Groundwater & Wastewater Services: Septic Project File & D

GWS File #:	10498
WASPS App #:	12996
Primary ES assigned to project:	Heather Ray
Secondary ES assigned to project:	
Project Type:	New System
Site Evaluation Information: .1939(a)(1) - Topography and Landscape Position Recorded?	Yes
Site Evaluation Information: .1940(a-g) - Slope % Recorded?	Yes
Site Evaluation Information: .1939(a)(2) - Texture Class Recorded?	Yes
Site Evaluation Information: .1939(a)(2) - Structure Type Recorded?	Yes
Site Evaluation Information: .1939 (a)(2) - Consistence Recorded?	Yes
Site Evaluation Information: .1939(a)(2) - Mineralogy Recorded?	Yes
Site Evaluation Information: .1939(a)(3) - Soil Wetness Condition Recorded?	Yes
Site Evaluation Information: .1939(a)(4) - Soil Depth to Rock or Parent Material Recorded when Encountered?	Yes
Site Evaluation Information: .1939(a)(5) - Depth to Restrictive Horizons Recorded when Encountered?	Yes
Site Evaluation Information: .1939(a)(6) - Sufficient Available Space Recorded?	Yes
Site Evaluation Information: .1937(m) - Are the Profile Locations Shown?	Yes
Site Evaluation Information: .1939(a) - Are the S/PS Profiles in system & in repair area?	Yes
Site Evaluation Information: .1939(d), .1955, .1956, .1957 - LTAR	Yes
Improvement Permit/Construction Authorization: .1937(g), 130A-336(a) - Proposed System Type stated - Initial	No
Improvement Permit/Construction Authorization: .1945(b) - Proposed System Type stated - Repair	No
Improvement Permit/Construction Authorization: 130A-336(a)(3) - System location identifiable by setbacks - Initial	Yes
Improvement Permit/Construction Authorization: .1937(g), .1945(b) - System components shown - Initial	Yes
Information Permit/Construction Authorization: .1945(b) - Repair area shown	Yes
Improvement Permit/Construction Authorization: .1937(f)(g) - Does System design match facility, flow & WW characteristics?	Yes
Improvement Permit/Construction Authorization: .1937(f)(g) - Is System design consistent with soil/site conditions?	Yes
Improvement Permit/Construction Authorization: .1937(f)(g) - Is the System located in the approved area?	Yes
Improvement Permit/Construction Authorization: 130A-336(a) - Number of Bedrooms, employees, seats, etc. indicated?	Yes
Improvement Permit/Construction Authorization: .1937 (g) - Trench depth correct?	Yes
Improvement Permit/Construction Authorization: .1937(g) - Trench width correct?	Yes
Improvement Permit/Construction Authorization: .19379(g) - Trench length correct?	Yes

Ok To Release
Occupancy Hold.
Not sure where the
Checklist sheet is?

Improvement Permit/Construction Authorization: 130A-336(a)(1) - Proposed/existing well shown?	Yes
Improvement Permit/Construction Authorization: 130A-336(a)(1) - Property line lengths shown?	Yes
Improvement Permit/Construction Authorization: 130A-336(a) - Facility/appurtenance setbacks shown from fixed points?	Yes
Corrections/modifications needed?	Yes
Comments:	Change the initial system to type IIIg and the repair to Type IIIe
IA issued date:	
OP Issued date:	
Review performed by:	Michelone
Date performed:	5/4/2022

Created at 5/4/2022 12:49 PM by Michelone, Jeremy
Last modified at 5/4/2022 12:49 PM by Michelone, Jeremy

Close

10498
#12996

MECKLENBURG COUNTY
HEALTH DEPARTMENT

24 MAR '22 AM 8:53

APPLICATION FOR A RESIDENTIAL SITE IMPROVEMENT PERMIT/ CONSTRUCTION AUTHORIZATION FOR AN ON-SITE WASTEWATER SYSTEM, NEW WELL INSTALLATION, OR REPAIR OF EXISTING WELL

1. SEPTIC / TYPE APPLICATION: ○ N/A ☒ NEW SYSTEM ○ ALTERATION ○ REPAIR ○ MODIFIED PLOT PLAN

2. WELL / TYPE APPLICATION: ○ N/A ☒ NEW WELL ○ MAJOR REPAIR ○ ABANDONMENT

3. JOB LOCATION INFORMATION:

TAX PARCEL NUMBER: 01501106
STREET ADDRESS: 6210 Gilead Rd
CITY: Huntersville
STATE: NC ZIP: 28078
SUBDIVISION NAME: —
LOT #: _____ LOT SIZE (acres): _____
TOWNSHIP:

☒ MECKLENBURG ○ CORNELIUS ○ HUNTERSVILLE
○ DAVIDSON ○ CHARLOTTE ○ PINEVILLE
○ MATTHEWS ○ MINT HILL

4. BUILDING INFORMATION:

BUILDING TYPE:

○ SINGLE MOBILE HOME ○ MODULAR HOME
○ DOUBLE WIDE ○ MULTIPLE FAMILY
☒ HOUSE ○ OTHER _____
HEATED SQUARE FOOTAGE: 3412
NUMBER OF BEDROOMS: 4
NUMBER OF OCCUPANTS: 4
FOUNDATION TYPE:
☒ CONCRETE SLAB ○ BASEMENT WITH PLUMBING
○ CRAWL SPACE ○ BASEMENT WITH NO PLUMBING

5. IF PLANNING TO EXPAND OR ALTER THE EXISTING SEPTIC SYSTEM PLEASE COMPLETE THE FOLLOWING SECTION: ☒ N/A

NUMBER OF BEDROOMS TO BE ADDED: _____ NUMBER OF ADDITIONAL OCCUPANTS IN THE RESIDENCE: _____

6. WATER SUPPLY: ○ MUNICIPAL ● PRIVATE WELL ○ PUBLIC WELL ○ SHARED WELL ○ OTHER _____

7. PROPOSED USE OF WELL: ○ N/A ○ IRRIGATION ● POTABLE (DRINKING WATER) ○ OTHER _____

8. PLEASE INDICATE AND RANK DESIRED SEPTIC SYSTEM TYPE(S) IN ORDER OF PREFERENCE (1-MOST DESIRED 5-LEAST DESIRED):

☐ N/A ☑ ANY TYPE ☐ CONVENTIONAL ☐ ACCEPTED ☐ INNOVATIVE ☐ ALTERNATIVE ☐ OTHER _____

8A. RANK: ___ ___ ___ ___ ___

9. DO ANY OF THE FOLLOWING APPLY TO THE PROPERTY IN QUESTION? IF "YES" PLEASE ATTACH SUPPORTING DOCUMENTATION.

BURIED CABLES, LANDFILLS, STUMPHOLES	○ YES ☒ NO	GRADING/SOIL REMOVAL PERFORMED	○ YES ☒ NO		
EXISTING WASTEWATER (SEPTIC) SYSTEMS	○ YES ☒ NO	JURISDICTIONAL WETLANDS	○ YES ☒ NO		
WELLS, SPRINGS, OR WATER LINES	○ YES ☒ NO	APPROVAL REQUIRED BY ANY OTHER PUBLIC AGENCY	○ YES ☒ NO		
EASEMENTS OR RIGHT-OF-WAYS	○ YES ☒ NO	WASTEWATER OTHER THAN DOMESTIC SEWAGE	○ YES ☒ NO		
CHEMICAL/PETROLEUM STORAGE TANKS	○ YES ☒ NO	KNOWN UNDERGROUND CONTAMINATION	○ YES ☒ NO		
WASTE STORAGE	○ YES ☒ NO	GROUNDWATER USE RESTRICTIONS/VARIANCES	○ YES ☒ NO		

10. WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED? 11-8-13 ☐ UNKNOWN

11. WHAT IS THE ANTICIPATED CLOSING DATE FOR THIS PROPERTY? _____ ☒ N/A

12. PROPERTY OWNER:

NAME: Randy D Beard
ADDRESS: 6116 Gilead Rd
CITY: Huntersville
STATE: NC ZIP: 28078
WORK PHONE: _____
MOBILE PHONE: 704-519-8204
FAX: _____
E-MAIL: rdbunc@yahoo.com

13. OWNER'S LEGAL REPRESENTATIVE, IF APPLICABLE:

NAME: _____
ADDRESS: _____
CITY: _____
STATE: _____ ZIP: _____
WORK PHONE: _____
MOBILE PHONE: _____
FAX: _____
E-MAIL: _____

14. SEPTIC SYSTEM PERMIT APPLICATION:

If the information in this application is falsified, changed, or the site is altered, then the Improvement Permit and Authorization to Construct shall become invalid. I have read this application and certify that the information provided herein is true, complete and correct. Authorized county and state officials are granted right of entry to conduct necessary inspections to determine compliance with applicable laws and rules. I understand that I am solely responsible for the proper identification and labeling of all property lines and corners and making the site accessible so that a complete site evaluation can be performed. The permit is valid for either sixty (60) months or is non-expiring depending upon the documentation submitted: complete site plan = 60 months, complete plat = non-expiring.

RDB (initial here for septic system applications)

15. WELL PERMIT APPLICATION:

If the information in this application is falsified, changed, or the site is altered, then the Well Permit shall become invalid. I have read this application and certify that the information provided herein is true, complete and correct. Authorized county and state officials are granted right of entry to conduct necessary inspections to determine compliance with applicable laws and rules. I understand that I am solely responsible for the proper identification and labeling of all property lines and corners and making the site accessible so that a complete site evaluation can be performed. The permit is valid for a period of twelve (12) months from the date of issuance.

_____ (initial here for well applications)

16. APPLICATION SIGNATURE SECTION:

ONLY COMPLETE APPLICATIONS WILL BE PROCESSED. A proper signature is required in order to process your application. Please review the application carefully and sign in the space provided below. A PROPOSED PLOT PLAN is required to be submitted with each application.

Ruby D. Beard — Property Owner's or Owner's Legal Representative Signature

3-23-22 — Date

OFFICE USE ONLY

O SURVEY PLAT TO SCALE SUBMITTED O SCALED SITE PLAN SUBMITTED O UN-SCALED SITE PLAN SUBMITTED

SEPTIC APPLICATION FEE RECEIVED: $_____ DATE FEE RECEIVED: _____

WELL APPLICATION FEE RECEIVED: $_____ DATE FEE RECEIVED: _____

APPLICATION PROCESSED BY: _____

GWS FILE NUMBER ASSIGNED: _____

APPLICATION ID NUMBER ASSIGNED: _____

COMMENTS:

MECKLENBURG COUNTY – GROUNDWATER & WASTEWATER SERVICES
700 N. TRYON ST. SUITE 211 CHARLOTTE, NC 28202 OFFICE: 980-314-1680 FAX: 704-336-6804

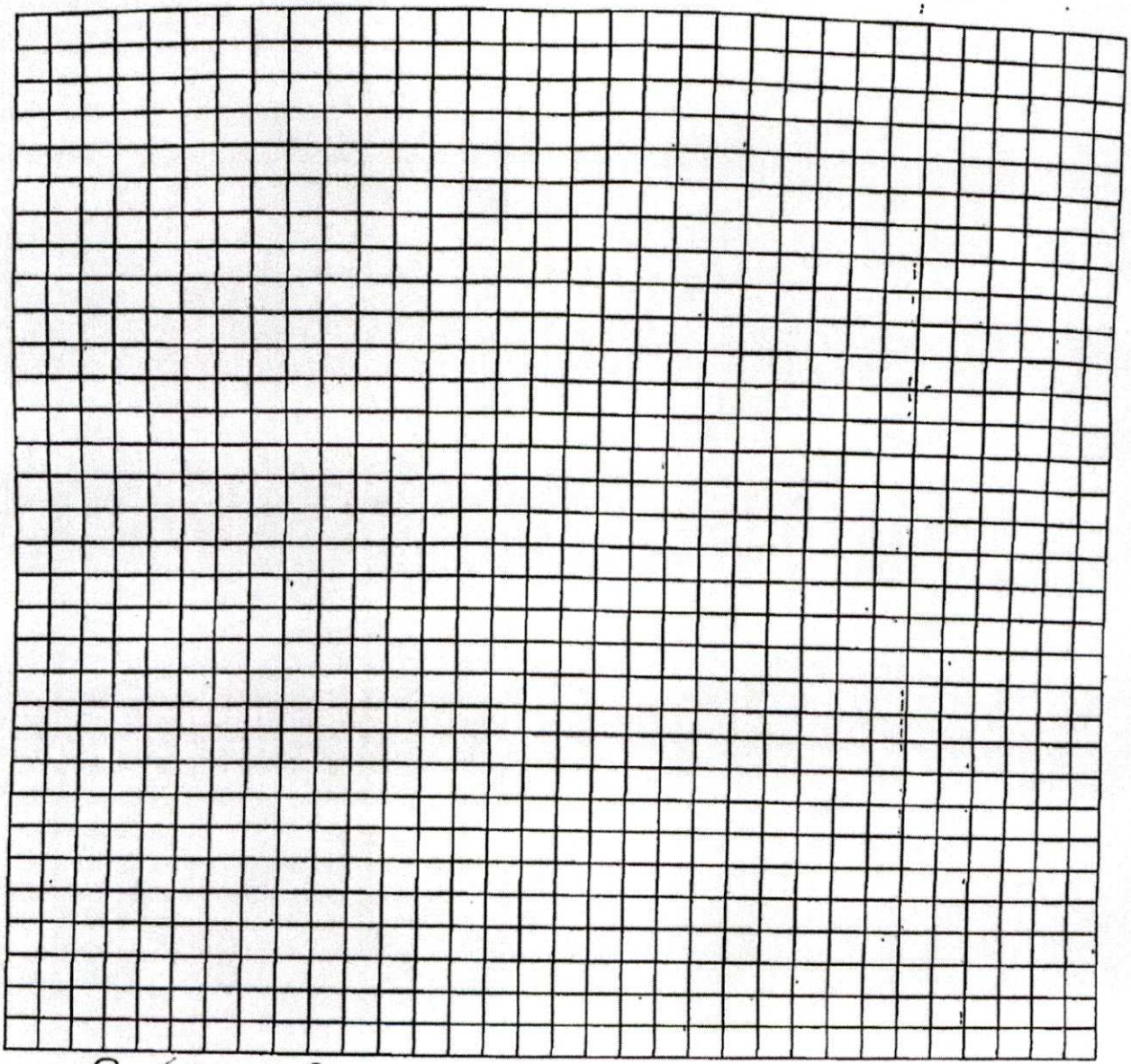
File #: _____

PROPOSED PLOT PLAN

A drawing showing the locations of the following items is required: existing and proposed property lines with dimensions, easements or right-of-ways, proposed building pad(s) or existing building footprint(s), all appurtenances (garage, driveway, deck, pool, etc.), location of existing or proposed well(s), location of existing or proposed sewer lines and sewage disposal systems, surface water bodies, and any aboveground or underground storage tanks. Provide names for all roads that adjoin the property.

