

Harnett County Department of Public Health Improvement Permit

A building permit cannot be issued with only an Improvement Permit

ISSUED TO: Dan Ryan Builders PROPERTY LOCATION: 115 Village Bend Dr. (Rawls Ch. Rd. - SR
 SUBDIVISION Olde Mill Village LOT # 55

NEW REPAIR EXPANSION Site Improvements required prior to Construction Authorization Issuance:

Type of Structure: 58X50 sfd 4 beds 2.5 baths

Proposed Wastewater System Type: 25% Reduction Sys.

Projected Daily Flow: 480 GPD

Number of bedrooms: 4 Number of Occupants: 8 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: 05/24/2021 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: Dan Ryan Builders PROPERTY LOCATION: 115 Village Bend Dr. (Rawls Ch. Rd. - S
 SUBDIVISION Olde Mill Village LOT # 55

Facility Type: 58X50 sfd 4 beds 2.5 bath New Expansion Repair

Basement? Yes No Basement Fixtures? Yes No

Type of Wastewater System** Pump to 25% Reduction System (Initial) Wastewater Flow: 480 GPD

(See note below, if applicable)

Pump to 25% Reduction System (Repair)

Installation Requirements/Conditions Number of trenches 4] x2 [INITIAL & REPAIR]

Septic Tank Size 1000 gallons Exact length of each trench 100 feet Trench Spacing: 9 Feet on Center

Pump Tank Size 1000 gallons Trenches shall be installed on contour at a Soil Cover: 12 inches

Maximum Trench Depth of: 20 inches (Maximum soil cover shall not exceed 36" above the trench bottom)

(Trench bottoms shall be level to +/-1/4" in all directions)

Pump Requirements: _____ ft. TDH vs. _____ GPM NA inches below pipe

Aggregate Depth: NA inches above pipe

Conditions: Pump to Medium D-Box or Pressure Manifold (Review Pre-Install) NA inches total

SEE TAP CHART / SPECS

**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: 05/24/2021 01/03/2022
ANDREW CURRIN Construction Authorization Expiration Date: 05/24/2026 01/03/2027

Harnett County Department of Public Health Site Sketch

Property Location: 115 Village Bend Dr. (Rawls Ch. Rd. - SR 1415)

