

**Adams Soil Consulting
1676 Mitchell Road
Angier, NC 27501
919-414-6761**

September 21, 2022
Project #1420

Gioia Palmieri
1005 Lamond Ave,
Durham, NC 27701

RE: Preliminary soil/site evaluation for Lots 1 & 2- of the minor subdivision for Gioia Palmieri located adjacent to 1205 Old Coats Road in Harnett County, NC.

Ms. Palmieri,

Adams Soil Consulting (ASC) conducted a preliminary soil evaluation on the above referenced parcel to determine the areas of soils which are suitable for subsurface wastewater disposal systems (conventional & LPP). The soil/site evaluation was performed using hand auger borings during moist soil conditions based on the criteria found in the State Subsurface Rules, 15ANCAC 18A .1900 "Laws and Rules for Sewage Treatment and Disposal Systems". From this evaluation, ASC sketched the boundary between the suitable soils and unsuitable soils onto preliminary plat map of the property supplied by your surveyor. The provisionally suitable soils shown on the accompanying soil map are suitable for conventional and accepted status type septic systems.

At the time of evaluation Lot #1 contained an existing residential home serviced by a gravity septic system. There was no evidence of past or current septic system failure. The existing systems will apparently be completely located within the new property lines and meet all current setbacks. Additionally, approximately 10,000 ft² of provisionally suitable soil was identified that could be utilized for a repair septic system should a repair be required in the future was identified. Lot 2 was vacant with no indications of previous structures on the property. Greater than 18,000 ft² of provisionally suitable soil was located on parcel "2" that could potentially support a conventional or accepted status type septic system as well as a repair septic area for a new homesite. A new home footprint of at least 50' x 50' should be able to be located on lot B-1. The provisionally suitable soil found should support a daily loading rate ranging from 0.3-0.6 gallons/ft²/day. Lot #2 could potentially accommodate a 4-bedroom septic system, but a detailed site plan and design will be required for final approval.

The specific septic system and loading rates for the lots will be permitted by the Harnett County Health Department. The areas for the proposed septic fields shall not be impacted by home sites, pools, garages and shall not be mechanically altered from the natural lay of the land.

The lots will require a detailed soil/site evaluation by the Harnett County Health Department prior to issuance of any permits for septic systems. A septic system design/ layout may be required before any permits can be issued on the above referenced lots demonstrating available space for the primary and repair septic areas. I can offer these services if requested. Due to the subjective nature of the permitting process and the variability of naturally occurring soils, Adams Soil Consulting cannot guarantee that areas delineated as suitable for on-site wastewater disposal systems will be permitted by the governing agency. The lot may require a septic system utilizing pumps, shallow or ultra-shallow conventional trench placement, low pressure pipe system, and/or reductions system for final approval. The accompanying soil map is preliminary in nature, no further assumptions or subdivision should be made without a more detailed evaluation.

Thank you for allowing me to perform this service for you. Please let me know if you have any questions regarding this report or the accompanying soil map.

