IREDELL COUNTY HEALTH DEPARTMENT

Statesville Office (704) 878-5305 Mooresville Office (704) 660-3625 PERMIT # 22[illegible]

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

PIN # 4659 14 3902

APPLICANT: Wendell Overby / Essex Homes APPLICANT ADDRESS: P.O. Box 832 Mooresville, NC 28115

SITE ADDRESS: 127 Harvest Wind Ct. Mooresville, NC PHONE: ALT. PHONE: 704 239-2001

SITE DIRECTIONS: Hwy 115/US 21 N TL Clear Springs TL Autumn Grove TR Early Frost TL Harvest Wind on left

SUBDIVISION: Autumn Grove SECTION: 2 LOT # 43 LOT AREA: 1.16 Acs DESIGN FLOW: 360 gpd L.T.A.R.: .3

Septic Tank 1000 (gal) STB 180 Date 7-17-17

Pump Tank 1000 (gal) PT 319 Date 9-28-17

Pump Make ____ Model ____ Serial # ____

Nitrification Fields 1 # Lines 5 Linear Ft: 200

Trench Width min 24" Max. Trench Bottom Depth 36" Gravel Depth N/A

[X] New System [ ] Repair [ ] Expansion System Type: I II III (IV) V VI

System Description: LPPPBPS

Repair System Description: LPPPBPS

Maintenance Agreement Required: [X] YES [ ] NO

[ ] GRAVITY [X] PRESSURE

[X] Residence No. Bedrooms 3

[ ] Business No. Persons ____

[ ] Other No. Employees ____

[ ] Slab [X] Crawl Space

[ ] Basement w/plumbing [ ] Basement w/o plumbing

Water Supply: [X] Private [ ] Public [ ] Community

Comments / Conditions:

INITIAL SITE SKETCH

See attached, approved Septic Plan by Soil & Forestry Services (dated 3/9/17)

AS BUILT SKETCH

	Date	Initials
Drain Lines Checked		
Tanks Checked	11-17-17	KW
Pressure Manifold or Valve Box Checked	2/20/18	BB
Pressure Head Set		
Electrical Checked		
Floats Set		
Alarm Checked		
Maintenance Contract (Y) N	11-17-17	KW

Comments: 11-17-17: 3 drain lines checked + OK → last 2 lines still need to be checked. Effluent filter still needed in septic tank. 2/20/18 B.B.

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. [X] AUTHORIZATION TO CONSTRUCT valid for period equal to IMPROVEMENT PERMIT--not to exceed 60 mo.

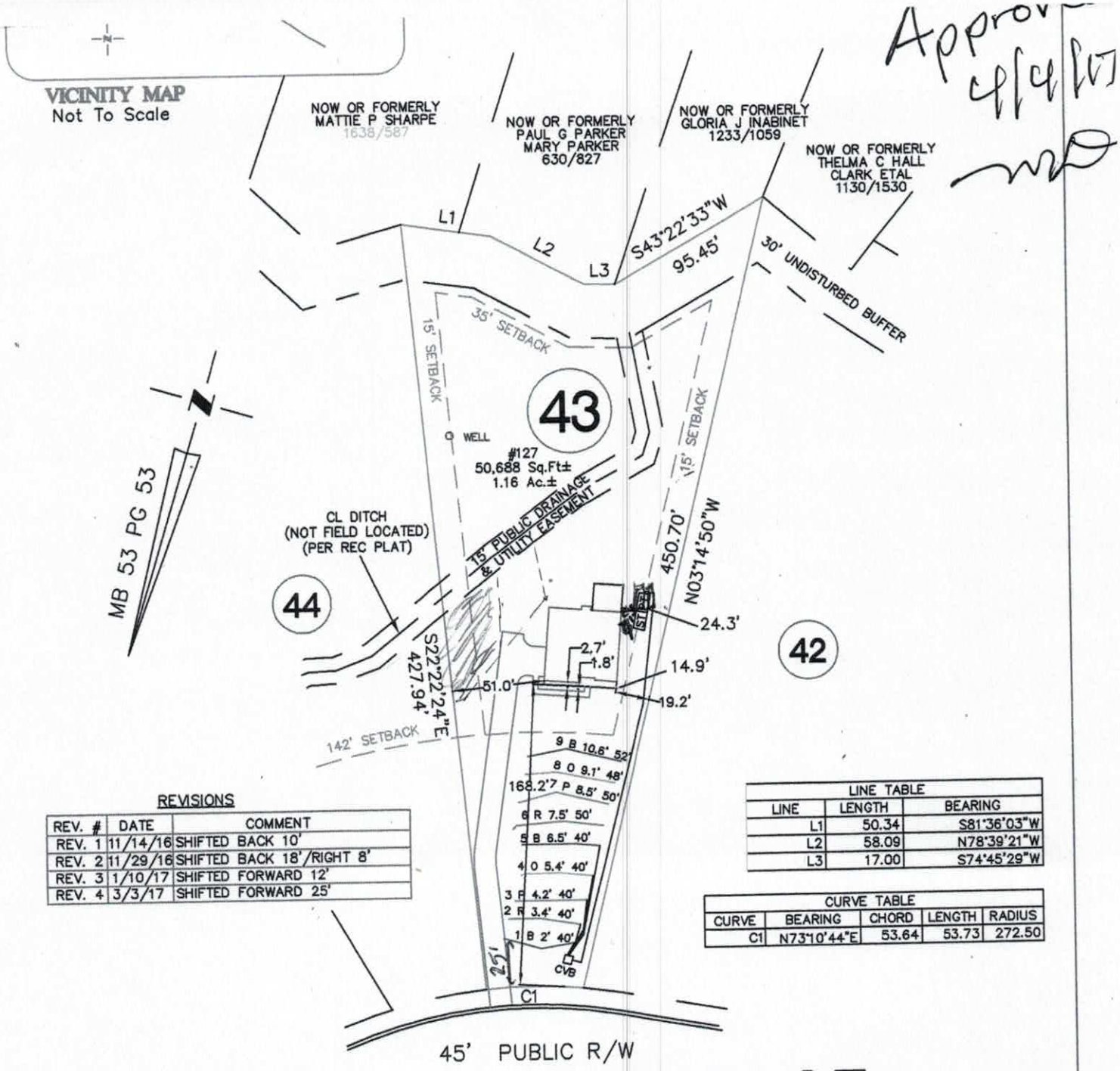
Owner / Applicant Signature: [signature] Date: 4-10-17 Installed by: Sid Gaskins - Mike Powell

IMPROVEMENT PERMIT by: Maria Dotson RS Date: 4/4/17 OPERATION PERMIT by: Benjamin A Bottoms Date: 2/20/2018

AUTHORIZATION TO CONSTRUCT by: Maria Dotson Date: 4/13/17 Existing System Inspected by: Date:

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

Approved 4/4/17 MD



REVISIONS

REV. #	DATE	COMMENT
REV. 1	11/14/16	SHIFTED BACK 10'
REV. 2	11/29/16	SHIFTED BACK 18'/RIGHT 8'
REV. 3	1/10/17	SHIFTED FORWARD 12'
REV. 4	3/3/17	SHIFTED FORWARD 25'

LINE TABLE

LINE	LENGTH	BEARING
L1	50.34	S81°36'03"W
L2	58.09	N78°39'21"W
L3	17.00	S74°45'29"W

CURVE TABLE

CURVE	BEARING	CHORD	LENGTH	RADIUS
C1	N73°10'44"E	53.64	53.73	272.50

NOTE:
1. BUILDER ASSUMES RESPONSIBILITY FOR GRADING LOT AND/OR DESIGNING STEPS, PORCHES, DECKS, ETC. AS NECESSARY TO PREVENT ENCROACHMENT INTO SETBACKS.
2. HOUSE DIMENSIONS AND OPTIONS SHOULD BE VERIFIED WITH CONTRACTOR PRIOR TO CONSTRUCTION.
3. SETBACKS/ EASEMENTS SHOULD BE VERIFIED WITH DEVELOPER AND LOCAL OFFICIALS PRIOR TO CONSTRUCTION.
4. THIS IS A CONCEPTUAL DRAWING AND CONTENTS SHOWN HEREON ARE SUBJECT TO CHANGE UPON FINAL CONSTRUCTION.
THIS PROPERTY MAY BE SUBJECT TO ANY AND ALL APPLICABLE DEED RESTRICTIONS, EASEMENTS, RIGHT-OF-WAY, UTILITIES AND RESTRICTIVE COVENANTS WHICH MAY BE OF RECORD OR IMPLIED

THIS DRAWING DOES NOT REFLECT AS-BUILT INFORMATION

PRELIMINARY PLAT
NOT FOR RECORDATION, CONVEYANCES, OR SALES.

