Virginia Tech
VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Virginia Agricultural Experiment Station ***Bulletin 00-2***

Using GIS as an Agricultural Land-Use Planning Tool

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December 2000

This publication available at: http://www.vaes.vt.edu/research/publications/index.html

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Using GIS as an Agricultural Land-Use Planning Tool

Abstract

Soil survey data and Geographical Information Systems (GIS) are important tools in land use planning. Intertwined, they represent an invaluable and underutilized resource. A high intensity soil survey was created for the Southern Piedmont Agricultural Research and Extension Center (SPAREC) in Blackstone, Virginia. The soils information was recompiled from an uncorrected aerial photographic base to a USGS topographic base map. Soils data were added to numerous other data layers and images. Interpretation maps, flooding frequency maps, and runoff maps were created from map unit interpretive records (MUIR). Additional soil and timber data were collected by field visits. The soil based-GIS made the decision-making process more accurate, automated, and efficient. It is a dynamic product that serves to convert verbal communication into visual communication while preventing information overload.

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COVER PHOTOS:

Left - This pond located at the Southern Piedmont Agricultural Research and Extension Center (SPAREC) provides irrigation water for the crops, water for the fisheries research ponds, and eventually water to support the forage/livestock program now under development. Wooded areas provide food and shelter for wildlife, and a portion of this area will be developed for agroforestry research and extension projects.

Right - A view of the SPAREC GIS now being used for land use planning and for organization of research and extension projects at the Center.

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ACKNOWLEDGEMENTS

This work was part of the non-thesis Master's degree program of Amber L. (Williams) Coleman. Committee members were Dr. John Galbraith, Dr. Lee Daniels, Dr. Lucien Zelazny, and Dr. Matt Eick. The authors appreciate the funding which came through the Virginia Agricultural Experiment Station. Soil Scientist Robert Hodges provided the detailed soil survey of the center. Mr. Alan Moore provided technical assistance in preparing the GIS imagery. Field work was supported and enabled by Dr. Gerald Jubb, Dr. James Jones, and Dr. Bill Wilkinson. Mr. Tom Gallagher of the Forestry Department conducted the timber value assessment. Pond site investigation and technical assistance was provided by Mr. Dennis Green and Mr. John Nicholson of the USDA-NRCS in Farmville.

INTRODUCTION

Wise land-use planning involves making knowledgeable decisions about land use and the environment. Holistic planning involves input from multiple, interrelated data sources and types. In order to accomplish this feat a great deal of information must be considered simultaneously. Physical and chemical soil information is a vital component in the planning process, reflecting directly upon land-use suitability.

Traditional land-use planning involved many different sources of printed information such as soil survey manuals, topographic maps, aerial photographs, vegetation surveys, flood maps, hydrology maps, and property surveys to name a few. Each source contributed an important characteristic to the final decision. Human decision-makers were challenged to keep track of all this information at once, to understand the interrelationships, and to correlate multiple data sources at single locations.

Publishing of static data sources such as USDA Soil Surveys was infrequent. Thousands of copies were printed at one time and then distributed. There were no backup copies once the supply was exhausted. The imagery was dark and copies were hard to read. The imagery became outdated quickly in rapidly developing areas. Inclusion of colored maps and figures was so expensive that they were not added until recent years. Publishing was often a time consuming process as well, sometimes taking 10 years to receive the end product.

Today, advances have been made towards extraordinary digital systems for utilization in land-use planning. Computer programs including decision support systems (models), Geographic Information Systems (GIS), spreadsheets, databases, and color desktop publishing programs contribute to the speed and efficiency of the overall planning process. Also available are inexpensive, sometimes free, digital photos and images, digital maps, and digital file distribution options (GeoComm, 2000; Radford Univ., 2000; USGS, 2000).

Conversion of printed information to digital format and integration using Geographic Information System (GIS) enables land-use planners to correlate multiple data layers to one location and manipulate the appearance of the data to visualize trends and patterns. The GIS also allows tabular soil information to be georeferenced and easily converted to geographic and interpretive maps, providing the user with a visual representation of the tabular data. Georeferencing tables allow users to see tabular information for any feature on any map by a simple mouse click.

A GIS allows access to large amounts of information quickly and efficiently. "Geographic Information Systems let you visualize information in new ways that reveal relationships, patterns, and trends not visible with other popular systems" (Environmental Systems Research Institute, 1999). A GIS is a thematic mapping system, meaning you can produce maps based on themes such as soils or hydrology. Map features can be linked to corresponding information contained in database tables. Another advantage of GIS is that it is a dynamic product rather than a static product, making it is easy to update, edit, and reproduce maps. Multiple layers of maps can be quickly displayed in a variety of overlap, scales, and combinations to fit the needs of the user.

The Southern Piedmont Agricultural Research and Extension Center was faced with a land-use planning dilemma, and the Virginia Tech College of Agriculture decided to fund the creation of a soils-based GIS to assist their decision-making needs. The Center had access to a number of printed maps and tables and needed a better system of information organization and correlation. This paper focuses on a case study of the advantages of using digital information and on the methods behind creating a GIS for wise land-use planning purposes.

In 1886, the Virginia General Assembly established the Agricultural Experiment Station as an agency of the state at the Virginia Agricultural and Mechanical College at Blacksburg, now known as Virginia Polytechnic Institute and State University (Figure 1). The Virginia Assembly appropriated funds for district experiment stations in 1910 (Va. Ag. Experiment Station 1999). In between 1937 and 1972 three small Experiment Stations were established, two in Chatham and one at Charlotte Courthouse. In 1972, the Virginia General Assembly provided funds to consolidate the three stations into one centralized tobacco research facility called the Southern Piedmont Agricultural Research and Extension Center. The second phase of the Center included funding for laboratories and greenhouses was built in 1982 (Jones 2000).