Sincerely,



Alex Adams
NC Licensed Soil Scientist #1247
Encl: Soil Map



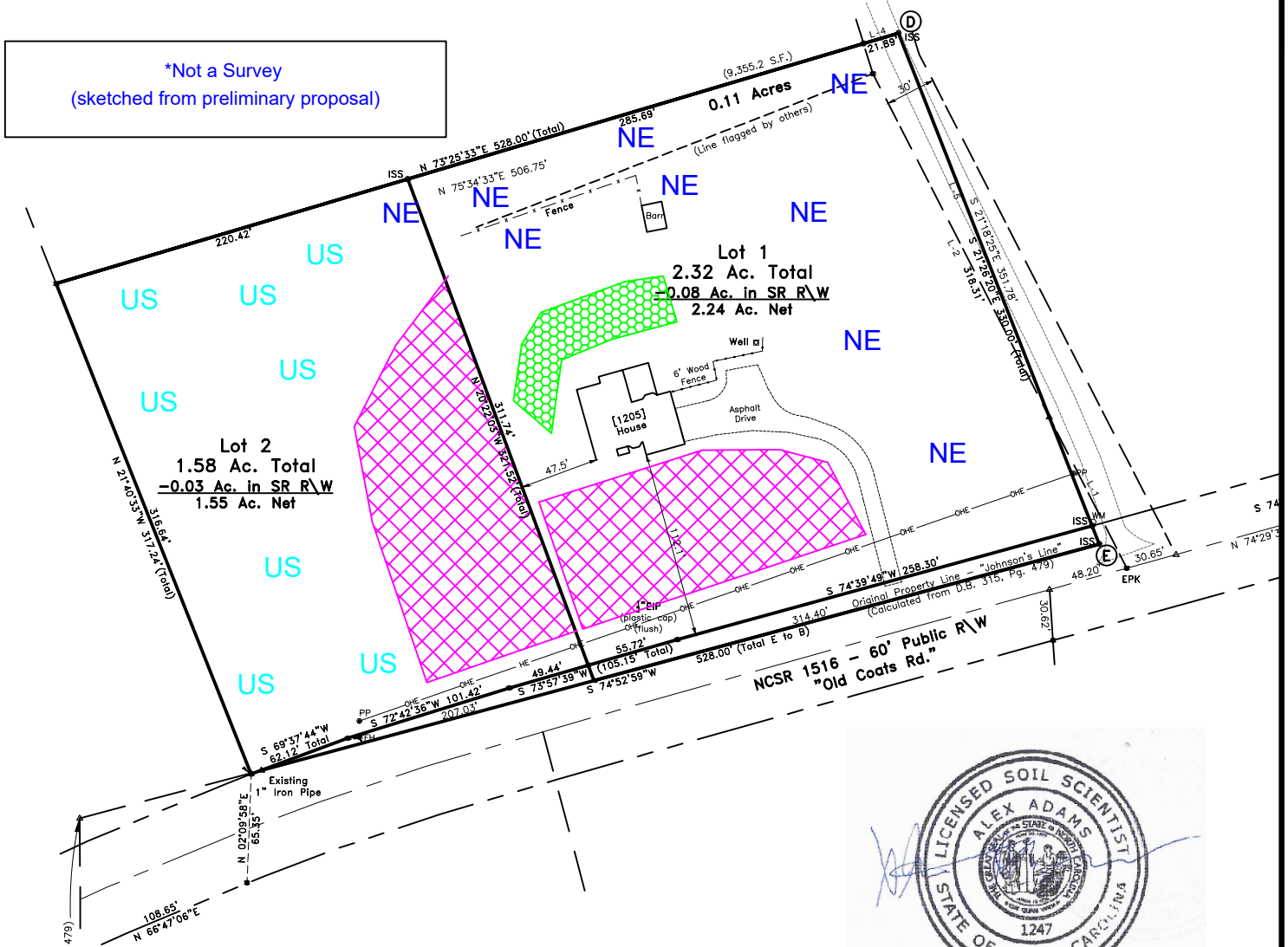
Preliminary Soil Evaluation

Gioia Palmieri

Lots 1 & 2

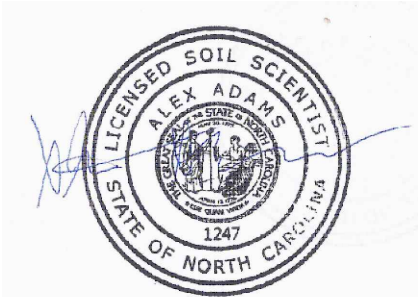
1205 Old Coats Road - Harnett County NC

*Not a Survey
(sketched from preliminary proposal)



Legend

	Areas contain soils with 24 inches or more of useable material and have potential for conventional, modified conventional, LPP or ultra-shallow conventional septic systems. Backhoe pits may be required at the time of permitting due to dense gravel layer present in the soil.
	Approximate location of existing gravity septic system
US	Unsuitable Areas
NE	Areas not evaluated



- *Preliminary Soils Evaluation
- *Soil boundary was sketched onto a preliminary map of the property supplied by the client's surveyor.
- *Not a Survey.
- *Septic system setbacks listed below for new lots.
 - 1) 10' from property lines.
 - 2) 100' from wells for primary systems.
 - 3) 50' from surface waters (streams, ponds, lakes).
- *Any mechanical disturbances such as grading, cutting and filling of the suitable soil areas can render areas unsuitable for future septic systems.
- *See accompanying report for additional information.
- *Due to Soil Variability, Adams soil consulting cannot guarantee that the areas shown as suitable will be permitted by the local Health Department.

GRAPHIC SCALE
1" = 100'



Adams
Soil Consulting
919-414-6761
Project #1420