

January 23, 2025

LETTER OF OPINION

Cole Bundick
P.O. Box 264
Oak Hall, VA 23416-0264

Re: NE Corner of Guards Shore RD & Winterville RD, Accomack County, VA; TM # 53-A-130

Dear Mr. Bundick:

Upon your request, I conducted a site and soil study of the above referenced property in order to determine if the site was suitable to accommodate a conventional "septic tank effluent" sewage disposal system or an alternative treatment sewage disposal system in accordance with the Virginia Sewage Handling & Disposal Regulations, effective July 1, 2000, and the Regulations for Alternative Onsite Sewage Systems, effective December 7, 2011.

It is important to note that the site and soil evaluations made during this study were not intended to be "site specific" as with a construction permit soil evaluation or Certification Letter, but intended merely to provide a general overview to verify if soils on the site were approvable for onsite sewage disposal as well as determine if the property can comply with the setback requirements as outlined in the Sewage Regulations as well as applicable county ordinances. Based on soil borings conducted on the property as well as site observations, I am simply rendering my professional opinion as to whether the property has sufficient physical area and soils to support an onsite sewage disposal system in compliance with current Health Department Regulations and policies. This letter of opinion is not intended to reflect any official determination by the Virginia Department of Health (VDH) or Savage Onsite Septic, nor is it intended to be used for the purposes of obtaining sewage approval for real estate transactions.

The subject property consists of approximately 9 acres at the northeast corner of Guards Shore Road and Winterville Road, outside the town limits of Bloxom. The parcel is mostly wooded with an existing dilapidated dwelling fronting Winterville Road. It should be noted that the property is listed as falling within the NIMMO Soil Series per the Accomack County Soil Maps (see Exhibit A). "NIMMO" is classified as very deep and poorly drained soil with a moderate percolation rate. NIMMO soils are generally unsuitable for septic tank effluent (conventional septic tank and drainfield) sewage systems. However, under the Regulations for Alternative Onsite Sewage Systems (AOSSO), a professional engineer licensed in the Commonwealth of Virginia, may design an above grade alternative treatment system (Treatment Level 3 or TL-3 Effluent) with chlorine or ultraviolet (UV) disinfection on sites like this where the seasonal water table is <6" from existing grade (as typically is the case with NIMMO soils). My soil borings were made randomly throughout the wooded parcel and behind the dilapidated dwelling. Based on my soil testing, I would have to concur with the county soil maps as my testing revealed a high seasonal water table extending up to existing grade. Based on encountering heavy sandy loam to loam soil textures, I would estimate the percolation rate to be between 35 – 40 minutes per inch at 6" depth. The soil profile test borings were found to be very consistent throughout the property and I would consider these soils to fall within the NIMMO Soil Series.

It should be noted that while the AOSSO Regulations allow for a PE to design a TL-3 Effluent alternative treatment system in these types of poorly drained soils, there are some limitations that the PE must still comply with for the Health Department to be able to issue a sewage disposal system construction permit. First, all horizontal setbacks such as setbacks to neighboring private wells and to property lines must be adhered to. The existing dwelling on the property appears to have been served by a shallow well and this well will need to be located and may need to be properly abandoned if it is determined that it will be <100' to the proposed sewage system. Also, if a property contains any non-tidal wetlands as defined by the Army Corps of Engineers, then the PE is prohibited from designing a sewage system within 5' of a non-tidal

wetland. Based on the National Wetland Inventory (NWI) Wetland Maps (see attachment B), there does appear to be a significant area along the southern end of the property that is mapped as "Freshwater Forested/Shrub Wetland". However, the NWI maps are not site specific and are very general in nature, so if wetlands are suspected or of concern, then it is always best to hire a certified wetland delineator to conduct a field survey of the property to determine whether the property is impacted by any non-tidal wetlands. It would appear, assuming that the NWI maps are accurate in this case, that there is ample remaining area on the property that could accommodate a TL-3 Effluent sewage disposal system while maintaining the minimum required 5' setback off these wetlands (the wetlands would have to be identified and mapped in order to design that close to them).

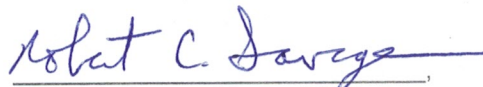
I should also note that it is possible under the current regulations to obtain a certification letter for a TL-3 Effluent sewage disposal site if you so desire. Certification letters are issued through the local Health Department and are a 100% guarantee that the Health Department will issue a sewage disposal system construction permit for the property in the future. They have no expiration date and are 100% transferable to a new owner. For a TL-3 Effluent certification letter, we would need to get a PE to sign off on the letter based on this level of treatment required if you chose to pursue one. Also, the Health Department requires that you furnish them with a copy of a recorded land survey of the property by a licensed land surveyor for them to issue a certification letter. So, in other words, if the property has never been surveyed, then it would need to be surveyed before you could apply for the certification letter.

Based on the areas tested, there appears to be sufficient area and soil to easily accommodate a 3-4-bedroom residential dwelling served by an engineered TL-3 Effluent sewage disposal system with approved disinfection. While pricing can vary depending upon the sewage system design and the type of treatment unit utilized, a current ballpark figure for the installation of such a system to serve a 3-4-bedroom residence will typically run about \$35,000 - \$40,000.

