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 2024-59337

PIN # 4761-- 34-- 2999 ✓

APPLICANT/OWNER: True Homes

APPLICANT ADDRESS: 2649 Brekonridge Centre Dr, Monroe, NC 28110

SITE ADDRESS: 193 Wheatfield Drive, Statesville, NC 28677

PHONE: 704-238-1229

ALT. PHONE:

SITE DIRECTIONS: N NC 21 -> R Ostwalt Amity -> R Wheatfield -> lot on L

SAP CONTROLLED: ☐ YES ☑ NO

SUBDIVISION: Wheatfield ✓

SECTION: 1

LOT # 92 ✓

LOT AREA: 0.52

DESIGN FLOW: 480 gpd

L.T.A.R.(Initial): 0.25

L.T.A.R (Repair): 0.25

Septic Tank 1000 (gal) STB JEO Date

Pump Tank 1000 (gal) PT 303 Date 7/10/24

Pump Make Zoeller Model N151 Serial #

Nitrification Fields 1 # Lines 4 Linear Ft: 320

Trench Width 24 *Max. Trench Depth(Initial) 25 *Max. Trench Depth(Repair) 25 Gravel Depth n/a

* Measured on the downhill side of the trench

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

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

System Description: VPPBPS - PM (IIIbe)

Repair System Description: VPPBPS - PM (IIIbe)

Maintenance Agreement Required: ☐ YES ☑ NO

☐ GRAVITY ☑ PRESSURE

Usable Depth to LC (Initial): 41

☑ 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

Usable Depth to LC (Repair): 41 *Limiting Condition*

Comments / Conditions: Do not pave, grade, drive, park, or bury utilties in drainfield.

Ensure a full 6" of approved cover over product. 12.25" drawdown

If layout varies significantly from design shown, Soil Scientist will need to approve install.

INITIAL SITE SKETCH

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

Alan Clapp

LSS# 1058

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

AOWE# 10017E

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.

Tanks Flags 8/19/24 PW

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 Date: 8/12/24

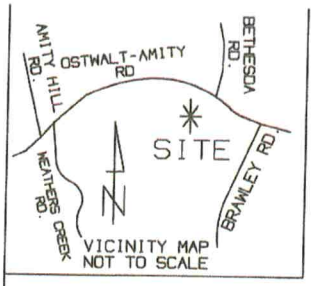
AUTHORIZATION TO CONSTRUCT by: D. Wieberg Date: 8/12/24

Installed by: Nate Dean

OPERATION PERMIT by: Date: 8/22/24 ✓

Existing System Inspected by: Date:

	Date	Initials
Drain Lines Checked	8/20/24	DW
Tanks Checked	8/19/24	DW
Pressure Manifold or Valve Box Checked	8/20/24	DW
Pressure Head Set		
Electrical Checked		
Floats Set	8/19/24	DW
Alarm Checked		
Maintenance Contract Y / (N)	—	—



As Built Sketch

IMPERVIOUS SURFACE AREA	
DESCRIPTION	AREA
LOT AREA TO B/C	24118 SF
HOUSE	2040 SF
DRIVE TO R/W	910 SF
DRIVE APRON	288 SF
PATIO	361 SF
LEADWALK	29 SF
5' PUBLIC WALK	N/A
TOTAL PROPOSED	3628 SF
SOD/SEEDING CALCULATIONS	
SOD	20490 SF
SEED/STRAW	N/A

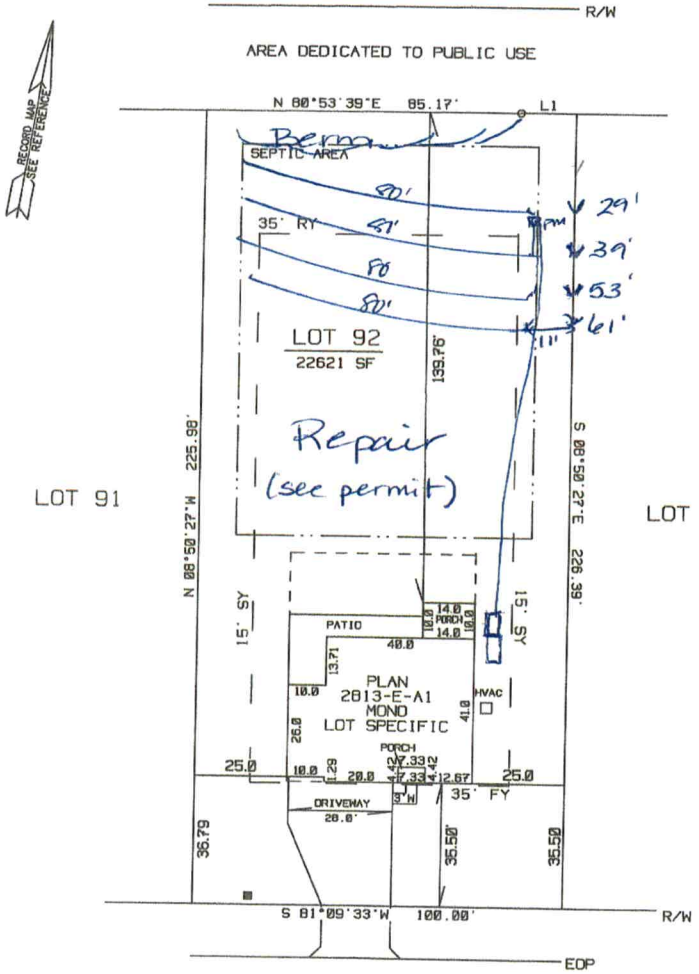
OSWALT AMITY ROAD

60' REPUTED R/W

R/W

AREA DEDICATED TO PUBLIC USE

1"=50'



WHEATFIELD DRIVE

50' PUBLIC R/W

LINE	BEARING	DISTANCE
L1	N 81°06'38"E	14.84'

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

0' 20' 40' 80'

SCALE: 1 INCH = 40' FEET

JENKINS AND LOWERY LAND SURVEYING
3409 OLD CHARLOTTE HWY
MONROE, NC 28110
704-821-3350
NC FIRM LICENSE # C-3167
SC COA # 3737

