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> Septic Easement Delineation Report 853 Joe Collins Rd, Lillington NC 27546 Harnett County (PIN: 0631-41-4484.000)

PREPARED FOR:

Andrew Bourgeois

PREPARED BY:

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DATE:

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Agri-Waste Technology, Inc. (AWT) was contracted to perform a Septic Easement Delineation on the property located at 853 Joe Collins Rd, Lillington NC 27546. This septic easement is to serve two (2) 6-bedroom homes located on the parcel across the road at 1008 Joe Collins Rd, Lillington, NC 27546 (PIN: 0630-59-1579.000).

The design flow for each 6-bedroom home is 720 gallons per day (gpd). Using an LTAR of 0.4 gpd/ft<sup>2</sup>, the application area for each home is 1800 ft<sup>2</sup>. The length of 3 ft wide trench for each is then 600 ft. The layout assumes the use of 25% reduction trench media which reduces the per system trench length to 450 ft. Each system requires a primary layout and a repair layout, totaling 900 ft per home. Since two separate homes are to use this septic easement, state rules require a 20-ft buffer between the two systems.

This evaluation was done in accordance with the laws and rules governing wastewater systems in North Carolina. AWT conducted a field flagging of the potential septic systems' drainfields. The findings are as follows:

The easement originally proposed was inadequate for two separate six-bedroom systems. The area was expanded to provide adequate area while making efficient use of the land and keeping the easement boundary simple. The revised easement boundary and drainfield layouts for both 6-bedroom systems are shown in the accompanying drawing. The total area of the proposed easement is 35515 ft<sup>2</sup> (0.8153 acres).

One system is composed of Lines 1-7, with Lines 5-7 being the primary and Lines 1-4 being the repair. The second system is composed of Line 9-13, with part of Line 11 and Lines 12-13 being the primary and Lines 9-10 and the remainder of Line 11 being the repair.

Effluent from each home will be collected in their respective pump tanks, then pumped under the road to pressure manifolds serving the separate systems. The details of operation will be determined as part of the design process should these projects move forward.

## Additional Notes:

- If this project is going to proceed, the flags must not be disturbed. All flags must be in place for the county's inspection of the site for permitting purposes. If the flags must be moved for mowing, please mark the locations of the flags with spray paint on the ground or painted stakes and replace the flags in their original positions after mowing.
- Line 13 will need to be flagged before inspection.
- A surveyor will be required to flag the new boundary and record the easement with the county prior to inspection.

We appreciate the opportunity to assist you. Please contact us with any questions, concerns, or comments upon review of this document.

Christopher McGee, LSS

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