Harnett COUNTY NORTH CAROLINA

App# SFD2110-0078

# Harnett County Department of Public Health

**Division of Environmental Health**

www.harnett.org

## Improvement Permit

A building permit cannot be issued with only an Improvement Permit

Harnett County Government Complex
307 W. Cornelius Harnett Boulevard
Lillington, NC 27546
ph: 910-893-7547
fax: 910-893-9371

ISSUED TO: D. R. Horton Inc,

PROPERTY LOCATION: 104 Long Meadow Ln. (Baptist Grove Rd.)

SUBDIVISION Lafayette Meadows LOT # 5

NEW ☒ REPAIR ☐ EXPANSION ☐

Site Improvements required prior to Construction Authorization Issuance:

Type of Structure: 4- Bedroom 46x38' SFD

Proposed Wastewater System Type: 25% Reduction Sys.

Projected Daily Flow: 360 GPD

Number of bedrooms: 3 Number of Occupants: 6 max

Basement ☐ Yes ☒ No

Pump Required: ☒ Yes ☐ No ☐ May be required based on final location and elevations of facilities

Type of Water Supply: ☐ Community ☒ Public ☐ Well Distance from well NA feet

Permit valid for: ☒ Five years ☐ No expiration

Permit conditions:

Authorized State Agent:: [signature] Date: 11/03/2021 SEE ATTACHED SITE SKETCH

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. This site 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 the Laws and Rules for Sewage Treatment and Disposal and to conditions of this permit..

## Construction Authorization

(Required for Building Permit)

The construction and installation requirements of Rules .1950, .1952, .1954, .1955, .1956, .1957, 1958 and .1959 are incorporated by references into this permit and shall be met. Systems shall be installed in accordance with the attached system layout.

ISSUED TO: D. R. Horton Inc,

PROPERTY LOCATION: 104 Long Meadow Ln. (Baptist Grove R

SUBDIVISION Lafayette Meadows LOT # 5

Facility Type: 4- Bedroom 46x38' SFD ☒ New ☐ Expansion ☐ Repair

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

Type of Wastewater System** Pump to 25% Reduction Sys. (Initial) Wastewater Flow: 360 GPD

(See note below, if applicable ☐) Pump to 25% Reduction Sys. (Repair)

Installation Requirements/Conditions

Septic Tank Size 1000 gallons

Pump Tank Size 1000 gallons

Number of trenches 4

Exact length of each trench Multi feet

Trenches shall be installed on contour at a Maximum Trench Depth of: 18-24 inches (Trench bottoms shall be level to +/-1/4" in all directions)

Trench Spacing: 9 Feet on Center

Soil Cover: 6-12 inches (Maximum soil cover shall not exceed 36" above the trench bottom)

Pump Requirements: ft. TDH vs. GPM

Aggregate Depth: NA inches below pipe, NA inches above pipe, NA inches total

Conditions: Proposal by Hal Owen & Associates, Inc.

WATER LINES (INCLUDING IRRIGATION) MUST BE 10FT. FROM ANY PART OF SEPTIC SYSTEM OR REPAIR AREA.
NO UTILITIES ALLOWED IN INITIAL OR REPAIR DRAIN FIELD AREA.

**If applicable: *I understand the system type specified is different from the type specified on the application. I accept the specifications of this permit.*

Owner/Legal Representative Signature: Date:

This Construction Authorization is subject to revocation if the site plan, plat, or the intended use changes. The Construction Authorization shall not be transferred when there is 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. SEE ATTACHED SITE SKETCH