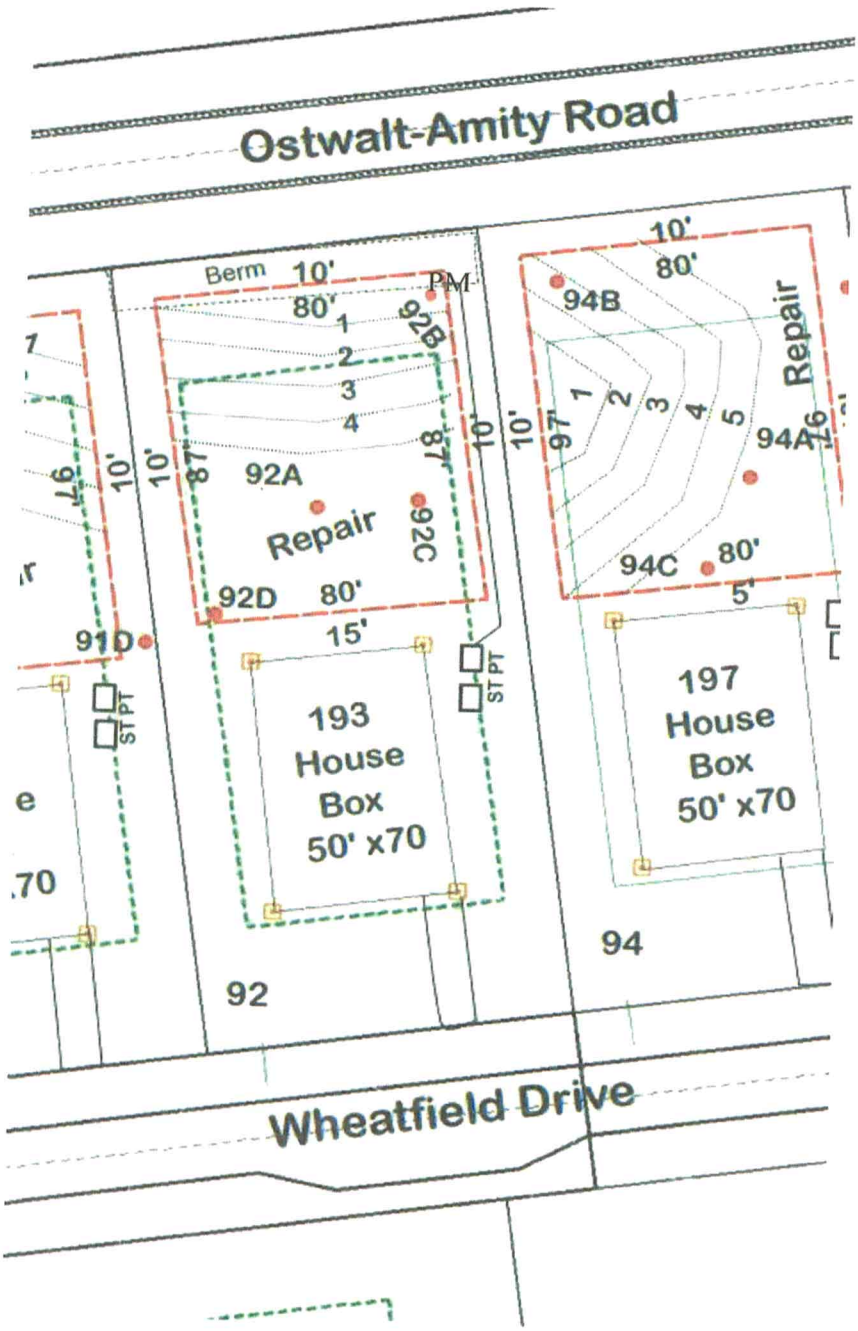
HOUSE LOCATION PLOT PLAN FOR TRUE HOMES

OF
193 WHEATFIELD DRIVE
LOT 92 OF WHEATFIELD PHASE 1 SECTION 2
CHAMBERSBURG TOWNSHIP, IREDELL COUNTY, N.C.

AREA BY COORDINATE COMPUTATION
MAP BOOK: 82
PAGES 1/2

REVISED: 04/04/24
DRAWN BY: ESJ/JLK/TAJ
P. WFF92

Site Plan:


Ostwalt-Amity Road
Berm
10'
80'
PM
92B
1
2
3
4
87'
10'
92A
Repair
92C
92D
80'
15'
91D
ST PT
193
House
Box
50' x70
97'
10'
94B
Repair
94A
94C
80'
5'
197
House
Box
50' x70
94
92
Wheatfield Drive

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 2024-59337

PIN # 4761-- 34-- 2999

APPLICANT/OWNER: True Homes

APPLICANT ADDRESS: 2649 Brekonridge Centre Dr, Monroe, NC 28110

SITE ADDRESS: 193 Wheatfield Drive, Statesville, NC 28677

PHONE: 704-238-1229

ALT. PHONE:

SITE DIRECTIONS: N NC 21 -> R Ostwalt Amity -> R Wheatfield -> lot on L

SAP CONTROLLED: ☐ YES ☑ NO

SUBDIVISION: Wheatfield

SECTION: 1

LOT # 92

LOT AREA: 0.52

DESIGN FLOW: 480 gpd

L.T.A.R.(Initial): 0.25

L.T.A.R (Repair): 0.25

Septic Tank 1000 (gal) STB THEO Date

Pump Tank 1000 (gal) PT 3023 Date 7/10/24

Pump Make Zoeller Model N151 Serial #

Nitrification Fields 1 # Lines 4 Linear Ft: 320

Trench Width 24 *Max. Trench Depth(Initial) 25 *Max. Trench Depth(Repair) 25 Gravel Depth n/a

* Measured on the downhill side of the trench

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

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

System Description: VPPBPS - PM (IIIbe)

Repair System Description: VPPBPS - PM (IIIbe)

Maintenance Agreement Required: ☐ YES ☑ NO

☐ GRAVITY ☑ PRESSURE

Usable Depth to LC (Initial): 41

Usable Depth to LC (Repair): 41 *Limiting Condition*

☑ 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: Do not pave, grade, drive, park, or bury utilties in drainfield.

Ensure a full 6" of approved cover over product. 12.25" drawdown

If layout varies significantly from design shown, Soil Scientist will need to approve install.

INITIAL SITE SKETCH

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

Alan Clapp

LSS# 1058

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

AOWE# 10017E

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.

Tanks Foaks 8/19/24 RW

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:

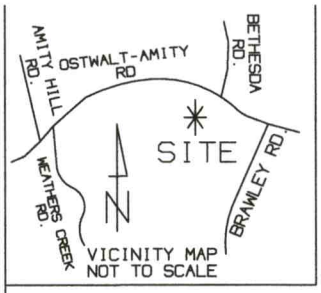
IMPROVEMENT PERMIT by: D. Wieberg Date: 8/12/24

AUTHORIZATION TO CONSTRUCT by: D. Wieberg Date: 8/12/24

Installed by: Nate Quan

OPERATION PERMIT by: Date:

Existing System Inspected by: Date:



As Built Sketch

IMPERVIOUS SURFACE AREA	
DESCRIPTION	AREA
LOT AREA TO B/C	24118 SF
HOUSE	2040 SF
DRIVE TO R/W	910 SF
DRIVE APRON	288 SF
PATIO	361 SF
LEADWALK	29 SF
5' PUBLIC WALK	N/A
TOTAL PROPOSED	3628 SF
SOD/SEEDING CALCULATIONS	
SOD	20490 SF
SEED/STRAW	N/A

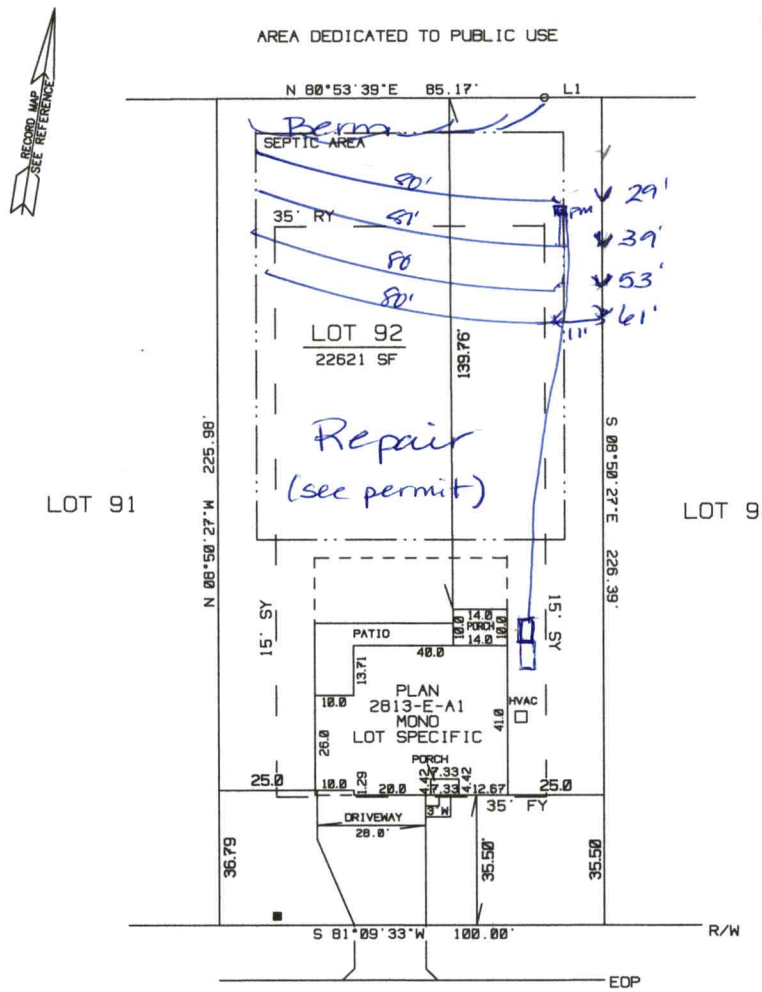
OSWALT AMITY ROAD

60' REPUTED R/W

R/W

AREA DEDICATED TO PUBLIC USE

1"=50'



