



NC DEPARTMENT OF HEALTH AND HUMAN SERVICES

ROY COOPER • Governor
KODY H. KINSLEY • Secretary
MARK BENTON • 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

Please check one of the following:

- New Construction Expansion System Relocation Change of Use Repair
5 Year Expiration Requested (site plan provided)
Non-Expiring Permit Requested (plat provided, as defined in G.S. 130A-334(7a))

LOT 28

Property Owner Name: Clayton Properties Group
Property Owner Mailing Address: 2521 Schieffelin Rd., Suite 116, Apex, NC 27502
Property Owner Phone Number: 919-548-9381
Property Owner Email Address: MBURBANO2MUNGO.COM

Applicant Name: Same
Applicant Mailing Address:
Applicant Phone Number:
Applicant Email Address:

Does the property include, or is subject to, any of the following:

- Yes No Previously identified jurisdictional wetlands
Yes No Existing or proposed easements, rights-of-way, encroachments, or other areas subject to legal restrictions
Yes No Approval by other public agencies

A site plan or plat is required, OR the site sketch submitted from the LSS/AOWE, must include the following:
(A) existing and proposed facilities, structures, appurtenances, and wastewater systems
(B) proposed wastewater system showing setbacks to property line(s) or other fixed reference point(s)
(C) existing and proposed vehicular traffic areas
(D) existing and proposed water supplies, wells, springs, and water lines; and
(E) surface water, drainage features, and all existing and proposed artificial drainage, as applicable.

Requesting DHHS review: Yes No

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: Date:

Owner's Signature: Date:

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES • DIVISION OF PUBLIC HEALTH

LOCATION: 5605 Six Forks Road, Building 3, Raleigh, NC 27609
MAILING ADDRESS: 1632 Mail Service Center, Raleigh, NC 27699-1632
www.ncdhhs.gov • TEL: 919-707-5854 • FAX: 919-845-3972

AN EQUAL OPPORTUNITY / AFFIRMATIVE ACTION EMPLOYER

Permit/File #: _____



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: [] (a2) Improvement Permit [] (a2) Construction Authorization [] Fee \$ _____

IMPROVEMENT PERMIT FOR G.S. 130A-335(a2)

County: Harnett
PIN/Lot Identifier: 0681-44-2483
Issued To: Clayton Properties Group, 2521 Schieffelin Rd., Suite 116, Apex, NC 27502
Property Location: 132 Sagamore Avenue, Angier
Subdivision (if applicable) Cambridge Reserve Lot #: 28 Block: Section:
LSS Report Provided: Yes [x] No []
If yes, name and license number of LSS: John Kase #1323
New [x] Expansion [] System Relocation [] Change of Use []
Facility Type: Single Family Residence
Number of bedrooms: 3 Number of Occupants: <6 Other:
Design Wastewater Strength: [x] Domestic [] High Strength [] Industrial Process Wastewater
Proposed Design Daily Flow: 360 GPD Proposed LTAR (Initial): 0.275 Proposed LTAR (Repair): 0.275
Proposed Wastewater System Type*: Illb-Pump to 25% reduction Accepted System (Initial) Pump Required: [x] Yes [] No [x] May be required
Proposed Wastewater System Type*: Illb-Pump to 25% reduction Accepted System (Repair) Pump Required: [x] Yes [] No [x] 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): [x] Yes [] 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)*: 34 Usable Depth to LC (Repair)*: 34 * Limiting Condition
Max. Trench Depth (Initial)*: 20 Max. Trench Depth (Repair)*: 20 * 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:
Install as per detail sheet and map. Do not disturb, compact, rut or cut any soil within the septic drainfield area. Ensure 6 inches approved fill cover is maintained over system after installation.

Licensed Soil Scientist Print Name: John Kase
Licensed Soil Scientist Signature: [Signature] Date: 2/19/2025

The LSS evaluation is being submitted pursuant to and meets the requirements of G.S. 130A-335(a2).
See attached site sketch



This Section for Local Health Department Use Only

Initial submittal received: _____ by _____
Date 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: _____ Date: _____

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: _____

See attached site sketch

Re-submittal of Improvement Permit

LHD USE ONLY: This IP resubmittal received: _____ by _____
Date *Initials*

The following items are being resubmitted pursuant to G.S. 130A-335(a3) for issuance of the Improvement Permit:

I, _____ hereby attest that the information required to be included with this re-submittal
Licensed Soil Scientist (Print Name)
is accurate and complete to the best of my knowledge and that the proposed Improvement Permit meets all applicable federal, State, and local laws, regulations, rules, and ordinances.

Signature of Licensed Soil Scientist *Date*

The section below is for Local Health Department use after submittal of items noted as missing above.

LHD Follow-up Completeness Review of Improvement Permit

The review for completeness of this Improvement Permit re-submittal 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: _____ Date: _____

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

County: Harnett Pre-Construction Conference Required: Yes No

PIN/Lot Identifier: 0681-44-2483

Issued To: Clayton Properties Group, 2521 Schieffelin Rd., Suite 116, Apex, NC 27502

Property Location: 132 Sagamore Avenue, Angier

AOWE/PE Plans/Evaluations Provided: Yes No If yes, name and license number of AOWE/PE: John Kase #10060E

Facility Type: Single Family Residence

Number of bedrooms: 3 Number of Occupants: <6 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* IIIb- Pump to 25% Reduction Accepted System (Initial) IIIb-Pump to 25% Reduction Accepted System (Repair)

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

Design Daily Flow: 360 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: 330 feet Trench/Bed Spacing: 9 feet on center

Trench/Bed Width: 36 inches LTAR: 0.275 gpd/ft² Usable Depth to LC (Initial)*: 34 ^{*Limiting condition}

Soil Cover: 6 inches Slope Corrected Maximum Trench/Bed Depth*: 20 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: 11.87 ft. TDH vs. 21.33 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: Owner to maintain wastewater system in accordance with rule .1301

Permit conditions:
Install as per detail sheet and map. Do not disturb, compact, rut or cut any soil within the septic drainfield area.
Ensure 6 inches approved soil fill cover over system after installation and maintained.
No changes may be made to the septic system design without approval of the AOWE.

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: John Kase

AOWE/PE Signature: [Signature]

Date: 2/19/2025

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

See attached site sketch



This Section for Local Health Department Use Only

Initial submittal received: _____ by _____
Date 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: _____ Date of Issuance: _____

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: _____

See attached site sketch

Re-submittal of Construction Authorization

LHD USE ONLY: This CA resubmittal received: _____ by _____
Date Initials

The following items are being resubmitted pursuant to G.S. 130A-335(a5) for issuance of the Construction Authorization:

I, _____ hereby attest that the information required to be included with this re-submittal
Authorized Onsite Wastewater Evaluator (Print Name)
 is accurate and complete to the best of my knowledge and that the proposed Construction Authorization meets all applicable federal, State, and local laws, regulations, rules, and ordinances.