In 1999 in cooperation with the Nottoway County Board of Supervisors, the Center readjusted its boundaries as part of the Public Allowance Acquisition in the Ft. Pickett base closure process (Figure 2). The green line encompassing the yellow and orange areas designates the old property lines. The yellow areas were released and the red area in the southeast corner was acquired. The yellow star in the south central portion of the property represents the Center headquarters building.

With this new land acquisition, the cropland research areas will be expanded and a large forage and livestock research area as well as an agroforestry research area will be established. Additional buildings, roads, fences, and livestock watering will also be added. The timber from the future cropland and forage areas must be sold in order to fund this expansion project. The GIS enhanced the timber value estimation capabilities by easily providing comprehensive acreage and easy visualization of the plot boundaries.

The Center funded this soils-based GIS to assist with the planning process to provide comprehensive, accurate, and visual information. The GIS will be provided to the Center personnel to be used with future research projects and plans. This GIS will also be available on the Internet where it will be an easily accessible resource for educational purposes by students and educators everywhere.

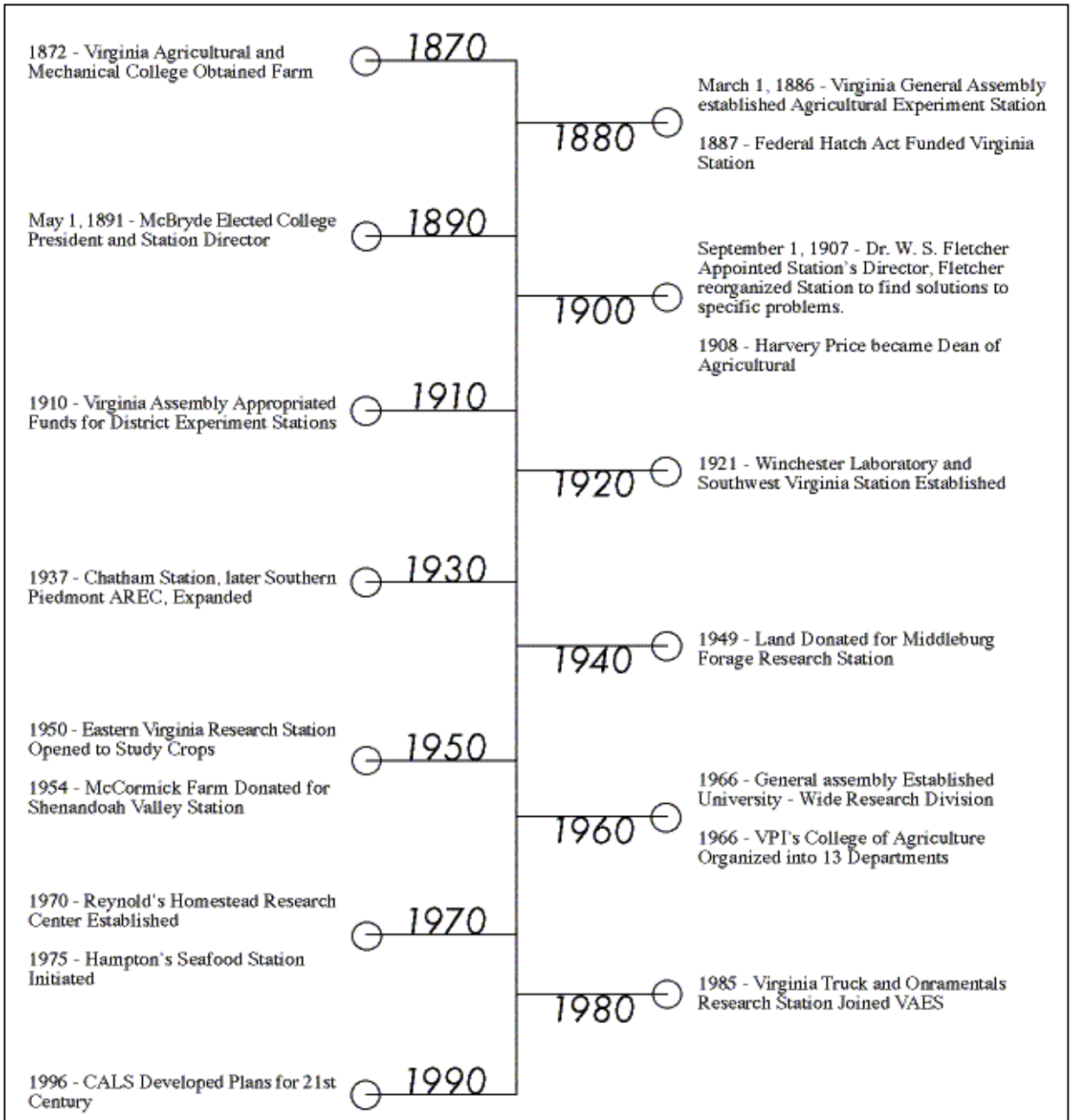

Figure 1. Virginia Agricultural Experiment Station timeline.
(Va. ***Ag. Exp. Sta., 2000)).***