WHEATFIELD DRIVE

50' PUBLIC R/W

LINE	BEARING	DISTANCE
L1	N 81°06'38"E	14.84'

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

0' 20' 40' 80'

SCALE: 1 INCH = 40' FEET

JENKINS AND LOWERY LAND SURVEYING
3409 OLD CHARLOTTE HWY
MONROE. NC 28110
704-821-3350
NC FIRM LICENSE # C-3167
SC COA # 3737

HOUSE LOCATION PLOT PLAN FOR TRUE HOMES
OF
193 WHEATFIELD DRIVE
LOT 92 OF WHEATFIELD PHASE 1 SECTION 2
CHAMBERSBURG TOWNSHIP. IREDELL COUNTY. N.C.

AREA BY COORDINATE COMPUTATION
MAP BOOK: 82
PAGES 1/2

REVISED: 04/04/24
DRAWN BY: ESJ/JLK/TAJ
P: WFF92

As Built Sketch

Site Plan:


Ostwalt-Amity Road
Berm
10'
80'
PM
1
2
3
4
92B
92C
92A
Repair
92D
80'
87'
97'
10'
15'
91D
ST PT
193
House
Box
50' x70
92
94B
94A
94C
5'
197
House
Box
50' x70
94
Wheatfield Drive

Permit/File #: OSWP-2024-59337

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES

ROY COOPER • Governor
KODY H. KINSLEY • Secretary
MARK BENTON • Chief 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: PIN: 4761342999
Issued To: True Homes
Property Location: 193 Wheatfield Drive
Subdivision (if applicable) Wheatfield Lot #: 96 Block: _____ Section: _____
LSS Report Provided: Yes [X] No [ ]
If yes, name and license number of LSS: Alan Clapp 1058

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

Facility Type: Residential Single Family Dwelling
Number of bedrooms: 4 Number of Occupants: 8 Other: _____
Design Wastewater Strength: [X] Domestic [ ] High Strength [ ] Industrial Process Wastewater
Proposed Design Daily Flow: 480 GPD Proposed LTAR (Initial): .25 Proposed LTAR (Repair): .25
Proposed Wastewater System Type*: IIIbe (Initial) Pump Required: [X] Yes [ ] No [ ] May be required
Proposed Wastewater System Type*: IIIbe (Repair) Pump Required: [X] Yes [ ] No [ ] May be required

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

Effluent Standard: [X] DSE [ ] HSE [ ] NSF/ANSI 40 [ ] TS-I [ ] TS-II [ ] RCW
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)[x]: 41" Usable Depth to LC (Repair)[x]: 41" ***[x] Limiting Condition***
Max. Trench Depth (Initial)[‡]: 25" Max. Trench Depth (Repair)[‡]: 25" ***[‡] Measured on the downhill side of the trench***
Artificial Drainage Required: [ ] Yes [X] No If yes, please specify details: _____
Type of Water Supply: [ ] Private well [ ] Public well [ ] Shared well [X] 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:

Licensed Soil Scientist Print Name: Alan Clapp
Licensed Soil Scientist Signature: Alan Clapp Date: 8/1/24

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-2024-59337

This Section for Local Health Department Use Only

Initial submittal received: 8/9/24 *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. Wieberg Date: 8/12/24

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: 8/12/29

See attached site sketch

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES
Division of Public Health

Permit/File #: OSWP-2024-59337

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

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

PIN/Lot Identifier: PIN: 4761342999

Issued To: True Homes

Property Location: 193 Wheatfield Drive

AOWE/PE Plans/Evaluations Provided: Yes ☒ No ☐ If yes, name and license number of AOWE/PE: Alan Clapp # 10017E

Facility Type: Residential Single Family Dwelling

Number of bedrooms: 4 Number of Occupants: 8 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* IIIbe (Initial) IIIbe (Repair)

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

Design Daily Flow: 480 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: 320 feet Trench/Bed Spacing: 6 feet on center

Trench/Bed Width: 36 inches LTAR: .25 gpd/ft² Usable Depth to LC (Initial)ˣ: 41" ˣ***Limiting condition***

Soil Cover: 6 inches Slope Corrected Maximum Trench/Bed Depth‡: 25" inches ‡ ***Measured on the downhill side of the trench***

Pump Tank Size (if applicable): 1000 gallons Requires more than 1 pump? ☐ Yes ☒ No

Pump Requirements: * ft. TDH vs. 25 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: per IIIb systen classification

Permit conditions:
Construct surface water diverion above and around system.

Per 15A NCAC 18E .1403 (b) (5) tanks with more than three feet of cover shall have PE 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: Alan Clapp

AOWE/PE Signature: Alan Clapp Date: 8/1/24

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-2024-59337

This Section for Local Health Department Use Only

Initial submittal received: 8/9/24 (*Date*) by DW (*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. Wieberg Date of Issuance: 8/12/24

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: 8/12/29

See attached site sketch

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES
Division of Public Health

Permit/File #: OSWP-2024-59337

ADDENDUM TO G.S. 130A-335(a2) SUBMITTAL

County: Iredell

PIN/Lot Identifier: PIN: 4761342999

Issued To: True Homes

Additional Improvement Permit Conditions:

1. This permit package voids and replaces any previous septic system permitting.
2. Property served by Iredell water.
3. ~~Construct protective fencing around the soil area and layout to protect from grading, compaction, and~~ construction traffic. Storage of materials, cuts and fill over septic area could result in revocation of the permit.
4. Maintain septic layout until system is installed.
5. ~~Bring in clean topsoil to fill voids when removing tree root balls in wooded areas.~~
6. Install system per 15A 18E .0800, .0900 and .0901 (g).
7. Use septic and pump tanks as required per 15A NCAC 18E .0805.
8. Make sure property lines are marked prior to installation.

