



IMPROVEMENT PERMIT
Franklin County Health Department
107 Industrial Drive
Louisburg, NC 27549
Phone:

For Office Use Only	
*CDP File Number	353459 - 1
County ID Number:	1852-24-9791
Evaluated For:	NEW

PERMIT VALID UNTIL: 06/07/2026

***NOTE TO INSPECTIONS DIVISION:** Building Permits cannot be issued with this Improvement Permit.

Applicant: THREE SIX BUILDERS
 Address: PO BOX 113
 City: ZEBULON
 State/Zip: NC 27597
 Phone #: _____

Property Owner: PATTERSON WOODS LLC
 Address: 833 WAKE FOREST BUSINESS PARK
 City: WAKE FOREST
 State/Zip: NC. 27587
 Phone #: _____

Property Location & Site Information

Address/Road #: 104 BLUE FINCH CT Subdivision: EAST WOODS Phase: NEW Lot: 74
 YOUNGSVILLE, NC 27596 **Directions** AT PATTERSON
 Structure: SINGLE FAMILY
 # of Bedrooms: 3 104 BLUE FINCH CT
 # of People: 6
 *Water Supply: N/A

System Specifications

Initial System
 *Site Classification: Provisionally Suitable Minimum Trench Depth: _____ Inches
 Design Flow: 360 Maximum Trench Depth: 20 Inches
 Soil Application Rate: 0.3000
 *System Classification/Description: TYPE III G. OTHER NON-CONV. TRENCH SYSTEMS Septic Tank: 1000 Gallons
 Pump Required: Yes No May Be Required
 *Proposed System: 50% REDUCTION Pump Tank: 1000 Gallons

Repair System Required: Yes No No, but has Available Space

Repair System
 *Site Classification: Provisionally Suitable Minimum Trench Depth: _____ Inches
 Soil Application Rate: 0.300 Maximum Trench Depth: 20 Inches
 *System Classification/Description: TYPE III G. OTHER NON-CONV. TRENCH SYSTEMS Pump Required: Yes No May Be Required
 *Proposed System: 50% REDUCTION Pump Tank: _____ Gallons

No grading or construction activity is allowed in areas designated for system and repair without approval of Health Department

***Site Modifications**

The issuance of this permit by the Health Department in no way guarantees the issuance of other permits. The permit holder is responsible for checking with appropriate governing bodies in meeting their requirements.

***Permit Conditions**

Install system as designed by Agri-Waste Technology, Inc. Install Horizontal Panel Block with Pressure Manifold distribution.

The Department and Local Health Department may impose conditions on the issuance and may revoke the permits for failure of the system to satisfy the conditions, the rules, or this article. This permit is subject to revocation if the site plan, plat, or intended use changes (NCGS 130A-335(f)). The person owning or controlling the system location, installing, operation, maintenance, monitoring, reporting, and repair (1938(h)).

DS DS DS
BEJ W LBF

Authorized State Agent: Ennis, Crystal Date of Issue: 06/07/2021

Total Time: (HH:MM)

Hand Drawing Import Drawing ****Site Plan/Drawing attached.****



Construction Authorization

Franklin County Health Department
 107 Industrial Drive
 Louisburg, NC 27549
 Phone: _____

For Office Use Only

*CDP File Number: 353459 - 1
 County ID Number: 1852-24-9791
 Evaluated For: NEW

PERMIT VALID UNTIL: 06/07/2026

Open Pump System Sheet

Applicant: THREE SIX BUILDERS
 Address: PO BOX 113
 City: ZEBULON
 State/Zip: NC 27597
 Phone #: _____

Property Owner: PATTERSON WOODS LLC
 Address: 833 WAKE FOREST BUSINESS PARK
 City: WAKE FOREST
 State/Zip: NC. 27587
 Phone #: _____

Property Location & Site Information

Address/Road #: 104 BLUE FINCH CT Subdivision: EAST WOODS Phase: NEW Lot: 74
YOUNGSVILLE, NC 27596 Directions: AT PATTERSON

Structure: SINGLE FAMILY 104 BLUE FINCH CT

of Bedrooms: 3

of People: 6

*Water Supply: PUBLIC

System Specifications

*Site Classification: Provisionally Suitable Minimum Trench Depth: _____ Inches
 Design Flow: 360 Maximum Trench Depth: 20 Inches
 Soil Application Rate: 0.3000 Minimum Soil Cover: _____ Inches