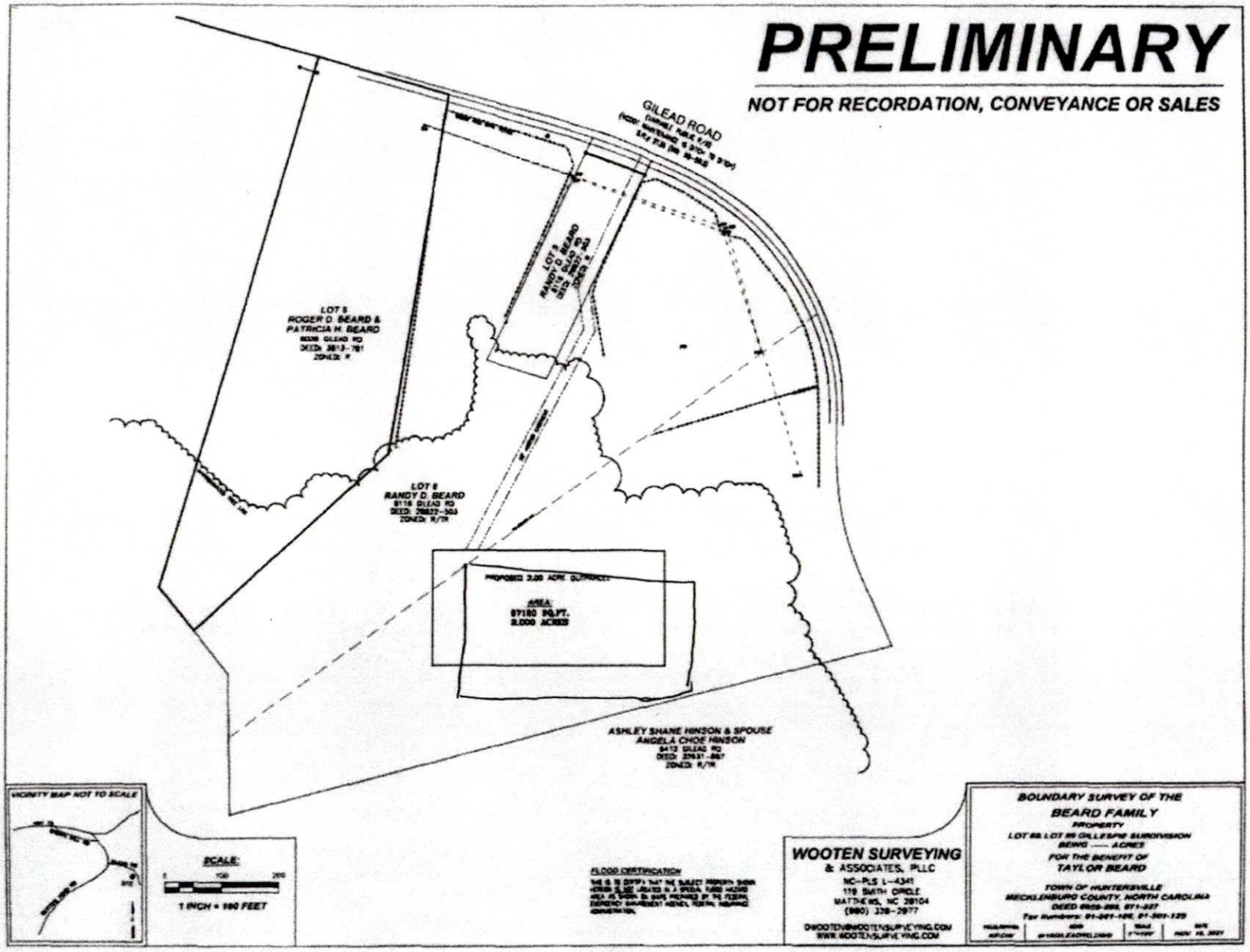
Street Address: _____ Tax Parcel #: _____

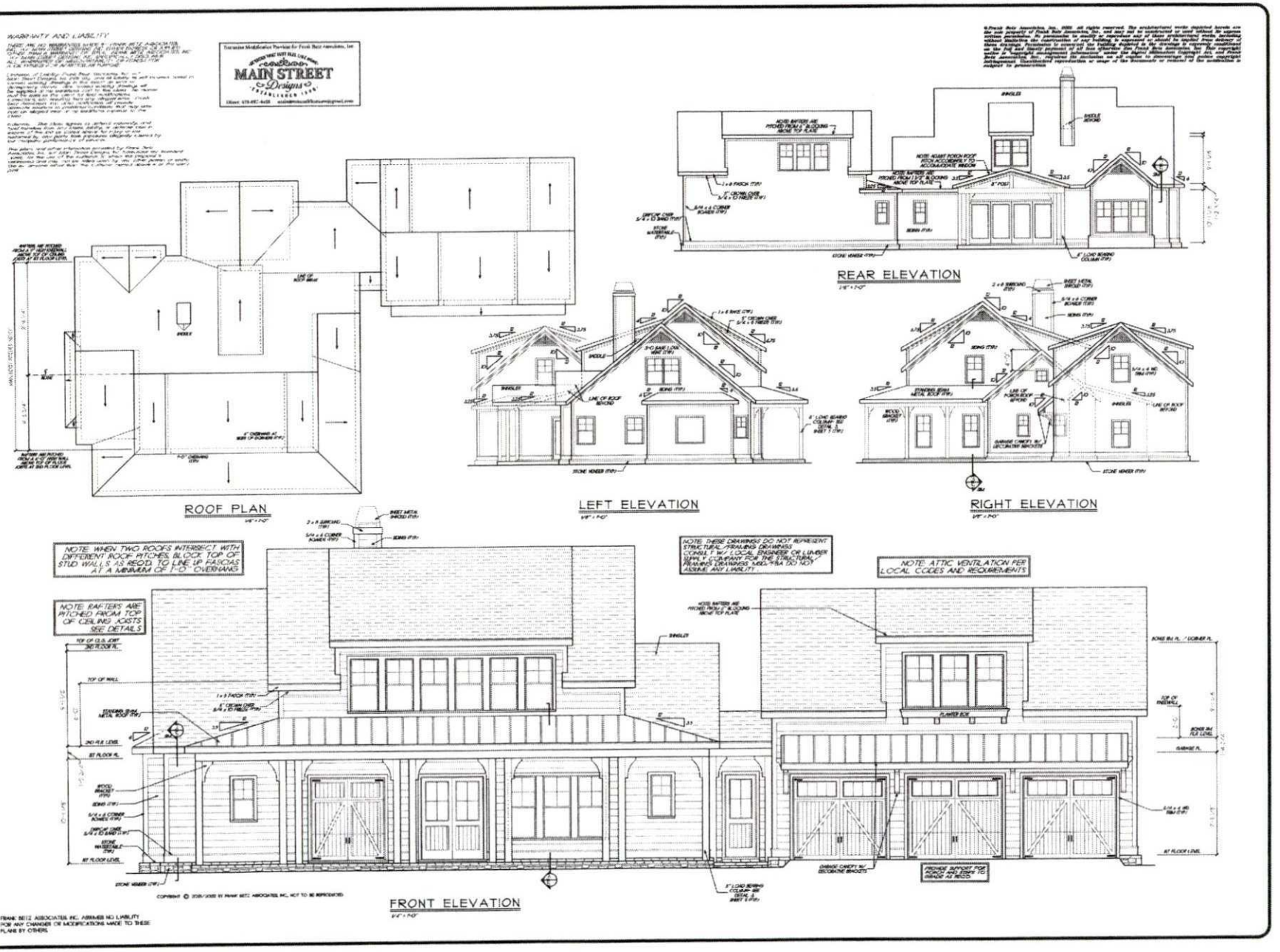
Subdivision Name: _____ Lot #: _____



Property Owner's or Owner's Legal Representative Signature

3.23.22
Date


PRELIMINARY
NOT FOR RECORDATION, CONVEYANCE OR SALES
GILEAD ROAD
LOT 5
ROGER D. BEARD &
PATRICIA H. BEARD
LOT 6
RANDY D. BEARD
LOT 9
RANDY D. BEARD
ASHLEY SHANE HINSON & SPOUSE
ANGELA CHOE HINSON
AREA
87180 SQ.FT.
2.000 ACRES
VICINITY MAP NOT TO SCALE
SCALE:
1 INCH = 100 FEET
FLOOD CERTIFICATION
WOOTEN SURVEYING
& ASSOCIATES, PLLC
NC-PLS L-4341
119 SMITH CIRCLE
MATTHEWS, NC 28104
(980) 339-2977
DWOOTEN@WOOTENSURVEYING.COM
WWW.WOOTENSURVEYING.COM
BOUNDARY SURVEY OF THE
BEARD FAMILY
PROPERTY
FOR THE BENEFIT OF
TAYLOR BEARD
TOWN OF HUNTERSVILLE
MECKLENBURG COUNTY, NORTH CAROLINA



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THE BEARD RESIDENCE
HUNTERSVILLE, NC

ELEVATIONS / ROOF PLAN

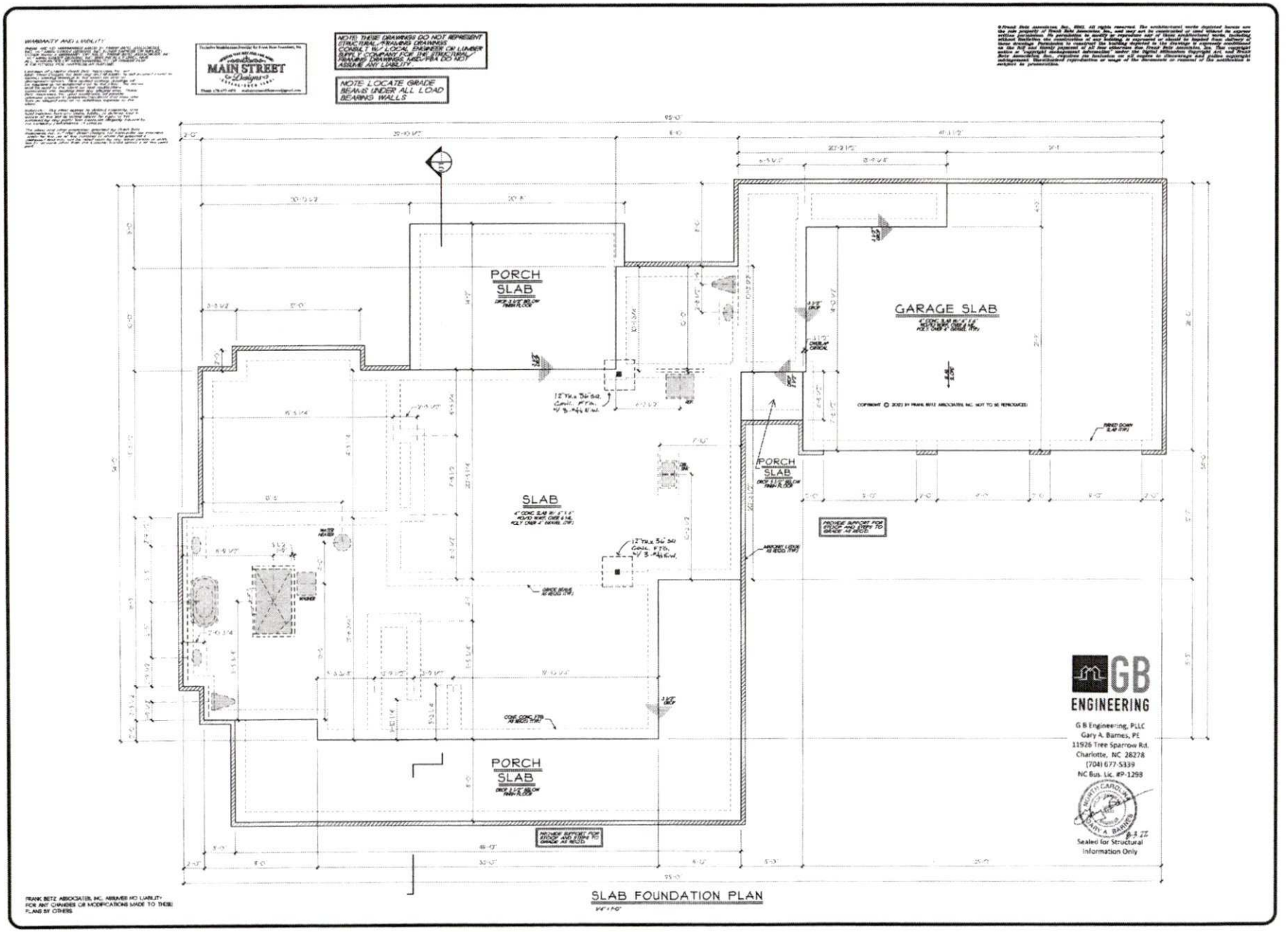
THE MAGNOLIA COTTAGE

FRANK BETZ ASSOCIATES, INC.
DESIGNERS OF DURATON AND STOCK HOMEPLANS
12045 HIGHWAY 92
WOODSTOCK, GEORGIA 30188
770-421-0999
888-717-3003