Additional Construction Authorization Conditions:

9. Contact NC 811 prior to any digging.
10. Use most current T&J Panel Installation Manual guidelines.
11. Required Backfill Sand: (Clean, Screened, Naturally Occurring, Concrete Sand, or ~~ASTM-C33, NC-2S,~~ FA-1 and Grade "A" Sands)
12. Divert all surface water around system and repair area including gutter and foundation drains. Install upslope surface diversion swales.
13. ~~Install system during dry conditions. Install system in area noted at the trench depth specified. Final plum~~bing stub out elevation will determine final TDH.
14. Demonstrate pressure manifold water tightness by first setting pressure head at 2'. Replace pressure cap and ~~then run at minimum a 3-minute drawdown. Observe manifold for leaks and measure delivery rate.~~
15. Straw and seed septic area after installation to establish a stable cover and prevent soil erosion.
16. Submit the attached common form, report, and map with signature and an application(if required) to the Heal~~Department.~~

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES

ROY COOPER • Governor
KODY H. KINSLEY • Secretary
MARK BENTON • Chief 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 submitted 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:
☒ (a2) Improvement Permit ☒ (a2) Construction Authorization ☐ (a2) Repair/Construction Authorization

If applying for a Construction Authorization, please indicate desired system type(s):
☐ Accepted ☐ Conventional ☐ Innovative ☒ Other Vertical PPBPS ☐ Any

☒ New Construction ☐ Expansion ☐ System Relocation ☐ Change of Use ☐ Repair
☒ 5-Year Expiration Requested (site plan provided) ☐ Non-Expiring Permit Requested (plat provided, defined in G.S.130A-334(7a)
Requesting DHHS review? (systems >3000 GPD or IPWW) ☐ Yes ☒ No

Applicant: _____
Mailing Address: _____
_____
City: _____
State: _____ Zip: _____
Phone #: _____
Email: _____

Owner: True Homes
Mailing Address: 2649 Brekonridge Centre Drive Suite 104
_____
City: Monroe
State: NC Zip: 28110
Phone #: 336-653-6359
Email: ccole@TrueHomesUSA.com

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

☐ Yes	☒ No	Does the site contain any jurisdictional wetlands?
☐ Yes	☒ No	Is any wastewater going to be generated on the site other than domestic sewage?
☐ Yes	☒ No	Is the site subject to approval by any other public agency?
☐ Yes	☒ 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: Michelle Sturdivant Date: 8/9/24

Owner's Signature: _____ Date: _____

Alan Clapp
Licensed Soil Scientist
405 N. Churton Street
Hillsborough, NC 27278

Phone: 336-202-6808 alanclapp63@gmail.com
Soil/Site Evaluations-Septic Systems Layout and Design-Storm Water Assessment-Preliminary Evaluations

August 1, 2024

True Homes
2649 Brekonridge Centre Drive
Monroe, NC 28110
Attn.: Caleb Cole

RE: Wheatfield Subdivision Lot 92
193 Wheatfield Drive
PIN: 4761342999 - .519 Acres
Iredell County, NC

Mr. Cole:

On May 31 and June 25, 2023, and July 30, 2024, the property referenced above in Iredell County was evaluated to facilitate Improvement Permit/Construction Authorization permitting for a septic system. This report and attached documents were prepared to meet the requirements for a Licensed Soil Scientist evaluation and AOWE design to meet **G.S. 130A-335 (a2)/SL 2023-90.** Iredell water is proposed to serve the dwelling. **This permit package is a revision due to plumbing stub out depth now requiring the system to be pumped to meet maximum trench depth requirements.**

Soil borings were made and examined to determine soil suitability for on-site sewage disposal systems in accordance with **15A NCAC 18E Wastewater Treatment and Dispersal Systems**. These borings were made by a soil auger. The property was traversed, and numerous bores were made in a transect-type sampling pattern to perform the soil/site evaluation. A septic layout is shown to demonstrate available space (.0508). The soil profile descriptions and locations along with the septic layout drawing will be located on a copy of the site plan. Under state regulations, sites for subsurface sewage disposal systems (septic tank systems) are evaluated for landscape position and topography, soil characteristics (structure, mineralogy, and texture), soil depth, soil wetness, restrictive horizons, and available space. This property is in the Piedmont physiographic region and the geologic region of the Charlotte Terrane.

Typical Septic System used in Piedmont of NC:

The most common septic systems used in North Carolina are listed with the corresponding minimum usable soil depth required and any trench length reduction if allowed noted in parentheses: conventional (30"), shallow conventional systems (24" with soil cap), chamber systems (24" with soil cap and 25% drain field reduction),

polystyrene systems (24" with soil cap and 25% drain field reduction), vertical panel block systems (requires at least 34" of usable soil and allows 50% drain field reduction), horizontal panel block systems (requires 26" of usable soil depth and allows 50% drain field reduction), large diameter pipe (24"), low pressure pipe (24"), low profile chamber (20"), low pressure fill (18") and drip irrigation (18"). A pump can be used to deliver effluent to the usable soil area if gravity flow cannot be achieved. Also, a pump is required on any system with over 750' of drain field. The percent reduction means the amount of drain field trench length reduction for that product as compared to conventional trenches. Certain models of chamber systems and polystyrene bundle systems are considered accepted trench products. Accepted trench products may be substituted in lieu of conventional gravel trenches per Accepted Wastewater System Approval Number: AWWS 2005-01-R11.

SL 2023-90 Conditions, System Specifications and Site Features:

The information below is provided to facilitate the IP/CA issuance. One additional feature I would recommend is to **construct protective fencing around the soil area and septic layout**. No grading, filling, storage, compaction, or disturbance should be allowed over the soil/septic area. No soil removal from septic area during clearing.

Design Flow:	480 GPD	**Nitrification Field:**	320 Lin. Ft.
Septic Tank:	1000 GAL	**# of Lines:**	4
Pump Tank:	1000 GAL	**Min. Trench Depth:**	24 inches
Soil LTAR:	0.25 gpd/ft²	**Max. Trench Depth:**	25 inches
Usable Soil Depth:	41"	**Min. Soil Cover:**	6 inches
Initial System Type:	PPBPS Trench	**Max. Soil Cover:**	7 inches
Initial System Classification:	IIIbe	**Trench Spacing:**	6 Ft. on Center
Repair System Type:	PPBPS Trench	**Trench Width:**	24 inches
Repair System Classification:	IIIbe	**Aggregate Depth:**	6" Backfill Sand + Vertical Panel
Saprolite System:	No	**Distribution Type:**	Pressure Manifold
Pump Requirements:	25 gpm @ TDH	**Pre-treatment (Y/N):**	No
Dosing Volume:	259 GAL	**Conditions:**	See attached
Installer Level Required:	II	**Water Supply:**	**Public water**

SL 2023-90 Conditions and Site Features:

The information below is provided to facilitate the IP/CA issuance. The information below is provided to facilitate the IP/CA issuance. The water supply is public water. I recommend **constructing protective fencing around the soil area and septic field**. No grading, filling, storage, compaction, or disturbance should be allowed over the soil/septic area. Grading, filling, storage, and compaction of the soil area could result in revocation of a permit. Final plumbing stub out location and elevation can affect requirement of a pump versus gravity fed delivery of effluent to the drainfield. No soil removal from septic area during clearing.

193 Wheatfield Drive

Wheatfield Lot 92 PIN: 4761342999

NRCS Soil Series: Cecil (Fine, kaolinitic, thermic Typic Kanhapludults)

Bedrooms: 4, single family dwelling

Design Flow: 4-bedroom x 120 gpd/bedroom = 480 gpd, domestic strength wastewater

Tankage: (15A NCAC 18E .0801 and .0802):

For a 4-bedroom dwelling, the minimum septic tank size is 1000-gallon septic tank (STB) capacity with effluent filter. Use a 1000-gallon septic tank. For a system that also requires a pump use a 1000-gallon pump tank.

