (inches)	48
	Media Height (inches)	12
	Tank Size (gallons)	1000
	Required Feet of Line (system)	100
	Designed Feet of Line (system)	100
REPAIR	Repair LTAR	0.3
	Repair Type	ACCEPTED
	Repair Distribution	GRAVITY
	Repair Trench Center Distance (feet)	9
	Repair Trench Width (inches)	36
	Repair Trench Depth (inches)	32
	Soil Cap (inches)	0
	Usable Soil Depth (inches)	48
	Tank Size (gallons)	1000
	Required Feet of Line (repair)	100
	Designed Feet of Line (repair)	100

Sheet 1 of 1
PROPERTY ID #: 4730413928.000
COUNTY: Iredell

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM
(complete all fields in full)

OWNER: Richard H Lyon // Lyon Holdings, LLC
ADDRESS: PO Box 1106
PROPOSED FACILITY: 1 bedroom house
LOCATION OF SITE: 135 Bentley Ct

APPLICATION DATE:
DATE EVALUATED: 2/10/2023
PROPERTY SIZE: 0.69 acres
PROPERTY RECORDED: 2023

WATER SUPPLY: ☑ Private ☑ Well ☐ Spring ☐ Other

EVALUATION METHOD: ☐ Auger Boring ☑ Pit ☐ Cut

TYPE OF WASTEWATER: ☑ Sewage ☐ Industrial Process ☐ Mixed

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941)		OTHER PROFILE FACTORS				PROFILE CLASS & LTAR
			.1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	.1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPR CLASS	.1944 RESTR HORIZ	
23	L / 5%	0 - 7	RB CL WFG	FR SS SP	N/A	48	N/A	N/A	0.3
		7 - 27	RB C WMS	FR SS SP					
		27 - 48	BR CL WFS	FR SS SP C SAP					
24	L / 5%	0 - 6	RB CL WFG	FR SS SP	N/A	48	N/A	N/A	0.3
		6 - 20	RB C WMS	FR SS SP					
		20 - 48	BR CL WFS	FR SS SP					
25	L / 10%	0 - 6	RB CL WFG	FR SS SP	N/A	50	N/A	N/A	0.3
		6 - 23	RB C WMS	FR SS SP					
		23 - 50	BR CL WFS	FR SS SP C SAP					
26	L / 8%	0 - 13	B SCL WFG	FR SS SP	N/A	48	N/A	N/A	0.3
		13 - 38	RB C WMS	FR SS SP					
		38 - 48	BR CL WFS	FR SS SP					
27	L / 10%	0 - 17	B SL WFG	FR SS SP	N/A	48	N/A	N/A	0.3
		17 - 40	RB C WMS	FR SS SP					
		40 - 48	BR CL WFS	FR SS SP					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	100	100
System Types(s)	ACCEPTED	ACCEPTED
Site LTAR	0.3	0.3

OTHER FACTORS (.1946):
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: OVERBY
ERROR(S) PRESENT:

LICENSED SOIL SCIENTIST WENDELL OVERBY

COMMENTS:



PIPPIN
HOME DESIGNS
INC.

Professional Member, AIBD
110-D PINEHILL HIGHWAY
PMB 174
MOORESVILLE, NC 28117
TEL 704 [illegible]
www.pippinhomedesigns.com

N·C·B·D·C

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A NEW BARNDOMINIUM DESIGN FOR:
LYON HOLDINGS LLC
LOT #11 HONEYCUTT FLATS
BENTLEY COURT
TROUTMAN NC IREDELL COUNTY

DATE:
2/7/24
SCALE:
1/4" = 1'-0"
SHEET:
A-3

SHEET SIZE: 42" X 30"

FIRST FLOOR PLAN DIMENSIONED