80 0 80
SCALE: 1" = 80'

EASTOVER
LAND SURVEYING COMPANY, P.A.
LAND SURVEYORS – PLANNERS (C-1833)
10430 PARK ROAD, SUITE #300
CHARLOTTE, NORTH CAROLINA 28210

HOUSE LOCATION PLOT PLAN

FOR

LOT 43, AUTUMN GROVE SUBDIVISION, PHASE 2

Barringer Township, Iredell County, North Carolina

PROPERTY OF: ESSEX HOMES

MAP BOOK 53 PAGE 53 DEED REFERENCE

SOIL & FORESTRY SERVICES
OF THE CAROLINAS, PA

www.soilandforestryservices.com

March 9, 2017

Iredell County Environmental Health
610 E Center Avenue
Mooresville, NC 28115

Re: Lot 43 Autumn Grove

To Whom It May Concern:

Attached please find a revised expedited review submittal for Lot 43 of Autumn Grove subdivision. A recent expedited review was submitted for the lot and approved for 4 bedrooms. The owner, Essex Homes, has changed the bedroom count to 3. Therefore we are submitting the attached packet as an intermediate re-layout. As such, no zoning receipt or soils information is attached with the submittal.

Thank you,

Wendell Overby
NC Licensed Soil Scientist

SOIL & FORESTRY SERVICES
OF THE CAROLINAS, PA

Attached is a proposed design for a PPBPS Septic System with low pressure distribution for a 3 bedroom single family residence on Lot # 43 in Autumn Grove Subdivision, Iredell County, North Carolina.

Contents:

	Page
Information for the Installer	1
Design Information	2-3
Design Specifications	4
Layout Specifications	5
System Tapsheet	6
Site Plan	7
LP Panel Diagram	8
Calculations	9
Iredell County Expedited Review Checklist	10
Iredell County Septic Application	11
Iredell County Site Plan Worksheet	12
Environmental Health Requirements Checklist	13
Agent Authorization	14
Volutary Relinquishment of Appeal Rights	

Owner: Essex Homes SE
120 Cromer Road, Lexington, SC 290273
803.223.4003

March 9, 2017
Project #: 17-1009
Design By: Wendell Overby

INFORMATION FOR THE INSTALLER:

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 DEHNR, and certification supplied by the manufacturer.
- 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 structure.
- 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 for installation.
- Elevations at pinflag locations should be checked by the installer prior to beginning
- Pump tank riser should be 6" above grade, control panel should be 12" above grade.
- Septic tank riser shall be a minimum of 6" above finished grade.
- System is specified as a PPBPS installation.
- Repair is specified as a PPBPS installation.
- Backfill 4 - 6" of material (County Approved) over panels, rake trench walls, lime side-walls, install trenches 24" wide and have no more than 1/4" fall in 10 feet.
- Iredell County has approval to relocate well or tanks.

LP PPBPS SYSTEM
FOR WASTEWATER TREATMENT

Approved
4/4/17
MD

Owner/Applicant: Essex Homes SE

Address: 120 Cromer Road
Lexington, SC 29073

Phone: 803-233-4003

County: Iredell

Location: AUTUMN GROVE LOT 43

Source of Wastewater Flow: 3 Bedroom Single Family Residence

Estimated Gallons Per Day Flow: 360

System Flow: 18.92307692

Design Specifications

Drainfield Size: 200

Loading Rate (gpd/ft.^{2}): 0.3

Depth of Gravel in Trench: NA (PPBPS)

Gravel Size: NA (PPBPS)

Trench Depth: 36 in.

Trench Width: 24 in.

Septic Tank Size: 1000

Pump Tank Size: 1000

Estimated Supply Line Length: 220

Supply Line Diameter: 2 in. SCH 40 PVC

Supply Line Volume: 38.28

Dosing Volume: 111.32

Supply Manifold: N/A

Supply Manifold Length: N/A

Supply Manifold Volume: N/A

Recommended Float Controls: SJE Sensor Float Control Switches as Required for Control Panel or County Approved Equivalents

Recommended Control Panel: SJE-Rhombus Model 112 (NEMA 4x) Control Panel or County Approved Control Panel.

Pressure Head: 2 ft.

Friction Head: 3.37

Elevation Head: 27.00

Total Dynamic Head: 32.87

Threaded Union: In Tank

Gate Valves: 1 in Tank
1 per lateral

Check Valves: In Tank

Anti-Siphon Hole: NA

AUTUMN GROVE LOT 43

LP PPBPS

DESIGN FLOW (gpd):	360
SOIL APPLICATION RATE (gpd/ft.^{2}):	0.3
TOTAL AREA TRENCH BOTTOM:	400
TOTAL LATERAL LENGTH:	200
NUMBER OF FIELDS:	1
LATERAL LENGTH REQUIRED PER FIELD:	200
SUPPLY LINE LENGTH:	220
TOTAL DYNAMIC HEAD:	32.87
MANIFOLD SIZE:	N/A
DOSING VOLUME:	111.32
PUMP TANK DRAW DOWN*:	5.3
SEPTIC TANK SIZE:	1000
PUMP TANK SIZE:	1000

Approved
4/4/17
MD

**Pump tank draw down based on a volume basis of 21 gallons per inch. Draw down may vary among pump tank manufacturers.*

Approved 4/4/17 mo

AUTUMN GROVE LOT 43

Project #: 17-1009

March 9, 2017

LAYOUT FOR 3 BEDROOM HOME

LINE #	FLAG COLOR	BS	HI	FS	ELEVATION	FLAGGED LINE LENGTH	DESIGN LINE LENGTH
TBM		3.4			100.00		
INSTR. 1			103.40				
HOUSE CNR				14.90	88.50		
P. TANK				24.30	79.10		
1	*BLUE*			*2.00*	*101.40*	*40*	*40*
2	*RED*			*3.40*	*100.00*	*44*	*40*
3	*PINK*			*4.20*	*99.20*	*48*	*40*
4	*ORANGE*			*5.40*	*98.00*	*54*	*40*
5	*BLUE*			*6.50*	*96.90*	*63*	*40*
6	RED			7.50	95.90	58	50
7	PINK			8.50	94.90	57	50
8	ORANGE			9.10	94.30	48	48
9	BLUE			10.60	92.80	55	52
					Total	**467**	**400**

	LINE LENGTH	LTAR GPD/FT2	SYSTEM TYPE	TRENCH SYSTEM	DISTRIBUTION
** System*	*200*	*0.300*	*MOD.*	*PPBPS*	*LOW PRESSURE*
Repair	200	0.300	MOD.	PPBPS	LOW PRESSURE

Notes:

** TBM located top of ground at EIP at corner of lot

**TBM is assumed to be 100'

**All measures in feet

**Nitrification lines are demonstrated on contour via colored pin flags

**BS, HI, and FS indicate rod readings

Approved 4/4/17 MD

LP PPBPS TAPSHEET -AUTUMN GROVE LOT# 43

SYSTEM

Line #	Color	Elevation	Length	Hole Size	Flow/hole	Trench Area	Number of Panels
1	BLUE	101.4	40	0.156	**0.41**	80	9
2	RED	100	40	0.156	**0.41**	80	9
3	PINK	99.2	40	0.156	**0.41**	80	9
4	ORANGE	98	40	0.156	**0.41**	80	9
5	BLUE	96.9	40	0.156	**0.41**	80	9
							46
	total	**feet =**	**200**	**gal/min =**	**18.9231**		

Des. Flow	**360**
Pump Run=	**5.88**
soil LTAR	**0.3**
LTAR +5%	**0.315**
LTAR with mod.	**0.6**

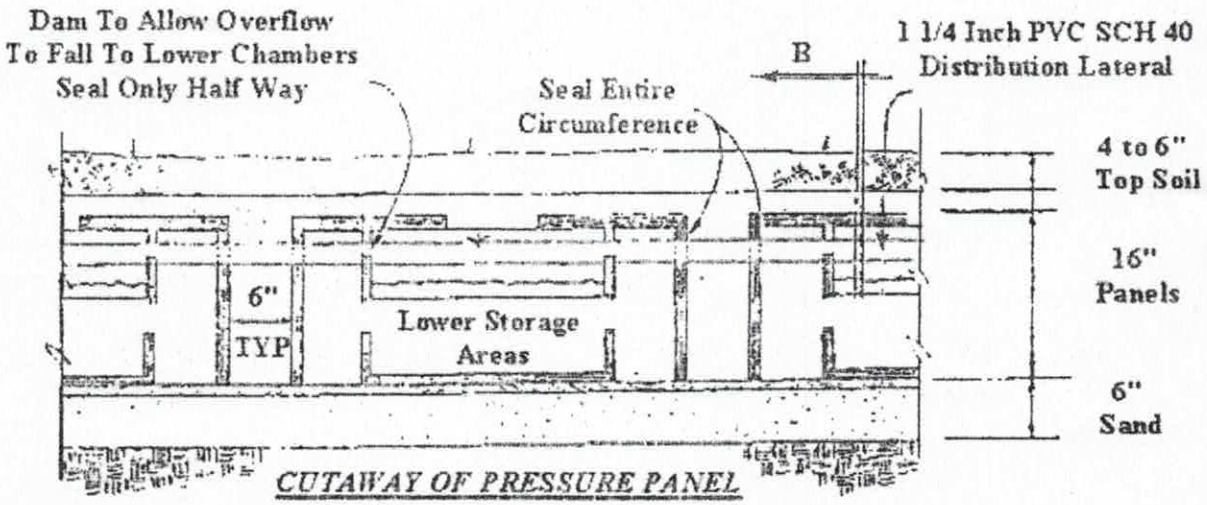
.156 equals 5/32 inch hole

Panels With Pressure Distribution

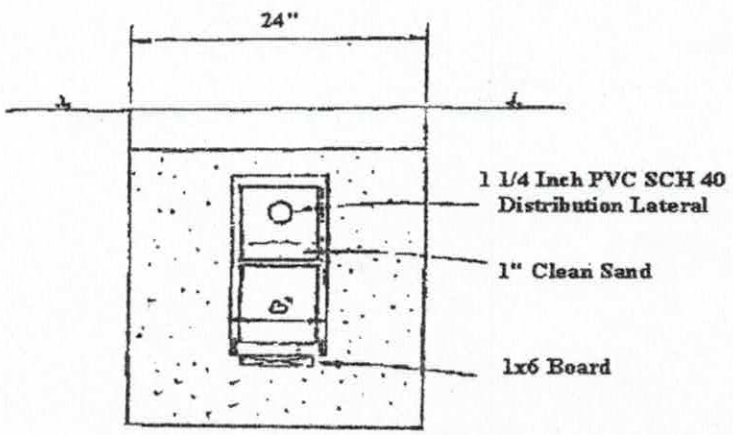
The LP Panel uses technology similar to that of Low Pressure Pipe (LPP) Systems. The tables and distribution design described in the LPP manual is applicable to the pressure Panel System. The system should be used with two to four feet of head. In many respects a LP Panel is similar to a LPP with the holes discharging into the panels.

The dosing cycle for the Panel System is designed to pump enough effluent to fill the top chambers of all the panels in the system. The top chamber of a 16 inch panel holds 3.6 gallons. When the system has 34 panels and all holes are the same size, then you would multiply 34 X 3.6 to get 122 gallons per dose cycle. The holes are drilled in the distribution pipe at the 10 and the 2 o'clock position. These are then placed so that the effluent is pumped into the top chamber of the panel. If the hole sizing changes in the system the pump cycle is set by the hole that is discharging the fastest.

All valves and turn-ups should be neatly capped, covered and labeled for future service. Pump tanks should be constructed as shown in the drawing on page 12 to allow for service and repairs.



CUTAWAY OF PRESSURE PANEL



CALCULATIONS

Location AUTUMN GROVE

Project Number 17-1009

Lot No: 43

Approved
4/4/17
MD

No. of Bedrooms	3	
Design Flow	360	$^{gal}/_{day}$
LTAR	0.300	$^{gal}/_{ft^2\ day}$
PPBPS? (YES OR NO)	YES	
Supply Line Length	220	ft.
Supply Line Volume	38.28	gal.
Required Feet of Line	200.0	ft.
Amount of Line from Layout	200	ft.
Gallons per Minute	18.92308	$^{gal}/_{min}$
Required Septic Tank Capacity	1000	gal.
Minimum Standard Tank Size	1000	
Panel Volume	3.6	gal.
# of Panels	46	
Dosing Volume	111.32	gal.

Note: Dosing Volume based on 67% of # of panels times 3.6 gal/panel

FRICTION FACTOR INTERPOLATER
2" SCH 40 PVC

GPM	*f*
20	0.84
	-0.88
25	1.27
27.5	1.53
30	1.78
	-1.76
35	2.37
	-2.25
40	3.03
43.07	3.48
45	3.77
48.14	4.28
50	4.58
57.11	5.89
60	6.42

Tank Draw Down	5.3	*Generic Draw Down of 21 gal.per in.*
Pump Run Time	5.88	minutes
Elevation Head	27	ft.
Pressure Head	2	ft.
Friction Factor	1.53	ft./100 ft. *(From the interpolater.)*
Friction Head	3.37	ft.
Friction Head +15%	3.8709	
Total Dynamic Head	32.87	ft.

DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC HEALTH, ENVIRONMENTAL HEALTH SECTION
ON-SITE WATER PROTECTION BRANCH

Sheet 1 of 1
PROPERTY ID #: 46591439
COUNTY: IREDELL

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

APPROVED FEB 09 2017

OWNER: ESSEX HOMES SE
ADDRESS: 120 CRUMER RD LEXINGTON SC
PROPOSED FACILITY: RESIDENCE
PROPOSED DESIGN FLOW (.1949): 480
LOCATION OF SITE: LOT 43 AUTUMN GROVE

APPLICATION DATE: 1-19-17
DATE EVALUATED: 1-11-17
PROPERTY SIZE: 1.16 AC
PROPERTY RECORDED: YES

WATER SUPPLY: ☒ Private ☐ Public ☒ 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) .1941 STRUCTURE/ TEXTURE	SOIL MORPHOLOGY (.1941) .1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
1	L/4%	0-6	BSL WFGR	FR SS SP	–	48	–	–	PS .3
		6-48	RC WMSBK	FR SS SP					
2	L/4%	0-4	BSL WFGR	FR SS SP	–	48	–	–	PS .3
		4-44	RC MMSBK	FR SS SP					
		44-48	RCL WMSBK	FR SS SP					
3	L/7%	0-5	BSL WFGR	FR SS SP	–	48	–	–	PS .3
		5-40	RC WMSBK	FR SS SP					
		40-48	RBC WMSBK	FR SS SP f-c YB					
4	L/10%	0-5	BSL WFGR	FR SS SP	–	48	–	–	PS .3
		5-42	RC WMSBK	FR SS SP					
		42-48	RCL WFSBK	FR SS SP					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	267	267
System Type(s)	PPBPS	PPBPS
Site LTAR	.3	.3