Signature of Authorized On-Site Wastewater Evaluator _____
Date

The section below is for Local Health Department use after submittal of items noted as missing above.

LHD Follow-up Completeness Review of Construction Authorization

The review for completeness of this Construction Authorization re-submittal 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: _____ Date: _____

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

County: Harnett

PIN/Lot Identifier: 0681-44-2483

Issued To: Clayton Properties Group, 2521 Schieffelin Rd., Suite 116, Apex, NC 27502

Additional Improvement Permit Conditions:

See attached detail sheet.

Additional Construction Authorization Conditions:

See attached detail sheet.

Southeastern Soil & Environmental Associates, Inc.

P.O. Box 9321
Fayetteville, NC 28311
Phone/Fax (910) 822-4540
Email mike@southeasternsoil.com

February 19, 2025

Mr. Mateo Burbano
Clayton Properties Group
2521 Schieffelin Rd., Suite 116, Apex, NC 27502

Re: Soil/site evaluation for subsurface waste disposal (GS 130A-335(A2)/SL 2022-11), 132 Sagamore Avenue, Angier, NC 27501, Lot 28, Cambridge Reserve Subdivision, Harnett County, North Carolina

Dear Mr. Burbano,

A soil/site evaluation has been conducted on the aforementioned property at your request. The purpose of the investigation was to determine if soils were suitable or provisionally suitable for a subsurface waste disposal system (conventional, accepted and innovative) to serve a proposed single-family residence (3-bedroom home). All ratings and determinations were made in accordance with "Laws and Rules for Wastewater Treatment and Dispersal Systems, 15A NCAC 18E". **This LSS evaluation is being submitted to meet the requirements of GS 130A-335(a2)/SL 2022-11.**

The soil evaluation was completed on February 18, 2025. Hand auger borings were advanced under moist soil conditions. The site essentially lies on a linear slope landscape (1% slope). Soil borings conducted in most of this area consisted of 10 or more inches of loamy sand/sandy loam underlain by clay loam and clay soils to 48 or more inches below the soil surface. Soil wetness and/or parent material (greater than 50%) was not observed shallower than 34 inches below the soil surface (initial and repair system). All other soil characteristics were suitable to at least 48 inches.

Based on soil borings and site conditions, the site would be designated **Suitable** for a gravity distribution to accepted trench subsurface waste disposal drainfield (0.275 gal/day/ft² LTAR; initial system). There is enough suitable soil area to allow for a gravity distribution to accepted subsurface septic system repair (0.275 gal/day/ft²). A map showing the approximate location of the site and proposed septic layout accompanies this report. **[Note: No grading, rutting or other soil disturbance can occur in or**

near the proposed septic area. Any grading can alter the findings of this report and render the site unusable. As such, we recommend the builder protect the proposed septic areas with rope, flagging, fencing, etc.]

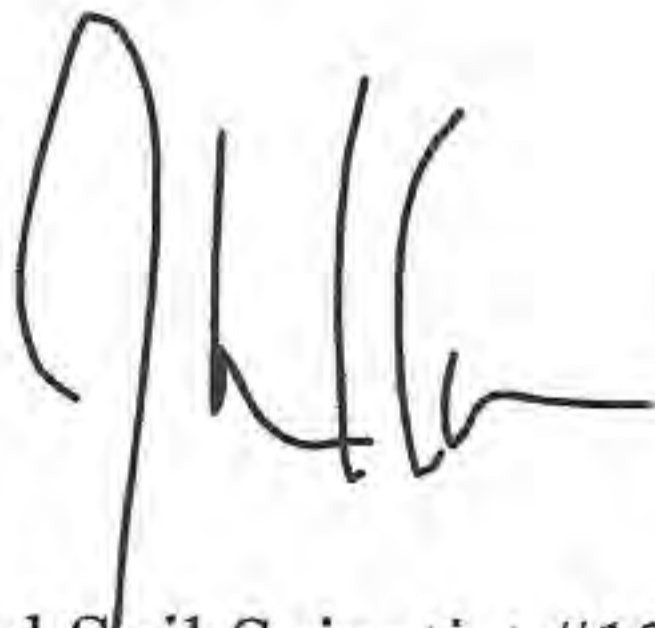
Design Summary

- Initial System-Pump to Pressure Manifold with Accepted trench product.
- 360 gal/day flow rate (3BR)
- Initial System 0.275 gpd/ft² LTAR
- 330 total linear feet, (see septic layout)
- 20" maximum trench depth (measure on downhill side of trench)
- 1000-gallon septic and 1000-gallon pump tank (**certified watertight**)
- Repair System- Pump to Pressure Manifold with Accepted trench product.
- 330 total linear feet, (see septic layout)
- 0.275 gpd/ft² LTAR
- 20" maximum trench depth (measure on downhill side of trench)
- 1000-gallon septic and 1000-gallon pump tank (**certified watertight**)
- No grading, rutting or filling in septic areas
- No vertical cuts (greater than 2') within 15' of septic lines/areas
- Keep tanks and drainlines 10' from property lines
- Keep supply line 5 or more feet from property lines
- **Install in dry soil conditions**
- Maintain natural contours when clearing the lots
- Direct gutter water away from septic system

During site construction, it is important not to impact and suitable or provisionally suitable soil areas with activities such as excavation or filling. Only the vegetation should be removed in the areas of the proposed septic drainfields to prevent any disturbance of naturally occurring soil. We recommend all lot clearing activity be delayed until the local health department issues a permit.

To the extent possible, we have identified the soil types that will impact the flow of wastewater on this site and have provided a professional opinion as to the best septic system layout. This report does not guarantee that the proposed septic system will properly function for any specific length of time.

Sincerely,



John Kase
NC Licensed Soil Scientist #1323
NC Authorized Wastewater Evaluator #10060E
NC REHS #1785



SOUTHEASTERN SOIL & ENVIRONMENTAL ASSOC., INC.