Soil/Site Conditions:

Initial LTAR: .25 gpd/ft²
Trench Bottom Square Footage Required: 480 gpd/.25 gpd/ft² = 1920 ft²
Drainfield Requirement: 1920 ft²/ 3 ft trench = 640 ft.
System Requirement:

Conventional:	640'
Accepted Trench (Chamber or EZ Flow):	480'
PPBPS (T & J panel block):	320'

Usable Soil Depth – Initial and Repair: 41" (Based on borings 92A, 92B, 92C, 92D in the usable soil area and slope corrected)
Initial and Repair System Type: PPBPS trench (IIIe)
Initial and Repair Trench Required: 320' PPBPS Vertical Trench
Minimum Trench Depth: 24"
Maximum Trench Depth: 25" (For Vertical PPBPS MTD = USD – 16")

Septic Layout:

Line	Length	# of panels
1	80'	18
2	80'	18
3	80'	18
4	80'	18
Total:	**320'**	**72**

1. Initial system - 320' needed PPBPS Trench Layout Lines 1-4
2. Repair system area below line 4.
3. Meets .1945 Available Space requirements.
4. Lines at 6' on center at minimum.
5. # panels = LF (Linear feet) x 12/52

System Distribution: Pressure manifold

Pressure Manifold Tap Requirements:

Line	Layout Length	Length Used	# panels	Tap Dia.	Tap Sch.	Tap Flow[1]	Flow/Foot
1	80'	80'	18	½"	80	5.5	.069
2	80'	80'	18	½"	80	5.5	.069
3	80'	80'	18	½"	80	5.5	.069
4	80'	80'	18	½"	80	5.5	.069
Total:	**320'**	**320'**	**72**			**22**	

1. Tap Flows @ 2' Pressure Head
2. The pump shall be sized to deliver 25 gpm @ TDH determined by pump elevation and final tank location and allows for vent hole (2 gpm) flow loss in pump tank.
3. # panels = LF (Linear feet) x 12/52

Manifold, Dosing Volume, Drawdown:

Manifold Size 3 or 4" **Force Main Size** 2 " PVC

Dosing Volume = **72** (Number of Panels) X 3.6 = 259 Gallons (per T&J panel design manual)

Dosing Volume: 259 Gallons for Vertical PPBPS

Drawdown tether = **259** Gallons / Gallons per Inch of Pump Tank used = ____* "

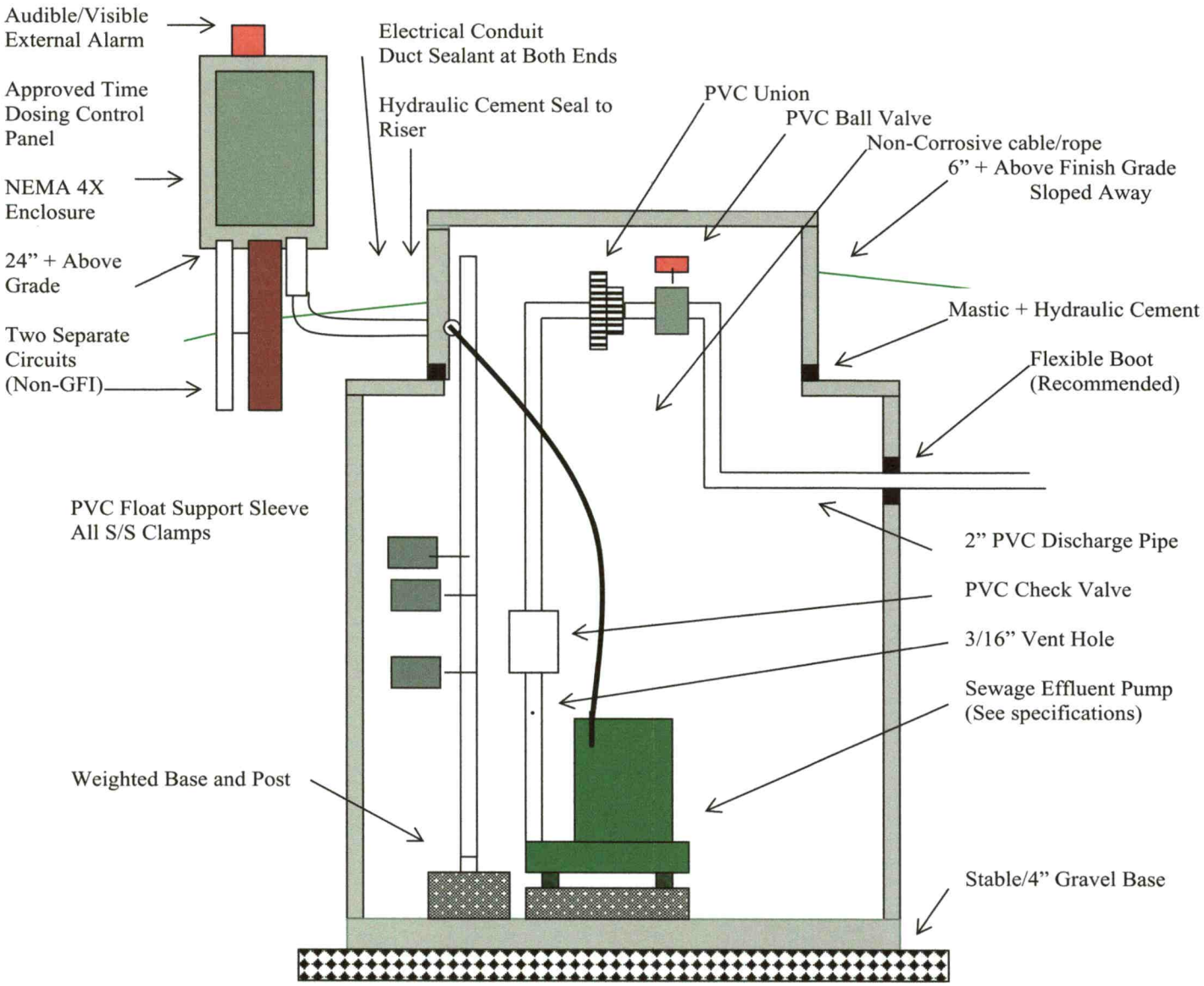
Total Dynamic Head = ____* (Elevation Head) + ____* ' (Friction Loss) + 2' = ____'* TDH (+ Pressure Head)

Pump Requirement **25** GPM @ ____* Head.

***To be determined at time of installation based on final plumbing stub out elevation and tank elevations**

Pump Supply Lines and Force Mains:

Meet .1950 (e) setbacks and .1952 design specifications. Any driveway crossing to meet .1950 (c).



TYPICAL PUMP TANK DETAIL SPECIFICATIONS

Not to Scale

- The Alarm shall be located adjacent to the pump tank and approved for outdoor locations (NEMA 4X or equal)
- The circuit serving the alarm shall be on a separate circuit from the pump.
- The control panel enclosure shall be mounted at least 3-5' above grade on a durable, sturdy, non-corrosive post such as a pressure treated 4X4.
- The floats shall be supported using non-corrosive materials separate from the discharge pipe. The float wire pivot points shall be secured with durable straps such as all stainless-steel clamps or equivalent. The floats should be strapped to a 2" removable PVC pipe sleeve located over a smaller diameter weighted standpipe. The floats shall be adjustable and replaceable without entering the tank or removing the pump. The pump off level shall be set to keep the pump submerged.
- Pipe penetrations shall be through approved flexible boots or sleeves. The riser and conduit shall be sealed to the tank with pliable mastic followed by a troweled coat of hydraulic cement.
- All piping shall be Schedule 40 minimum PVC. All fittings shall be PVC pressure fittings labeled NSF-PW. Valves and unions shall be located within 18" of the riser cover and should be Schedule 80 or equal.