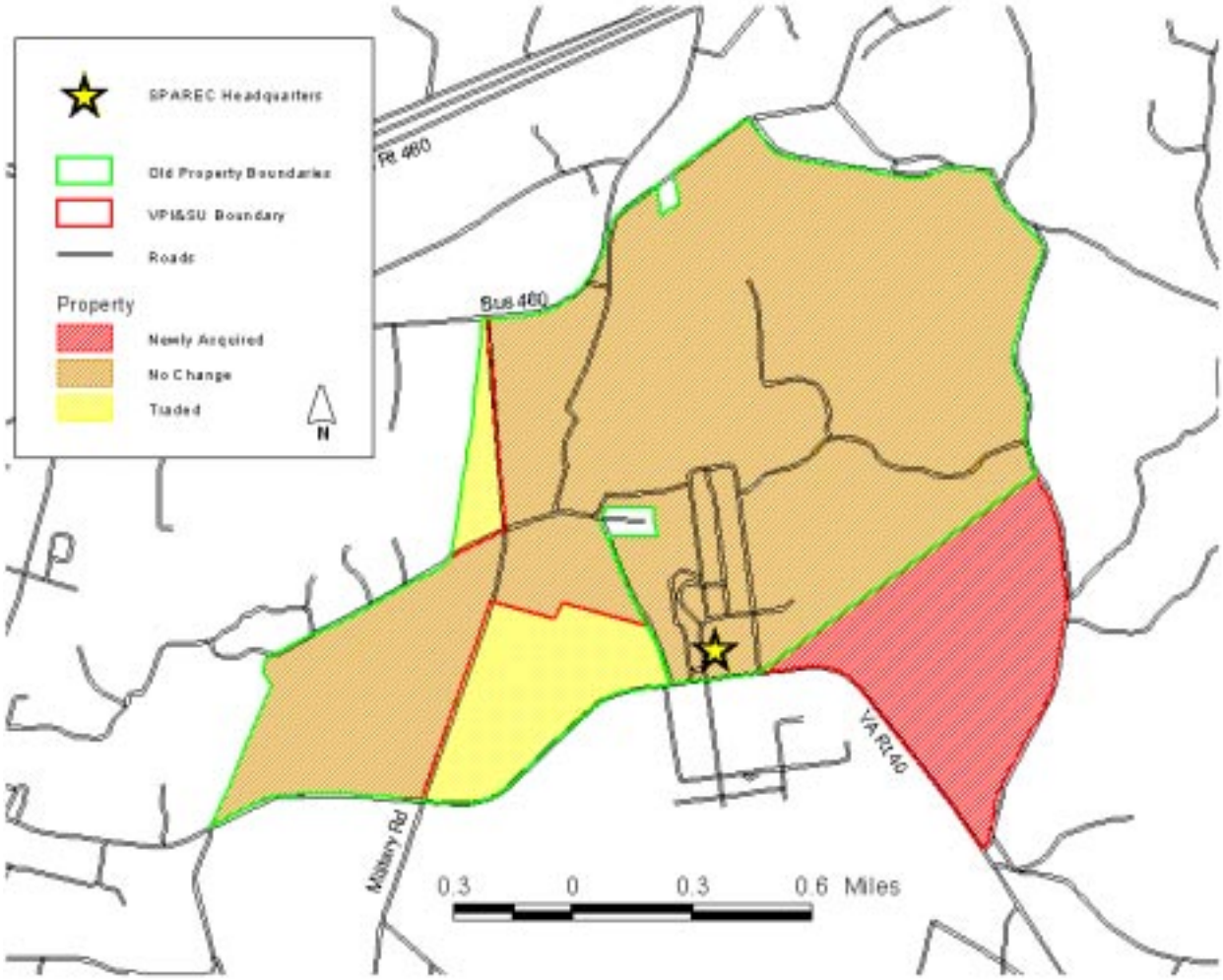

Figure 2. Southern Piedmont Agricultural Research and Experiment Station boundaries.

OBJECTIVE

Our objective was to develop a dynamic, natural resource-based decision support system using GIS to enable efficient and environmentally sound land-use planning.

MATERIALS AND METHODS

The Southern Piedmont Agricultural Research and Extension Center is located in Nottoway County, approximately 1.5 miles east of the town of Blackstone, Virginia. Nottoway County lies entirely within the Piedmont physiographic province (Coleman 1960). "The county is an old plain that has been dissected by many small streams that flow in narrow, winding valleys" (Coleman, 1960). Geologic formations in Nottoway County, consisting of granite gneiss, granite, hornblende gneiss, diabase, quartz, mica gneiss, and quartz sericite schist, extend in a northeast-southwest direction (Coleman, 1960).

The local climate consists of fairly mild winters with frequent, short, cold spells. Nottoway County averages 191 frost-free days, extending from about April 16 until about October 24. The area has an average precipitation of 40.88 inches spread throughout the year (Coleman, 1960).

The Center is approximately 1200 acres south of US Rt. 460-Business and north of VA Rt. 40. A few hundred acres lie west of Military Road while the majority of the area lies directly to the east (Figures 2 and 3).

The hardware used in creating this GIS included a Pentium III® personal computer and a combination light-table and digitizer. Microsoft Excel™ and Microsoft Access™ were used to create and organize the large soils database. Environmental Systems Research Institute, Inc. (ESRI) ArcView GIS™ software was used for every other aspect of this project including digitization, calculating areas, creating buffers, and making any end-product paper maps.

The following data layers were needed to create this GIS: Base map image, topography, hydrology, soils, roads, property boundaries, current land use, flooding frequencies, timber survey and values, and various spot symbols such as boulders.

Base data are the most correct in terms of area, location, and topography. Therefore it is the data used to "base" or register all of the other information to. The base map data consisted of a 1999 land survey of the property boundaries, the USGS Blackstone East topographic quadrangle, and a USGS Blackstone East Digital Orthophoto Quadrangle (DOQ). A DOQ (Figure 3) is a computer generated image in which displacements caused by camera orientation and terrain have been removed (USGS National Mapping Homepage 2000). In other words, a DOQ is a digital, geospatially corrected version of an aerial photograph. The DOQ used in this project had a resolution of 1 meter, which means that 1 pixel in the image represents 1 meter on the ground. This high resolution allows users to pick out individual roads, buildings, and sometimes even individual trees. The high resolution along with the detailed land survey allowed us to create a highly accurate digital property boundary.