BY: GB RB CK MD RD

DATE: 3-7-13 1-10-13

SHEET 1 OF 7



SLAB FOUNDATION PLAN

1/4" = 1'-0"

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HUNTERSVILLE, NC

SLAB FOUNDATION PLAN

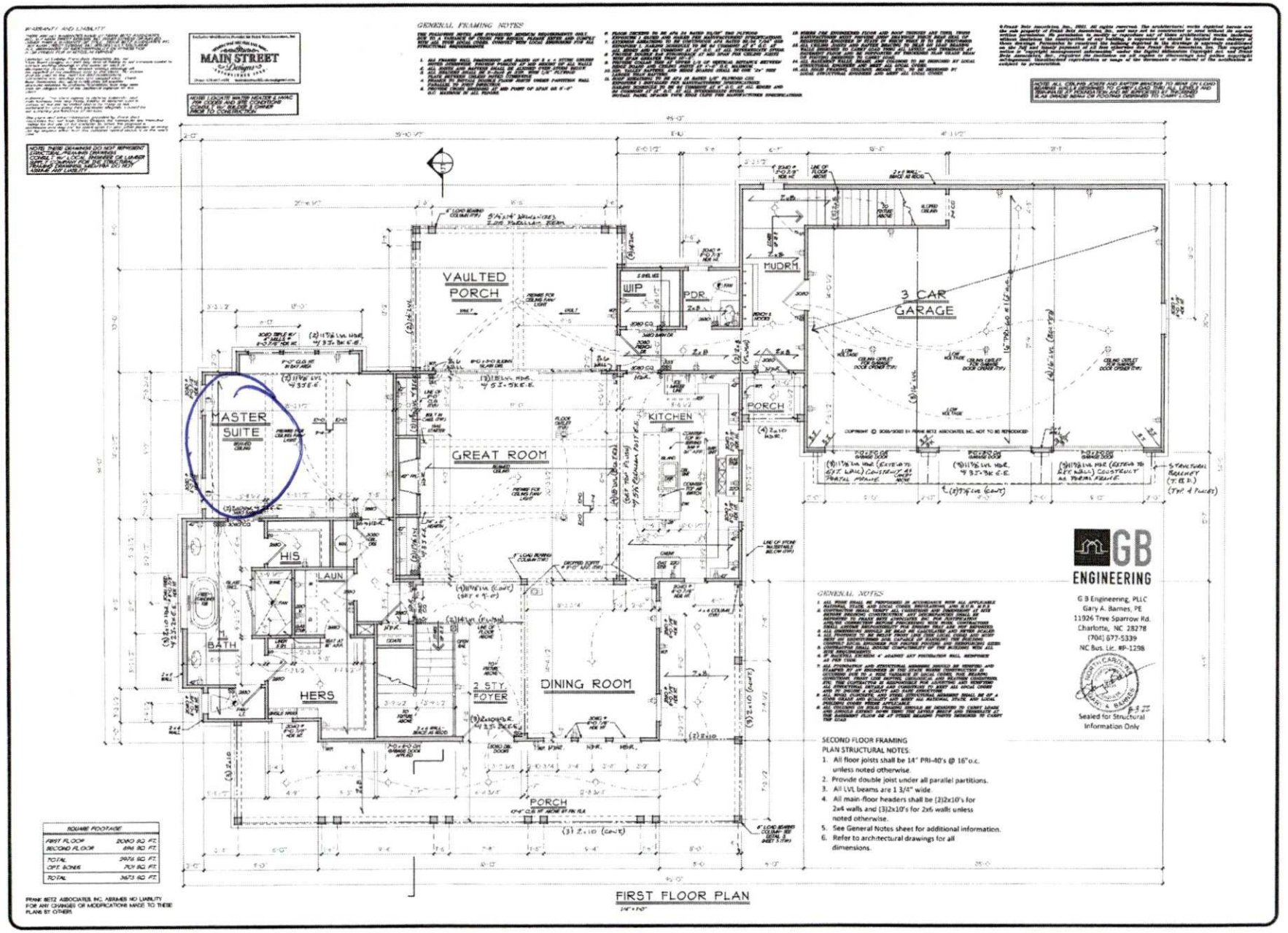
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WOODSTOCK, GEORGIA 30188
770-421-0888 888-717-3003

BY: DAF RF CK: MD RV

DATE: 3-7-18 4-6-18

SHEET 2 OF 7



FIRST FLOOR PLAN

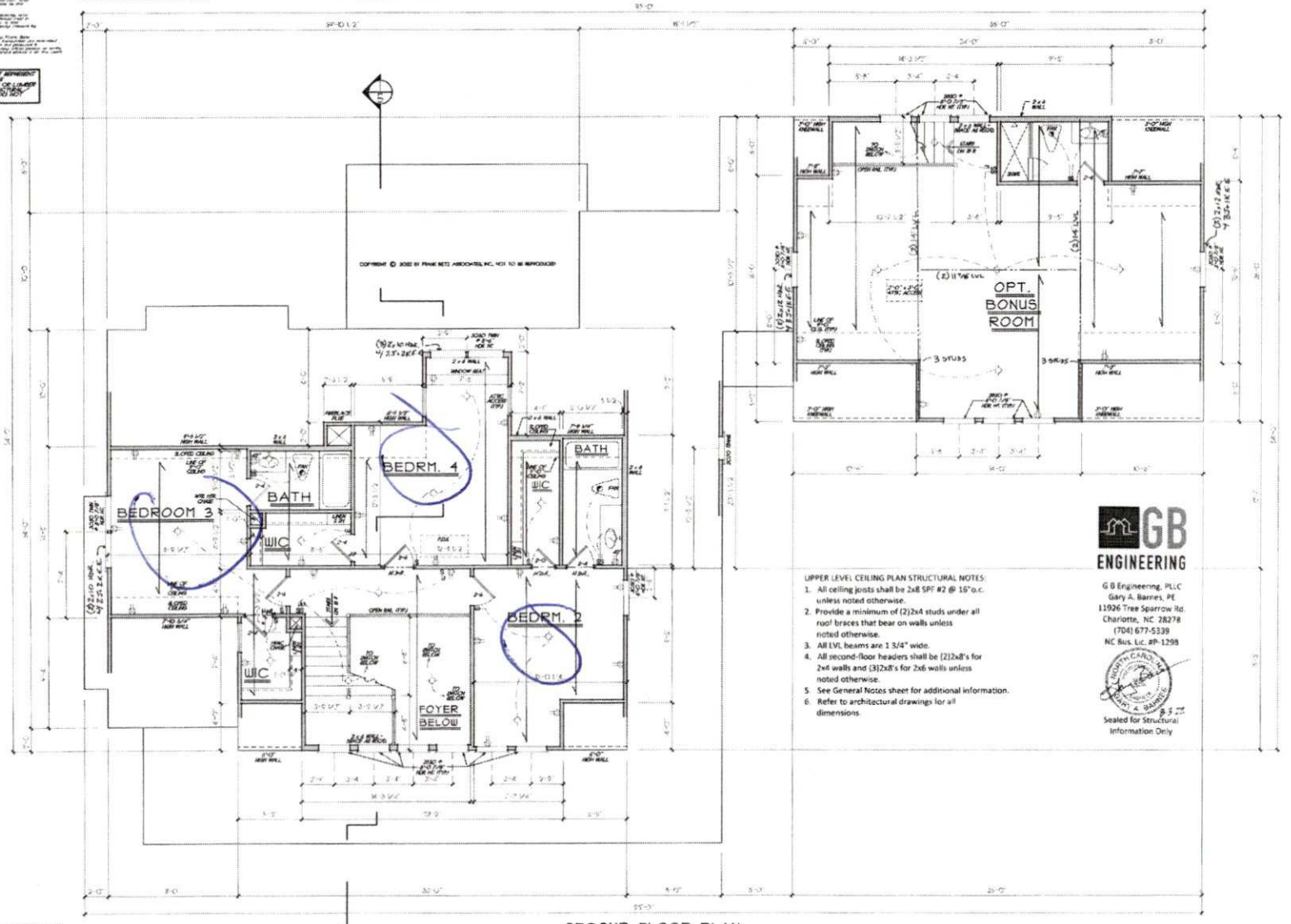
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770-431-0888
800-717-3003

THE BEARD RESIDENCE
HUNTERSVILLE, NC

FIRST FLOOR PLAN

THE MAGNOLIA COTTAGE

SHEET 3 OF 7



SECOND FLOOR PLAN

UPPER LEVEL CEILING PLAN STRUCTURAL NOTES:

1. All ceiling joists shall be 2x8 SPF #2 @ 16"o.c. unless noted otherwise.
2. Provide a minimum of (2)2x4 studs under all roof braces that bear on walls unless noted otherwise.
3. All LVL beams are 1 3/4" wide.
4. All second-floor headers shall be (2)2x8's for 2x4 walls and (3)2x8's for 2x6 walls unless noted otherwise.
5. See General Notes sheet for additional information.
6. Refer to architectural drawings for all dimensions.

GB ENGINEERING

GB Engineering, PLLC
Gary A. Barnes, PE
11926 Tree Sparrow Rd.
Charlotte, NC 28278
(704) 677-5339
NC Bus. Lic. #P-1298

Sealed for Structural Information Only

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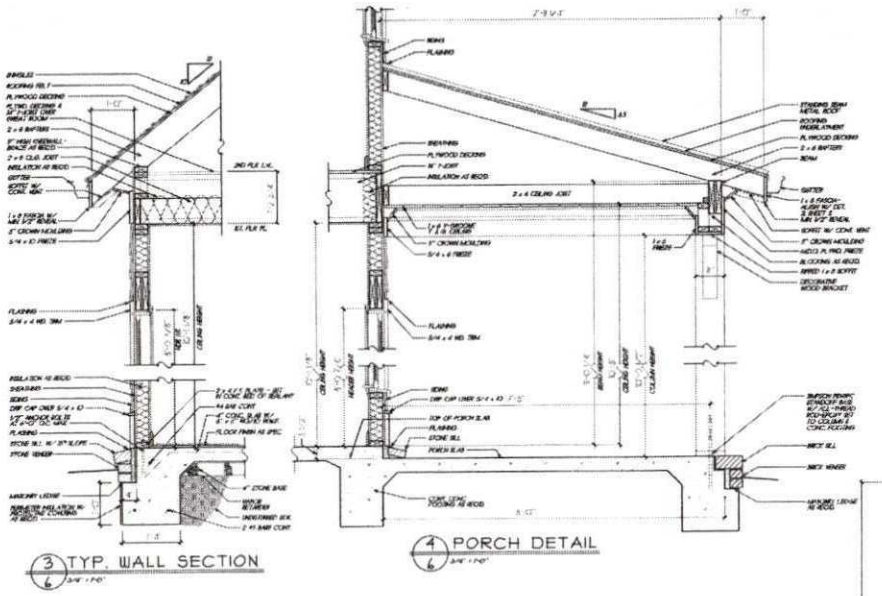
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SECOND FLOOR PLAN

THE MAGNOLIA COTTAGE

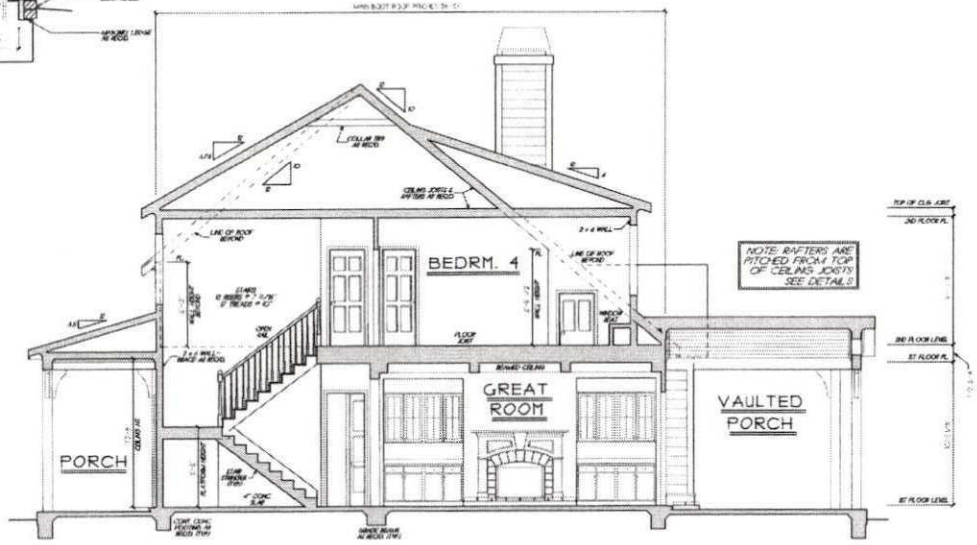
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800-717-3003