PROPOSED SUBSURFACE WASTE DISPOSAL SYSTEM DETAIL SHEET

SUBDIVISION: Cambridge Reserve

LOT 28

INITIAL SYSTEM: Accepted 25% Reduction

REPAIR: Accepted 25% Reduction

DISTRIBUTION: Pressure Manifold

DISTRIBUTION Pressure Manifold

BENCHMARK: 100.0

LOCATION Water Meter Box 3.3

NO. BEDROOMS: 3

LTAR 0.275 gpd/ft²

SEPTIC TANK SIZE 1000 Gallons

PUMP TANK SIZE 1000 Gallons

Initial

<u>LINE</u>	<u>FLAG COLOR</u>	<u>ELEVATION(FT)</u>	<u>LENGTH(FT)</u>
6	Pink	100.1	110
7	Blue	100	110
8	Yellow	99.8	110

Total-330

Repair

2	Yellow	99.2	67
3	Pink	99.3	74
4	Blue	99.5	78
5	Yellow	99.7	124

Total-345

Not Used

1	Blue	99	65
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BY John Kase

DATE 2/18/2025

TYPICAL PROFILE

THERE SHALL BE NO GRADING,

CUTTING, LOGGING OR OTHER SOIL

DISTURBANCE IN SEPTIC AREA

HEALTH DEPARTMENT USE ONLY.

DESIGNS DO NOT GURANTEE FUNCTIONALITY

Initial

0-10	SL GR	VFR/NS/NP
10-22	CL SBK	FR/S/P
22-34	C SBK	FR/S/P
34	SWC 10YR7/2	

Repair

0-12	SL GR	VFR/NS/NP
12-40	C SBK	FR/S/P
40	SWC	10YR7/2

PRELIMINARY PLOT PLAN FOR

MUNGO HOMES

LOT 28, CAMBRIDGE SUBDIVISION

132 SAGAMORE AVENUE

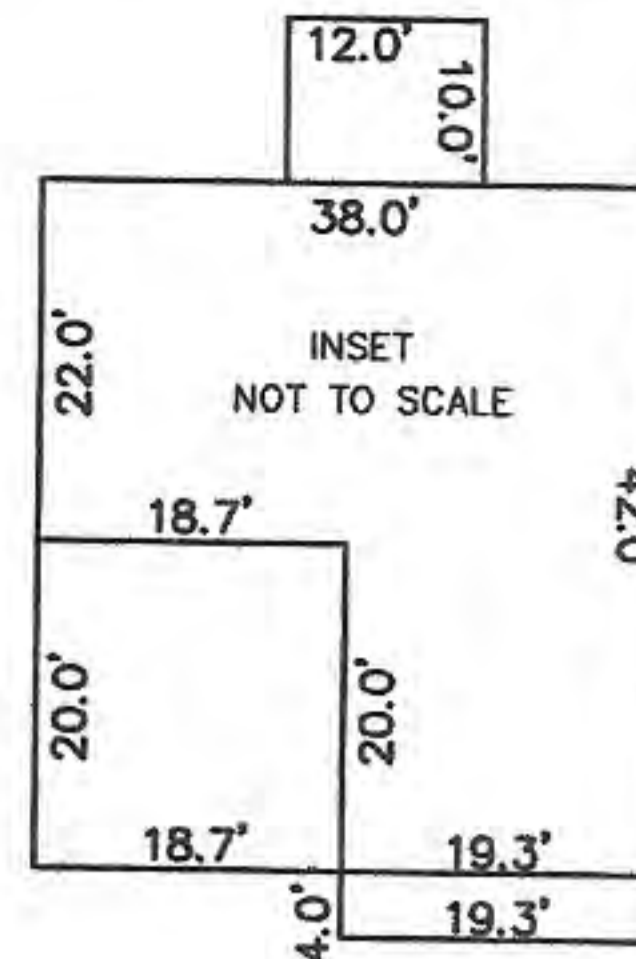
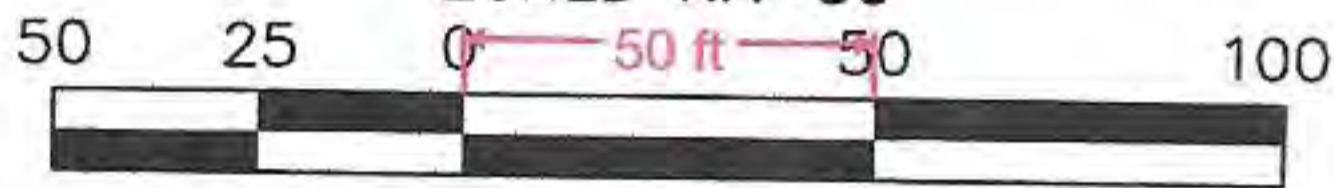
REF: P.B. 2025, PG.7