Issued To: Dan Ryan Builders

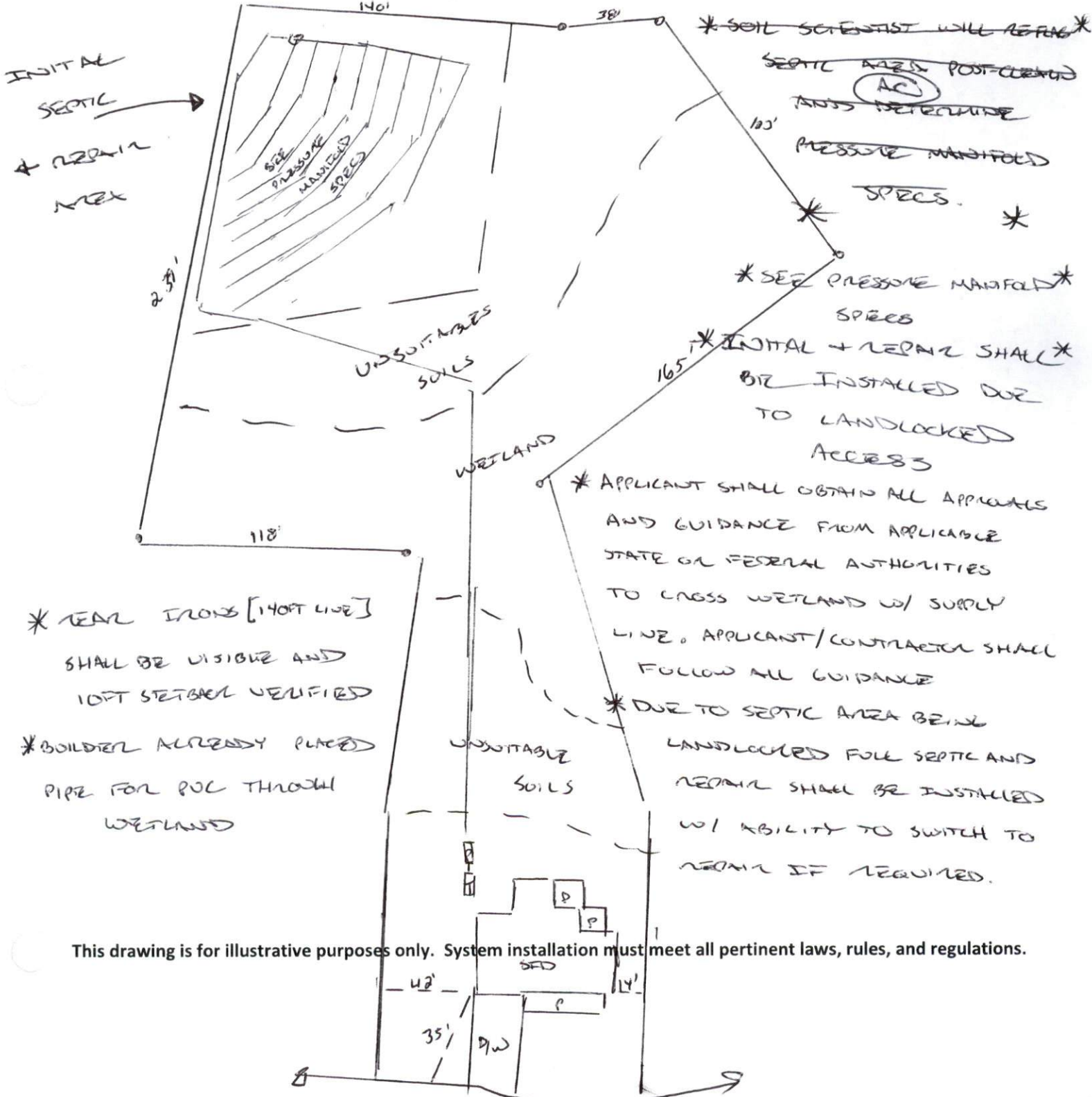
Subdivision Olde Mill Village

Lot # 55

Authorized State Agent: _____

ANDREW LUNDIN

Date: 01/03/2022
~~01/21/2021~~



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

PRESSURE MANIFOLD DESIGN

Name: Dan Ryan Builders **P.I.N. #:** **D#:**
Address: Lot 55 **Subdiv:** Olde Mill Village **Lot#:** 1
of BDR: 4 **Daily Flow:** 450 **gal/day** **L.T.A.R.:** 0.30 **gal/day/sq.ft**
Septic Tank: 1000 **gals** **Pump Tank:** 1000 **gals** **Sq. Foot:** 1230 **Stone Depth:**
Number of Taps: 5 **Length of Trenches:** 410 **ft(See Tap Chart for Details)**
Depth of Trenches: 18" **in** **Manifold Length:** 48 **in**
Manifold Diameter: 4in sch 80pvc **Tap Configuration:** 6 in spacing **side(s) of manifold**
Supply Line: length: 350 **ft** **Diameter:** 2 **in sch 40pvc**
Friction Loss + Fitting Loss: 15.81 **ft(supply line length + 70' for fittings in pump tank)**
Design Head: 2 **ft** **Elevation Head:** 20.80 **ft**
Total Head: 38.61 **ft** **Pump to Deliver:** 41.26 **gals/min at** 38.61 **ft head**
Dosing Volume: 187 **gals,**
Drawdown: 187 **gals divided by** 19.65 **gals/in =** 9.5 **inches**

TAP CHART

| | | | | | | | | | |
|---------------------------|--------------|-----------------|--|---------------|-----------------------|---------------------|----------------|-----------------------|------------------|
| Bench Mark | 0 | is = 100.00 | set at EIP at corner Cabin Hill and Redgrass | | | Design Head: | 2 | | |
| Pump tank elev. | 16 | 84.00 | Pump elev. | 79.00 | Manifold elev. | 99.80 | | | |
| line | color | rod read | Elevation | length | hole size | flow/tap | gal/day | trench area | LINE LTAR |
| 1 | Blue | 1.2 | 98.80 | 55 | 1/2in SCH 80 | 5.48 | 63.75 | 165 | 0.386 |
| 2 | Orange | 2.3 | 97.70 | 55 | 1/2in SCH 80 | 5.48 | 63.75 | 165 | 0.386 |
| 3 | Yellow | 3.5 | 96.50 | 100 | 3/4in SCH 80 | 10.1 | 117.50 | 300 | 0.392 |
| 4 | Red | 4.6 | 95.40 | 100 | 3/4in SCH 80 | 10.1 | 117.50 | 300 | 0.392 |
| 5 | Pink | 5.9 | 94.10 | 100 | 3/4in SCH 80 | 10.1 | 117.50 | 300 | 0.392 |
| | | total | feet = | 410 | gal/min = | 41.26 | | LTAR = | 0.30 |
| % of Dose Vol. | 70 | | Des. Flow | 480 | | | | (ltar + 5%) | 0.32 |
| Dose Volume | 187 | | Pump Run= | 11.63 | | | | (ltar W/ INOV) | 0.40 |
| Dose Pump Time | 4.52 | | Tank Gal/IN | 19.65 | | | | (ltar + 5%) | 0.42 |
| Drawdown in Inches | 9.5 | | Elev. Head | 20.80 | | | | | |
| Supply Line Length | 350 | | | | | | | | |
| Comments: | | | | | | | | | |

Hydraulic Profile

| | | |
|--------------------|-------|-----|
| Manifold Elevation | 99.80 | 350 |
| Pump tank elev. | 84.00 | 2 |
| Pump elev. | 79.00 | 0 |