Other data sources used in this GIS included Digital Line Graphs (DLG) and a variety of paper thematic maps. Digital line graphs are digital representations of information contained on USGS topographic quadrangle maps (USGS National Mapping Homepage 2000). This includes roads, hydrology, and 10-ft contour lines. The hydrologic information provided by USGS was mapped at a smaller scale and not detailed enough for this study, so new stream data was created. In ArcView, 5-ft contour lines were projected from the 10-ft contour lines to better recognize landforms like floodplains and steep slopes.

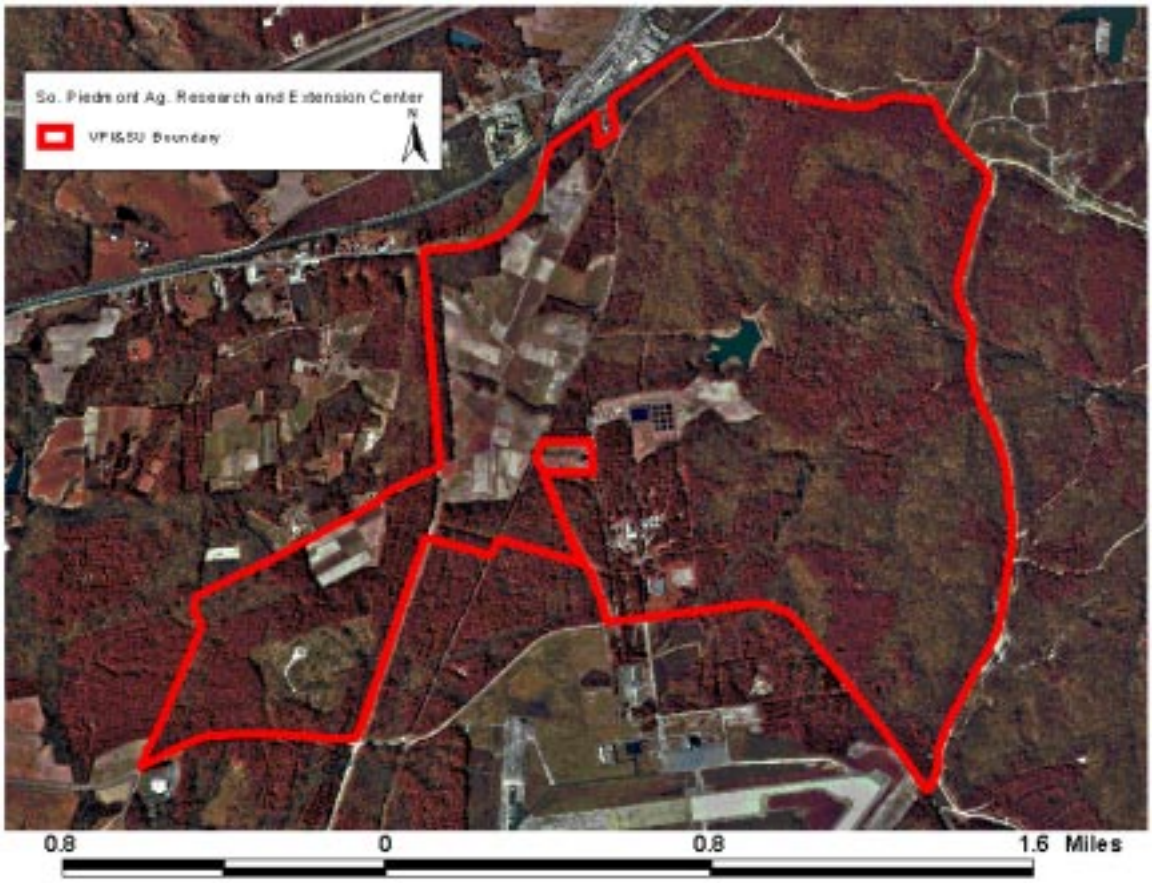

Figure 3. Digital Orthophoto Quad (DOQ) and SPAREC boundary.

In 1998, Robert L. Hodges created an updated soil survey of the SPAREC property. He correlated a 1974 soil survey of the old property (Pettry and Edmonds, 1974), a 1973 research report of the croplands (Pettry and Edmonds, 1973), the 1954 published USDA-NRCS Nottoway County soil survey at 1:20000 (Coleman, 1960), along with his own mapping. His map was produced on an uncorrected aerial photograph at a scale of 1:7920.

To transfer this soils information onto a corrected base it was necessary to recompile it. The 1998 soil survey polygons and property boundary were drawn on a mylar overlay over the USGS topographic quadrangle using the 10-ft contours as guides. Each map unit polygon and the outer property boundary was digitized and labeled using a digitizer/light table and the ArcView software. Figure 4 is an example of the digitized version of the 1998 soil survey viewed on top of the DOQ and 5-ft contour lines. Next, we adjusted the 1998 polygon boundaries, using the DOQ and the detailed 5-ft contour lines as improved references. Figure 5 is an example of the new recompiled and corrected portion of the mylar overlay containing the new corrected soil information. Since the new delineation was created with accessibility to more correct base data, the adjusted 1998 polygon lines more accurately reflect the true landform.

The 1998 soil mapping legend was a list compiled from the legends of the other soils information sources. Since the earliest survey, some of the soil series had become inactive, some were recorrelated, or new series added by USDA-NRCS. A new correlated digital legend was

created using the Official Series Descriptions (OSD) from the National Soil Data Access Facility, data from the old soil information, and field checks.