OTHER FACTORS (.1946): PS
SITE CLASSIFICATION (.1948): PS

EVALUATED BY: OVERCAST
OTHER(S) PRESENT:

COMMENTS: AB
0-21 RC MSBK 21-48 CL MSBK .3

RECEIVED MAR 14 2017

IREDELL COUNTY HEALTH DEPARTMENT *ENVIRONMENTAL HEALTH DIVISION*

(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)

Paid $225.00 Int. Redraw

1. APPLICATION FOR: X **Improvement Permit** X **Authorization To Construct** ___ **Existing System Inspection**

#224097

2. Page 2: *Site Plan Worksheet* Form MUST Accompany This Application

The following optional attachments may also be submitted: X **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:

WENDELL OVERCAY	PO BOX 832 MOORESVILLE 28115		704 239 2001
Applicant Name	**Mailing Address**	**Home Phone #**	**Alternate Phone #**
ESSEX HOMES SE	120 CROMER RD LEXINGTON SC 29073		803 223 4003
Owner Name	**Mailing Address**	**Home Phone #**	**Alternate Phone #**

4. Property Information:

127 HARVEST WIND CT	AUTUMN GROVE	LOT 43
Street Address	**Subdivision Name**	**Section/Phase and Lot Number**

Driving Directions: TAKE E CENTER AVE N TO BROAD STREET. TURN RIGHT (ON 115) GO NORTH & FOLLOW 21 TO CLEAR SPRINGS ROAD. TURN LEFT ON CLEAR SPRINGS, LEFT ON AUTUMN GROVE, RIGHT ON EARLY FROST, LEFT ON HARVEST WIND

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 due to _____
( ) Other _____

Maximum Number of Bedrooms 3
Maximum Number of Occupants 6
If Expansion, Current Number of Bedrooms ___

(X) Crawl Space Foundation?
( ) Concrete Slab Foundation?
( ) 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:

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

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

( ) Alternative ( ) Conventional ( ) Innovative (X) Modified Conventional ( ) Other_____

8. Please Answer The Following ( ) Yes (X) No **Does the site contain any jurisdictional wetlands?**
To The Best of Your Ability: ( ) Yes (X) No **Is any non-domestic sewage (i.e. industry) to be generated?**
( ) Yes ( ) 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: Wendell Oy — 3-9-17

Property owner or owner's legal representative signature (SIGNATURE REQUIRED) — **DATE**

AUTHORIZATION TO ACT AS AGENT FOR OWNER

Any application/document/permit requiring a signature must be signed by the property owner or their authorized agent. This form shall be provided by the owner to allow specified individuals to act as agents for the owner. This form allows the specified individuals to sign or receive any application/document/permit on behalf of the owner. This form allows the authorized agent to make decisions on behalf of the owner pertaining to modifications of permits in the field. It is the responsibility of the owner to assure that any/all permit conditions specified on permits issued by this Division are followed.

I, Essex Homes, am the legal owner of the property located at LOT 43 AUTUMN GROVE, identified as PIN(Parcel Identification Number) 4659143902, located in Iredell County, North Carolina.

I do hereby authorize (print authorized agent/company name) SOIL & FORESTRY SERVICES, _____, _____, _____, to act as an agent on my behalf in applying for/signing/obtaining any of the documents described below.

1. Improvement Permit (IP)/ Authorization to Construct (AC).
2. Application for soil-site evaluation (new/repair).
3. Application/permit for water well/well abandonment.
4. Application for existing system.
5. Application for Improvement Permit (IP)/ Authorization to Construct (AC).

I agree to abide by any and all decisions and/or conditions between the agent acting on my behalf and the Iredell County Department of Public Health, Environmental Health Division. This form must be fully executed before the individual's specified above will be recognized as the authorized agent.

Signature of Owner — 11/18/16 — Date — Darek Burns

Signature of Witness — 11/18/16 — Date

IREDELL COUNTY HEALTH DEPARTMENT
JANE MURRAY, RN BSN MS
HEALTH DIRECTOR

Public Health
Prevent. Promote. Protect.
Iredell County Health Department

Voluntary Relinquishment of Administrative Appeal Rights
(Completion of Form by Property Owner)

3/9/17 (Date)

Owner: ESSEX HOMES SE
Address: 120 CROMER RD
LEXINGTON SC 29073

Subject: Voluntary Relinquishment of Administrative Appeal Rights

(specify Permit ID/owner's name/property location/site legal description):
PERMIT 224097 / AUTUMN GROVE 43

I, Essex Homes, voluntarily relinquish my rights to pursue a formal appeal through the Office of
(print full name)

Administrative Hearings pursuant to NC General Statute 130A-24 and 150B-23 and all other applicable provisions of Chapter 150B for the above referenced permit in order for the authorized agent/local health department to issue the applicable permit (new IP and/or CA) for the site. I understand by completing this form the previous permit issued on 2/23/17 (date) for a system
4 BEDROOM PANEL
(system name)

for the site will be "revoked" immediately by the authorized agent/local health department.

Signature of Property Owner
Darek Burns 3/9/17
Purchasing Manager
Essex Homes

Central Office
318 Turnersburg Hwy
Statesville, NC 28625
704 878-5300

Mooresville Office
610 E. Center Avenue
Mooresville, NC 28115
704 664-5281

Environmental Health
349 N. Center Street
Statesville, NC 28677
704 878-5358

http://www.co.iredell.nc.us/Departments/Health/

IREDELL COUNTY HEALTH DEPARTMENT
JANE MURRAY, RN BSN MS
HEALTH DIRECTOR

Public Health
Prevent. Promote. Protect.
Iredell County Health Department

Notice of Intent to SUSPEND/REVOKE Improvement Permit/Construction Authorization

4/5/17 (Date)

Owner: Essex Homes
Address: 120 Cromer Rd
Lexington, SC 29073

Subject: Notice of Intent to Revoke/Suspend Autumn Grove #43
(**specify name/location**) Improvement Permit/Construction Authorization

Dear Essex Homes:
(Owner's Name)

The Iredell County Health Department (ICHD) inspected the site for the on-site wastewater system located at 127 Harvest Wind Ct (physical address) for compliance with the Laws (Article 11 of Chapter 130A of the North Carolina General Statutes), Rules (15A NCAC 18A .1900 et seq.), and Improvement Permit/Construction Authorization Type 4 LPPPBPS (specify type and number) conditions. As a result of this inspection, the Department has determined the following violations:

Violation	Law or Rule Citation
2 permits for 1 site	15A NCAC 18A, 1937 Permits

[Example #1 - 18 inches of soil removed from site in violation of NCGS 130A-335(f), Rule .1937(g), Rule .1943, Rule .1947(c), and IP Condition No. 2.]
[Example #2 - Nitrification trenches installed at a depth of 30 inches in violation of Rule .1955 (m) and CA Condition No. 2.]

This is to notify you that based on these violations, the Department intends to suspend/revoke (specify) your Improvement Permit/Construction Authorization (specify) 30 days from the date of this notice.

If the ICHD determines that all of the violations have been corrected before thirty (30) days expire, the suspension/revocation (specify) will not go into effect. *[Insert for suspension]* If the permit is suspended, the health department must determine that the violations have been corrected before the suspension will be lifted. *[Insert for revocation]* If the permit is revoked, you must apply for a new Improvement Permit/Construction Authorization and meet the requirements of the current laws and rules necessary to obtain a new IP/CA.