Authorized State Agent: [signature] Date: 11/03/2021

ANDREW CORBIN Construction Authorization Expiration Date: 11/03/2026

Harnett COUNTY NORTH CAROLINA

Application # SFD2110-0078

**Division of Environmental Health**

# Harnett County Department of Public Health
## Site Sketch

www.harnett.org

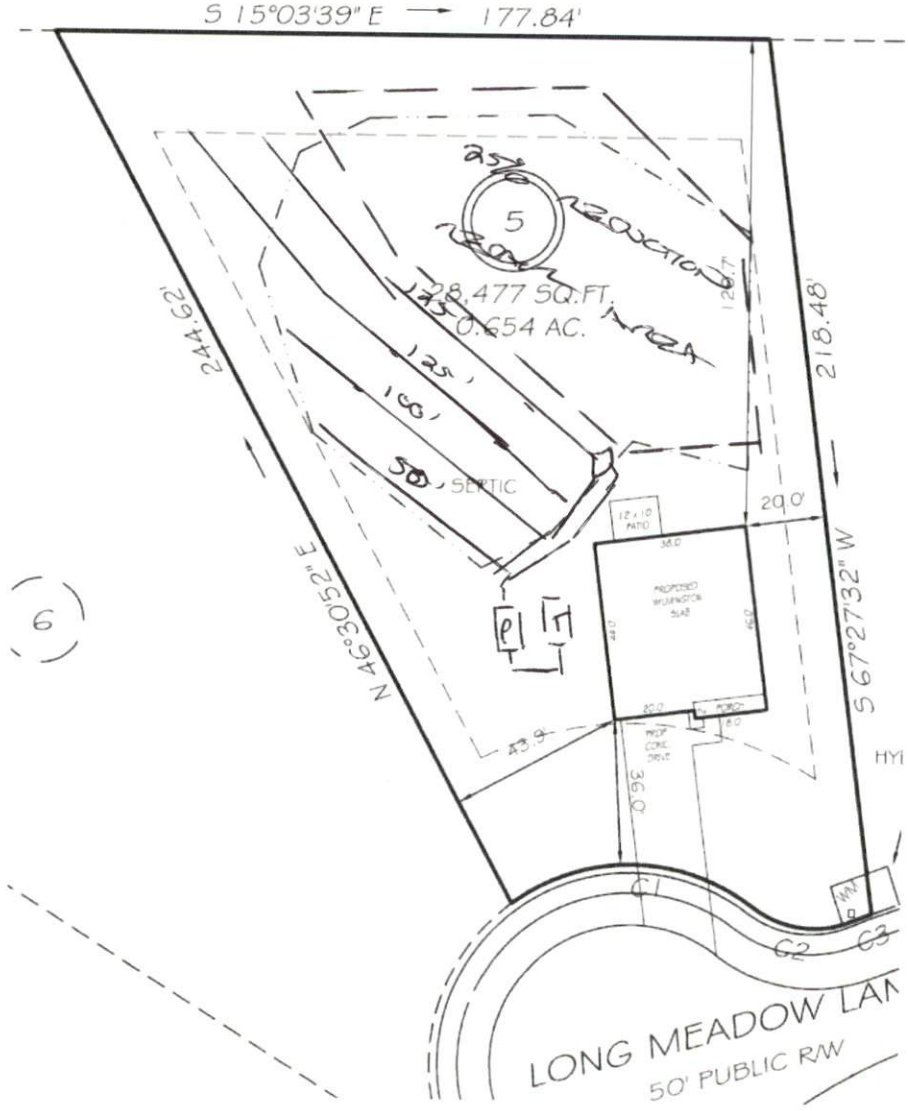
Harnett County Government Complex
307 W. Cornelius Harnett Boulevard
Lillington, NC 27546
ph: 910-893-7547
fax: 910-893-9371

Property Location: 104 Long Meadow Ln. (Baptist Grove Rd. - SR 1427)

Issued To: D. R. Horton Inc, Subdivision Lafayette Meadows Lot # 5

Authorized State Agent: [signature] ANDREW CRAIN Date: 11/03/2021

* PROPOSAL BY HAL OWENS & ASSOCIATES
* PUMP TO PRESSURE MANIFOLD [SPECS ATTACHED]