NEILL'S CREEK TOWNSHIP

HARNETT COUNTY, NORTH CAROLINA

JANUARY 21, 2025

ZONED RA-30

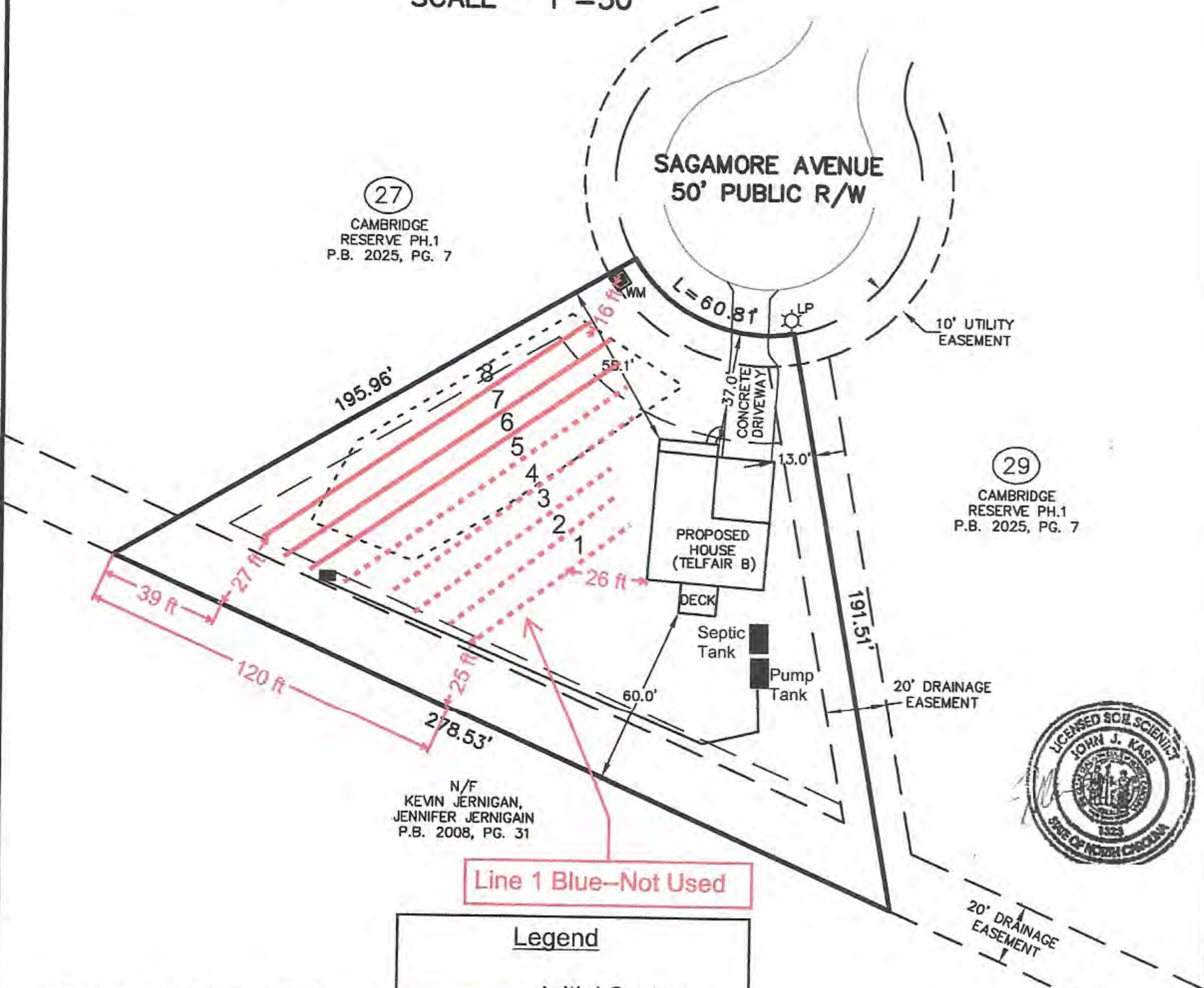


(27)
CAMBRIDGE
RESERVE PH.1
P.B. 2025, PG. 7

SAGAMORE AVENUE
50' PUBLIC R/W

10' UTILITY
EASEMENT

(29)
CAMBRIDGE
RESERVE PH.1
P.B. 2025, PG. 7



N/F
KEVIN JERNIGAN,
JENNIFER JERNIGAIN
P.B. 2008, PG. 31



Line 1 Blue--Not Used

Legend

- Initial System
- - - - - Repair System

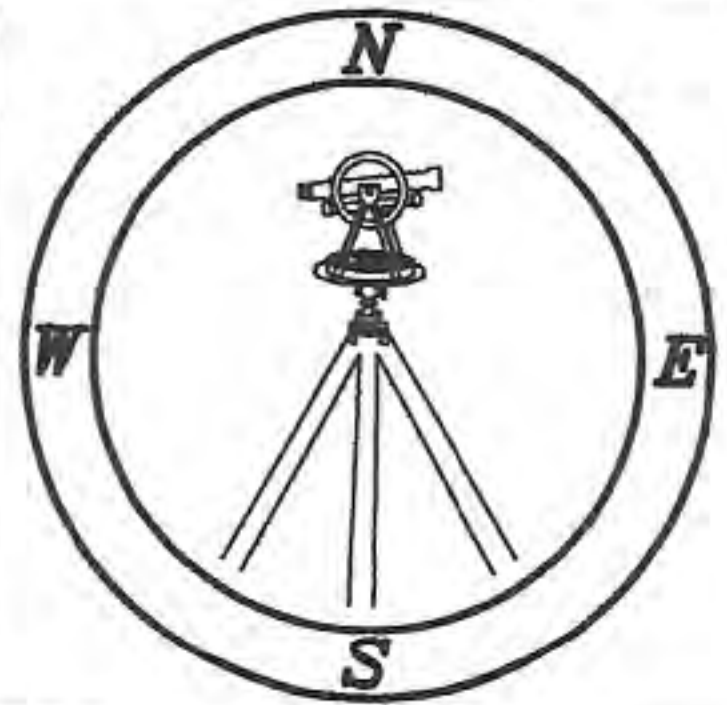
IMPERVIOUS SURFACE TABLE

HOUSE	1,673 S.F.
DECK	120 S.F.
DRIVEWAY	621 S.F.
SIDEWALKS	31 S.F.
MISC/UTILITIES	9 S.F.
TOTAL IMPERVIOUS AREA	2,454 S.F.
TOTAL LOT AREA	26,333 S.F.
PERCENTAGE OF IMPERVIOUS AREA	9.31 %

TOTAL CONCRETE & LANDSCAPE

CONCRETE	839 S.F.
LANDSCAPE	21,832 S.F.

THIS SURVEYOR DOES NOT WARRANTY THE ACCURACY OF ARCHITECTURAL DIMENSIONS. THEY ARE TO BE VERIFIED BY THE CONTRACTOR.



CMP
Professional Land Surveyors
C-1525
333 S. White Street
Post Office Box 1253
Wake Forest, N.C. 27588
(919)556-3148

NOTES:
-THIS PLAN DOES NOT REFLECT AN ACTUAL SURVEY. IT IS A PRELIMINARY PLAN AND SHOULD BE USED FOR ITS INTENDED PURPOSE ONLY.
-NOT FOR RECORDATION, CONVEYANCES, OR SALES.

**SOUTHEASTERN SOIL & ENVIRONMENTAL ASSOCIATES, INC.
PRESSURE MANIFOLD DESIGN - REPAIR SYSTEM**

of BDR: 3 Daily Flow: 360 gal/day L.T.A.R.: 0.2750 gal/day/sq.ft

Septic Tank: 1000 gals Pump Tank: 1000 gals Sq. Foot: 1029 System Type: Accepted

Number of Taps: 4 Length of Trenches: 343 ft(See Tap Chart for Details)

Depth of Trenches: 24 in Manifold Length: 42 in

Manifold Diameter: 4in sch 80pvc Tap Configuration: 6 in spacing 1 side(s) of manifold

Supply Line: length: 150 ft Diameter: 2 in sch 40pvc

Friction Loss + Fitting Loss: 5.24 ft(supply line length + 70' for fittings in pump tank)