SHEET 4 OF 7



3 TYP. WALL SECTION
3/4" = 1'-0"

4 PORCH DETAIL
3/4" = 1'-0"



1 TRANSVERSE SECTION
3/4" = 1'-0"

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[illegible boilerplate]

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MAIN STREET Designs
ESTABLISHED 1994

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G B Engineering, PLLC
Gary A. Barnes, PE
11926 Tree Sparrow Rd
Charlotte, NC 28278
(704) 677-5339
NC Bus. Lic. #P-1298

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL GARY A. BARNES
8.3.22
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REVISIONS	DATE	BY

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THE BEARD RESIDENCE
HUNTERSVILLE, NC

SECTIONS / DETAILS

THE MAGNOLIA COTTAGE

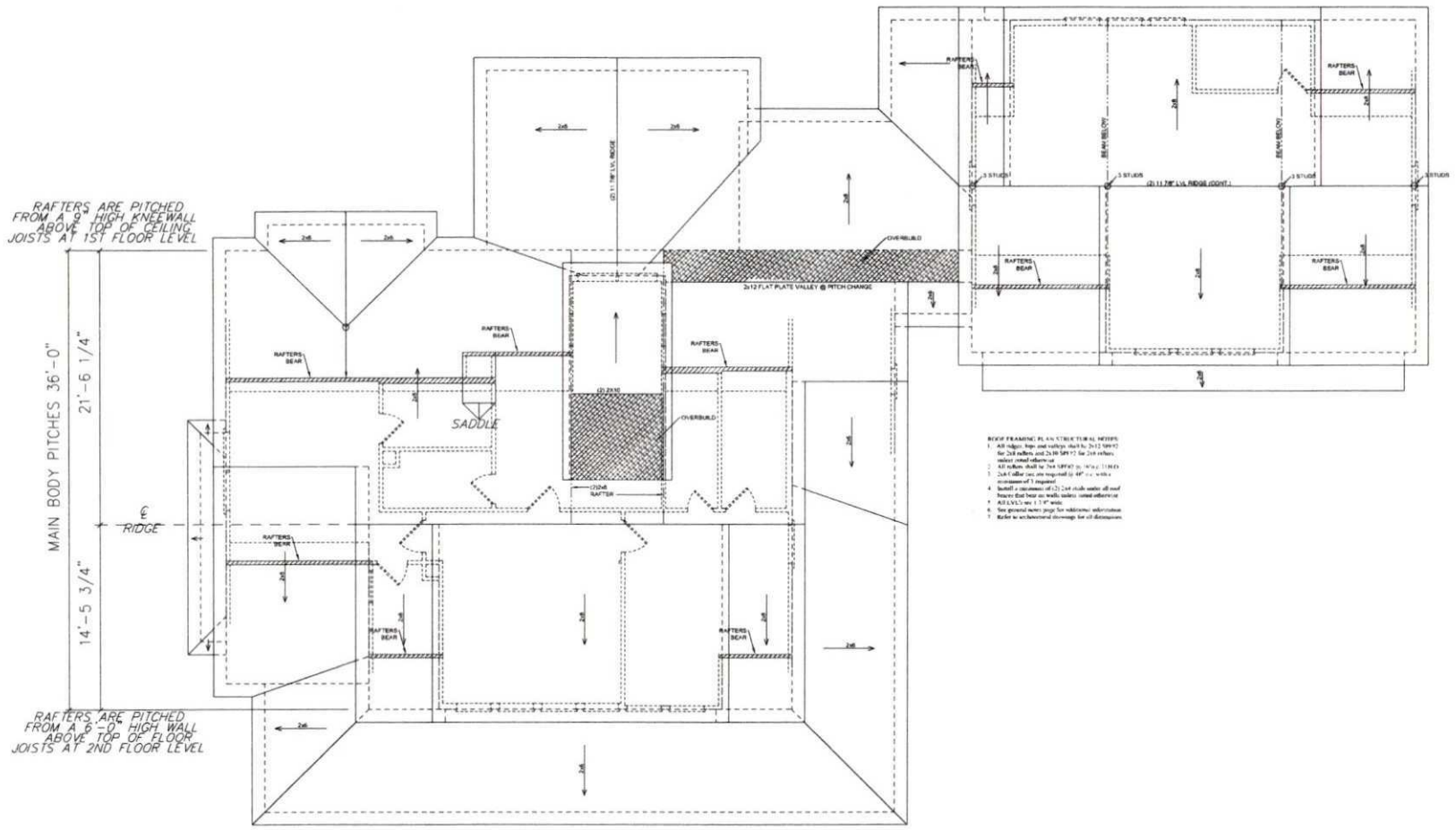
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BY CHK MBD

DATE 3-7-22

SHEET 5 OF 7

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ROOF PLAN

1/4" = 1'-0"

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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 038001 GARY A. BARNES

8.5.22

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Roof Plan

The Beard Residence
Huntersville, North Carolina

6

RESIDENTIAL STANDARD NOTES

DESIGN LOADS

1) Design loads are all dead loads plus

1) Sleeping Rooms	30 PSF
2) All other floors	40 PSF
3) Balconies	60 PSF
4) Attic floor live loading with the following:	
a.) Area accessible by stairs	30 PSF
b.) Roof slopes > 3:12	20 PSF
c.) Roof slopes < 3:12	10 PSF
5) Roof live load	20 PSF or as required by Code
6) Wind load	115 MPH or as required by Code
7) Snow load	20 PSF or as required by Code

2) All designs are in accordance with 2018 Edition of the North Carolina Building Code and the International Residential Code. Refer to the relevant Code for any additional information not covered in these notes or the designs.
3) Engineering design is for structural information only. The Engineer of Record does not accept responsibility for dimension errors, architectural errors, detailing of waterproofing, plumbing, electrical, or mechanical information or any part of the plan not relevant to the structural information.

RESIDENTIAL FOUNDATIONS

1) All continuous wall footings are 16"×24" for one and two story houses and footings for three story walls shall be 12"×24" unless otherwise noted. Reinforcing is to be as noted on plans. Footings on original soil do not need rebar. Rebar is required on any compacted fill regardless of compaction.
2) All interior piers are 8"×16" CMU up to a maximum height of 32". All piers over 32" high must be filled with Type S mortar. Maximum height for 8"×16" filled pier is 6'-8". Piers larger than 8"×16" are noted on plans and must be filled with Type S mortar. For one-story structures, pier caps are to be 4" solid masonry. For two-story structures, pier caps are to be 8" of solid masonry.
3) Footings for 8"×16" piers are 24"×36"×16" unless noted otherwise. Reinforcing is to be as noted on plans.
4) Interior thickened slab footings which occur in basements and "slab on grade" floors are 16" deep by 20" wide with 2x4 reinforcing bars running continuously unless noted otherwise. Thickened footings are required under all bearing walls.
5) All rebar splices shall be a minimum of 2'-0" unless otherwise noted.
6) Shallow foundations are designed for an assumed soil bearing capacity of 2,000 psf. The contractor is responsible for notifying the Engineer of Record if any soils are found to be unsuitable for this bearing capacity. The contractor is responsible for obtaining soil borings to ensure that the bearing capacity of the soil meets or exceeds this value. All fill is to be compacted to 95% density as measured by the Standard Proctor Test (ASTM D1557).
7) All soils and fill under floors and/or within or under buildings shall have preconstruction soil treatment for protection against termites. Certification of Compliance shall be issued to the Building Department by a licensed pest control company.
8) All footing excavations shall be neat, straight, and level in the proper elevations to receive the concrete. Excessive variations in the dimensions of footings or slabs will not be permitted. Reinforcing steel and mesh shall be accurately placed and supported to maintain their position during the concrete pouring. Edge forms shall be used for concrete that will be exposed.
9) All slab penetrations are to be the responsibility of the contractor. Penetrations interfering with reinforcing shall be approved by the Engineer of Record prior to the placement of concrete.
10) Elevation difference between the bottom of adjacent footings shall be less than their horizontal distance. Contractor shall maintain a 1 to 1 slope influence line to support adjacent footings. Differential heights between footings can become excess where a crawlspace pier footing is next to a basement wall footing.

SPECIAL FOUNDATION CONSIDERATIONS:

1) Waffle slabs are self-supporting slabs reinforced according to details and do not require firm soil for support. Soil must only be capable of supporting concrete until it hardens and develops strength.
2) Caisson foundations shall be a minimum of 12" diameter drilled unreinforced concrete caissons. Caissons shall extend to a minimum depth providing 2' penetration into good original ground. Depth of drilling is limited by 15" Therefore, no poor material more than 15" deep is suitable for a caisson foundation. A caisson cannot be used if water rises immediately into a drilled hole. Piles will have to be used in such cases.
3) Treated wood piles with a minimum diameter of 6" and a maximum design load of six tons are used for all foundations with unsuitable soil deeper than 15" or with water in drilled caisson holes. Drive per North Carolina or South Carolina Code.
4) Sizes and reinforcing for footing sizes over caissons or piles shall be as shown on plans.
5) Chimney footings are to be 12" larger than the chimney footprint by 12" thick. Reinforced with 6#'s at 8" o.c. each way.
6) Foundation wall backfilling with dirt which support structural framing shall be constructed as follows:
   A. For earth fill up to a maximum height of 4'. Use 8" CMU or 8" brick with Bituthene membrane waterproofing on exterior. Footings are to be 8"×16" or 8"-24" as noted on the plan.
   B. For earth fill 4' to a maximum height of 9'. Use 8"-24" footing with 84 at 16" dowels hooked in footing and projecting 18" above footings. Use 12" CMU walls, with #4 at 16" vertical bars located 4" from near-fill face, lap all splices 12" and one 3-wire wall horizontal reinforcing every 8" in CMU joints. Install 1 of 1-Line with 2#4 legs at every other joint horizontally at all corners, i.e., #3 corner bars at 16" o/c vertically. Fill all open cells of CMU with either type S or M mortar or fill with 2,500 psi concrete. Install waterproof Bituthene membrane, or equal.
   C. In lieu of the preceding designs, basement walls may be constructed in accordance with R404.1 of the Code. However, 24"×24", #3 corner bars shall be installed at 16" o/c vertically regardless of the wall height.
      DIRECT ALL FRAMING BEFORE BACKFILLING
7) For retaining walls without framing see special designs on drawings.

FRAMING CONSTRUCTION - OTHER THAN ROOF

1) See Table R802.3(1) of the Code for a fastener schedule for structural members.
2) Wood beams shall be supported by metal hangers of adequate capacity where framing into beams or ledgers. The allowable load capacity of the hanger shall be equal to or greater than the load specified on the plan. Where no load is specified, the "lightest" available hanger for the application is acceptable.
3) Center girders and lintel with 4" cantilever wall and joist construction shall be 2-2×10 Southern Yellow Pine #1 unless noted otherwise. Maximum clear spans are to be 4'-8" (8'-0" c/c spacing of posts).
   To avoid objectionable cracking in finished hardwood floors over any girders, use the following procedure:
   A) Nailing
      a.) All floor joists must be toenailed to their support girders with a minimum of (3) 8d nails at each end. Larger nails will split and render the toenail ineffective. No end nailing through the girder or band is permitted.
      b.) If dropped girders are used, end lap all joists and side nail each with a minimum of (3) 16d nails at each end of each joist. Ledger strips should be spaced 3" apart and nailed with 3-16d nails at each joist end.
      c.) Nail multiple member built-up girders with two rows of 16d nails staggered at 32" o/c 2" down from the top and 2" up from the bottom with 3-16d nails at each end of each piece in the joist through the members making up the multiple girder.
      d.) This nailing pattern will ensure a tight floor from the outside of the house to the outside so that when the framing shrinks during the heat heating season, the shrinkage will be uniformly distributed over the entire floor. If the girder nailing pattern is omitted, then the shrinkage will accumulate over the girders and an objectionable crack will develop in the finished hardwood floor over the girder line.
   B) As all girders shown the joists change direction, install bridging at 6' o/c for a minimum of six joist spacings beyond any joist direction change. This will assure shrinkage distribution over the floor and not let it accumulate at the girder.
   C) There must be wood blocking duly bolted to the steel beam with joists attached to the beam with metal hangers under any hardwood floors that cross over a steel beam supporting floor joists. This condition often exists over basement areas.
4) All other lumber may be Spruce #2 unless noted otherwise.
5) Steel beams must have 3-2×4 stud jacks under each end support unless noted otherwise.
6) "Lam" beams must have 3-2×4 stud jacks under each end support unless noted otherwise.
7) Masonry lintels
   A) For spans up to 6': Use 3"×3"×1/4" steel angles.
   B) For spans from 6' to 10': Use 5"×3½"×5/16" steel angles. Attach angle to framing using 5/8" x 4" lag screws @ 16" o.c.
   C) For spans from 9' to 16': Use 5"x5"x5/16" steel angles. Attach angle to framing using 5/8" x 4" lag screws @ 16" o.c.
   D) When structural steel beams with bottom plates are used to support masonry, the bottom plate must extend the full length of the steel beam. This provides support to the ends of the plate by bearing on the adjacent masonry jambs. The beam should be temporarily shored prior to laying the masonry. The shoring may be removed five days after laying the masonry.