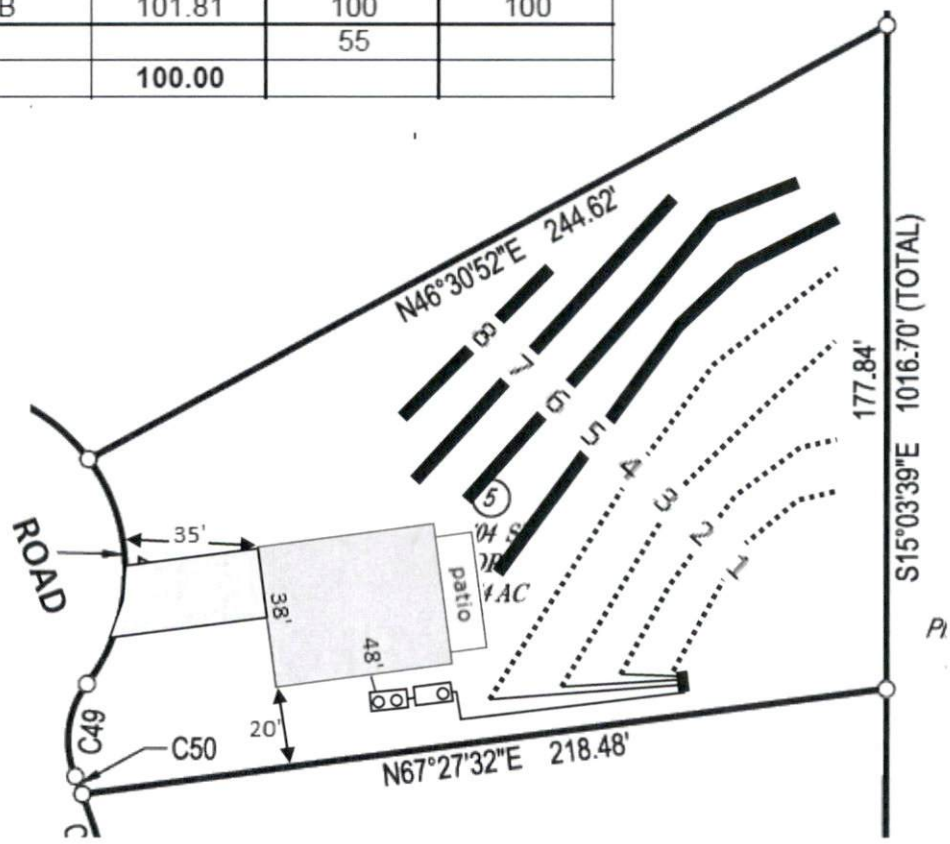

**This drawing is for illustrative purposes only. System installation must meet all pertinent laws, rules, and regulations.**

Lot 5, Lafayette Meadows Subdivision

Benchmark @ EIP on Lot 6

Design Flow (gal/day) = 480
Lines flagged at site on 9-ft centers.

| Line # | Color | Relative Elevation (ft) | Drainline Length(ft) | Field Length(ft) |
|---|---|---|---|---|
| 1 | R | 104.16 | 60 | 65 |
| 2 | Y | 103.9 | 80 | 89 |
| 3 | B | 103.5 | 115 | 115 |
| 4 | W | 102.99 | 145 | 147 |
| 5 | R | 102.64 | 125 | 177 |
| 6 | Y | 102.22 | 125 | 150 |
| 7 | B | 101.81 | 100 | 100 |
| 8 | | | 55 | |
| **Benchmark** | | **100.00** | | |




Scale 1 in = 50 ft

*Distances are paced and approximate. Not a survey.*

4 bedroom home (480 gal/day)

Initial System

Pump to 400ft (pressure manifold distribution)
Accepted Status System (25% reduction drainlines)
installed on contour at 20 inch trench depth
LTAR 0.3 gal/day/sqft

Repair System

Pump to 405ft (pressure manifold distribution)
Accepted Status System (25% reduction drainlines)
installed on contour at 18-24 inch trench depth
LTAR 0.3 gal/day/sqft

This design represents our professional opinion but does not guarantee or represent permit approval by the Health Department.

# Lafayette Meadows Lot 5

## Pressure Manifold Design Criteria

### Initial System

| Line Number | Line Color | Elevation | Drainline Length(ft) | Tap Size/ Schedule | Flow/tap (gpm) | gpd/ft | LTAR (gpd/sqft) |
|---|---|---|---|---|---|---|---|
| 1 | R | 104.16 | 60 | 1/2"sch 80 | 5.48 | 1.246 | 0.415 |
| 2 | Y | 103.90 | 80 | 1/2"sch 40 | 7.11 | 1.212 | 0.404 |
| 3 | B | 103.50 | 115 | 3/4"sch 80 | 10.10 | 1.198 | 0.399 |
| 4 | W | 102.99 | 145 | 3/4"sch 40 | 12.50 | 1.176 | 0.392 |
| | | | | | | | |

Total Drainline= 400 Total Flow= 35.19

Pressure Head (ft)= 2 Target LTAR* (gpd/sf)= 0.4 LTAR + 5% 0.420

Daily Flow= 480 Total Flow (gpm)= 35.19 Daily PRT(min)= 13.64

Dose Vol= 195.90 gallons w/ Pipe Vol @% 75 Dose PRT (min)= 5.57

### Repair System

| Line Number | Line Color | Elevation | Drainline Length(ft) | Tap Size/ Schedule | Flow/tap (gpm) | gpd/ft | LTAR (gpd/sqft) |
|---|---|---|---|---|---|---|---|
| 5 | R | 102.64 | 125 | 3/4"sch 40 | 12.50 | 1.183 | 0.394 |
| 6 | Y | 102.22 | 125 | 3/4"sch 40 | 12.50 | 1.183 | 0.394 |
| 7 | B | 101.81 | 100 | 3/4"sch 80 | 10.10 | 1.195 | 0.398 |
| 8 | | | 55 | 1/2"sch 80 | 5.48 | 1.179 | 0.393 |

Total Drainline= 405 Total Flow= 40.58

Pressure Head (ft)= 2 Target LTAR* (gpd/sf)= 0.4 LTAR + 5% 0.42

Daily Flow= 480 Total Flow (gpm)= 40.58 Daily PRT(min)= 11.83

Dose Vol= 198.35 gallons w/ Pipe Vol @% 75 Dose PRT (min)= 4.89

* Target LTAR: Convert LTAR for accepted system drainlines by dividing soil LTAR by 75%