You have a right to an informal review of this decision. You may request an informal review by the environmental health supervisor at the local health department. You may also request an informal review by the NC Department of Health and Human Services Regional Soil Scientist. A request for informal review must be made in writing to the local health department.

You also have a right to a formal appeal of this decision. To pursue a formal appeal, you must file a petition for a contested case hearing with the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, NC 27699-6714. You may write the Office of Administrative Hearings, call the office at (919) 431-3000 or get a copy of the petition form from the OAH web site at http://www.ncoah.com/forms.html . The petition for a contested case hearing must be filed in accordance with the provision of North Carolina General Statutes 130A-24 and 150B-23 and all other applicable provisions of Chapter 150B. North Carolina General Statute 130A-335 (g) provides that your hearing would be held in the county where your property is located.

If you wish to pursue a formal appeal, you must file the petition form with the Office of Administrative Hearings **WITHIN 30 DAYS OF THE DATE OF THIS LETTER.** The date of this letter is 4/5/17. Meeting the 30 day deadline is critical to your formal appeal.

If you file a petition for a contested case hearing with the Office of Administrative Hearings, you are required by law (NC General Statute 150B-23) to serve a copy of your petition on the Office of General Counsel, NC Department of Health and Human Services, 2001 Mail Service Center, Raleigh, NC 27699-2001.

Do not serve the petition on your local health department. Sending a copy of your petition to the local health department will not satisfy the legal requirement in NC General Statute 150B-23 that you send a copy to the Office of General Counsel, 2001 Mail Service Center, NC Department of Health and Human Services.

You may contact our office at 704-878-5305 x3456 or by fax at 704-871-3483.

Sincerely,

Signature of DHHS Authorized Agent

IREDELL COUNTY HEALTH DEPARTMENT

Statesville Office (704) 878-5305 Mooresville Office (704) 660-3625 PERMIT # 224097

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

PIN # 4659-14-3902

APPLICANT: WENDELL OVERRY APPLICANT ADDRESS: PO BOX 832 MOORESVILLE

SITE ADDRESS: 127 HARVEST WIND CT. MOORESVILLE PHONE: 704-239-2001 ALT. PHONE:

SITE DIRECTIONS: 115 N, TL CLEAR SPRINGS, TL AUTUMN GROVE, TR EARLY FROST, TL HARVEST WIND, ONL

SUBDIVISION: AUTUMN GROVE SECTION: LOT # 43 LOT AREA: 1.16 AC DESIGN FLOW: 480 L.T.A.R.: .3

Septic Tank 1000 (gal) STB Date

Pump Tank 1000 (gal) PT Date

Pump Make Model Serial #

Nitrification Fields 1 # Lines 6 Linear Ft: 267'

Trench Width 24" Max. Trench Bottom Depth 36" Gravel Depth —

☒ New System ☐ Repair ☐ Expansion System Type: I II III (IV) V VI

System Description: LP- PANEL BLOCK

Repair System Description: SAME

Maintenance Agreement Required: ☒ YES ☐ NO

☐ GRAVITY ☒ PRESSURE

☒ Residence No. Bedrooms 4

☐ Business No. Persons 8

☐ Other No. Employees

☐ Slab ☒ Crawl Space

☐ Basement w/plumbing ☐ Basement w/o plumbing

Water Supply: ☒ Private ☐ Public ☐ Community

Comments / Conditions: * Though a 3-Bedroom house is to be built [per submitted floorplans] the 4-Bedroom system must be installed unless specific health department approval is otherwise granted - SA 2-23-17

INITIAL SITE SKETCH

SEE PLAN FROM SOIL & FORESTRY SERVICES

AS BUILT SKETCH

Revoked

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: 2-15-17 Installed by:

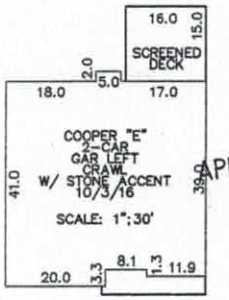
IMPROVEMENT PERMIT by: Date: 2-9-17 OPERATION PERMIT by: Date:

AUTHORIZATION TO CONSTRUCT by: Date: 2-23-17 Existing System Inspected by: Date:

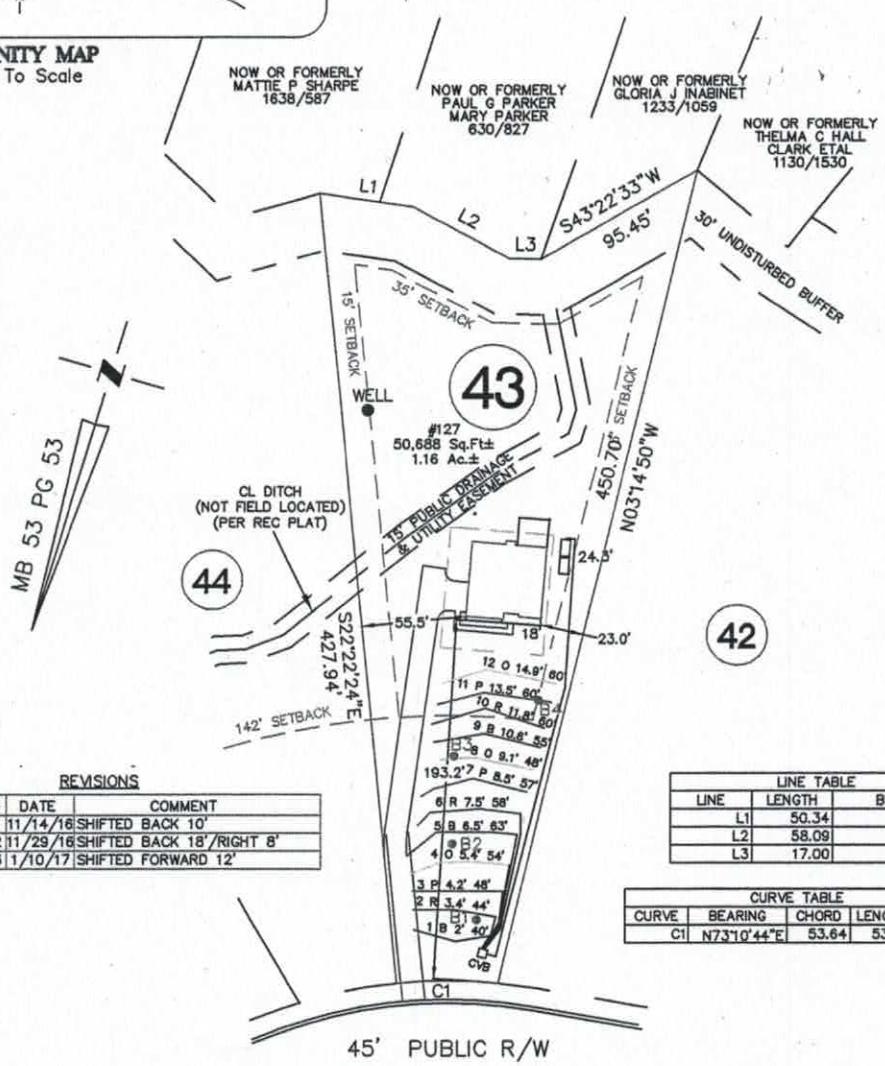
Health Dept. Copy - WHITE Applicant (Final Approval) - YELLOW Applicant (Conditional Approval) - PINK



VICINITY MAP
Not To Scale



APPROVED FEB 09 2017



45' PUBLIC R/W

HARVEST WIND CT.