TYPICAL WALL SHEATHING ATTACHMENT

8) All brick veneer over lower roofs (brick chimbs) must have a structural angle leg screwed to an adjacent stud wall in accordance with detail, with steel brick stops to prevent sliding of brick.
9) All rafter bracing must have no more studs from plate through all floors to the foundation or supporting beam below. No braces shall be attached to top wall plate without studs directly under them.
10) Where partitions fall between floor joists or trusses, 2×4 ladders at 16" o/c must be placed perpendicular to the trusses to support the plywood decking. The ladders shall be supported with a Simpson "Z" clip or similar device.
11) All wall I-joists and open joists must be braced in accordance with the manufacturer's directions plus details shown on plans. Load-bearing partitions, jacks, beams and column supports must be solid blocked through floor. Trusses and plywood shall not carry concentrated point loads. I-joist material should not be used as blocking under concentrated point loads. All point loads must be carried to foundations with adequate blocking and/or beams.
12) All steel columns shall bear on concrete, masonry, or steel only. Beams that bear on top of steel columns shall be welded to the column. Where steel columns bear on concrete or masonry, unless otherwise noted, a 5/8"x6"x6"x½" base plate shall be used to spread the column load across the bearing surface. Base plates shall be bolted with four ½" diameter anchor bolts or expansion bolts to concrete or masonry.
13) Unless noted otherwise on the plans, all exterior facing and walls reflec thru -ish shall be constructed as follows:
   A. Walls 10' to 12' high - Bullson Brame 2×4 studs at 12" o/c with ½" OSB sheathing and 3 long studs on each side of each opening nailed securely to the header.
   B. Walls 12' to 20' high - Bullson Brame 2×6 studs at 16" o/c (½" OSB sheathing required for wall heights > 17). Provide 2-1¾"×5½" LVL king studs on each side of openings 3' to 6' wide and 2-2×6 king studs for openings less than 3' wide. Fasten king studs securely to all headers with a minimum of 12-16d nails or 4-3/8" diameter lag screws embedded a minimum of 4" into the header.
   C. Gable end walls of rooms with vaulted ceiling joists. Bullson frame wall and provide triple king stud on each side of openings, nailed securely to the header.
   D. Two-story high foyer walls less than 9' wide: Extend 3½"x9½" PSL member with 3-2x4 flat plates across the entire wall. Locate the beam near midheight of the wall at or near first floor top plate.
      NOTE: SEE SPECIAL DESIGN OR ENGINEER FOR WALLS TALLER THAN 20', WHEN OPENINGS IN HIGH WALLS EXCEED 6' IN WIDTH, OR IF THE WALL CANNOT BE CONSTRUCTED USING ANY OF THE METHODS MENTIONED.
14) Continuous 2×6 bridging shall be nailed to diagonal or vertical web members of all open-web floors trusses over 18' long. They shall be installed near mid-span as a load distribution member. If the 2×6 bridging is not continuous, lap ends of bridging one truss space.
15) Lower stud walls for buildings over two stories, but not more than three stories:
   A) Interior walls
      1) Load bearing 2-4 o/c 12" ply.
      2) Non-load bearing 2-4 @ 16" o/c
   B) Exterior walls.
      Use 2-6 at 16" o/c with ½"-4'-8' plywood sheathing at all corners and every 25' o.c.; OR use 2-4 at 12" o/c with ½" plywood sheathing solid on walls.
16) Headers shall be as shown unless noted differently on plan:
   A) Interior and exterior
      1) Spans up to 2'-6" 2-2×6's. W/1 Jack Stud and 1 King Stud (Est. only) each end.
      2) Spans 2'-6" to 3'-6" 2-2×8's. W/2 Jack Studs and 1 King Stud (Est. only) each end
      3) Spans 3'-6" to 4'-6" 2-2×10's. W/2 Jack Studs and 2 King Studs (Est. only) each end
      4) Spans 4'-9" or more. See Plan
   B) Headers wider than 9' shall have a minimum of three king studs on each side unless noted otherwise.
17) When ceiling joists are parallel to an exterior wall, tie the rafters near the top plate to ceiling joists with a 2×6 strongback a minimum of 6' long at 4 feet on center across the top of the ceiling joists. 2x6 rafter ties shall be fastened to the side of the rafter and the strongback.
18) At all exterior diagonal wall panels, each panel shall be nailed to each adjacent panel with 5-16d nails or tied together with metal strapping nailed at four locations between floors with a minimum of 2-16d nails at each panel at each strap. This will assist wind vertical cracking in panel joints due to horizontal oscillating panels.
19) At all starts, every stud at each stringer must be nailed to each stringer with a minimum of 2-16d nails. This will avoid cracking between wallboard near the floor resulting due to vertical oscillation of stair stringers.
20) Roof trusses that have non-framing partitions passing under their should be nailed to the partition plates to avoid ceiling wall cracking.
21) Roof spaces close to side walls framing and used as dead wood for cheerset bonnds should be nailed to the wall framing to prevent ceiling/wall cracking.
22) All structural framing lumber exposed directly to the weather or bearing directly on exterior masonry piers or concrete shall be treated. All wood in contact with the ground is to be ground-contact approved. All wood exposed to weather or moisture shall be protected to prevent the occurrence of rot.
23) Unless otherwise detailed, all attic built "false chimneys" shall be constructed with 2×8 studs at 12" o/c balloon-framed from attic ceiling or floor. Frame 13"x13" CDX plywood on all sides of the chimney along the full length of the studs. Fasten each stud to the supporting beam or ceiling joist with a 1 1/2"x24" 18-gauge metal strap or a similar connector.
24) NOTE: ALL POINT LOADS FROM ROOF BRACES, JACK STUDS, BEAM SUPPORTS - WHETHER WOOD OR STEEL - CANNOT BEAR ON SHEATHING ALONE. BLOCKING EQUAL TO OR BETTER THAN THE POINT LOAD SUPPORTED ABOVE MUST BE CARRIED THROUGH ALL CONSTRUCTION TO THE FOUNDATION.
25) Note to apply to all hard coat stucco exterior finishes.
   Addons are necessary at the following locations.
   a) Horizontal cracks over windows.
   b) No cracks larger than 1/64 S.F. surface exposed.
   c) No dimension longer than 18'.
   d) No dimension longer than 2½ times the shortest dimension.
   R)Deep setsgd required at the bottom of walls 2' above precad stops and 4' above grade.
   C) See ASTM 926 and 1063 for further information.

ROOF CONSTRUCTION

1) All roof trusses must be built in accordance with truss manufacturers' requirements. Tie-down connections to resist uplift shall be installed where required. When roof truss manufacturers do not provide the required connection, it is the responsibility of the contractor to notify the roof truss engineer of the Engineer of Record to provide an adequate connector.
   1A) In addition to the Codes fastener schedule, unless noted otherwise on the plan, roof members shall be tied down with additional steel connectors as follows:
   a) Stick-framed members exceeding 10' in length, as measured from their horizontal projection, and all such error-mitchelized errors such as porches are strapped 102.5 connectors every 3' or every third rafter to fasten the lower end of the rafter to the top plate.
2) Rafters shall be 2×6 at 16" spruce-pine-fir #2 for shingles except as noted. They are to be cut max hips, ridges, etc., unless noted otherwise.
   Tile, slate and other heavy roof coverings shall use 2×8 at 16" o/c spruce-pine-fir #2 rafters unless noted otherwise.
3) Collar ties shall be 2×6 at 48" o/c at all ridges unless noted otherwise and located a nominal 3 below the ridge.
   Vaulted ceilings require special collar tie and ridge beam details. See the end of Table R802.5.1 in the Code unless otherwise detailed on the plan.
4) A minimum of three collar ties shall be used at all ridges even if two ties must be put on one set of rafters.
5) All hips and ridges are a size larger than rafters unless noted otherwise.
6) All hips on ceiling joists or rafters are 1½ long 2×6's unless noted otherwise. Rafters may be spliced over hips. Splice rafter hips only at a roof brace.
7) Gable end framing must be braced parallel to ridges with a minimum of 2×6 diagonal braces at 6' o/c along the gable wall to interior ceiling joists. Braces to run to 2×6 hips and to the gable wall at approximately mid-height of gable walls. Braces shall be at an angle of approximately 45°. Other bracing may be used if it meets with the design engineer's approval.
8) Ceiling joists when erected parallel to rafters must be fastened to rafters and nailed with 3-16d nails at each rafter. If a lanewall is used and ceiling joists cannot touch rafters, then rafters must be tied to the ceiling joists using 2×4 or 1×6 rafter ties spaced no more than 4' on center.
9) Roof Plan Legend
   A) ⊗ Indicates location of roof brace point or taller level.
   B) ⊗ Arrow away from the brace point indicates direction of roof brace to partition, beam, or other brace point below.
   C) ⊗ Arrow into brace point indicates a vertical or almost vertical roof brace to partition, beam, or other brace point below.
   D) All roof braces are 2-2x4 nailed with 16 penny nails @ 9" o/c vertically from top to bottom. Braces longer than 10' must be braced horizontally in two directions at mid-height.
   E) Maximum spacing of roof braces is to be as follows:
      i) For 2x6 Hog @ 4'-0" o/c
      ii) For 2x8 Hog @ 6'-0" o/c

WALL BRACING NOTE

IN LIEU OF THE WALL BRACING REQUIREMENTS OF SECTION R602.10, ALL STORIES SHALL BE SHEATHED WITH WOOD STRUCTURAL SHEATHING PANELS. PANELS SHALL BE FASTENED AT 6"o.c. w/ 8d NAILS ALONG ALL EDGES AND 12"o.c. AT INTERMEDIATE FRAMING. UNLESS NOTED OTHERWISE ON THE DRAWINGS, NO BLOCKING, STRAPS, OR SPECIAL HOLDDOWNS ARE REQUIRED IF SHEATHED AS DESCRIBED ABOVE. GARAGE DOOR PORTALS/FRAMES SHALL BE CONSTRUCTED AS SHOWN ELSEWHERE ON THIS PAGE. IF REQUIRED BY ENGINEERING EVALUATION, ADDITIONAL PORTAL FRAMING REQUIREMENTS WILL BE SHOWN ON THE DRAWINGS.

MATERIALS SPECIFICATIONS:

CONCRETE GENERAL NOTES:

1) Except where otherwise noted, for all concrete, the proportions of cement, aggregate, and water to obtain required plasticity and compressive strength shall be in accordance with ACI 318 Code. Concrete shall be 2,500 psi in 28 days for footings and 3,000 psi for slabs, walls, and columns, unless noted otherwise.
2) Before placing concrete, all debris, water and other deleterious material shall be removed from the places to be occupied by the concrete. The placing of all concrete shall be in accordance with ACI 318 and ASTM C94 requirements. Planning of concrete will be permitted only with the Engineer of Record's approval of proposed concrete mix and method of pumping. Concrete shall be rapidly handled from the mixer to forms and deposited as nearly as possible to its final position to avoid segregation due to rehandling. Concrete to be spaded and worked by hand and vibrated to assure close contact with all surfaces of forms and reinforcing steel and leveled off at proper grade to receive finish. All concrete shall be placed upon clean, damp surfaces. Vibration shall be applied directly to the concrete and shall be sufficient to ensure flow of settlement but not long enough to cause segregation of the mix.
3) Construction joints shall be located in accordance with ACI 301. All reinforcing steel shall be continuous across joints. In slabs on grade, color construction joints shall not be over 20 feet easier to center each way. Joints shall be saws a depth of one-third of the slab thickness. Sawing of the joints shall commence as soon as the concrete has hardened sufficiently to permit sawing without excessive raveling. Fill the saw cuts with approved joint filler after the concrete has cured.
4) Concrete, when deposited, shall have a temperature not below 50° F and not above 90° F. The methods and recommended practices as described in ACI 306 shall be followed for cold weather concreting and ACI 305 for hot weather concreting.
5) Freshly placed concrete shall be protected from premature drying by one of the following methods.
   A. Ponding or continuous sprinkling.
   B. Absorptive mat or fabric kept continuously wet.
   C. Waterproof paper conforming to ASTM C171.
   D. Application of an approved chemical curing compound.
      The curing shall continue until the cumulative number of days when the ambient temperature above 50° F has totaled seven. During curing, the concrete shall be protected from any mechanical injury, load stresses, shock, vibration, or damage to finished surfaces.
6) Reinforcing steel bars shall be deformed in accordance with ASTM A305 and or A408 and formed of ASTM A615-76 Grade 60 steel. Welded wire fabric reinforcing to be ASTM A185 steel wire. Accessories shall conform to the CRSI "Manual of Standard Practice." The following minimum concrete cover shall be provided over reinforcing bars:
   A. Exposed to Earth 3"
   B. Exposed to Weather 1½"
   C. Slabs not Exposed to Weather ¾"
   D. Beams and columns 1½"

MASONRY GENERAL NOTES:

1) Masonry walls are to be of the sizes and in the locations shown on the plans and shall be constructed in accordance with the provisions of ACI 530.
2) Hollow Load Bearing Units. ASTM C90 made with lightweight or normal weight aggregates. Grade N-I units shall be provided for exterior and foundation walls. Grade N-I or S-I units shall be provided for other load-bearing walls or partitions.
3) Concrete Building Brick: ASTM C55 made with lightweight or normal aggregates, Grade N-I or S-I except that brick exposed to weather shall be N-I.
4) Mortar: ASTM C270-95. Type S preconfigured mortar mix which shall not contain any non-cementitious fillers combined with not more than three parts sand per one part mix.
5) Reinforcing Steel: ASTM A615 Grade 60 steel deformed bars where indicated on the plans. Where reinforcing bars are installed in the cells of concrete masonry units, they shall be secured with wire ties at intervals not exceeding 24" o/c to maintain no less than location in the cell. The tolerance for spacing of vertical bars is ±2 inches along the length of the wall. The tolerance for the distance between the face of the concrete masonry unit and the center of the bar shall not exceed ±½".
6) Mortar for reinforced wall be less than ½". A protrusion of ½" or greater must be removed before grouting.
7) Horizontal Joint Reinforcement: ASTM A82 fabricated from cold drawn steel wire and hot dip zinc coated (ASTM A153). It shall consist of two or more parallel longitudinal wires 0.187"0" in diameter with welded cross wires 0.148" in diameter at a maximum of 16" o/c. Joint reinforcement is to be installed in every other course and in the first two courses at the bottom and top of wall openings and shall extend not less than 24" past the openings. Splices shall overlap not less than 12".
8) Execution: Masonry units shall be laid in a running bond pattern unless noted otherwise. The walls shall be carried up level and plumb within the tolerances specified in ACI 530.1-05, Section 2.3.3.2. If nonstandard dimensions are encountered, block shall be cut with a masonry saw to fit, not by stretching or shrinking joints. Unfinished work shall be stepped back for joining with new work. Toothing will not be permitted except where specifically approved. Damaged units are to be cut out and new units set in place.
9) The filled cells and load bearing blocks of reinforced masonry walls are to be filled with ASTM C476-91, Grout for Masonry with minimum compressive stress of 2,000 psi and slump range of 8" to 11". The outside face of the bottom block of each cell is to be broken out to provide a clean out for inspection of reinforcing and clean out of mortar momentarily set cell. The grout is to be pumped into the cell in maximum five-foot lifts and immediately vibrated to minimize any cooling of the grout. Reconsolidate each lift by vibrating several minutes into the preceding lift before plasticity is lost. Reconsolidate the top lift and fill with grout any space left by settlement shrinkage.