After the soils were digitized, it was easy to analyze areas and counts of map units as well as check the GIS against the new legend. Some delineations were extremely small (<0.5 acres) or occurred on a small extent (only one delineation of a map unit existed). To simplify the legend as well as the map, these map units were combined with adjacent delineations and the soils listed as inclusions.

Figure 6 represents the new corrected soil survey. The yellow map units indicate 0-2 percent slopes on hilltops, the green map units are soils on 2-7 percent slopes, pink and purple represent 7-15 percent slopes, while the dark colors are soils on a 15-25 percent slope. The blue areas indicate wetter soils that occur on various slope gradients. Table 1 provides a condensed version of the soil map units. In Appendix Table A1, the inclusions are indicated by the number "2" in the "inclusions" column.

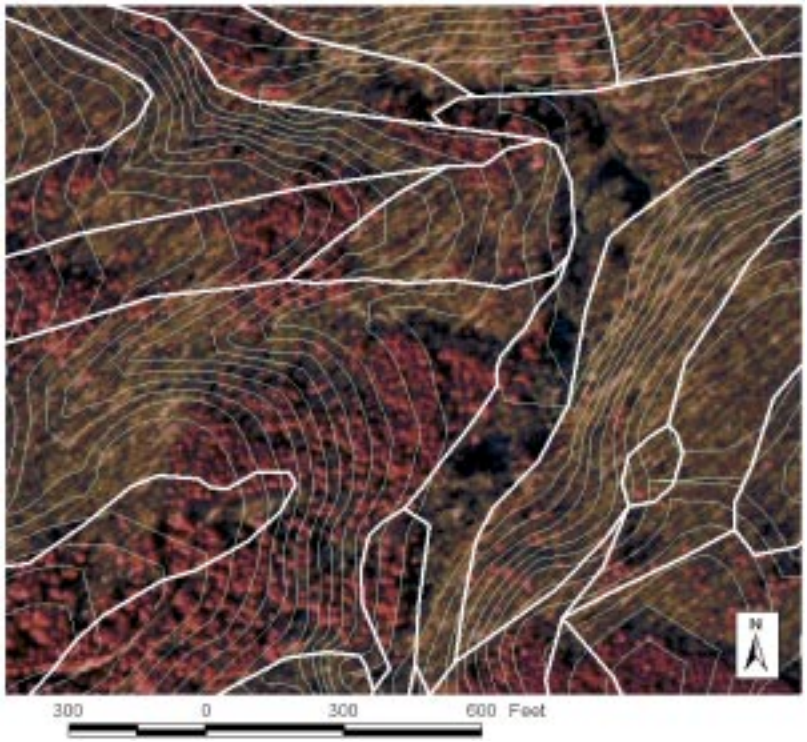

Figure 4. 1998 original soil map, 5-ft contours, and the DOQ.

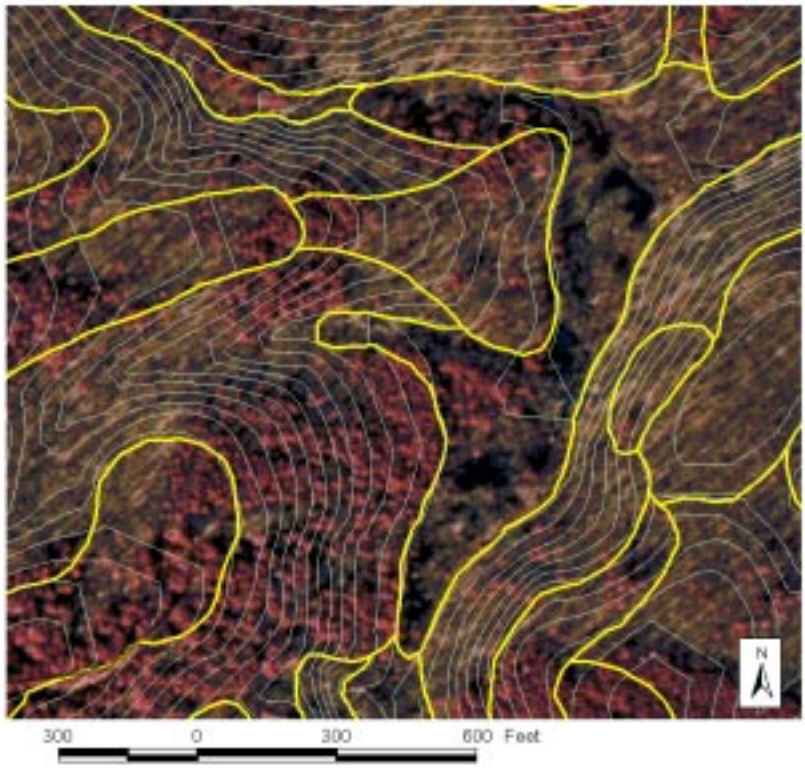

Figure 5. Recompiled corrected soil map, 5-ft contours, and the DOQ.