PRESSURE MANIFOLD DESIGN - REPAIR SYSTEM

Name: Dan Ryan Homes **P.I.N. #:** 0 **D#:** 0
Address: Lot 55 **Subdiv:** Olde Mill Village **Lot#:** 1
of BDR: 4 **Daily Flow:** 480 gal/day **L.T.A.R.:** 0.30 gal/day/sq.ft
Septic Tank: 1000 gals **Pump Tank:** 1000 gals **Sq. Foot:** 909 **Stone Depth:**
Number of Taps: 5 **Length of Trenches:** 400 ft(See Tap Chart for Details)
Depth of Trenches: 25 in **Manifold Length:** 48 in
Manifold Diameter: 4in sch 80pvc **Tap Configuration:** 6 in spacing 1 side(s) of manifold
Supply Line: length: 360 ft **Diameter:** 2 in sch 40pvc
Friction Loss + Fitting Loss: 20.68 ft(supply line length + 70' for fittings in pump tank)
Design Head: 2 ft **Elevation Head:** 12.50 ft
Total Head: 35.18 ft **Pump to Deliver:** 47.10 gals/min at 35.18 ft head
Dosing Volume: 195 gals,
Drawdown: 195 gals divided by 19.65 gals/in = 9.9 inches

Simplex Control Panel required; elapsed time meter and cycle counter required; Floats to be determined by type of pump tank used. A septic tank filter, or equal is required.

Possible pumps: **Hydromatic:** **Goulds:** **Myers:**
 Zoeller: **Other:**

TAP CHART

| | | | | | | | | | |
|--------------------|-----------|--------------|---------------|--------------------|------------------|-------------|-----------------------|-----------------------|-------------|
| Bench Mark | <u>0</u> | is = 100.00 | set at | | | | Design Head: | <u>2</u> | |
| Pump tank elev. | <u>16</u> | | 84.00 | Pump elev. | 79.00 | | Manifold elev. | 91.50 | |
| line | color | rod read | Elevation | length | hole size | flow/tap | gal/day | trench area | LINE LTAR |
| 6 | Blue | 9.5 | 90.50 | 160 | 1in SCH 40 | 20.2 | 205.86 | 480 | 0.429 |
| 7 | Orange | 10.9 | 89.10 | 145 | 1in SCH 80 | 16.8 | 171.21 | 435 | 0.394 |
| 8 | Yellow | 12.6 | 87.40 | 95 | 3/4in SCH 80 | 10.1 | 102.93 | 285 | 0.361 |
| | | total | feet = | 400 | gal/min = | 47.1 | | LTAR = | 0.30 |
| % of Dose Vol. | | 75 | | Des. Flow | <u>480</u> | | | (Itar + 5%) | 0.32 |
| Dose Volume | | 195 | | Pump Run= | <u>10.19</u> | | | (Itar W/ INOV) | 0.40 |
| Dose Pump Time | | 4.14 | | Tank Gal/IN | <u>19.65</u> | | | (Itar + 5%) | 0.42 |
| Drawdown in Inches | | 9.9 | | Elev. Head | <u>12.50</u> | | | | |
| Supply Line Length | | 360 | | | | | | | |
| Comments: | | | | | | | | | |

Dan Ryan Homes
Lot 55 - Olde Mill Village
 4-Bedroom Home (480 gal./day)

| <u>LINE #</u> | <u>COLOR</u> | <u>BS</u> | <u>HI</u> | <u>FS</u> | <u>ELEVATION</u> | <u>LINE LENGTH</u> | <u>Design Length</u> |
|---------------|--------------|-----------|-----------|------------|------------------|--------------------|----------------------|
| TBM | | 5.6 | | 100.0 | | <u>in field</u> | <u>installation</u> |
| INST. 1 | | | 105.6 | | | | |
| 1 | Blue | | | 1.2 | 104.4 | 60 | 55 |
| 2 | Orange | | | 2.3 | 103.3 | 90 | 55 |
| 3 | Yellow | | | 3.5 | 102.1 | 105 | 100 |
| 4 | Red | | | 4.6 | 101 | 110 | 100 |
| 5 | Pink | | | 5.9 | 99.7 | 145 | 100 |
| 6 | Blue | | | 7.6 | 98 | 160 | 160 |
| 7 | Orange | | | 8.9 | 96.7 | 145 | 145 |
| 8 | Yellow | | | 10.1 | 95.5 | 95 | 95 |

System

Lines 1-5

System Type

Accepted Status System

Repair

Lines 6-8

Accepted Status System

Suggested Soil LTAR

0.30

0.30

Total Line Length

410

400

Square Footage

1230

1200

Proposed Trench Bottom

See Harnett County Permit

See Harnett County Permit

**Septic Tank
Pump Tank**

**1000 Gallon
1000 Gallon**

Distribution Method

Pressure
Manifold

Pressure
Manifold

Lot 55 – White Oak Village
 Dan Ryan Builders

*Repair lines to be installed in conjunction with initial system.

3 inch Septic Supply line will need to be installed through approximately 65' of previously identified wetlands.