LUMBER GENERAL NOTES

1) All common framing lumber is to meet the following minimum specifications at 19% moisture content

MATERIAL	Fb (psi)	Fc (psi) Perp.	E (psi)
#2 Spruce Pine Fir	875	450	425	1,400,000
Southern Yellow Pine	1,150	600	480	1,600,000

2) All Structural Composite Lumber (LVL, LSL, PSL) is to meet the following minimum specifications:

APPLICATION	Fb (psi)	Fc (psi) (Parallel)	Fc (psi) (Perp.)	E (psi)
Girders & Beams (LVL, PSL)	2,600	2,310	650	1,900,000
Columns (LSL) & Rimboards	1,700	1,400	400	1,400,000

3) All Glue Laminated Timber (Glu-lam) is to meet the following minimum specifications:

APPLICATION	Fb (psi)	Fc (psi) (Parallel)	Fc (psi) (Perp.)	E (psi)
Girders & Beams (LVL, PSL)	2,400	1,700	740	1,700,000
Columns (LSL)	1,600	1,550	560	1,500,000

4) Open Web Floor Trusses.

APPLICATION	Fb (psi)
Top & Bottom Chords	2,230
Web Members	950

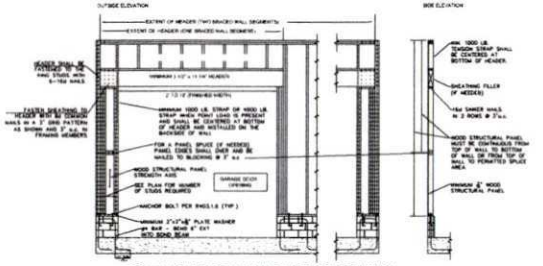
1 9E MSR Lumber
1 4E Lumber

5) Where three or four-ply "Lam" beams are side-loaded (joists frame into the side at the outside plies), fasten all plies together with two rows of ½" diameter bolts at 16" o/c. The bolts shall be located a minimum of 2½" and a maximum of 5½" from the top or bottom of the beam.

6) Built-up wood columns consisting of multiple studs shall have each lamination nailed with 16d nails at 9" o/c.

STEEL GENERAL NOTES:

1) All steel wide flange beams shall conform to ASTM A572 having a minimum yield stress of 50,000 psi.
2) All steel pipes shall be Schedule 40 or better with a minimum yield stress of 35,000 psi.
3) All steel angles shall conform to ASTM A500, Grade B, having a minimum yield stress of 46,000 psi.
4) All other shapes not listed above shall conform to ASTM A36 having a minimum yield stress of 36,000 psi.
5) Unless otherwise noted, all welds shall be fillet type with a minimum 3/16" leg. Welding electrodes shall be E70xx type having a minimum yield strength of 70,000 psi. Welding work and materials shall conform to the American Welding Society Welding Code (AWS D 1).
6) Bolted connections shall include high strength bolts conforming to ASTM A325. Foundation anchor bolts or tie rods shall conform to ASTM A36 having a minimum yield strength of 36,000 psi.



CONTINUOUS PORTAL FRAME PANEL CONSTRUCTION

GB ENGINEERING
G B Engineering, PLLC
Gary A. Barnes, PE
11926 Tree Sparrow Rd.
Charlotte, NC 28278
(704) 677-5339
NC Bus. Lic. #P-1298

Sealed for Structural Information Only

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Charlotte, NC 28278
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NC Bus. Lic. #P-1298

General Notes

The Beard Residence
Huntersville, North Carolina

GN

MECKLENBURG COUNTY
Health Department

Gibbie Harris, MSPH, BSN
Director

(980) 314-9020

Addendum to Application for
New Well or Septic System Installation
Abandonment or Repair of Existing Well or Septic System

Your signature below confirms the following:

1. The information on the application is true, complete and accurate.
2. Authorized county and state officials are granted right of entry to conduct necessary inspections to determine compliances with applicable laws and rules.
3. I acknowledge that _____ is acting as my legal representative (agent) in the submittal of the application for a water supply well or septic permit located at

6116 Gilead Rd. Huntersville.
Number Street Town
(Or Parcel Number)

RANDY D. BEARD
Property Owner (print name)

Randy D. Beard
Property Owner (signature)

3.23.22
Date

MECKLENBURG COUNTY
LAND USE AND ENVIRONMENTAL SERVICES
Payment Receipt

Receipt Information

Date: 03/28/22
Receipt #: 134933
Check / Auth #: VISA 019982
Received By: PLACILJ

Amount: 250.00
Tendered: 250.00
Returned: 0.00

Account Information

Account #: 200000
Contractor: TAYLOR BEARD
Attn:
Address:
Address:
City/State/Zip: ,

Item	Description	Permit#	Quantity	Unit Price	Total Price
0701	Improvment Permit App-Residen 6310 GILEAED RD		1	250.00	250.00

Outstanding Balances

Month-To-Date	Prior Month	30 Days	60 Days	90 Days	Balance
-59.73					

Department of Environment, Health, and Natural Resources
Division of Environmental Health
On-site Wastewater Section

Property ID: 015-011-06 (Portion of)
Lot #: NA
File #: 10498
AppID: 12996

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

Property Owner: Randy D Beard
Applicant: owner
Address: 6116 Gilead Rd, Huntersville, NC 28078
Date Evaluated: 4/6/2022
Proposed Facility: 4 Bedroom House
Design Flow (.1949): 480 GPD
Property Size: 2 ac
Location: 6310 Gilead Rd, Huntersville, NC 28078
Property Recorded: 11/8/2013
Water Supply: [ ] Public [X] Individual [X] Well [ ] Spring [ ] Municipal
Evaluation Method: [X] Auger Boring [ ] Pit [ ] Cut
Type of Wastewater: [X] Sewage [ ] Industrial Process [ ] Mixed

PROFILE #	.1940 Landscape Position/ Slope%	Horizon Depth (IN.)	SOIL MORPHOLOGY .1941 .1941 Structure/ Texture	.1941 Consistence Mineralogy	b PROFILE FACTORS .1942 Soil Wetness/ Color	.1943 Soil Depth (IN.)	.1956 Sapro Class	.1944 Restr Horiz	General Comments	Profile Class & LTAR	Maximum Trench Bottom Depth for 3' Wide Conventional Trench
Boring #1	R 2%	0 - 15	gr/sbk SCL	SS SP FR SEXP	10YR 7/1 at 16"	15	NA	NA		US	NA
		15 - 30	mass C	S VP VFI EXP							
Boring #2	R 2%	0 - 10	gr/sbk SCL	SS SP FR SEXP	>48"	48	NA	NA		PS IV 0.3	36"
		10 - 48	mass C	S P FI SEXP							
Boring #3	R 2%	0 - 7	gr/sbk SCL	SS SP FR SEXP	10YR 6/2 at 40"	45	NA	NA		PS IV 0.3	28"
		7 - 28	sbk C	S P FI SEXP							
		28 - 45	sbk CL/C	SS SP FR SEXP							
Boring #4	R 3%	0 - 25	Fill	NA	NA	0	NA	NA		US	NA
Boring #5	R 2%	0 - 6	gr SCL	SS SP FR SEXP	>48"	48	NA	NA		PS IV 0.3	36"
		6 - 48	sbk C	S P FI SEXP							
Boring #6	R 2%	0 - 3	gr SL	SS SP FR SEXP	>48"	48	NA	NA		PS IV 0.3	36"
		3 - 48	sbk C	S P FI SEXP							
Boring #7	R 2%	0 - 3	gr SL	SS SP FR SEXP	10YR 7/2 at 41"	44	NA	NA		PS IV 0.3	28"
		3 - 13	sbk SCL	SS SP FR SEXP							
		13 - 44	sbk C	S P FI SEXP							
Boring #8	R 2%	0 - 5	Fill	NA	>43"	43	NA	NA		PS IV 0.3	31"
		5 - 12	sbk SCL	SS SP FR SEXP							
		12 - 43	sbk C	S P FI SEXP							

Description	Initial System	Repair System
Available Space (.1945)	PS	PS
System Type(s)	III g	I Ie
Site LTAR (gpd/sq ft)	0.3	0.3

***LTAR only valid in area within soil evaluation location #'s 2, 3, 5, 6, 7, & 8.**

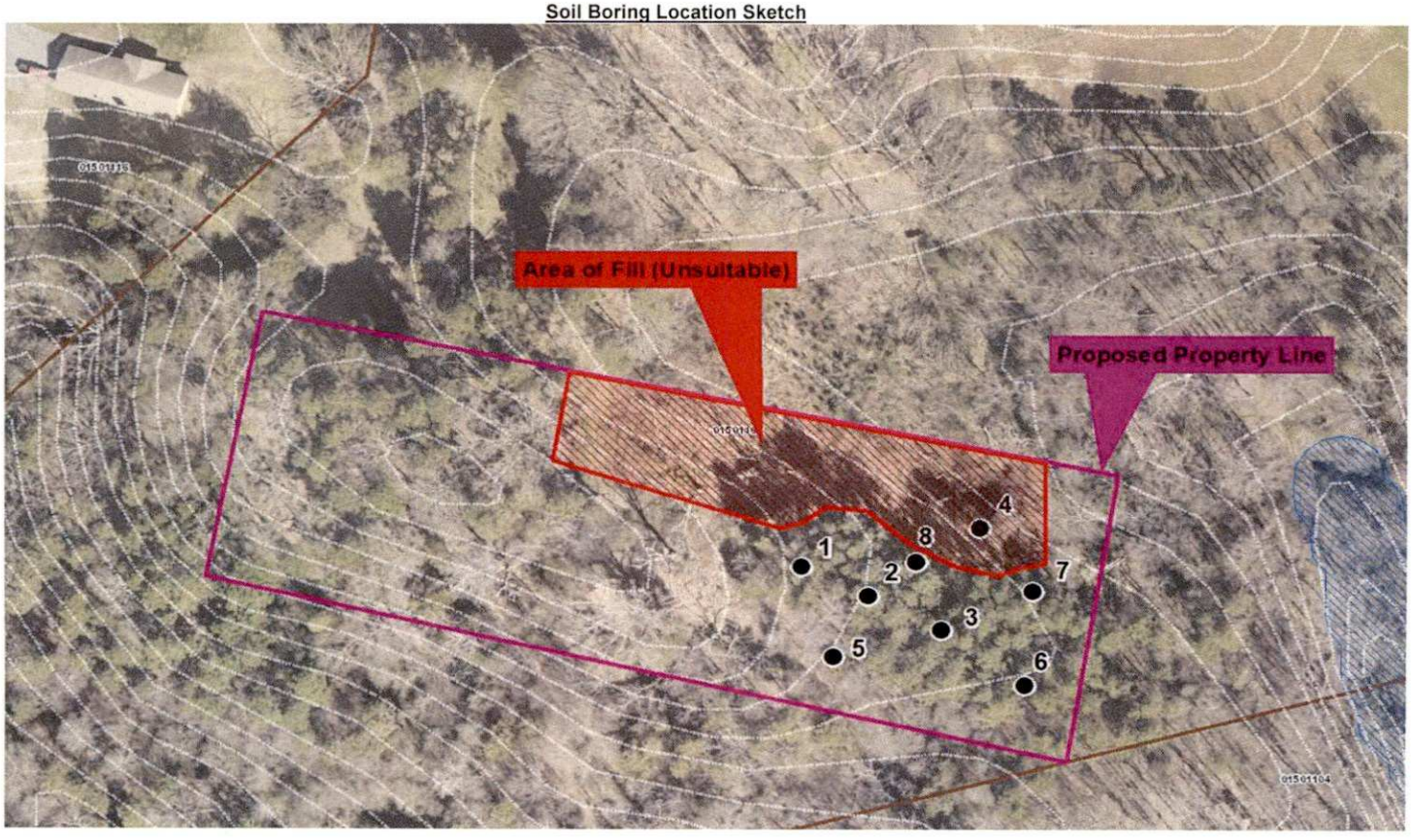
Other Factors (.1946):
Soil Evaluation By: Jacob Presley, REHS, LSS
Others Present:
Site Classification (.1948): PS
Site Evaluation By:
Others Present:

COMMENTS:

Landscape Position	Group	Texture	.1955 LTAR	Structure
R-Ridge	I	S-Sand	1.2 - 0.8	sg-Single Grain
SS-Shoulder Slope		LS-Loamy Sand		mass-Massive
LS-Linear Slope				cr-Crumb
FS-Foot Slope	II	SL-Sandy Loam	0.8 - 0.6	gr-Granular
NS-Nose Slope		L-Loam		sbk-Subangular Blocky
HS-Head Slope				abk-Angular Blocky
CC-Concave Slope	III	Si-Silt	0.6 - 0.3	pl-Platy
CV-Convex Slope		SiCL-Silty Clay Loam		pr-Prismatic
T-Terrace				Sap-Saprolite
FP-Flood Plain		CL-Clay Loam		**Structure Prefixes**
D-Drainage Way		SCL-Sandy Clay Loam		w-weak
				m-moderate
		SiL-Silt Loam		s-strong
				f-fine
	IV	SC-Sandy Clay	0.4 - 0.1	m-medium
		SiC-Silty Clay		c-coarse
		C-Clay		

Consistence Moist	Consistence Wet	Mineralogy
VFR-Very Friable	SS-Slightly Sticky	SEXP-Slightly Expansive
FR-Friable	S-Sticky	EXP-Expansive
FI-Firm	VS-Very Sticky	
VFI-Very Firm	NP-Non-Plastic	**Classification**
EFI-Extremely Firm	SP-Slightly Plastic	US-Unsuitable
	P-Plastic	PS-Provisionally Suitable
	VP-Very Plastic	S-Suitable
		NA-Not Applicable

Soil Boring Location Sketch



Mecklenburg County Groundwater & Wastewater Services
3205 Freedom Dr Suite 8000 Charlotte, NC 28208
Phone: (980) 314-1660 Fax: (704) 336-6894

NC DHHS
Division of Environmental Health
On-Site Wastewater Section

IMPROVEMENT PERMIT for a RESIDENTIAL
ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

Permit #: 30012996 GWS File #: 10498 Tax Parcel #: 015-011-06

- This IMPROVEMENT PERMIT is subject to revocation if site plans or the intended use change. There is to be NO grading, filling, or disturbance of the soil in the area of the septic tank system or repair area.
- CONSTRUCTION AUTHORIZATION must be obtained prior to receiving a Building Permit. Do not clear, grade, fill or disturb soil prior to obtaining a Construction Authorization.
- Domestic-type wastewater only. No industrial process wastewater may be discharged into the system.

I. This Improvement Permit Shall: Expire in Five (5) Years **Expiration Date (If Applicable):** 5/3/2027
Type of Installation: Residential - New System Lot Number: 0
Structure Type: HOUSE Size (ft^2): 3412 # Bedrooms: 4 Max. Occup.: 8
Building Foundation: Concrete Slab Water Supply: Private Well

II. Initial System Type: Accepted **System Classification:** ~~III~~ IIIg

Initial System Specifications:

Design Flow (gpd):	480	LTAR (gpd/ft^2):	0.3	Septic Tank Size (gal):	1000	Pump Tank Size (gal):	N/A
Trench Width (ft):	3	Trench Spacing (ft):	9	Absorption Area (ft^2):	1200	Total Trench Length (ft):	400
Maximum Trench Depth (in):	28	Depth of Media (in):	12	Distribution Device:	Drop Boxes		

III. Repair System Type: PPBPS (gravity) **System Classification:** ~~III~~ IIIe

Repair System Specifications:

Design Flow (gpd):	480	LTAR (gpd/ft^2):	0.3	Septic Tank Size (gal):	1000	Pump Tank Size (gal):	N/A
Trench Width (ft):	3	Trench Spacing (ft):	9	Absorption Area (ft^2):	800	Total Trench Length (ft):	267
Maximum Trench Depth (in):	28	Depth of Media (in):	22	Distribution Device:	Drop Boxes		

IV. Permit Conditions/Comments:

(Please See the Following Page for Permit Conditions.)

The undersigned, an authorized agent of the STATE OF NORTH CAROLINA, certifies that the Department is issuing an IMPROVEMENT PERMIT for the above referenced property. This permit is being issued in accordance with the *Laws and Rules For Sewage Treatment, and Disposal Systems* and is subject to the following provisions:

- No work shall be conducted on the septic system until a Pre-Construction meeting has been completed by the Department.
- The septic system installer shall be a licensed septic contractor with the North Carolina Wastewater Contractor Inspector Certification Board.
- The permitted system shall be installed in accordance with the included PLOT PLAN.
- This IMPROVEMENT PERMIT is transferable.

Authorized Agent: Heather Ray Owner/Legal Agent: Benjamin Beard
Print Name
Signature: Heather Ray Signature: Benjamin Beard
Date Issued: 5/3/2022

Mecklenburg County Groundwater & Wastewater Services
3205 Freedom Dr., Suite 8000 Charlotte, NC 28208
Phone: (980) 314-1680 Fax: (704) 336-6894

NC DHHS
Division of Environmental Health
On-Site Wastewater Section

IMPROVEMENT PERMIT for a RESIDENTIAL
ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

Permit #: 30012996 GWS File #: 10498

IV. Permit Conditions/Comments:

- This type of septic system requires an inspection once every 5 years by our office. The system owner is responsible for any fees, as determined by the Mecklenburg County Board of Commissioners, associated with this inspection.
- All components of the septic system must be located at least 100 ft. (50 ft. minimum) from all private wells.
- Flow from all gutters and downspouts shall be directed not to discharge water onto or across any part of the septic system.
- Foundation drains shall be constructed not to discharge water onto or across any part of the septic system.
- New property lines must be recorded prior to CA being issued.

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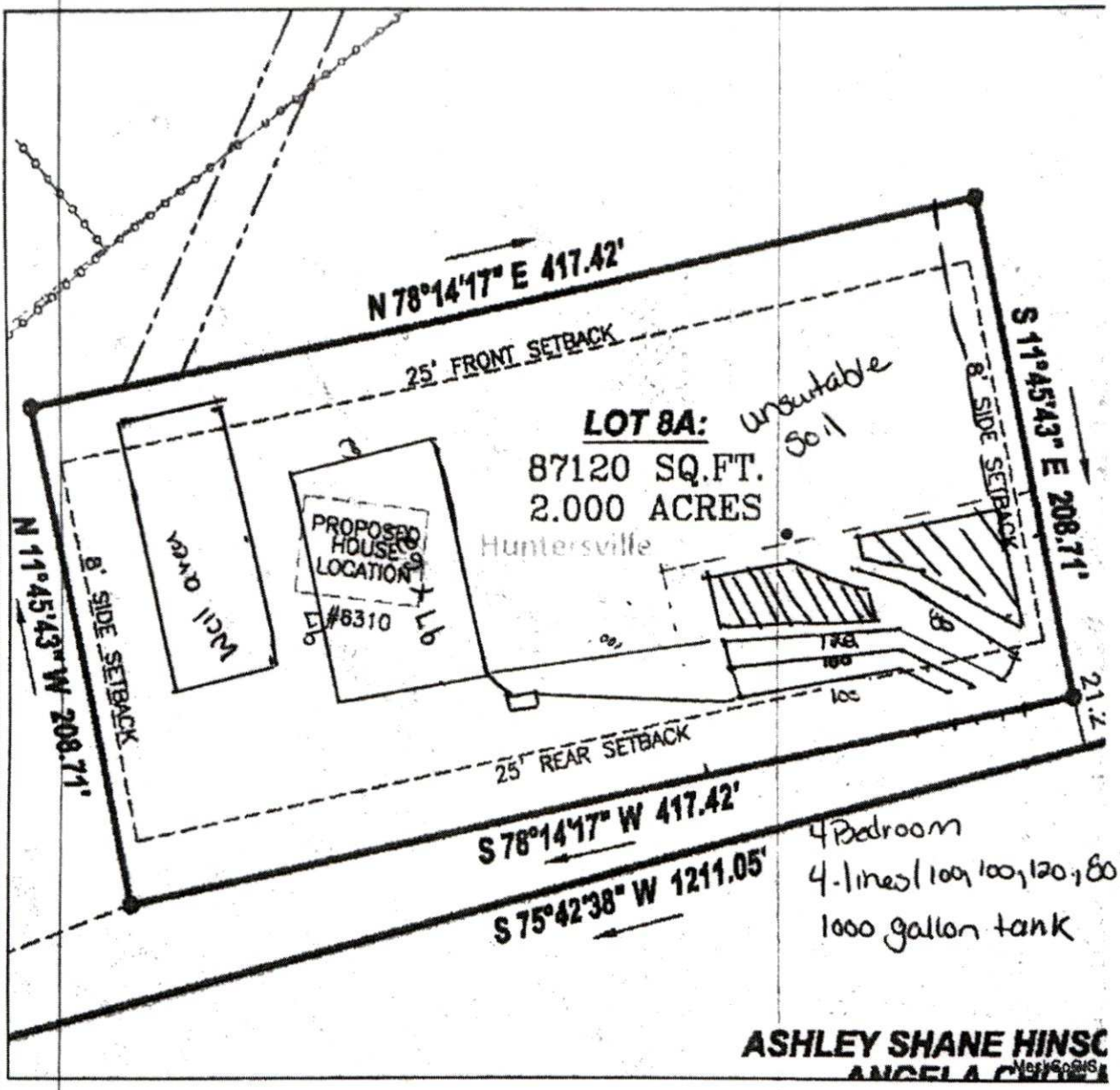
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- The permitted system shall be installed in accordance with the included PLOT PLAN.
- This IMPROVEMENT PERMIT is transferable.

Authorized Agent: Heather Ray Owner/Legal Agent: Benjamin Beard
Print Name

Signature: Heather Ray Signature: Benjamin Beard

Date Issued: 5/3/2022

On-site Wastewater Improvement Permit Diagram



Mecklenburg County Health Department
Environmental Health - Groundwater and Wastewater Services

Permit #: 30012946
PID #: 01501106
File #: 10498

Authorized Agent: Heather Rust Date: 5-3-2022

Owner/ Legal Agent: [signature] Date: 8/15/22

1 inch = 60 f

Mecklenburg County Groundwater & Wastewater Services
3205 Freedom Dr., Suite 8000 Charlotte, NC 28208
Phone: (980) 314-1680 Fax: (704) 336-6894

NC DHHS
Division of Environmental Health
On-Site Wastewater Section

IMPROVEMENT PERMIT for a RESIDENTIAL
ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

Permit #: 30012996 GWS File #: 10498 Tax Parcel #: 015-011-06

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I. This Improvement Permit Shall: Expire in Five (5) Years **Expiration Date (If Applicable):** 5/3/2027

Type of Installation: Residential - New System Lot Number: 0

Structure Type: HOUSE Size (ft^2): 3412 # Bedrooms: 4 Max. Occup.: 8

Building Foundation: Concrete Slab Water Supply: Private Well

II. Initial System Type: Accepted **System Classification:** ~~IIIb~~ IIIg

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Trench Width (ft):	3	Trench Spacing (ft):	9	Absorption Area (ft^2):	1200	Total Trench Length (ft):	400
Maximum Trench Depth (in):	28	Depth of Media (in):	12	Distribution Device:	Drop Boxes		

III. Repair System Type: PPBPS (gravity) **System Classification:** ~~IIIb~~ IIIe

Repair System Specifications:

Design Flow (gpd):	480	LTAR (gpd/ft^2):	0.3	Septic Tank Size (gal):	1000	Pump Tank Size (gal):	N/A
Trench Width (ft):	3	Trench Spacing (ft):	9	Absorption Area (ft^2):	800	Total Trench Length (ft):	267
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(Please See the Following Page for Permit Conditions.)

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- No work shall be conducted on the septic system until a Pre-Construction meeting has been completed by the Department.
- The septic system installer shall be a licensed septic contractor with the North Carolina Wastewater Contractor Inspector Certification Board.
- The permitted system shall be installed in accordance with the included PLOT PLAN.
- This IMPROVEMENT PERMIT is transferable.

Authorized Agent: Heather Ray Owner/Legal Agent: _____
Print Name

Signature: Heather Ray Signature: _____

Date Issued: 5/3/2022

Mecklenburg County Groundwater & Wastewater Services
3205 Freedom Dr., Suite 8000 Charlotte, NC 28208
Phone: (980) 314-1680 Fax: (704) 336-6894

NC DHHS
Division of Environmental Health
On-Site Wastewater Section

IMPROVEMENT PERMIT for a RESIDENTIAL
ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

Permit #: **30012996** GWS File #: **10498**

IV. Permit Conditions/Comments:

- This type of septic system requires an inspection once every 5 years by our office. The system owner is responsible for any fees, as determined by the Mecklenburg County Board of Commissioners, associated with this inspection.
- All components of the septic system must be located at least 100 ft. (50 ft. minimum) from all private wells.
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- The septic system installer shall be a licensed septic contractor with the North Carolina Wastewater Contractor Inspector Certification Board.
- The permitted system shall be installed in accordance with the included PLOT PLAN.
- This IMPROVEMENT PERMIT is transferable.