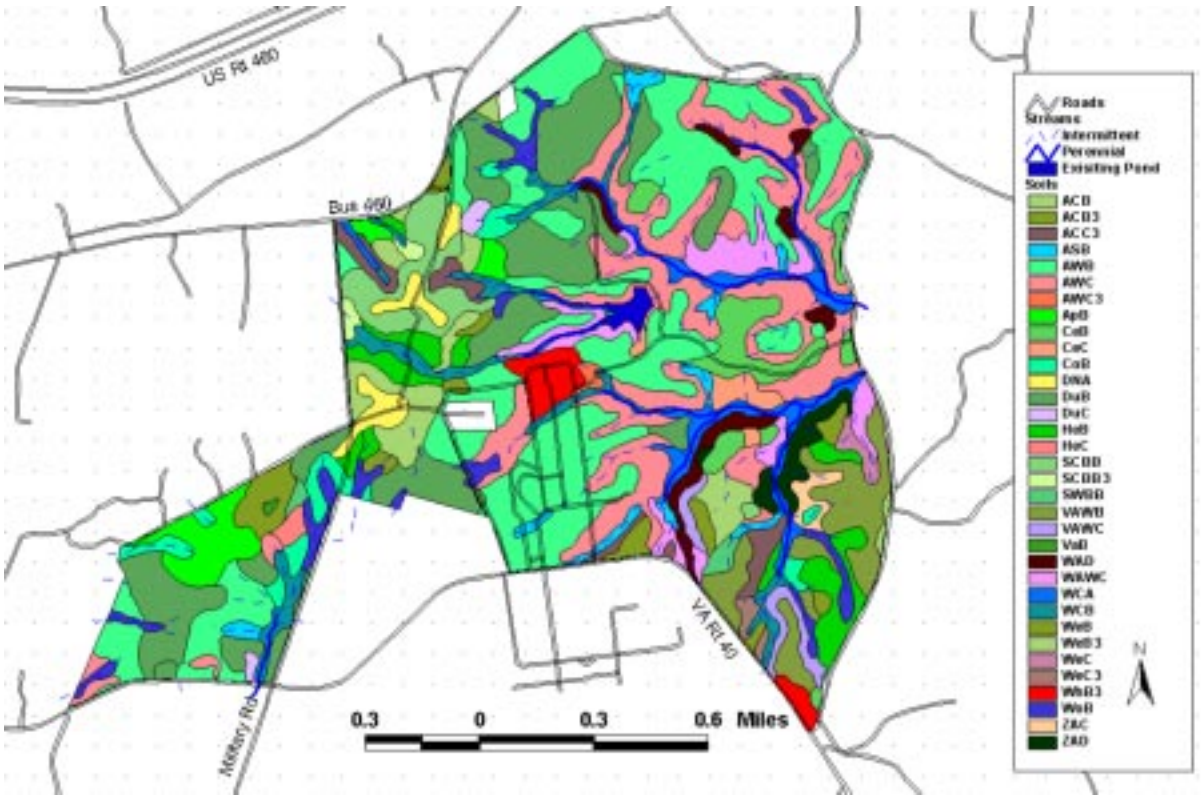

Figure 6. **Digital soil survey**.

Table 1. Soil Legend

MUSYMBOL	Name	Slope	Erosion	Flooding
ACB	Appling-Cecil sandy loams	2-7%	Moderate	
ACB3	Appling-Cecil sandy clay loams	2-7%	Severe	
ACC3	Appling-Cecil sandy clay loams	7-15%	Severe	
ApB	Appling sandy loams	2-7%	Moderate	
ASB	Abell-Starr fine sandy loams	0-4%	None	Rarely flooded
AWB	Appling-Wedowee sandy loams	2-7%	Moderate	
AWC	Appling-Wedowee sandy loams	7-15%	Moderate	
AWC3	Appling-Wedowee sandy clay loams	7-15%	Severe	
CeB	Cecil sandy loams	2-7%	Moderate	
CeB3	Cecil sandy clay loams	2-7%	Severe	
CeC	Cecil sandy loams	7-15%	Moderate	
CoB	Colfax sandy loams	2-7%	Moderate	
DNA	Dothan-Norfolk complex	0-2%	Moderate	
DuB	Durham sandy loams	2-7%	Moderate	
DuC	Durham sandy loams	7-10%	Moderate	
HeB	Helena sandy loams	2-7%	Moderate	
HeC	Helena sandy loams	7-15%	Moderate	
SCBB	Spotsylvania-Cecil-Bourne sandy loams	2-7%	Moderate	
SCBB3	Spotsylvania-Cecil-Bourne sandy loams	2-7%	Severe	
StB	Starr fine sandy loams	2-7%	None	Rarely flooded
SWBB	Spotsylvania-Wedowee-Bourne sandy loams	2-7%	Moderate	
VaB	Vance sandy loams	2-7%	Moderate	
VAWB	Vance-Appling-Wedowee sandy loams	2-7%	Moderate	
VAWC	Vance-Appling-Wedowee sandy loams	7-15%	Moderate	
WAD	Wateree-Ashlar sandy loams	15-25%	Moderate	
WAWC	Wateree-Ashlar-Wedowee sandy loams	7-15%	Moderate	
WCA	Wehadkee-Chewacla complex	0-2%	None	Frequently flooded
WCB	Wehadkee-Chewacla complex	0-4%	None	Occasionally flooded
WeB	Wedowee sandy loams	2-7%	Moderate	
WeB3	Wedowee sandy clay loams	2-7%	Severe	
WeC	Wedowee sandy loams	7-15%	Moderate	
WeC3	Wedowee sandy clay loams	7-15%	Severe	
WhB3	Wheaton sandy clay loam	0-7%	Severe	
WoB	Worsham sandy loams	0-4%	None	Rarely flooded
ZAC	Zion-Ashlar sandy loams	7-15%	Moderate	
ZAD	Zion-Ashlar sandy loams	15-25%	Moderate	

The streams were digitized on-screen in ArcView™. Lines were drawn based on the 5-ft contour lines with the DOQ in the background. The stream duration classes were assigned using the 1998 soil survey (Figure 7). Solid lines indicate perennial streams while the dashed lines indicate intermittent streams that do not flow year round.

