SHAFFER SOIL SERVICES

CES Santord road HYTOBORO, N.C. 27012 1910 DECASTOR

July 21, 2006

Mr. John Coffey Coffey Grounds, Inc. 127 Araya Lane Chapel Hill, NC 27516

Subject: General soils information and recommendations

Buck Branch Subdivision Hamlet Chapel Road Chatham County, NC

Dear John:

I have evaluated the subject property for suitability for septic systems over a number of days during the past 2 years. The purpose of my evaluations was first to perform an overall detailed site suitability map, then to follow up with lot-specific evaluations to insure that all proposed lots have soils suitable for a conventional or shallow conventional type of septic system. The current site plan map is dated July 20, 2006 from Mr. Van Finch, R.L.S.

On this site sketch plan as shown, all lots proposed have suitable or provisionally suitable soils for conventional or shallow conventional septic systems. During the first site evaluation phase, several large areas of suitable soils were located and no further evaluation has been performed or deemed necessary since the subdivision layout has been performed, hence no specific septic system area has been defined for the lots within these areas. For a number of other individual lots, I have defined septic system limits and flagged these on the lots. Each proposed lot is adequate in size to support the septic system plus required repair area for at least a 4-bedroom septic system, with the exception of several lots where a quick septic system layout was performed that may allow for only a 3-bedroom system. The number of bedrooms allotted will be determined ultimately by the LTAR (hydraulic loading rate) assigned by the Chatham County Health Department at permitting time. I encourage the use of innovative technologies with warranties which allow a significant space reduction in the size of the septic drainfield, and hence may allow 4-bedroom permits on all lots.

The soils in the area are Appling and Wedowee soils, which are deep to moderately deep and well drained. The subsoil is clayey but not very firm or plastic which allows for the classification of suitable or provisionally suitable for the septic systems. Areas that were classified as unsuitable during my site evaluations have not been proposed for septic areas.

This report represents my professional opinion. The recommendations given in this report will not insure that permits would be either issued or denied for any particular part of the tract or any given number of lots, and likewise will not insure that a specific type and size

of wastewater system will be allowed. These decisions will be made by the staff of the Chatham County Health Department. Also, this report does not indicate any guarantee that an installed system will function properly for a specified amount of time. Proper function of wastewater systems is dependent on proper installation procedures as well as owner maintenance.

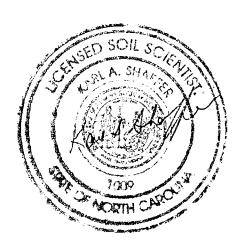
I appreciate the opportunity to perform this service for you. If you have any questions, please feel free to call.

Sincerely,

Karl A. Shaffer

NC Licensed Soil Scientist

License No. 1009



SNATTE SOLL SERVICES

August 12, 2006

John Coffey 127 Araya Lane Chapel Hill, NC 27516

Subject: Soils information on site sketch plan dated August 11, 2006

Coffey Grounds, Inc. Property Buck Branch Subdivision Hamlet Chapel Road Chatham County, NC

Dear John:

This letter serves as an update to the letter dated July 21, 2006 (attached) on the same property. An attached site plan map dated August 11, 2006 from Van Finch is also attached with this letter. This site plan was used to depict the areas of suitable and provisionally suitable soils that will accommodate septic systems of a conventional or shallow conventional design. The site map also depicts individual septic systems that were assessed in areas that originally appeared marginal for septic systems. In summary, each of the proposed 66 lots can be served by a conventional or shallow conventional septic system. On the lots where no individual septic system area is noted, the lot is deemed suitable as the original intensive survey depicted the areas as consistently suitable (noted as "S" on the site plan map). The survey intensity was adequate to prove that sufficient suitable area on each lot is available for the septic system.

If you have any questions, please feel free to call.

Sincerely,

NC Licensed Soil Scientist

License No. 1009

attachments: site plan map from Finch dated August 11, 2006 Shaffer Soil Services letter dated July 21, 2006



SHAFFER SOIL SERVICES

685 **S**ANFORD ROAD PITTSBORO, N.C. 27312 919-542-5803

JUNE 3, 2007

John Coffey 127 Araya Lane Chapel Hill, NC 27516

Subject: Soils Information from site evaluations
Horizon Subdivision – Buck Branch and Hamlets Chapel Road
Chatham County, NC 27312

Dear John:

This letter serves as the final summary for work performed to date on this property. Attached are two previous letters to you dated July 21, 2006 and August 12, 2006. These letters denote that each of the proposed 66 lots can be served by an on-site wastewater (septic) system of a shallow or conventional design, and all have sufficient area for at least a 3 bedroom system but most will easily accommodate a 4-bedroom system (possibly using innovative trench design). To support this determination, over 360 soil borings were performed on this tract. This does not include additional soil borings used to define specific septic areas on the lots mentioned below, where the original work found these areas to be less than ideal with respect to soil depth. The map dated August 11, 2006 from Van Finch, R.L.S., and edited and sealed by me dated August 12, 2006 is the map I am using for reference for the comments in this letter.

Please also refer to a map I sent to you that is dated March 23, 2006 which is a draft proposal for 60 lots. This map depicts the specific areas noted for specific septic systems on the areas that I determined had potential suitability. This map and its lot numbers were subsequently updated to the August 11, 2006 map, and expanding the tract to 66 lots. Using the August 11, 2006 map as reference, the following lots have had septic systems defined on the lot, and the corners of the septic systems are defined by these flag numbers:

LOT 1: 47-1, 47-2, 47-3, 47-4

LOT 2: 46-1, 46-2, 46-3, 46-5

LOT 3: 45-1, 330, 331, 332, 333, 335

LOT 4: 44-1, 44-2, 59, 279, 280, 281

LOT 5: 319, 320, 310, 311

LOT 6: 317, 318, 510, 511

LOT 7: 41-1, 41-2, 41-3, 41-4, 41-5, 41-6, 41-7

LOT 9: 39-1, 39-2, 39-3, 39-4, 77

LOT 25: 25-1, 25-2, 25-3, 184

LOT 27: 24-1, 24-2, 210, 211

LOT 29: 22-1, 22-2, 22-3, 22-4

LOT 56: 49-1, 49-2, 49-3, 49-4

LOT 57: 50-1, 50-2, 50-3, 50-4, 315

LOT 58: 51-1, 51-2, 286, 287, 51-6, 51-4

LOT 59: 52-2, 52-3, 75, 289

LOT 65: 58-1, 58-2, 366, 367

LOT 66: 60-1, 60-2, 60-3, 60-4, 60-5

Please let me know if you have any questions.

Karl Shaffer, L.S.S.

Attachments: Letter dated July 21, 2006

Letter dated August 12, 2006