Design Head: 2 ft Elevation Head: 6.50 ft

Total Head: 13.74 ft Pump to Deliver: 32.20 gals/min at 13.74 ft head

Dosing Volume: 147 gals,

Drawdown: 147 gals divided by 20 gals/in = 7.4 inches

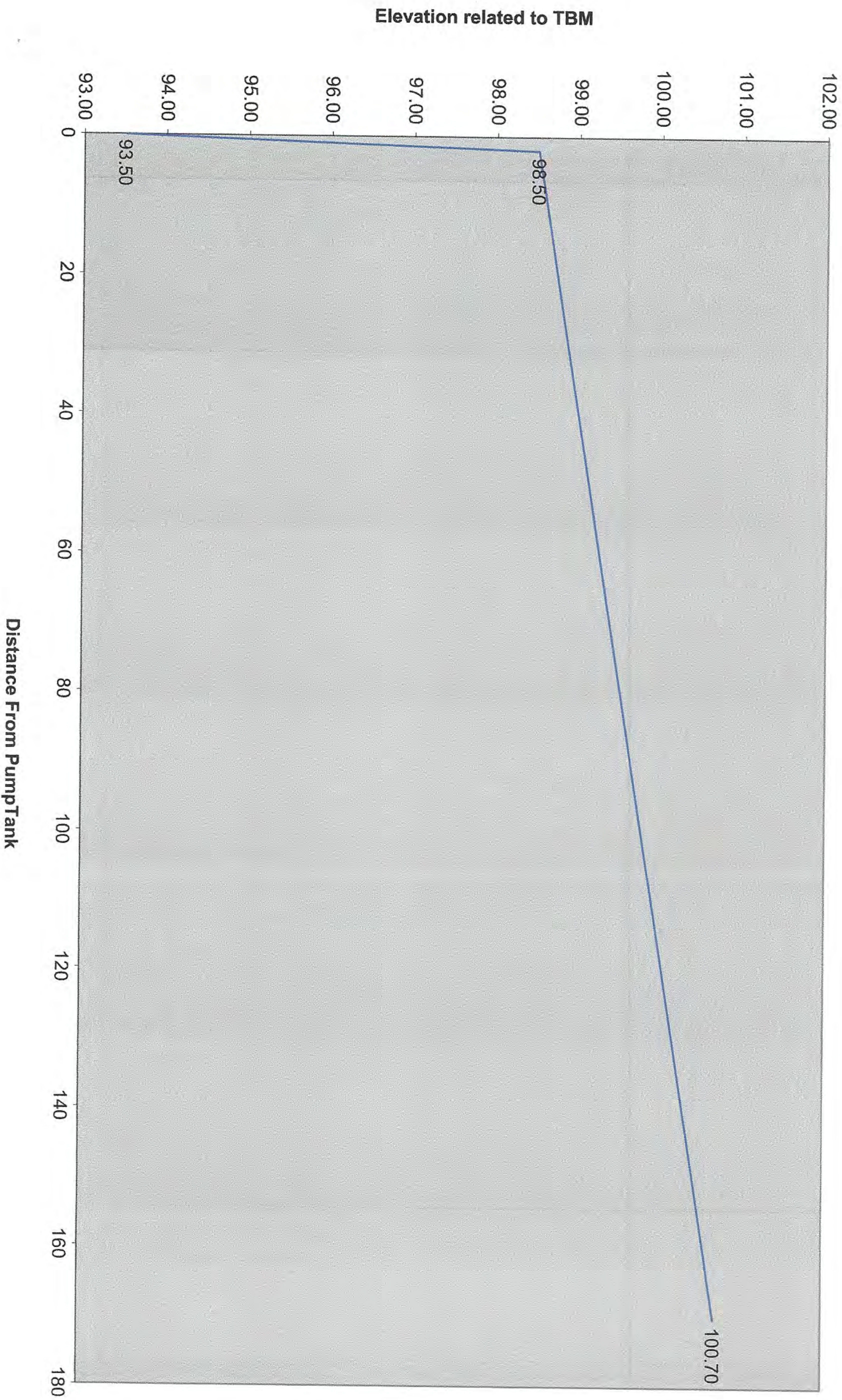
Simplex Control Panel required; elapsed time meter and cycle counter required; Floats to be determined by type of pump tank used. A septic tank filter is required.

TAP CHART

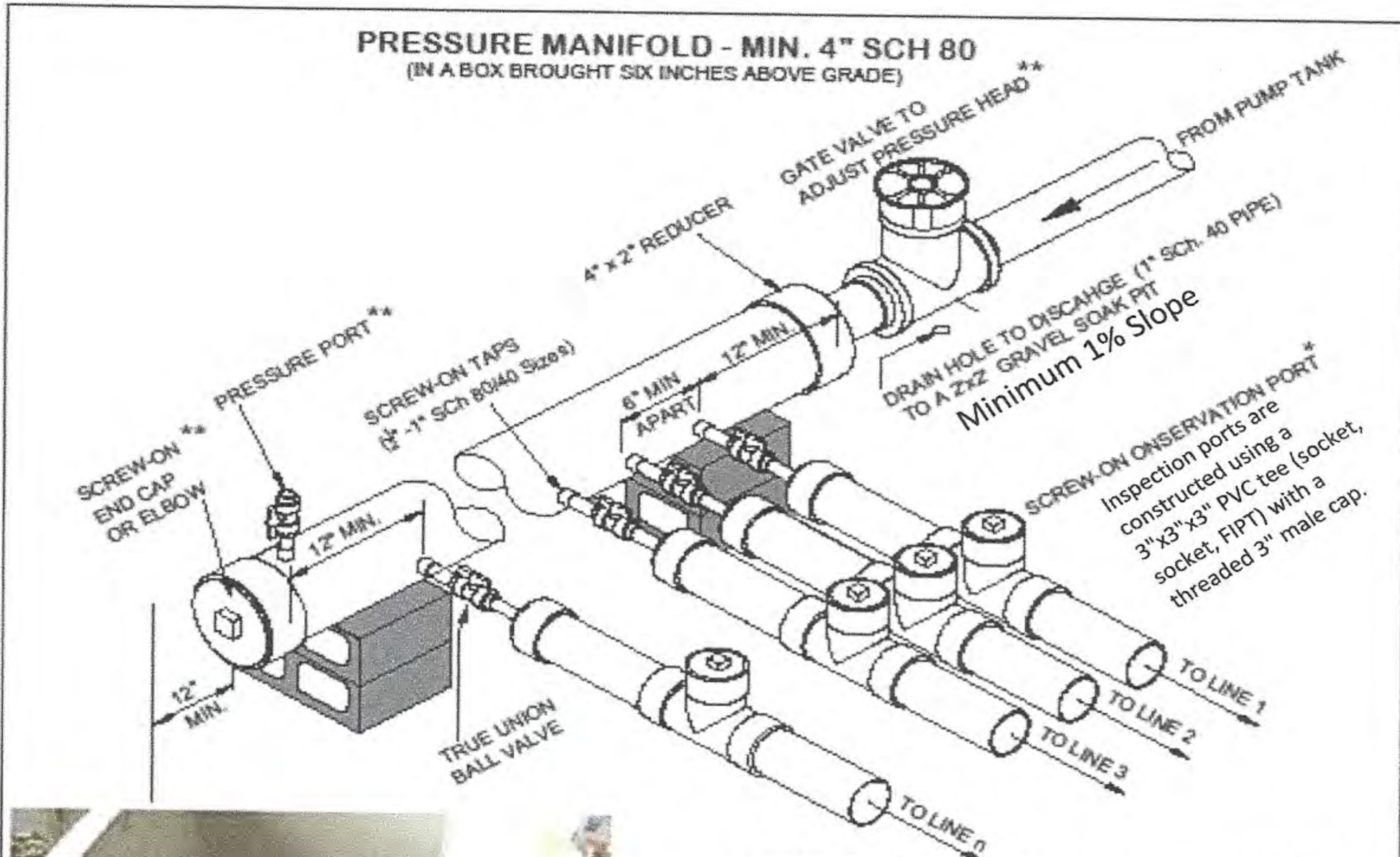
Benchmark <u>3.3</u> is = 100.00 set at							Design Head: <u>2</u>					
Pump tank elev.	line	color	rod read	Elevation	Pump elev.	length	hole size	flow/tap	Manifold elev.	trench area	LINE LTAR	# of Panels (PPBPS)
	2	Yellow	4.30	99.00	67	1/2in SCH 80	5.48	61.27	100.00	201	0.3048	
	3	Pink	4.30	99.00	74	1/2in SCH 40	7.11	79.49		222	0.3581	
	4	Blue	4.10	99.20	78	1/2in SCH 40	7.11	79.49		234	0.3397	
	5	Yellow	3.80	99.50	124	3/4in SCH 40	12.5	139.75		372	0.3757	
				103.30			0	0.00		0	#DIV/0!	
				103.30			0	0.00		0	#DIV/0!	
				103.30			0	0.00		0	#DIV/0!	
				103.30			0	0.00		0	#DIV/0!	
				103.30			0	0.00		0	#DIV/0!	
				103.30			0	0.00		0	#DIV/0!	
				103.30			0	0.00		0	#DIV/0!	
				Total Feet =	343	gal/min =	32.20					
				Feet Required =	327	Velocity =	3.08					
				Des. Flow	360							
				Pump Run=	11.18							
				Tank Gal/IN	20							
				Elev. Head	6.50							
								LTAR =	0.2750			
								(ltar + 5%)	0.2888			
								(ltar w/25% red)	0.3667			
								(ltar + 5%)	0.3850			