Bedrock outcrops, gravelly spots, boulders, eroded spots, disturbed land, and wet spots are shown on maps by “spot symbols” because they are too small to be delineated as a polygon. This GIS contains three types of spot symbols: rocks, erosion, and disturbance. The spot symbols were obtained from the 1998 soil survey and digitized using the 5-ft contour lines and soil map units as references. Figure 8 shows a boulder on the east side of the property. It is easy to see how this feature would influence future land use.

The DOQ is an infrared photograph taken during the winter after the hardwood trees have lost their leaves. The softwood trees show up with a red signature due to the reflectance behavior of the water stored in the needles. Since the hardwood trees have no leaves they show up as brown patches of vegetation. A few of the cropland fields also show up as a brighter red, indicating they are covered with vegetation such as winter wheat.

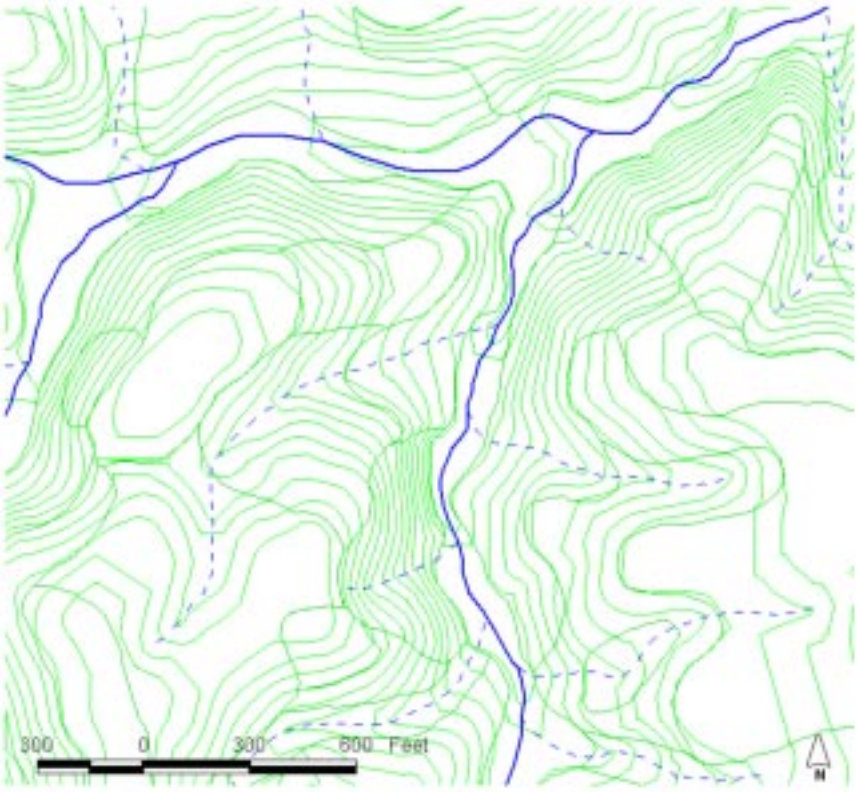

Figure 7. **Streams and 5-ft contours**.

In order to fully appreciate and utilize any soil map, it is important to know the characteristics of the soils contained in it. For instance, what is the difference between an Appling sandy loam and a Wehadkee sandy loam? Which is more suitable to build a greenhouse on? For answers to these questions it was necessary to build a large database of morphological, distributions, physical, chemical, and interpretive data downloaded as map unit interpretive records (MUIR) from the USDA-NRCS National Soil Data Access Facility (USDA-NRCS NSDAF 1999). MUIR data are listed by soil survey area and contains information for all soil series included on the soil survey legend. Nottoway County was surveyed in 1954, and the MUIR data are out of date and incomplete. To find soil data for every series phase in this study it was necessary to search MUIR data sets from surrounding counties. For example, data for the Appling sandy loam map unit on a 2-7% slope was missing from the Nottoway County MUIR data but was found in the neighboring Amelia County data. The corresponding data were matched by series phase (surface texture and slope) because these factors affect the interpretive properties and ratings. Table A2 in the Appendix identifies the counties of origin for each soil map unit component.

A unique soil series code was created to use as a common modifier for joining data with the legend because one did not exist to distinguish differences in slope and texture phases. The codes are contained in Table A2 in the Appendix. An Appling sandy loam on a 2-7 percent slope is coded as APSLB.

Figure 8. **Boulder on east side of SPAREC**

MUIR data sets include many tables and a wide variety of information, available from the National Soil Data Access Facility. This study utilized only four MUIR tables. The "comp" table includes map unit compositional data such as flooding phase and surface textures. The "layer" table includes physical and chemical data for each horizon of each series. The "taxclass" table includes the taxonomic classification of each series. And finally the "interp" table includes ratings and limitations for 26 different interpretations for each series. Table A3 provides a complete list of the interpretations available while Tables A4.1 though A4.26 provide the ratings for each interpretation.

These MUIR data sets were downloaded for each county in the area of Nottoway County. We added the series phase code to each table, and used this code to join data from different tables, using Microsoft Access™. The compiled table was joined to the attribute table in ArcView™. The attribute table stores the spatial and property information for each soil map unit polygon. Maps can be created from any information column contained in the attribute table, using ArcView™ tools.

When interpretations for map units are being created a dilemma exists in correctly representing a soil complex containing two different ratings. In this study the worst case scenario of the named soil series were mapped. Imagine a soil map unit polygon that contains soil A and soil B, soil A is severely rated for septic drainfields while soil B is rated moderate. This map unit will be mapped as severe since these interpretive maps are created for the purpose of alerting the user to the most limiting hazards for the intended land use.