REVISIONS

REV. #	DATE	COMMENT
REV. 1	11/14/16	SHIFTED BACK 10'
REV. 2	11/29/16	SHIFTED BACK 18'/RIGHT 8'
REV. 3	1/10/17	SHIFTED FORWARD 12'

LINE TABLE		
LINE	LENGTH	BEARING
L1	50.34	S81°36'03"W
L2	58.09	N78°39'21"W
L3	17.00	S74°45'29"W

CURVE TABLE				
CURVE	BEARING	CHORD	LENGTH	RADIUS
C1	N73°10'44"E	53.64	53.73	272.50

NOTE:
1. BUILDER ASSUMES RESPONSIBILITY FOR GRADING LOT AND/OR DESIGNING STEPS, PORCHES, DECKS, ETC. AS NECESSARY TO PREVENT ENCROACHMENT INTO SETBACKS.
2. HOUSE DIMENSIONS AND OPTIONS SHOULD BE VERIFIED WITH CONTRACTOR PRIOR TO CONSTRUCTION.
3. SETBACKS/ EASEMENTS SHOULD BE VERIFIED WITH DEVELOPER AND LOCAL OFFICIALS PRIOR TO CONSTRUCTION.
4. THIS IS A CONCEPTUAL DRAWING AND CONTENTS SHOWN HEREON ARE SUBJECT TO CHANGE UPON FINAL CONSTRUCTION.
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THIS DRAWING DOES NOT REFLECT AS-BUILT INFORMATION

PRELIMINARY PLAT
NOT FOR RECORDATION, CONVEYANCES, OR SALES.

80 0 80
SCALE: 1" = 80'

EASTOVER
LAND SURVEYING COMPANY, P.A.
LAND SURVEYORS - PLANNERS (C-1833)
10430 PARK ROAD, SUITE #300
CHARLOTTE, NORTH CAROLINA 28210
PHONE (704) 927-8080
FAX (980) 309-0842

HOUSE LOCATION PLOT PLAN

FOR

LOT 43, AUTUMN GROVE SUBDIVISION, PHASE 2
Barringer Township, Iredell County, North Carolina

PROPERTY OF: ESSEX HOMES

MAP BOOK 53 PAGE 53 DEED REFERENCE

DRAWN BY: ERG | DATE: NOVEMBER 9, 2016

RECEIVED FEB 2 2 2017

IREDELL COUNTY HEALTH DEPARTMENT

ENVIRONMENTAL HEALTH DIVISION

PAGE 1: *APPLICATION FORM*

Application For: ( ) New Well Permit ( ) Well Repair Permit ( ) Well Abandonment
( ) Septic Improvement Permit (✓) Authorization to Construct ( ) Existing System Inspection ( ) Septic System Repair

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.

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 an (X) beside whichever is submitted if applicable ( ) Custom Site Plan, scaled no more than 1 inch = 60 feet

Applicant Information:

Applicant Name: Essex Homes **Address:** 13000 S. Tryon St. F-L 205 **Phone:** 704-301-3229

Owner Name: Same **Address:** " " **Phone:** " "

Property Information:

Street Address: 127 Harvest Wind Court

Subdivision Name: Autumn Grove **Section/Phase:** 2 **Lot Number:** 43

Driving Directions: I-77 to Exit 42, East toward Mooresville, Right onto Clear Springs

Site Development Information: *(check or complete ALL that apply)*

(✓) New Single Family Residence
( ) New Multi-Family Residence
( ) Accessory Building
( ) Bedroom(s) Addition

Maximum Number of Bedrooms: 3
Maximum Number of Occupants: _____
( ) Swimming Pool
( ) Other Addition/Structure: _____

(✓) Crawl Space Foundation
( ) Concrete Slab Foundation
( ) Basement with Plumbing
( ) Basement without Plumbing

Non-Residential Site Development:
Type of Business: _____
Square Footage of Building: _____
Maximum Number of Employee: _____
Maximum Number of Seats/Beds/Other: _____

Water Supply:

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

Desired Septic System Type: *(you may rank in order of preference)* Year existing system installed: _____
( ) No Preference ( ) Alternative ( ) Conventional ( ) Innovative ( ) Modified Conventional ( ) Other: _____

Please answer the following to the best of your ability:

( ) Yes (✓) No Does the site contain any jurisdictional wetlands?
( ) Yes (✓) No Is any non-domestic sewage (i.e. industrial) to be generated?
( ) Yes (✓) 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.

Signature: Stan Cressler
Property owner or owner's legal representative signature (SIGNATURE REQUIRED)

2/22/17
DATE

AUTHORIZATION TO ACT AS AGENT FOR OWNER

Any application/document/permit requiring a signature must be signed by the property owner or their authorized agent. This form shall be provided by the owner to allow specified individuals to act as agents for the owner. This form allows the specified individuals to sign or receive any application/document/permit on behalf of the owner. This form allows the authorized agent to make decisions on behalf of the owner pertaining to modifications of permits in the field. It is the responsibility of the owner to assure that any/all permit conditions specified on permits issued by this Division are followed.

I, Essex Homes, am the legal owner of the property located at Lot 43 Autumn Grove, identified as PIN(Parcel Identification Number) 4659143902, located in Iredell County, North Carolina.

I do hereby authorize (print authorized agent/company name) Soil & Forestry Services of The Carolinas, _____, _____, _____, to act as an agent on my behalf in applying for/signing/obtaining any of the documents described below.

1. Improvement Permit (IP)/ Authorization to Construct (AC).
2. Application for soil-site evaluation (new/repair).
3. Application/permit for water well/well abandonment.
4. Application for existing system.
5. Application for Improvement Permit (IP)/ Authorization to Construct (AC).

I agree to abide by any and all decisions and/or conditions between the agent acting on my behalf and the Iredell County Department of Public Health, Environmental Health Division. This form must be fully executed before the individual's specified above will be recognized as the authorized agent.

Signature of Owner — Date: 1-18-16 — Dareh Burns

Signature of Witness — Date: 1-18-16

IREDELL COUNTY HEALTH DEPARTMENT

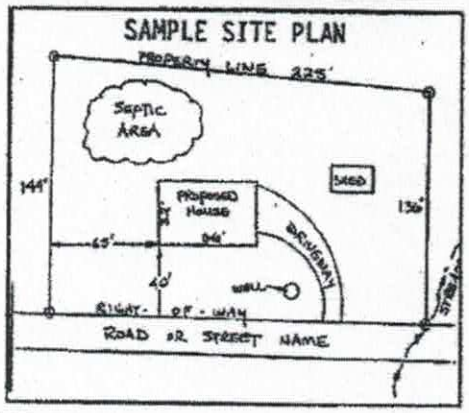
ENVIRONMENTAL HEALTH DIVISION

PAGE 2: *SITE PLAN WORKSHEET*

SEE THE "SAMPLE SITE PLAN" BELOW. *INCOMPLETE SITE PLANS WILL BE RETURNED TO YOU FOR COMPLETION AND MAY RESULT IN A DELAY IN THE ISSUANCE OF YOUR SEPTIC SYSTEM PERMIT!!!*

Place an (X) beside each item as you complete the site plan:

- ( ) **Property Line measurements are clearly identified**
- ( ) **All proposed structures are indicated**
- ( ) **Front and side setbacks from property line**
- ( ) **Preferred driveway location and well location**
- ( ) **Area you prefer your septic system to be placed**
- ( ) **North arrow, or other sufficient indicator of direction**



Circle N/A on the following if appropriate:

Location of septic systems and wells within 100' of your property	**N/A**
Location of easements and rights of ways on your property	**N/A**
Location of any designated wetlands on the property	**N/A**

USE THIS SPACE TO DRAW YOUR SITE PLAN

Show: proposed house or business footprint, wells, water lines, patios, pools and decks, and any other item that will occupy space on the site