Total # of Panels (PPBPS)
 % of Dose Vol. 66
 Dose Volume 147
 Dose Pump Time 4.57
 Drawdown in Inches 7.4
 Comments:

Hydraulic Profile



	Line 1	Line 2	Line 3	Line 4	Line 5	Line 6	Line 7	Line 8	Line 9	Line 10
Taps	1/2in SCH 40	1/2in SCH 40	1/2in SCH 40							
Flow	7.11	7.11	7.11	0	0	0	0	0	0	0



- ** MAY BE LOCATED INSIDE OR OUTSIDE MANIFOLD BOX. WHEN LOCATED OUTSIDE VALVE BOX IS REQUIRED.
- * MAY BE INSIDE BOX OR IF OUTSIDE, BRING 6" ABOVE GRADE

LINE #	TAPS	LENGTH
6	1/2in SCH 40	110
7	1/2in SCH 40	110
8	1/2in SCH 40	110

SOUTHEASTERN SOIL & ENVIRONMENTAL ASSOCIATES, INC.			SOIL/SITE EVALUATION SHEET				Sheet #: 1	
OWNER/APP. NAME: Clayton Properties Group			SUBDIV./LOT#: Cambridge Reserve Lot 28					
LOCATION OF SITE: 132 Sagamore Avenue, Angier			PROPERTY ID #: 0681-44-2483		DATE EVALUATED: 2/17/2025			
COUNTY: Harnett			PROPOSED DESIGN FLOW (.0400): 360 gpd		PROPERTY SIZE: 0.6 acres			
PROPOSED FACILITY: SFR			WATER SUPPLY: Public		WATER SUPPLY SETBACK: 10'			
TYPE OF WASTEWATER: Domestic			EVALUATION METHOD: Auger					
PROFILE #	.0502 LANDSCAPE POSITION/SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY		OTHER PROFILE FACTORS			.0509 PROFILE CLASS & LTAR
			.0503 STRUCTURE/TEXTURE	.0503 CONSISTENCE/MINERALOGY	.0504 SOIL WETNESS/COLOR	.0505 SOIL DEPTH	.0506 SAPRO CLASS	
1	L	0-10	SL/GR	VFR/NS/NP				S-0.275
	1%	10-22	CL/SBKw	FR/S/P				
	.0502(d) SLOPE CORRECTION	22-34	C/SBKm	FR/S/P		Not Observed	Not Observed	
		34	C/SBKm	FR/VS/VP				
	0.40				Not Observed			
2	L	0-11	SL/GR	VFR/NS/NP				S-0.3
	1%	11-20	CL/SBKw	FR/S/P				
	.0502(d) SLOPE CORRECTION	20-42	C/SBKm	FR/S/P		48	N.O.	
		42-48	CL/SBKw	FR/S/P	Not Observed		N.O.	
	0.4"							
3	L	0-12	SL/GR	VFR/NS/NP				S-0.275
	1%	12-22	CL/SBKw	FR/S/P				
	.0502(d) SLOPE CORRECTION	22-34	C/SBKw	FR/S/P			N.O.	
		34	C/SBKw	FR/VS/VP	10YR7/2		N.O.	
	0.4"							
4	L	0-11	SL/GR	VFR/NS/NP				0.275
	1%	11-20	CL/SBKw	FR/S/P				
	.0502(d) SLOPE CORRECTION	20-40	C/SBKw	FR/S/P			N.O.	
		40	C/SBKw	FR/S/P	10YR7/2		N.O.	
	0.4"							
DESCRIPTION:	INITIAL SYSTEM	REPAIR SYSTEM	SITE CLASSIFICATION (.0509):		Suitable			
Available Space	Suitable	Suitable	EVALUATED BY:		John Kase			
System Type(s):	25% Reduction	25% Reduction	OTHER(S) PRESENT:					
Site LTAR:	0.275	0.275						
Maximum Trench	20"	20"						
Saprolite System:	No	No						
Comments:	Trench bottoms depth measure on downslope side of trench..							



SOUTHEASTERN SOIL & ENVIRONMENTAL ASSOCIATES, INC.