*System Classification/Description: TYPE III G. OTHER NON-CONV. TRENCH SYSTEMS Maximum Soil Cover: _____ Inches

*Proposed System: 50% REDUCTION *Distribution Type: PRESSURE MANIFOLD

Nitrification Field: _____ Sq. ft. Septic Tank: 1,000 Gallons
 No. Drain Lines: 5 Pump Required: Yes No May Be Required
 Total Trench Length: 206 ft. Inches O.C. Pump Tank: 1,000 Gallons
 Trench Spacing: _____ - _____ Feet O.C. Grease Trap: _____ Gallons
 Trench Width: _____ - _____ Inches
 Aggregate Depth: _____ inches Septic Tank Installer Grade Level Required: I II III IV

The issuance of this permit by the Health Department in no way guarantees the issuance of other permits. The permit holder is responsible for checking with appropriate governing bodies in meeting their requirements.

***Permit Conditions:**
 Install system as designed by Agri-Waste Technology, Inc. Install Horizontal Panel Block with Pressure Manifold distribution.

The Authorization for Wastewater System Construction shall be valid for a period equal to the period of validity of the Improvement Permit and may be issued at the same time the Improvement Permit issued (NCGS 130A-336(b)). If the installation has not been completed during the period of validity of the Construction Permit, the information submitted in the application for a permit or Construction Authorization shall become invalid, and may be suspended or revoked (.1937(g)). The person owning or controlling the system shall be responsible for assuring compliance with the laws, rules, and permit conditions regarding system location, installation, operation, maintenance, monitoring, reporting

Authorized State Agent: Ennis, Crystal Date of Issue: 06/07/2021

Hand Drawing Import Drawing

****Site Plan/Drawing attached.****
 Total Time : (HH:MM) _____

DS BEJ W LBP



File # 353459 PIN# 1852-24-9791

Property Address: 404 Blue Finch Ct (Lot 74)

Applicant or Owner Name: Three Six Builders

Environmental Health Septic/Well Permit Diagram

Building permits cannot be issued nor should construction begin without Construction Authorization issuance.

- Septic Improvement Permit
- Septic Construction Authorization (CA)
- CA Reissue**
- As Built
- Well Construction Authorization
- Additional Diagram/Specifications Attached

Diagram Date**: 6-7-21 EHS: [Signature]

**Any previously dated CA diagram is revoked and/or invalid. Confirm this is the valid diagram for the site before beginning any construction.

Installation/grouting inspections may be scheduled the day before, or, the day of installation until 9am by contacting the Environmental Health office at 919 496 8100. A revisit fee may apply if installation is not ready for inspection at the time requested. Septic Operations Permits will be issued after installation is approved, all permits conditions are met, and any outstanding fees are paid. Well Certificate of Completion will be issued after well head approval, all permit conditions are met, and any outstanding fees are paid.

Septic Tank 1000 Pump Tank 1000 Drainfield 3'x206' Type System Pto Panel Block Max Trench Depth 20"

Septic Contractor _____ Septic/Pump tank dates _____ Pump fee? NO YES pd _____

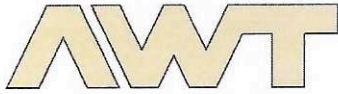
Well Contractor _____ Well Grout date: _____

A See attached layout designed by Agri-waste Technology Inc A

*X Install Horizontal panel block with pressure manifold distribution **

DS [Signature] DS [Signature] DS [Signature]

BES W LBP



Engineers and Soil Scientists

Agri-Waste Technology, Inc.
 501 N. Salem Street, Suite 203
 Apex, North Carolina 27502
 919-859-0669
 www.agriwaste.com

Project Manager: Jeff Vaughn, LSS (919)349-5218
 Designer: Kathy Morris, REHS (919)819-3033
 kmorris@agriwaste.com

New construction. Horizontal panel block with pressure manifold distribution
Date: 5/25/2021
County: Franklin

Name: Three Six Builders P.I.N. #: _____ **Permit #** _____ **to be issued** _____
 EHS: Crystal Ennis
Contact: Leslie Privette **Property address:** 104 Blue Finch Court
 leslie@threesixbuilders.com **Subdiv:** Patterson Woods **Lot#:** 74
Water supply: community