Authorized Agent: Heather Ray

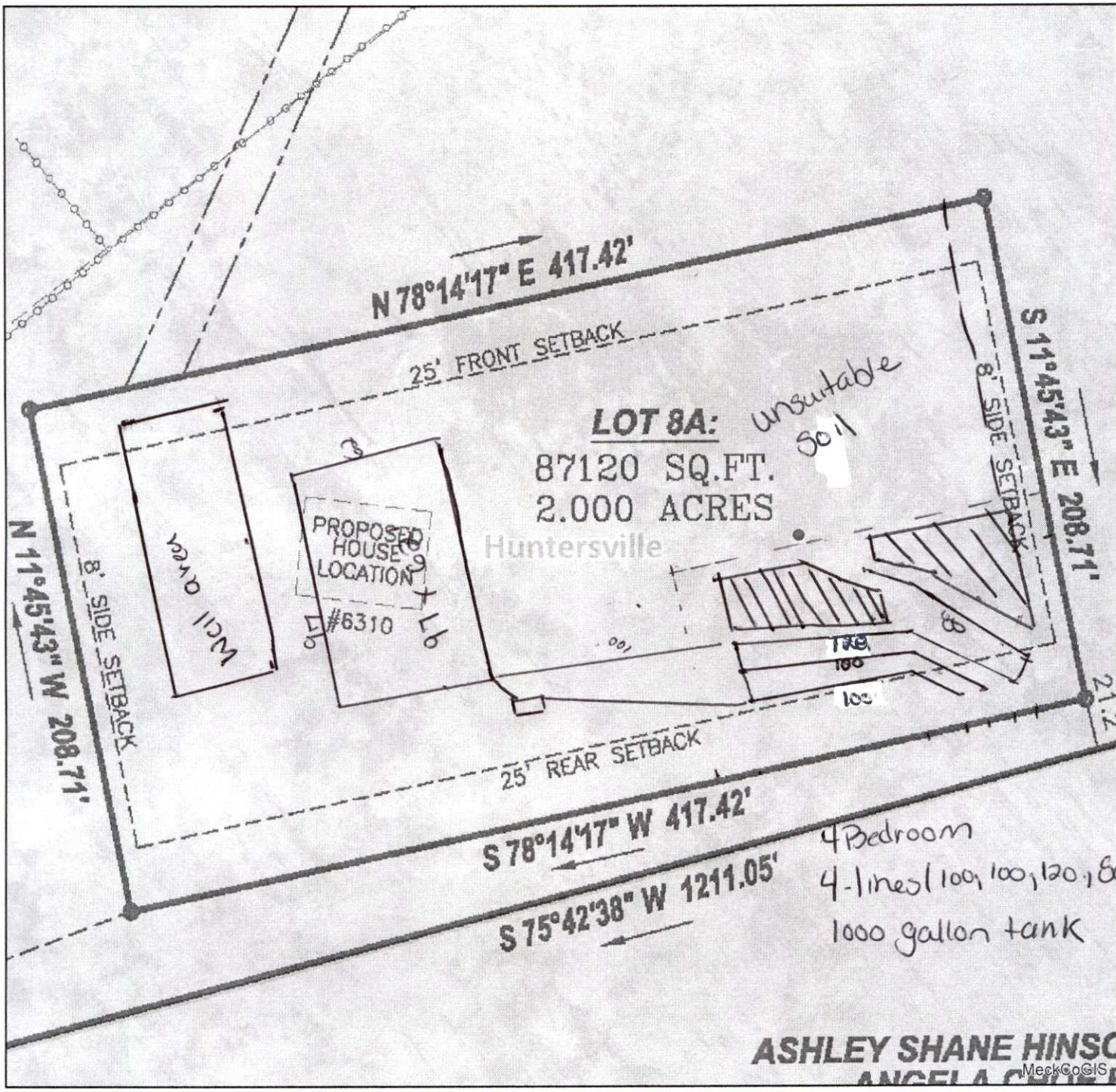
Signature: H Eather Ray

Date Issued: 5/3/2022

Owner/Legal Agent: _____
Print Name

Signature: _____

On-site Wastewater Improvement Permit Diagram



Mecklenburg County Health Department
Environmental Health - Groundwater and Wastewater Services

Permit #: 30012946
PID #: 01501106
File #: 10498

Authorized Agent: Heather Ruy Date: 5-3-2022

Owner/ Legal Agent: _____ Date: _____

1 inch = 60 f

MECKLENBURG COUNTY
LAND USE AND ENVIRONMENTAL SERVICES
Payment Receipt

Receipt Information

Date:	08/19/22	**Amount:**	200.00
Receipt #:	137357	**Tendered:**	200.00
Check / Auth #:	VISA 088735	**Returned:**	0.00
Received By:	GALLOSE		

Account Information

Account #: 200000
Contractor: BEARD TAYLOR
Attn: SEPTIC OPERATIONAL PERMIT
Address: 6310 GILEAD RD
Address:
City/State/Zip: ,

Item	Description	Permit#	Quantity	Unit Price	Total Price
0703	Septic Operational Permit 6310 GILEAD RD	10498	1	200.00	200.00

----------**Outstanding Balances**----------

Month-To-Date	Prior Month	30 Days	60 Days	90 Days	Balance

MECKLENBURG COUNTY
LAND USE AND ENVIRONMENTAL SERVICES
Payment Receipt

Receipt Information

Date:	08/19/22	**Amount:**	200.00
Receipt #:	137355	**Tendered:**	200.00
Check / Auth #:	VISA 088735	**Returned:**	0.00
Received By:	GALLOSE		

Account Information

Account #: 200000
Contractor: BEARD TAYLOR
Attn: CONSTRUCTION AUTHORIZATION
Address: 6310 GILEAD RD
Address:
City/State/Zip: ,

Item	Description	Permit#	Quantity	Unit Price	Total Price
0734	Septic Construction Authorizat 6310 GILEAD RD	10498	1	200.00	200.00

----------Outstanding Balances----------

Month-To-Date	Prior Month	30 Days	60 Days	90 Days	Balance

Mecklenburg County Groundwater & Wastewater Services
3205 Freedom Dr. Suite 8000 Charlotte, NC 28208
Phone: (980) 314-1680 Fax: (704) 336-6894

Septic System Pre-Construction Meeting Checklist

File # 10496 App# 12996 Tax Parcel# 015-011-06 (part of)

Property Owner: Randy Beard

Job Location Address: 6310 Gilead Rd

City: Huntersville State: NC Zip Code: 28078

1. Does System design match facility, flow & wastewater characteristics?

   ☑ YES ☐ NO

   Comments: _____

2. Is there sufficient available space for the septic systems initial and repair areas?

   ☑ YES ☐ NO

   Comments: _____

3. Can the septic system be installed per the permit conditions and drawing on file?

   ☐ YES ☑ NO

   Comments: had to dig pits. Owners graded original area

*If "NO" is checked for any of the above the existing permit may need to be revoked.

Permission is hereby given to ☐ install ☐ alter ☐ repair an on-site wastewater treatment & and disposal system, with subsurface soil absorption and effluent discharge meeting all of the construction requirements of 15A NCAC 18A .1900 which are in effect on the date of granting this approval. **System shall not be installed while soils are in wet condition.**

Authorized Agent — Date: 4-1-23

Others Present

Mecklenburg County Groundwater & Wastewater Services
3205 Freedom Dr. Suite 8000, Charlotte, NC 28208
Phone: (980) 314-1680 Fax: (704) 336-6894

NC DHHS
Division of Environmental Health
On-Site Wastewater Section

OPERATION PERMIT for an ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

File #: 10498 Permit #: 30012996 Tax Parcel #: 01501106

Property Owner: BENJAMIN & TAYLOR BEARD

Job Location Address: 6310 Gilead Rd

City: Huntersville State: NC Zip Code: 28078

Operation Permit Issuance Date: 4/10/23 Contractor Name: Chris Stevens Septic

Permitted Design Flow: 480 GPD Liquid Capacity of Dosing Tank: NA gallons

Liquid Capacity of Septic Tank: na gallons Tank Manufacture Shoaf Effluent Pump Model: NA

Drainfield Installation ☐ N/A

Trench Depth: 34 inches

Trench Width: 3 feet

Line Spacing: 9 feet (O.C.)

Total line length: 400 feet

# of Lines: 5 @ 80 feet

Depth of Media: 12 inches (Type) CHM 36

Depth of Cover: 6"+ inches

Distribution Device: End Cap to End Cap

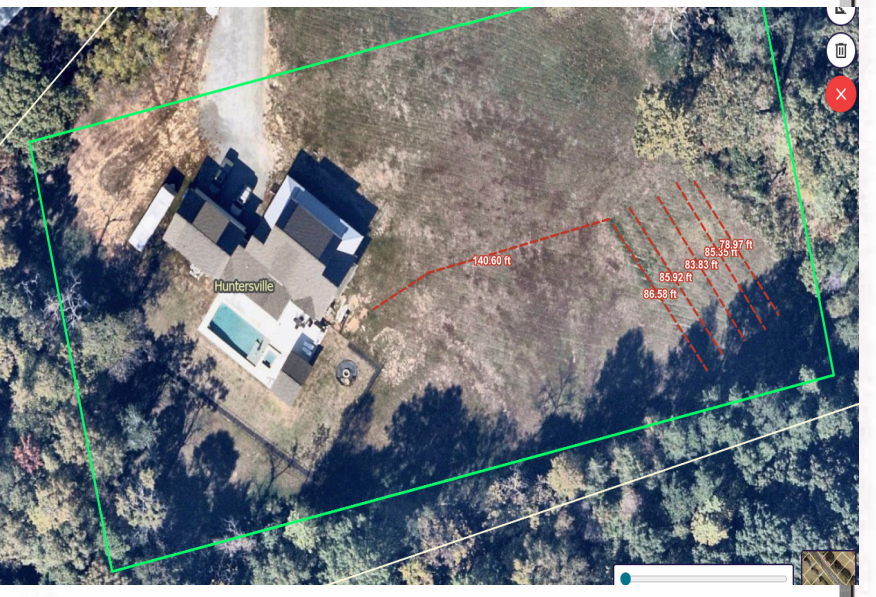
Inspection Dates

Tank(s) Inspected: 4/4/23

Excavation Inspected: 4/4/23

Pump & Controls Inspected: NA

SKETCH OF SYSTEM INSTALLATION
(As-Built Drawing)



Bed Installation *(For Repair Installations ONLY.)* ☐ N

Bed Depth: _____ inches

Bed Width: _____ feet

Total line length: _____ feet

# of Lines: _____ @ _____ feet

Depth of Media: _____ inches (Type) _____

Depth of Cover: _____ inches

Distribution Device: _____

Water Supply Source

☐ Municipal ☑ Private Well ☐ Community Well

☐ Other _____

System Installation Setbacks

Distance from Building Foundation: 15' feet

Distance from Property Line: 10' feet

Distance from Water Supply Source: 50' feet

The undersigned has inspected the Septic Tank System described above, and certifies it has been ☑ installed ☐ altered ☐ repaired ☐ as detailed in the plot above ☐ in accordance with the permit issued and meets the provisions of 15A NCAC 18A. 1900, "Laws and Rules for Sewage Treatment and Disposal Systems" in effect on the date of issuance of the permit. The issuance of this Operation Permit does not in any way guarantee that the system will operate properly or relieve any person now or hereafter owning, controlling, or using such system from any liability resulting from the failure of the system to operate properly. This document is issued subject to those restrictions and conditions shown on the permit(s) and the provisions of 15A NCAC 18A. 1900 in addition to those listed below under "Comments." This document shall be null and void if any information contained in the application is untrue or if any additions are made to the property which would increase the requirements for said system.

Notice: Disturbance of the designated repair area may result in the Suspension or Revocation of this permit.

Comments: System Classification & Type: IIIg/CHM36/G/Na/NA

DENR Authorized Agent: Heather Ray Signature: Heather Ray

Mecklenburg County Groundwater & Wastewater Services
3205 Freedom Dr. Suite 8000, Charlotte, NC 28208
Phone: (980) 314-1680 Fax: (704) 336-6894

NC DHHS
Division of Environmental Health
On-Site Wastewater Section

OPERATION PERMIT for an
ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

File #: 10498 Permit #: 30012996 Tax Parcel #: 01501106

Property Owner: BENJAMIN & TAYLOR BEARD

Job Location Address: 6310 Gilead Rd

City: Huntersville State: NC Zip Code: 28078

OPERATION PERMIT CONDITIONS:

I. Performance: System shall perform in accordance with 15A NCAC 18A .1961.

II. Monitoring: System shall be monitored as required by 15A NCAC 18A .1961.

III. Maintenance: Ground absorption sewage treatment and disposal systems shall be checked, and the contents of the septic tank removed, periodically from all compartments, to ensure proper operation of the system. The contents shall be pumped whenever the solids level is found to be more than 1/3 of the liquid depth in any compartment.

IV. Operation: System shall be operated in accordance with 15A NCAC 18A .1961.

System Classification: IIIG

*Operation Permits for Type V and VI systems expire five (5) years from the date of issuance (in accordance with Table V(a)). The system owner must contact GWS six (6) months prior to expiration for permit renewal.

Subsurface system operator required: Yes ☐ No ☑

☐ This type of system requires the system owner to maintain a contract with a certified operator to perform system inspection, maintenance, and reporting as required in 15A NCAC 18A .1961. and Table V(a). The system owner is responsible for all fees associated with these services.

☑ System does not require inspection by GWS on a routine frequency.

☐ System requires inspection by GWS once every five (5) years. The system owner is responsible for all fees associated with the inspection.

☐ System requires inspection by GWS once every three (3) years. The system owner is responsible for all fees associated with the inspection.

☐ System requires inspection by GWS once every twelve (12) months. The system owner is responsible for all fees associated with the inspection.

☐ System requires inspection by GWS once every six (6) months. The system owner is responsible for all fees associated with the inspection.

V. Other:

DENR Authorized Agent: Heather Ray Date: 4/10/23

Signature: Heather Ray