SOIL/SITE EVALUATION SHEET

Project #: 0
Sheet #: 2

OWNER/APP. NAME: Clayton Properties Group SUBDIV./LOT# Cambridge Reserve Lot 28
 LOCATION OF SITE : 132 Sagamore Avenue, Angier
 COUNTY: Harnett PROPERTY ID #: 0681-44-2483 DATE EVALUATED: 2/18/2025
 PROPOSED FACILITY: SFR PROPOSED DESIGN FLOW (.400): 360 PROPERTY SIZE 0.6
 WATER SUPPLY: Public WATER SUPPLY SETBACK: 10'

TYPE OF WASTEWATER: Domestic EVALUATION METHOD: Auger

P R O F I L E #	.502 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.503)		OTHER PROFILE FACTORS				PROFILE CLASS & LTAR
			.503 STRUCTURE/ TEXTURE	.503 CONSISTENCE/ MINERALOGY	.504 SOIL WETNESS/ COLOR	.505 SOIL DEPTH	.506 SAPRO CLASS	.507 RESTR HORIZ	
5	L	0-12	SL/GR	VFR/NS/NP	48	S	N.O.	S-0.275	
	1%	12-22	CL/SBKw	FR/S/P					
	.0502(d) SLOPE CORRECTION	22-48	C/SBKw	FR/S/P					
	0.4"			Not observed					
	.0502(d) SLOPE CORRECTION								
	.0502(d) SLOPE CORRECTION								
	.0502(d) SLOPE CORRECTION								

Comments:

Standard Abbreviations

LANDSCAPE POSITION	GROUP	SOIL TEXTURE	CONVENTIONAL LTAR	SAPROLITE	LPP LTAR	MINERALOGY/ CONSISTENCE	STRUCTURE
CC (Concave Slope)	I	S (Sand)	0.8 - 1.2	0.6 - 0.8	0.4 - 0.6	SEXP (Slightly Expansive)	G (Single Grain)
CV (Convex Slope)		LS (Loamy Sand)		0.5 - 0.7		EXP (Expansive)	M (Massive)
D (Drainage Way)	II	SL (Sandy Loam)	0.6 - 0.8	0.4 - 0.6	0.3 - 0.4	MOIST	GR (Granular)
FP (Flood Plain)		L (Loam)		0.2 - 0.4		VFR (Very Friable)	SBK (Subangular Blocky)
FS (Foot Slope)	III	SIL (Silt Loam)	0.3 - 0.6	0.1 - 0.3	0.15 - 0.3	FR (Friable)	WSBK (Weak Subangular Blocky)
H (Head Slope)		SCL (Sandy Clay Loam)		0.05 - 0.15*		FR (Friable)	ABK (Angular Blocky)
L (Linear Slope)		CL (Clay Loam)		N/A		EFL (Extremely Firm)	PL (Platy)
N (Nose Slope)		SiCL (Silty Clay Loam)				WET	PR (Prismatic)
R (Ridge/Summit)	IV	Si (Silt)	0.1 - 0.4	N/A	0.05 - 0.2	NS (Non-Stick)	MA-RCF (Massive Rock Controlled Fabric)
S (Shoulder Slope)		SC (Sandy Clay)				NP (Non-plastic)	AR (Auger Refusal)
T (Terrace)	O (Organic)	SIC (Silty Clay)	N/A	N/A	N/A	SS (Slightly Sticky)	OTHER
TS (Toe Slope)		C (Clay)				SP (Slightly Plastic)	NO (Not Observed)
						P (Plastic)	
						VP (Very Plastic)	
NOTES:							
SAPROLITE*	*Sandy clay loam sapsrolite can only be used with advanced pretreatment in accordance with 15A NCAC 18E .1200.						
HORIZON DEPTH	In inches below natural soil surface						
DEPTH OF FILL	In inches from land surface						
RESTRICTIVE HORIZON	Thickness and depth from land surface						
SAPROLITE	S (suitable) or U (unsuitable)						
SOIL WETNESS	Inches from land surface to free water or inches from land surface to soil colors with chroma 2 or less - record Munsell color chip designation						
CLASSIFICATION	S (Suitable) or U (Unsuitable)						
Long-term Acceptance Rate (LTAR): gal/day/ft2							