DESIGN PARAMETERS	TANKAGE	LOCKABLE RISERS RECOMMENDED
LTAR 0.3 gal/sq.ft/day	SEPTIC TANK 1000 gallons, min. NEW	
# BEDROOMS 3	with filter	
BASEMENT no	PUMP TANK 1000 gallons, min. NEW	
REPAIR horizontal panel block	20.16 gal/in	

DIMENSIONS	TRENCHES
SQ. FT 1200 conventional	WIDTH 36 inches
LINEAR FT 200 horizontal panel block, 50%	DEPTH 20 inches
206 (actual)	TRENCH FILL horizontal panel block
TAP SIZE VARIES WITH TRENCH LENGTH.	STONE DEPTH n/a inches
SEE TAP CHART.	STONE SIZE n/a or larger

MANIFOLD & SUPPLY	PUMP CRITERIA
DIAMETER 4 inches Sch. 80	ELEVATION HEAD 17.80 ft
LENGTH 48 inches (minimum)	DESIGN HEAD 2.00 ft
# OF TAPS 5	FRICTION & FITTINGS LOSS 5.91 ft
	TOTAL 25.71 ft
SUPPLY LINE 171 feet	FLOW RATE 35.28 gpm
DIAMETER 2 inches 2.067	DOSING VOLUME 346 gallons
	DRAWDOWN 9.0 inches

PUMP AND CONTROLS

PUMP Zoeller N140 PANEL: Rhombus 1121W914H 8AC 10E 15A 17A
 1 phase, 115 volts, 12.0 amps with event counter, elapsed time meter, NEMA 4X box,
 separate alarm circuit

other equipment that meets or exceeds the specifications may be substituted. Contact designer if questions.

The plans & specs for this Onsite Sewage Treatment & Disposal System have been prepared according to criteria in North Carolina's rules and regulations covering onsite systems, to additional county standards (if applicable), and to generally-accepted design and engineering principles. LTAR's, trench dimensions, and wasteloads are determined or confirmed by the county Health Department (or other soil science professionals) and are included as conditions of the permit. AWT accepts no responsibility for changes in these plans & specs unless we specifically authorize such changes in advance. If changes in specifications or locations of components are needed, please contact us for assistance in making such alterations before the component is installed.

DS DS DS
 L B P W



permit# to be issued
104 Blue Finch Court
Patterson Woods

TAP CHART - INITIAL

Bench Mark is 115.0 set at eip, southernmost property corner Lot 74 Design Head: 2.00

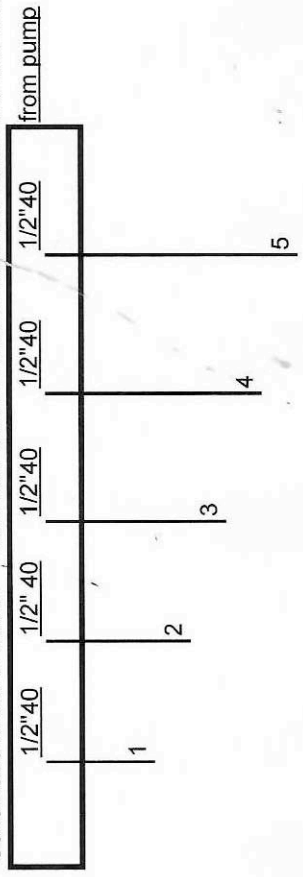
line	color	elevation	available	used	# panels	tap size	flow/tap	gall/day	trench area	LINE L	TAR
1	white	112.05	32	30	7	1/2" 80	5.48	55.92	89.5	0.625	0.300
2	pink	110.64	44	30	7	1/2" 80	5.48	55.92	89.5	0.625	0.315
3	purple	109.53	53	43	10	1/2" 40	7.11	72.55	128.5	0.565	0.600
4	yellow	108.33	62	60	14	3/4" 80	10.10	103.06	180.5	0.571	0.630
5	white	107.00	51	43	10	1/2" 40	7.11	72.55	128.5	0.565	0.630
		total	feet=	206	48	gal/min =	35.28			L	TAR =
						antisiphon	0.00			ltar + 5%=	
							35.28	GPM	panel block ltar		
									(ltar + 5%)		

ELEVATIONS: pump tank 98.50 surface
 pump off 94.75 top of discharge piping in PT
 manifold 112.55 see PT diagram
 other (such as highest point on supply line, if between pump tank and field)