The Control panel is to be mounted adjacent to the pump tank. Recommend at a height to allow the Operator to work controls while standing. (e.g., center of panel to be 3 to 5 feet above finished grade) The alarm circuit shall be supplied ahead of the pump circuit overload device (on a separate circuit). The alarm shall be provided with a test button which activates both the light and horn. In the event of a high-water condition, activation of a "silence" switch will bypass the horn and leave the visual alarm on. Any recurrence of the high-water condition will automatically reactivate the horn and light. *Alarm panels that are mounted indoors may be used in addition to, but not instead of the exterior alarm panel.*

PUMP CONTROLS (FLOATS) Electrical control floats or similar devices designed for detecting effluent levels shall be provided to activate and deactivate the pump. The pump-off elevation shall be set to keep the pump always submerged. A separate float to activate the high-water alarm shall be set to activate within 6 inches of the pump-on elevation. Underwriter's Laboratory or an equivalent third party electrical shall list the level sensing devices testing and listing agency.

The floats shall be supported utilizing durable, corrosion resistant material, and shall be adjustable, removable, and replaceable without requiring dewatering, entrance into the tank, or pump removal. An acceptable method would be to provide a PVC vertical weighted pipe with the float cables secured at the proper elevation using **"all stainless steel" clamps at the float pivot points**. *Care must be taken to ensure that the sharp edge of the clamp does not bear on the wire insulation. Plastic tie-wraps alone, or strapping floats to the discharge pipe are not acceptable.*

CONDUCTORS (WIRES) shall be conveyed to the disconnect enclosure through waterproof, gasproof, and corrosion-resistant conduits. Wire grips, duct seal, or other suitable material shall be used to seal around wire and wire conduit openings. There shall be no splices within the pump tank or tank access riser.

When necessary or specified, the tanks and control panels shall be protected from vehicular traffic by constructing guardrails or bollards.

Conclusions:

In North Carolina, three primary options for septic system permitting exist. 1. Traditional Health Department Permitting, 2. hybrid SL-2023 (a2) permitting, and 3. fully private permit options by either an engineer (EOP) or Authorized Evaluator (AOWE). With the hybrid permit option, SL2023-90 (a2), soil scientist that is also an AOWE will issue the Improvement Permit and Construction Authorization. The local Health Department will do the septic inspection and issue the Operation Permit. In the traditional permitting model, the county in the form of an Improvement Permit grants site approval. A Construction Authorization is issued once building floor plans are reviewed and the Improvement Permit is issued. The county issues an Operation Permit after the system has been installed to meet the specifications of the Construction Authorization. Septic layouts and system design can be performed as needed. The fully private permitting options are the Engineer Option Permit (EOP) and Authorized Onsite Wastewater Evaluator (AOWE) permit. A NC Licensed Engineer, a NC Licensed Soil Scientist, NC Authorized Evaluator, and a NC Registered Septic Installer can evaluate, design, and install a septic system without Health Department involvement other than record keeping.

The attached soil map and septic layout maps are based on soil boring, property iron and flag locations collected using an EOS Arrow Gold GPS and iCMTGIS Pro app and then overlain with the Iredell County topo shapefiles available from NC OneMap. PCGIS X software was then used to prepare the maps and site plan. A one inch to 50' version of the map will be provided. The map is scaled to print on 11" x 17" (Tabloid) paper in Landscape format. The GPS locations can be accurate to submeter, but county GIS shapefile layers should not be considered as accurate as survey located features, points and property lines. Property corners where found were collected and are noted on the soils map. Surveying and CAD plan was provided by Delta Land Services, Inc.

Site Conditions for Improvement Permit and Construction Authorization:

1. This permit package voids and replaces any previous septic system permitting.
2. Property served by Iredell water.
3. Construct protective fencing around the soil area and layout to protect from grading, compaction, and construction traffic. Storage of materials, cuts and fill over septic area could result in revocation of the permit.
4. Maintain septic layout until system is installed.
5. Bring in clean topsoil to fill voids when removing tree root balls in wooded areas.
6. Install system per 15A 18E .0800, .0900 and .0901 (g).
7. Use septic and pump tanks as required per 15A NCAC 18E .0805.
8. Make sure property lines are marked prior to installation.
9. Contact NC 811 prior to any digging.
10. Use most current T&J Panel Installation Manual guidelines.
11. Required Backfill Sand: (Clean, Screened, Naturally Occurring, Concrete Sand, or ASTM-C33, NC-2S, FA-10 and Grade "A" Sands)
12. Divert all surface water around system and repair area including gutter and foundation drains. Install upslope surface diversion swales.
13. Install system during dry conditions. Install system in area noted at the trench depth specified. Final plumbing stub out elevation will determine final TDH.
14. Demonstrate pressure manifold water tightness by first setting pressure head at 2'. Replace pressure cap and then run at minimum a 3-minute drawdown. Observe manifold for leaks and measure delivery rate.
15. Straw and seed septic area after installation to establish a stable cover and prevent soil erosion.
16. Submit the attached common form, report, and map with signature and an application(if required) to the Health Department.

NC Licensed Soil Scientist statement:

This LSS Evaluation is being submitted pursuant to and meets the requirements of GS. 130A-335 (a2).

NC Onsite Wastewater Evaluator statement (AOWE):

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

Please feel free to contact me if you have any further questions.

Alan Clapp

Alan Clapp

NC Licensed Soil Scientist #1058
NC Registered Environmental Health Specialist #1118
NC Subsurface Wastewater Operator #1009092
NC Authorized Onsite Wastewater Evaluator #10017E





Septic System Setbacks - *15A NCAC 18E .0601 Location of Sanitary Sewage Systems*:

TABLE IX. Minimum setbacks from all wastewater systems to site features

Site Features	Setback in feet
Any transient or non-transient non-community water supply well, community well, shared water supply well, well that complies with 15A NCAC 18A .1700, or water supply spring	100
A private drinking water well or upslope spring serving a single family dwelling unit	50
Any other well or source not listed in this table, excluding monitoring wells	50
Surface waters classified WS-I, from ordinary high-water mark	100
Waters classified SA, from mean high-water mark	100
Any Class I or Class II reservoir, from normal water level	100
Lake or pond, from normal water level	50
Any other stream, non-water supply spring, or other surface waters, from the ordinary high-water mark	50
Tidal influenced waters, such as marshes and coastal waters, from mean high-water mark	50
Permanent stormwater retention basin, from normal water level	50
Any water line, unless the requirements of Paragraph (i) have been met	10
Closed loop geothermal wells	15
Building foundation and deck supports	5
Patio, porch, stoop, lighting fixtures, or signage, including supporting structures such as posts or pilings	1
Any basement, cellar, or in-ground swimming pool	15
Buried storage tank or basin, except stormwater	10
Above ground swimming pool and appurtenances that require a building permit	5
Top of slope of embankment or cuts of two feet or more vertical height with a slope greater than 50 percent	15
Top of slope of embankment or cuts of two feet or more vertical height with a slope greater than 33 percent and less than or equal to 50 percent	15 If the site has suitable soil depth that extends for a minimum horizontal distance of 15 feet from the edge of the dispersal field, no minimum setback is required.
Top of slope of embankment or cuts of two feet or more vertical height with a slope less than 33 percent	0
Groundwater lowering system, as measured on the ground surface from the edge of the feature	25
Downslope interceptor drains and surface water diversions with a vertical cut of more than two feet, as measured on the ground surface from the edge of the feature	15

Upslope and sideslope interceptor drains and surface water diversions with a vertical cut of more than two feet, as measured on the ground surface from the edge of the feature	10
A stormwater collection system as defined in 15A NCAC 02H .1002(48), excluding gutter drains that connect to a stormwater collection system, with a vertical cut of more than two feet as measured from the center of the collection system	10
Bio-retention area, injection well, infiltration system, or dry pond	25
Any other dispersal field, except designated dispersal field repair area for project site	20
Any property line	10
Burial plot or graveyard boundary	10
Above ground storage tank from dripline or foundation pad, whichever is more limiting	5
Utility transmission and distribution line poles and towers, including guy wires, unless a greater setback is required by the utility company	5
Utility transformer, ground-surface mounted	5
Underground utilities	5

GENERAL DRAINFIELD REQUIREMENTS AND BEST CONSTRUCTION PRACTICES

1. Any clearing or preparation of the nitrification field shall be done without removal, disturbance, or compaction of soil. The contractor shall establish and stake the contour lines of the drainfield area before the installation and before the preconstruction conference, when required. **Tree or sediment protective fencing shall be installed around septic area to eliminate construction traffic and soil compaction on septic area.**

2. Drainfield trenches shall be installed level and shall follow the ground contours. An engineer's level or laser shall be used in staking and constructing the lines. Trench depth shall not exceed the maximum specified by the Construction Authorization, unless otherwise specified, (i.e., ultra-shallow systems). Trench installation specifications from product manufacturers shall be followed.