PRELIMINARY PLOT PLAN FOR

MUNGO HOMES

LOT 28, CAMBRIDGE SUBDIVISION

132 SAGAMORE AVENUE

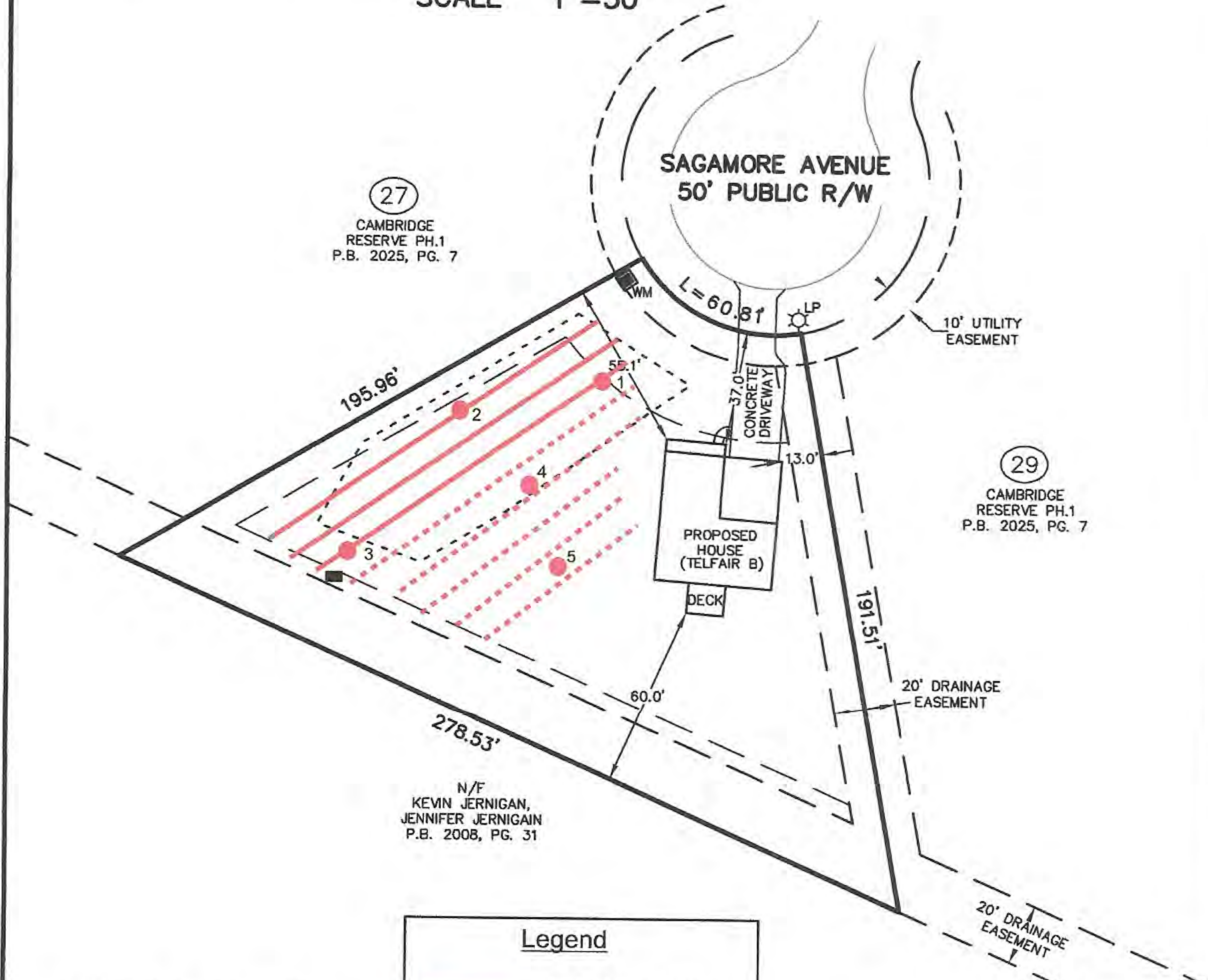
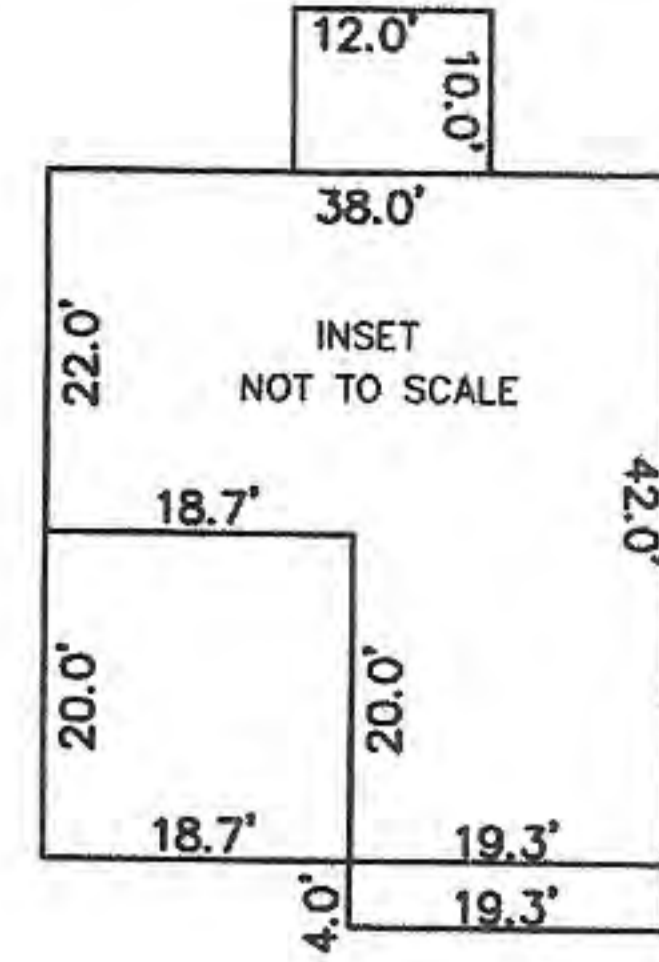
REF: P.B. 2025, PG.7

NEILL'S CREEK TOWNSHIP

HARNETT COUNTY, NORTH CAROLINA

JANUARY 21, 2025

ZONED RA-30



(27)
CAMBRIDGE
RESERVE PH.1
P.B. 2025, PG. 7

(29)
CAMBRIDGE
RESERVE PH.1
P.B. 2025, PG. 7

N/F
KEVIN JERNIGAN,
JENNIFER JERNIGAN
P.B. 2008, PG. 31

Legend

— Initial System

..... Repair System

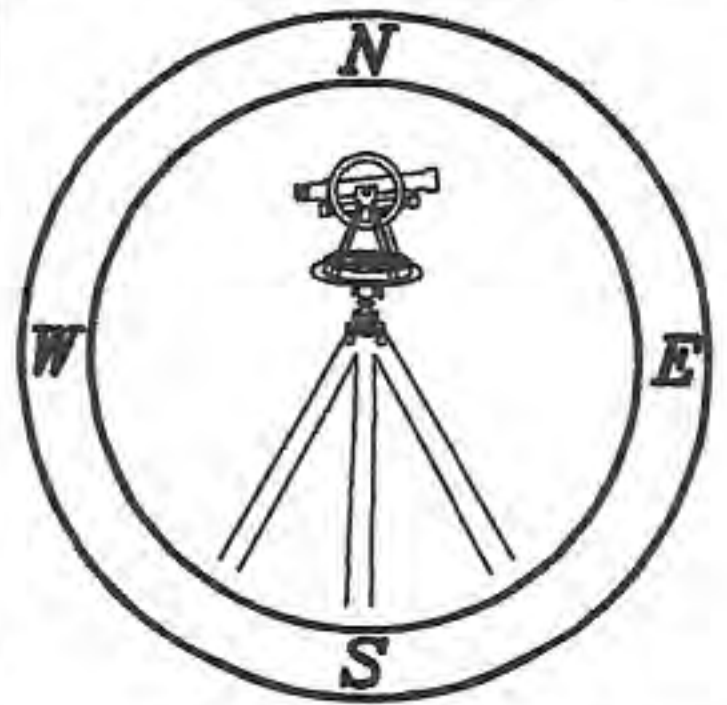
IMPERVIOUS SURFACE TABLE

HOUSE	1,673 S.F.
DECK	120 S.F.
DRIVEWAY	621 S.F.
SIDEWALKS	31 S.F.
MISC/UTILITIES	9 S.F.
TOTAL IMPERVIOUS AREA	2,454 S.F.
TOTAL LOT AREA	26,333 S.F.
PERCENTAGE OF IMPERVIOUS AREA	9.31 %

TOTAL CONCRETE & LANDSCAPE

CONCRETE	839 S.F.
LANDSCAPE	21,832 S.F.

THIS SURVEYOR DOES NOT WARRANTY THE ACCURACY OF ARCHITECTURAL DIMENSIONS. THEY ARE TO BE VERIFIED BY THE CONTRACTOR.



CMP

Professional Land Surveyors
C-1525

333 S. White Street
Post Office Box 1253
Wake Forest, N.C. 27588
(919)556-3148

NOTES:
-THIS PLAN DOES NOT REFLECT AN ACTUAL SURVEY. IT IS A PRELIMINARY PLAN AND SHOULD BE USED FOR ITS INTENDED PURPOSE ONLY.
-NOT FOR RECORDATION, CONVEYANCES, OR SALES.