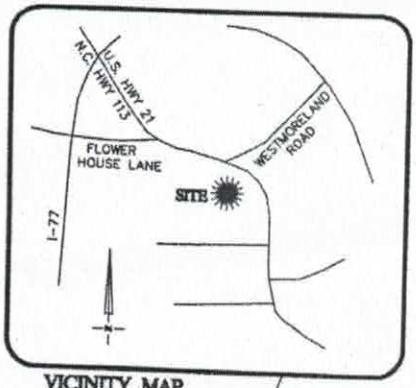
See attached Site Plan

Signature: Stan Pressley

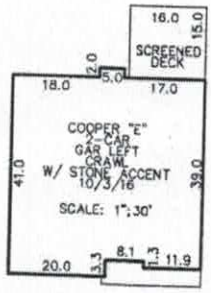
Property owner or owner's legal representative signature (SIGNATURE REQUIRED)

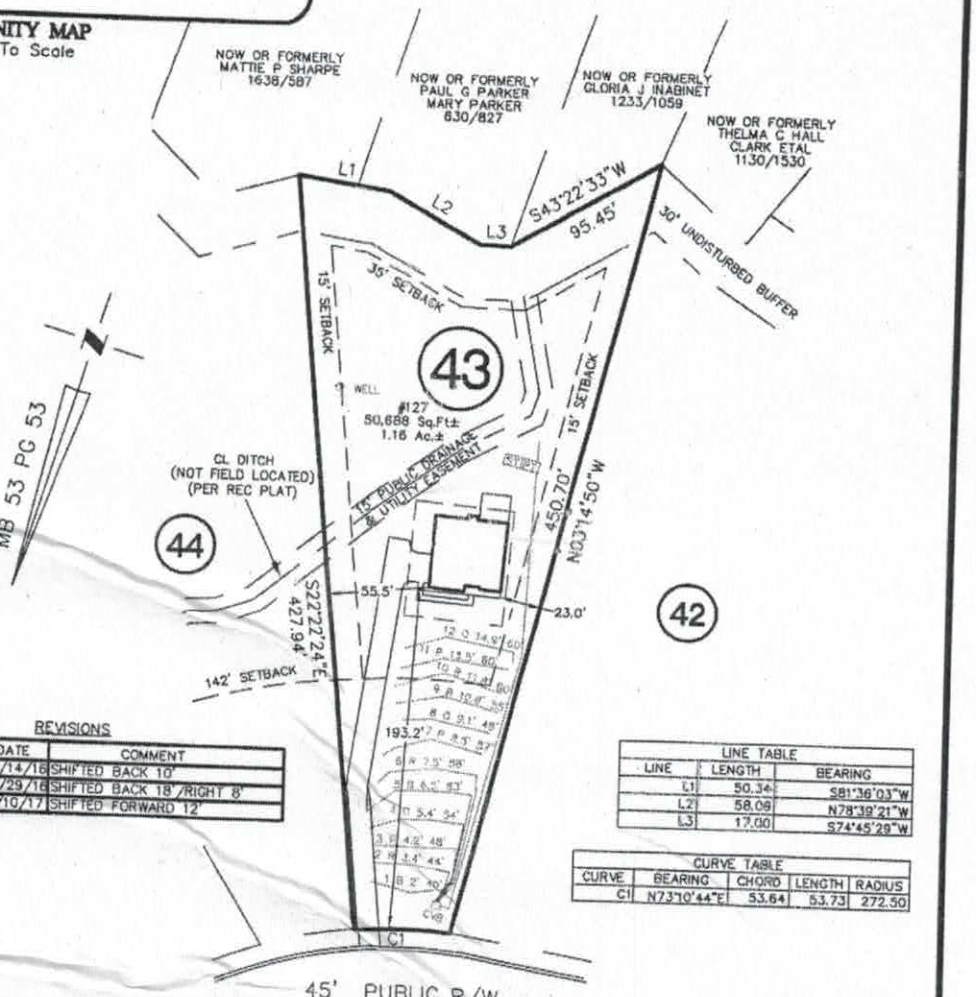
2/22/17

DATE



VICINITY MAP
Not To Scale





HARVEST WIND CT.

REVISIONS		
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NOT FOR RECORDATION, CONVEYANCES, OR SALES.

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SCALE: 1" = 80'

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PHONE (704) 927-8080
FAX (980) 309-0842

HOUSE LOCATION PLOT PLAN

FOR

LOT 43, AUTUMN GROVE SUBDIVISION, PHASE 2
Barringer Township, Iredell County, North Carolina

PROPERTY OF: ESSEX HOMES

MAP BOOK 53 PAGE 53 DEED REFERENCE

DRAWN BY: ERG | DATE: NOVEMBER 9, 2016

IREDELL COUNTY HEALTH DEPARTMENT *ENVIRONMENTAL HEALTH DIVISION*:

SITE PLAN WORKSHEET

SEE THE "SAMPLE SITE PLAN" BELOW. ***INCOMPLETE SITE PLANS WILL BE RETURNED TO YOU FOR COMPLETION AND MAY RESULT IN A DELAY IN THE ISSUANCE OF YOUR SEPTIC SYSTEM PERMIT!!!***

Place an (X) beside each item as you complete the site plan:

X **Property Line measurements are clearly identified…**

X **All proposed structures are indicated…**

SHOW: proposed house or business footprint, wells, water lines, patios, pools and decks, and any other item that will occupy space on the site

X **Front and side setbacks from property line…**

X **Preferred driveway location and configuration, preferred well location…**

X **Area you prefer your septic system to be placed…**

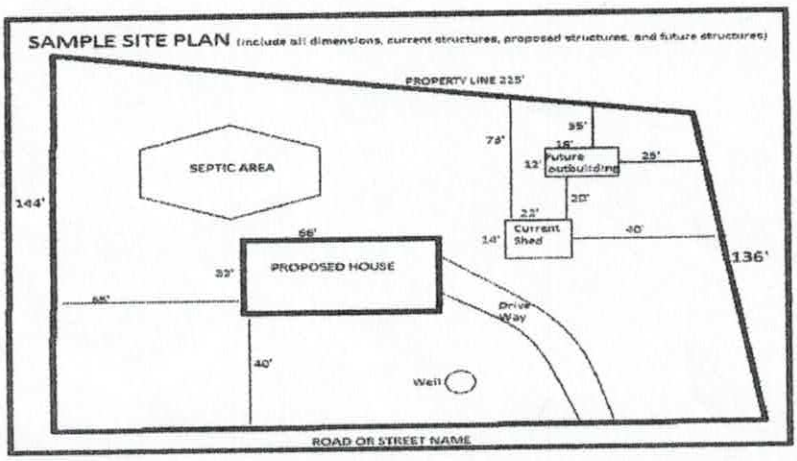
X **North arrow, or other sufficient indicator of direction…**

Circle N/A on the following if appropriate:

____ Location of septic systems and wells within 100' of your property… N/A

____ Location of easements and rights of ways on your property… N/A

____ Location of any designated wetlands on the property… N/A



USE THIS SPACE TO DRAW YOUR SITE PLAN

Signature: W Cly

REQUIRED **property owner or owner's legal representative signature.**

3-9-17

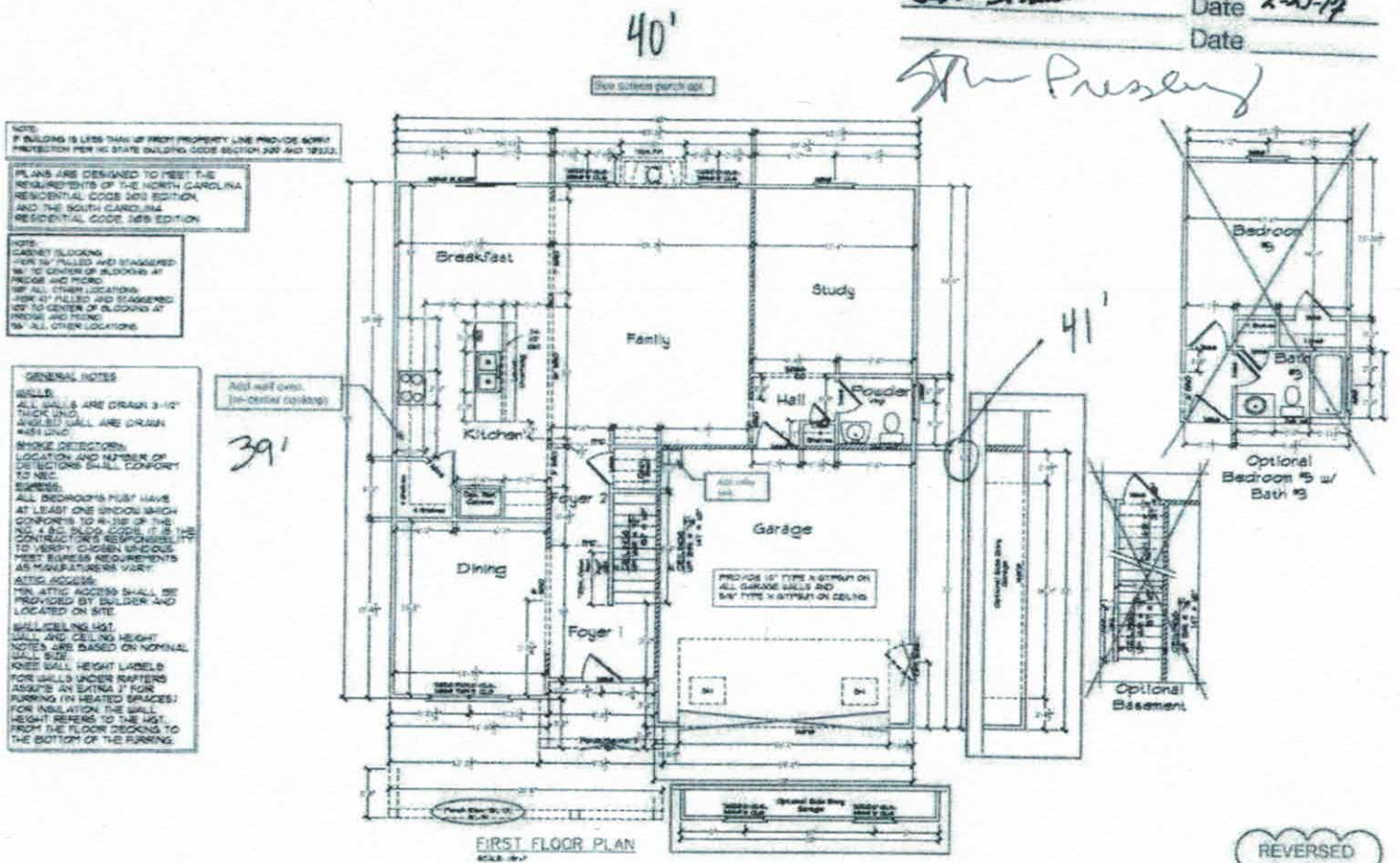
DATE

Acknowledgement of Plans Submittal ONLY!

Tom Shook Date 2-25-17

Date

Steve Presley



FIRST FLOOR PLAN

REVERSED

Lot 43 Autumn Grove
CJA 12-13-16

THE COOPER

Essex Homes, Inc.

DATE:	10/05/2016
DRAWN BY:	KDB
REVISION DATE:	

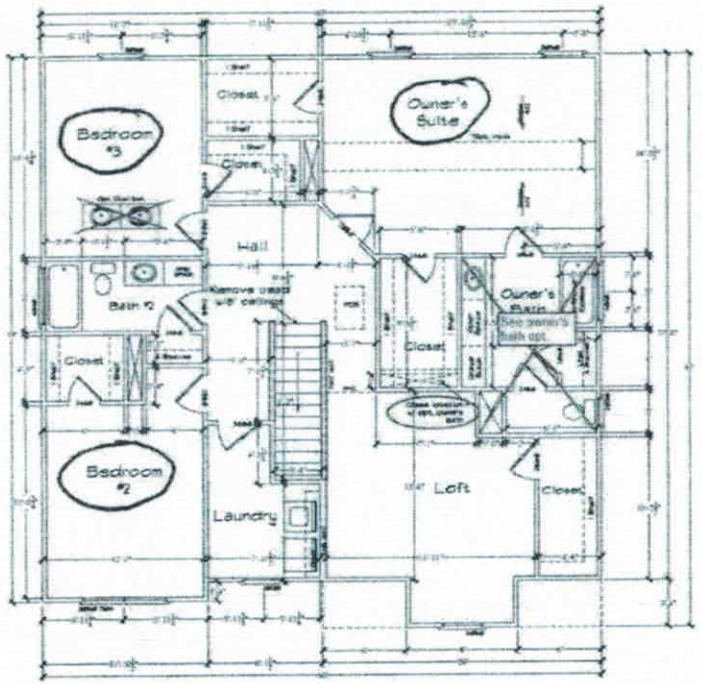
FIRST FLOOR "A & D"

SHEET NO. 4.1A

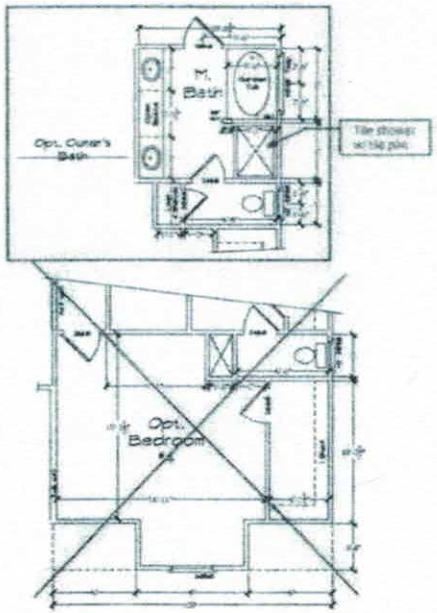
Acknowledgement of Plans Submittal ONLY!

For Stuck Date 2-23-17

Date



SECOND FLOOR PLAN ELEV. 'E'



REVERSED

Lot 43 Autumn Grove
CJA 12-13-16

THE COOPER

Essex Homes, Inc.

DATE: 10/05/2016
DRAWN BY: KDM
REVISION DATE:

SECOND FLOOR "E"

SHEET NO.
5.1E

IREDELL COUNTY

PO Box 788
349 North Center St.
Statesville, NC 28677

APPLICATION NUMBER
224097
Issue Date: 01/03/2017

ZONING PERMIT

Open Space

Parcel Number	Street Address	Jurisdiction
4659143902.000	127 HARVEST WIND COURT, MOORESVILLE, NC	IREDELL COUNTY

Owner Information	Applicant Information
Owner: ESSEX HOMES SOUTHEAST INC	Applicant: ROLLANS SOIL & ENVIRON
Address: 120 CROMER RD LEXINGTON, SC 29073	Address: 470 NORTH BROAD STREET SUITE D MOORESVILLE, NC 28115
Phone:	Phone: 704-658-1723

Use Requested	Zone Code
SFD REPLACING PERMIT 147306	RA

Lot Acreage	F Setback	B Setback	L Setback	R Setback	Watershed	Flood Zone
1.160	35.00	35.00	15.00	15.00	PACL	X

Remarks:

The applicant certifies that there are no deed restrictions, contractual agreements or governmental regulations of any kind that interfere with or prohibit the use of the property or the use for which this permit is requested. The applicant further acknowledges that enforcement of deed restrictions, plat conditions and other contractual agreements will not be undertaken by Iredell County and is the sole responsibility of the affected parties.

Applicant: wly Date: 1-18-17

Permit Number	89522	TOTAL FEES:	$ 77.25