DOSE PER PANEL 7.20 gal DESIGN FLOW 360 gpd
 DOSE VOLUME 346 gal PUMP RUN TIME 10.20 min/day
 DOSE PUMP TIME 9.80 min/dose* PUMP TANK GAL/IN 20.16 gal/inch
 DRAWDOWN 9.00 in ELEVATION HEAD 17.80 feet
 SUPPLY LINE LENGTH 171 ft PUMPING UP HILL? y
 SUPPLY LINE VELOCITY 3.37 ft/sec

A fitting for setting/adjusting pressure head in the manifold is required, other than the manifold cleanout

Schematic is not to scale. Place flow dividers and/or tees OUTSIDE the manifold vault.



DS L B (BES) W DS



Health Department
107 Industrial Drive, Suite C
Louisburg, NC 27549
Phone: 919-496-2533
Fax: 919-496-8127
www.franklincountync.us

FRANKLIN COUNTY ENVIRONMENTAL HEALTH SEPTIC SYSTEM PUMP REQUIREMENTS

PUMP SYSTEM FEE

An additional fee of fifty dollars (\$50.00) is assessed when a pump and related components are required for a new septic system. This fee must be paid prior to the Operations Permit being issued. Franklin County Environmental Health request the fee is paid before beginning the septic installation to make the final inspection go smoothly. ~~The septic permit will not be signed off and a CO cannot be obtained until this fee is paid.~~ This fee may be paid in person or by mail at:

Franklin County Health Department
Environmental Health Section
107 Industrial Dr, Suite C
Louisburg NC 27549

When making payment, please provide the permit number and the applicant name to ensure the payment is applied to the correct permit.

PUMP TO GRAVITY DISTRIBUTION

Unless otherwise noted on your septic permit or related attachments, the minimum type distribution method for your septic system is by means of a distribution box (D-box). This is achieved by pumping the wastewater to a D-box and allowing gravity to naturally disperse the wastewater equally to each drain line. This type distribution may be used for up to four (4) drain line laterals. The D-box should be watertight. The supply line is to be terminated in the D-box with a 90 degree elbow directed downwards to prevent a "swirling" action of the wastewater. The D-box location should be marked on-site to make it easily identifiable and prevent damage.

DS
L B B E W
DS DS

REQUIREMENTS FOR PUMP SYSTEMS
(Pump to conventional, pressure manifold, or LPP)

The following requirements must be met, in addition to the requirements on the permit itself:

Tanks and Risers-

- all tanks shall be constructed according to plans which have been approved by the Division of Environmental Health
- pump tanks shall have a riser which extends to at least 6" above the finished grade (riser is recommended on septic tank)
- pump tanks should be of "one piece" construction; if not, it shall be tested for water tightness by the approved method (if a soil wetness condition exist within 5' of the tank top) -risers must be properly sealed to the top of the tank
- pipes shall be properly sealed into the tank
- pipes and conduit must exit riser through "knock-outs" provided
- vent shall be installed on pump tank if over 30' from facility

Supply Line-

- supply line shall be Schedule 40 PVC or stronger
- supply line shall have a check-valve, gate valve, and a threaded union(in order to allow easy removal of pump)-corrosion resistant rope or chain shall also be connected to pump
- supply line into box shall be elbowed with a 90 and extended down to within 2" of the bottom of the distribution box
- supply line shall be properly sealed at pump tank and box

Electrical-

- all connections, pump controllers, and alarm components shall be enclosed in a NEMA 4X (watertight) enclosure
- enclosure shall be securely mounted on a treated 4x4 post, adjacent to the pump tank, and at least 12" above grade
- wires from pumps and control floats shall be conveyed from the riser to the control panel through sealed electrical conduit(shall be sealed to be watertight and gastight)
- original plugs shall be used, with no splices in the wire cables
- control floats shall be sealed mercury type
- control floats shall be suspended from a PVC arm or "Christmas Tree" (not from the supply line) for unrestricted movement

Alarm System-

- power to high-water alarm shall be on a separate circuit from power to the pump
- alarm shall be audible and visible to system user
- alarm system shall be NEMA 4X or equivalent if mounted outside
- NEMA 4X junction box, containing a means of disconnection for the alarm float, shall be provided adjacent to the pump tank, if the alarm panel is located inside the facility

****electrical service or a generator must be available for final inspection in order to check pump and alarm system