3. No construction or backfilling shall be done when soil conditions are wet enough to cause a smearing or compaction of the soil in the drainfield or repair area.

4. The pipe between the septic tank and drainfield, or between the septic tank and pump tank shall be a minimum of 3" schedule 40 PVC or equivalent, with a minimum fall of 1/8" per foot. All joints from the septic tank to the drainfield shall be watertight. The pipe shall be on a firm, stable surface and secured. There shall be a 2' dam of undisturbed earth before a gravel trench begins. All other trench types per manufacturer. The pipe shall then be inserted at least 2' into the corrugated pipe. A cleanout to the ground surface shall be located at the end of the gravity pipe (the beginning of the drainfield) when the drainfield is over 50' from the tank.

5. The trench bottoms shall be smoothed and level with loose soil removed.

6. When necessary to change to a new contour, a step-down shall be constructed of a 2' **undisturbed** earth dam, which is raised to an elevation equal to the upstream gravel surface. However, precautions shall be taken to prevent raising the level of the effluent in the tank. Schedule 40 pipe (3" minimum) shall be used in crossing dams. Fittings will be needed to make the turns. The rigid pipe shall extend at least 2 feet into the level portion of the corrugated pipe. Area taken up by dams and step-downs shall not count as part of the footage required. *For accepted trench products and Panel Block products, use manufacturer's specifications.*

7. The soil cover over the drainfield shall be to a depth of at least 6". Boulders should be removed from the backfill material to prevent damage to the pipe. The finished grade shall be smoothed to prevent ponding of surface water over the drainfield. Surface water from upslope, including foundation and gutter drains, shall be effectively diverted away.

8. A vegetative cover of grass over the drainfield shall be established after final grading to prevent soil erosion. Divert all surface water and gutter drainage around system.

Installation and Testing Recommendations and Best Practices:

1. A pre-construction conference is recommended to be attended by the installer and health department prior to beginning construction of the system.
2. For Accepted trench products use manufacturer's specifications for installation. The Installer should be certified in writing by the manufacturer.
3. The septic tank, dosing tank, risers and pipe penetrations shall be demonstrated to be watertight by a 24-hour leak test (no measurable leakage in 24 hours). The test shall be run with riser's inlet/outlet pipes installed.
4. Care shall be taken during installation to prevent extraneous debris from entering tanks, supply lines or distribution network. Supply lines and manifold shall be flushed prior to system start-up.
5. For pump dosed systems, a pump delivery rate shall be measured, and the floats adjusted according to the measured delivery rate to achieve the design flow at design head. All other mechanical components, pump(s), pump cycling, filters, etc., as applicable must be demonstrated to be fully operable in accordance with their design.
6. Install water line, electrical lines and other buried utilities around septic and repair areas.
7. Keep repair areas free of parking and any future construction. Maintain grass cover over drainfield and repair areas.
8. Any proposed Septic Tank, Pump Tank and Pressure Manifold locations are at the discretion of the Health Department at the time of the preconstruction conference.
9. Call NC 811 to mark any utilities prior to digging.
10. Estimated Septic Tank pumping frequency:

Table I. Septic Tank Pumping Frequency in Years										
Septic Tank Size Gallons / Liters	Household size - Number of Occupants									
	1	2	3	4	5	6	7	8	9	10
	Septic Tank Pumping Frequency in Years									
500 gallons * / 1890 liters	5.8	2.6	1.5	1.0	0.7	0.4	0.3	0.2	0.1	--
750 * / 2840	9.1	4.2	2.6	1.8	1.3	1.0	0.7	0.6	0.4	0.3
900 / 3400	11.0	5.2	3.3	2.3	1.7	1.3	1.0	0.8	0.7	0.5
1000 / 3800	12.4	5.9	3.7	2.6	2.0	1.5	1.2	1.0	0.8	0.7
1250 / 5000	15.6	7.5	4.8	3.4	2.6	2.0	1.7	1.4	1.2	1.0
1500 / 5500	18.9	9.1	5.9	4.2	3.3	2.6	2.1	1.8	1.5	1.3

NC DHHS Division of Public Health Onsite Water Protection:
Understanding and Protecting Septic Systems

Septic System Resources form NC State Agricultural Extension:
https://content.ces.ncsu.edu/septic-systems-and-their-maintenance
https://content.ces.ncsu.edu/septic-system-owners-guide

Accepted Trench Products: https://ehs.ncpublichealth.com/oswp/approvedproducts.htm

T and J Panel Resources: http://www.tjpanel.com/installation-manual.html

Sheet ____ of ____
PROPERTY ID #:
COUNTY: Iredell

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

OWNER: True Homes / MJ SUMNER — APPLICATION DATE
ADDRESS: — DATE EVALUATED:
PROPOSED FACILITY: SFD — PROPOSED DESIGN FLOW (.1949): 480 gpd — PROPERTY SIZE: .52 ACRES
LOCATION OF SITE: Wheatfield S/D 193 WHEATFIELD DR — PROPERTY RECORDED:
WATER SUPPLY: ☐ Private ☒ Public ☐ Well ☐ Spring ☐ Other
EVALUATION METHOD: X Auger Boring ☐ Pit ☐ Cut — TYPE OF WASTEWATER: ☒ Sewage ☐ Industrial Process ☐ Mixed

Boring/Pit/Cut #	92 A	92B	92C	92D	E	F	G	H
Landscape position (.1940)	R	R	R	R				
Slope % (.1940)	3	4	4	5				
H1 depth (.1943)	0-5	0-7	0-5	0-8				
H1 texture (.1941)	scl	scl	scl	scl				
H1 consistence (.1941)	fr	fr	fr	fr				
H1 structure (.1941)	gr	gr	gr	gr				
H1 mineralogy (.1941)	se	se	se	se				
H2 depth (.1943)	5-30	7-48	5-31	8-29				
H2 texture (.1941)	c	c	c	c				
H2 consistence (.1941)	fi	fi	fi	fi				
H2 structure (.1941)	sbk	sbk	sbk	sbk				
H3 depth (.1943)	30-43		31-41	29-43				
H3 texture (.1941)	c		c	c				
H3 consistence (.1941)	fi		fi	fi				
H3 structure (.1941)	sbk		sbk	sbk				
H3 mineralogy (.1941)	se		se	se				
H4 depth (.1943)			41"	43"				
H4 texture (.1941)			SAP	SAP				
H4 consistence (.1941)								
H4 structure (.1941)								
H4 mineralogy (.1941)								
Soil wetness (.1942)								
Saprolite (.1941/.1956)								
Notes:	x	x	x	x-2				
Usable soil depth	48"	48"	48"	41"				
Profile Class	PS	PS	PS	PS				
LTAR (.1955)	.25	.275	.25	.25				
Evaluation Date	5-31-23	5-31-23	6-25-23	6-25-23				