Again, it should be noted that I am simply rendering my professional opinion as a licensed Master Alternative Onsite Soil Evaluator (AOSE) as to the potential sewage disposal usage of the property based solely on available physical area, soil characteristics, and Health Department regulations and policies. I would be more than happy to assist you further should you desire to either pursue a certification letter or sewage disposal system construction permit in the future.

I look forward to working with you and am more than happy to assist in any way I can. Should you have any questions regarding this matter, please feel free to give me a call at (757) 710-2681.

Sincerely,



Robert C. Savage, Master AOSE
Lic. # 1940001082

Attachments: 2

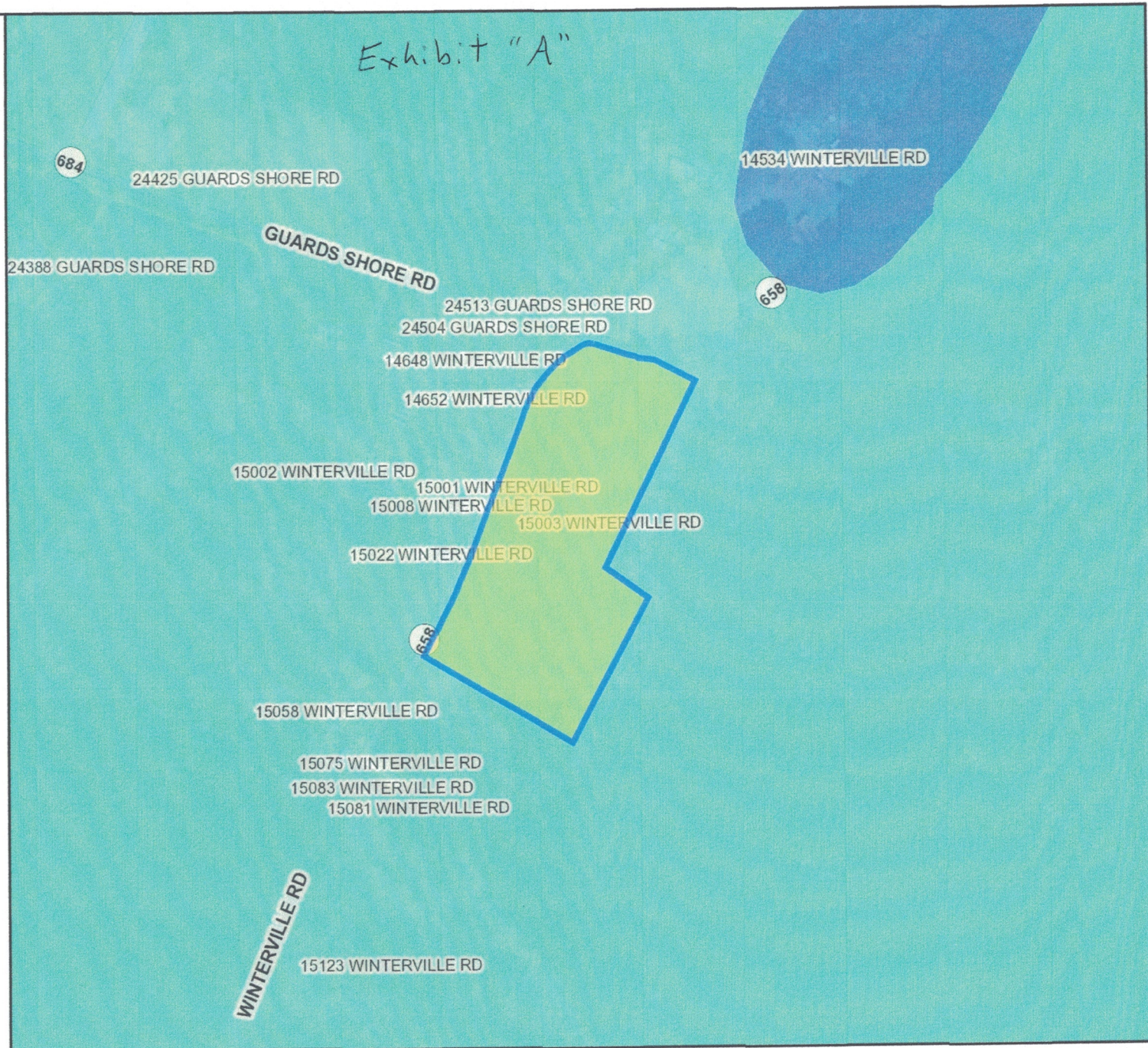
Accomack County, Virginia

Legend

Parcels

Soils

- Arapahoe
- Assateague
- Beaches
- Bojac
- Camocca
- Chincoteague
- Dragston
- Fisherman
- Magotha
- Melfa
- Molena
- Munden
- Nimmo
- Polawana
- Seabrook
- Udorthents
- Water



Map Printed from AccoMap

<https://parcelviewer.geodecisions.com/Accomack>

Feet



1:4,514 / 1"=376 Feet

Title:

Date: 1/23/2025

DISCLAIMER: This drawing is neither a legally recorded map nor a survey and is not intended to be used as such. The information displayed is a compilation of records, information, and data obtained from various sources, and Accomack County is not responsible for its accuracy or how current it may be.

Accomack County, Virginia

Legend

Parcels

NWI Wetlands
color="#B33013"> UPDATED
2023

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine



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