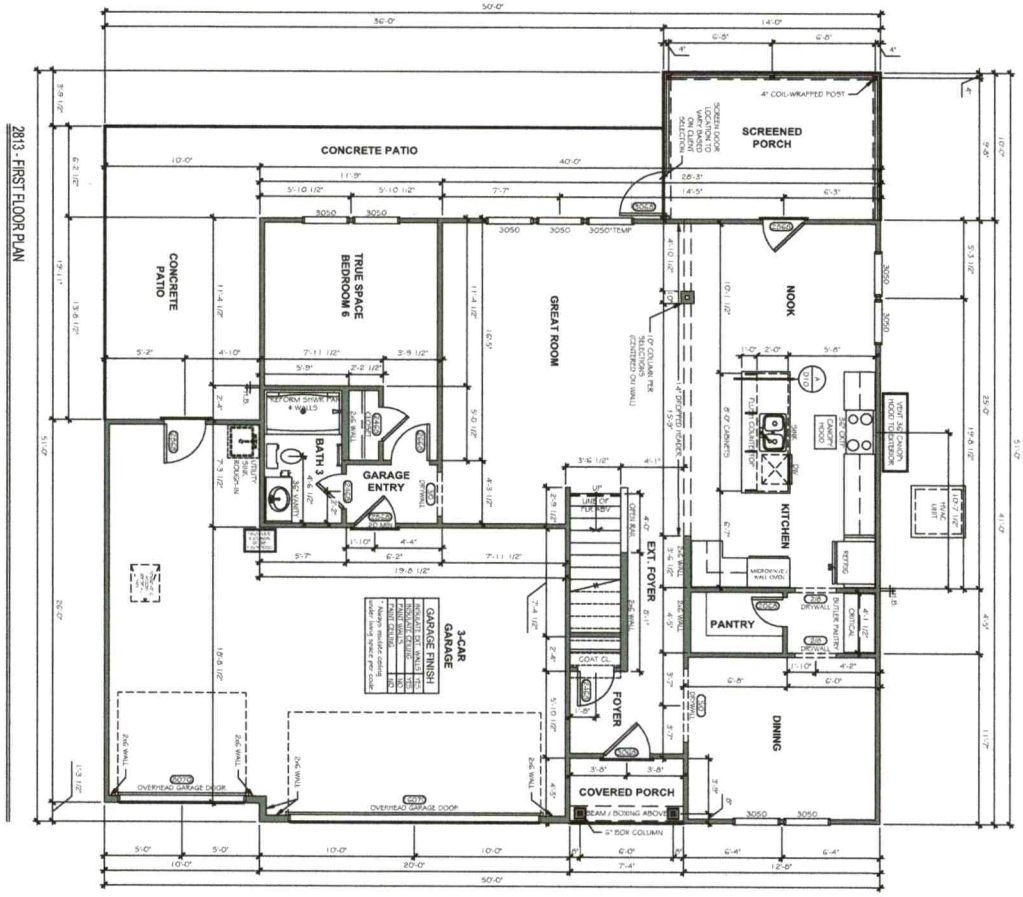
DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	5	5
System Type(s)	IIIb	IIIb
Site LTAR	.25	.25

OTHER FACTORS (.1946): ____
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: Alan Clapp, LSS, REHS
OTHER(S) PRESENT: KIP LED BETTER

COMMENTS:
x- Slope correction (inches) * reclassified provisionally suitable using .1955, .1956 & .1970

Updated February 2014

Lot: 92



SHEET:	A2.1
PREPARED BY:	SETH
DATE:	3-26-24
SCALE:	1/8"=1'-0"
REVIEWED BY:	CHUCK

Copyright True Homes L.L.C. All rights reserved. Unauthorized use, duplication, copying, sale, rental, licensing, or any other portion thereof, of the plans depicted hereon is strictly prohibited.

KIPLING
2813

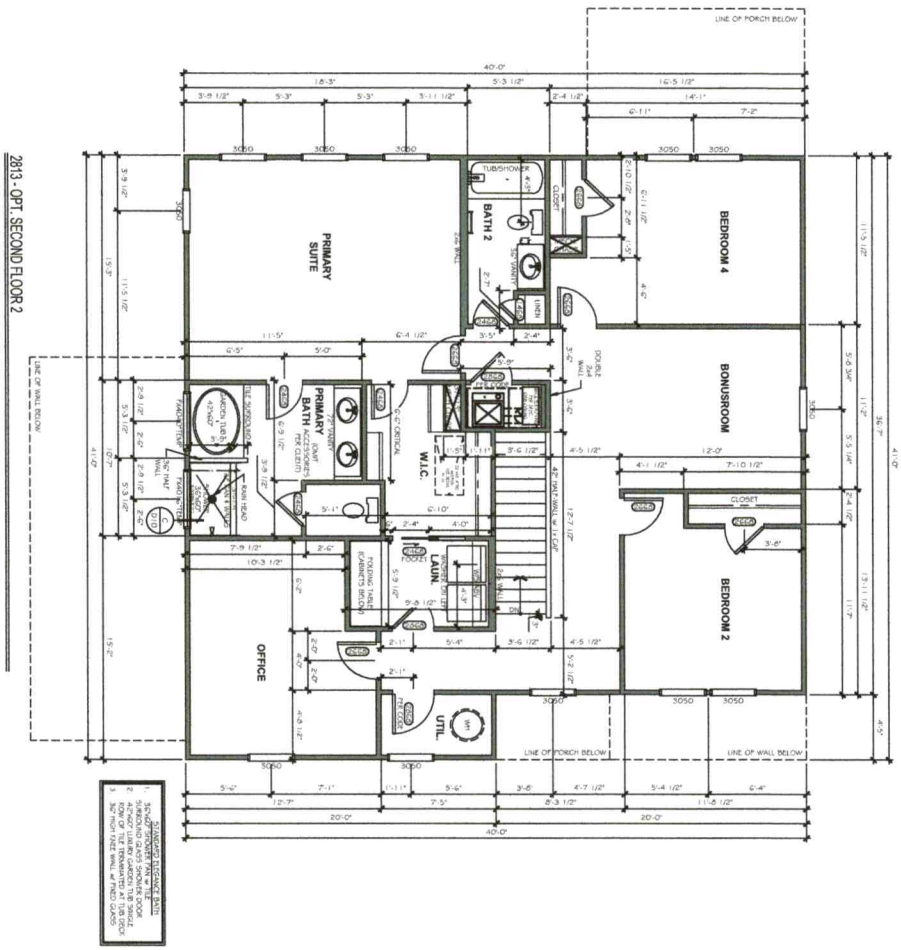
IREDELL

WHEATFIELD ESTATES

LOT# 92

TrueHomes
IT'S ALL ABOUT U
2649 Brekonridge Centre Dr.
Suite 104
Monroe, N.C. 28110
704-271-1191

2813 - OPT. SECOND FLOOR 2



Copyright: This home(s) is/are copyrighted and all rights reserved. The duplication, reproduction, modification, sale or other distribution or use of these drawings and/or specifications without the express written consent of Nelson Homes is strictly prohibited.

PREPARED BY:	SETH
DATE:	3-28-24
SCALE:	1/8"=1'-0"
REVIEWED BY:	CHUCK

SHEET: A2.2

KIPLING
2813

IREDELL

WHEATFIELD ESTATES

LOT# 92

TrueHomes
IT'S ALL ABOUT U
2649 Brekonridge Centre Dr.
Suite 104
Monroe, N.C. 28110
704-271-1191