An example of one of the interpretive maps created is the ratings for site suitability of local roads and streets (Figure 9). Green areas represent a slight rating meaning they are the most suitable. Yellow areas are rated moderate and red areas are severe areas having the most serious limitations. Using the ArcView™ information cursor, the red area was clicked on to provide the information for that polygon that is contained in the attribute table. The Worsham sandy loam on a 2-7% slope in Figure 9 is rated severe because of wetness and low soil strength.

Distinctions were given to the ratings of dwellings with basements, irrigation, and septic tank absorption field suitability. For these land uses it was important to recognize inclusions of wet (hydric) soils. Two new rating classes were created to alert users of limiting inclusions. A moderately rated map unit with severe inclusions was given the rating of "moderate with limitations." A slight or favorable map unit with severe inclusions was called "slight with limitations" or "favorable with limitations." Figure 10 shows an example of a map with the new ratings. The polygon in question is rated moderate with limitations because the soil percolates slowly but has inclusions of a severely rated soil wet soil.

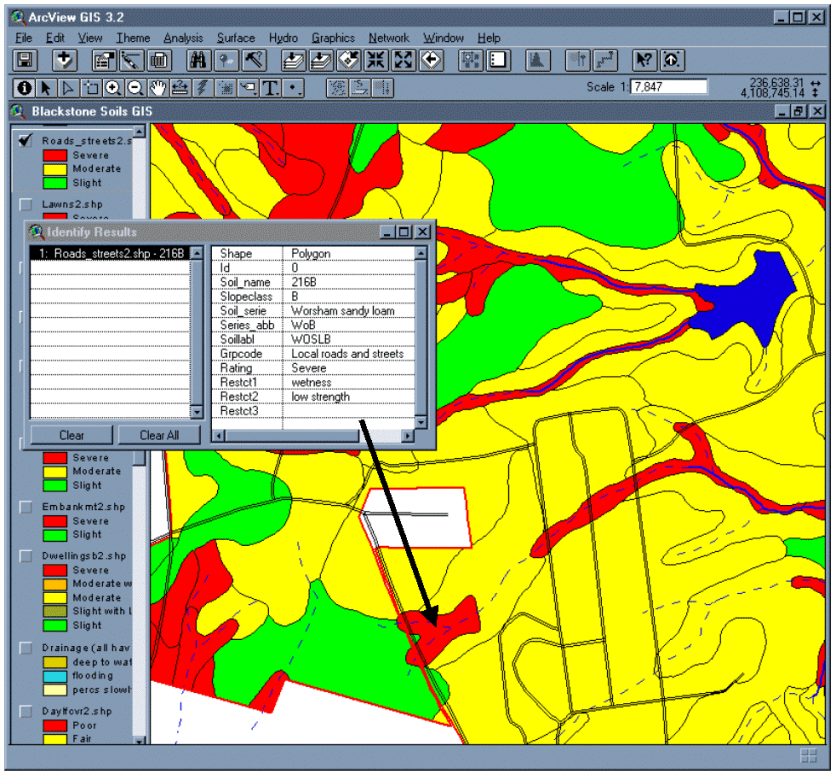

Figure 9. Example of interpretation ratings for local roads and streets

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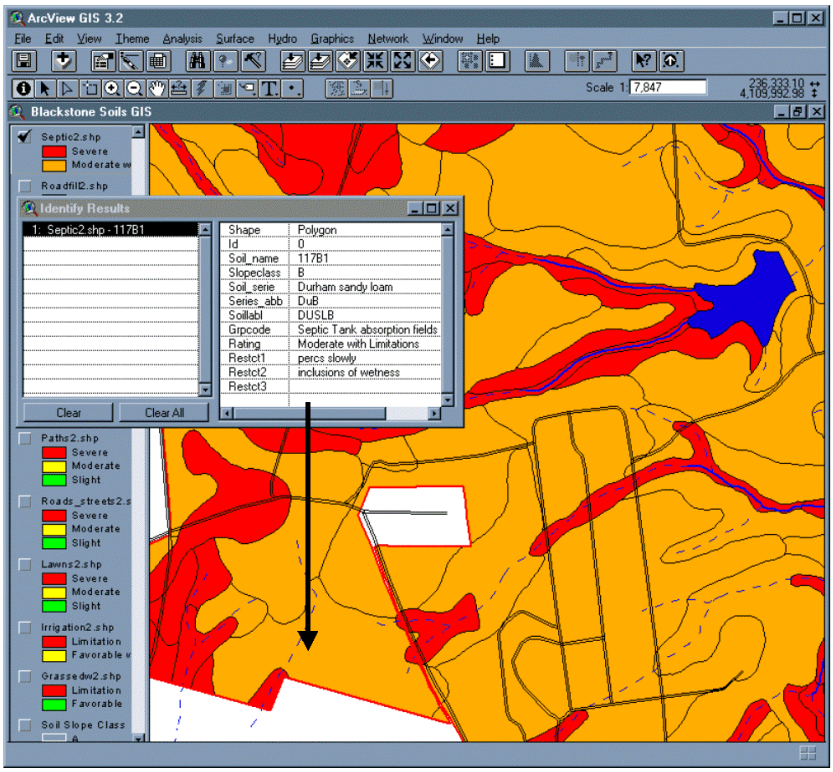

Figure 10. Example of interpretation ratings for septic tank absorption fields.

Included in the *comp* table are flooding frequency estimates of the map units. This information was converted from tabular values to a map in ArcView™. The map was adjusted according to topography and watershed size. The staff at the Center also provided input on the flooding conditions of the area. In Figure 11, the blue areas are frequently flooded, red areas are occasionally flooded and the green areas are rarely flooded. Definitions of flooding class phases can be found in Appendix Table A5.

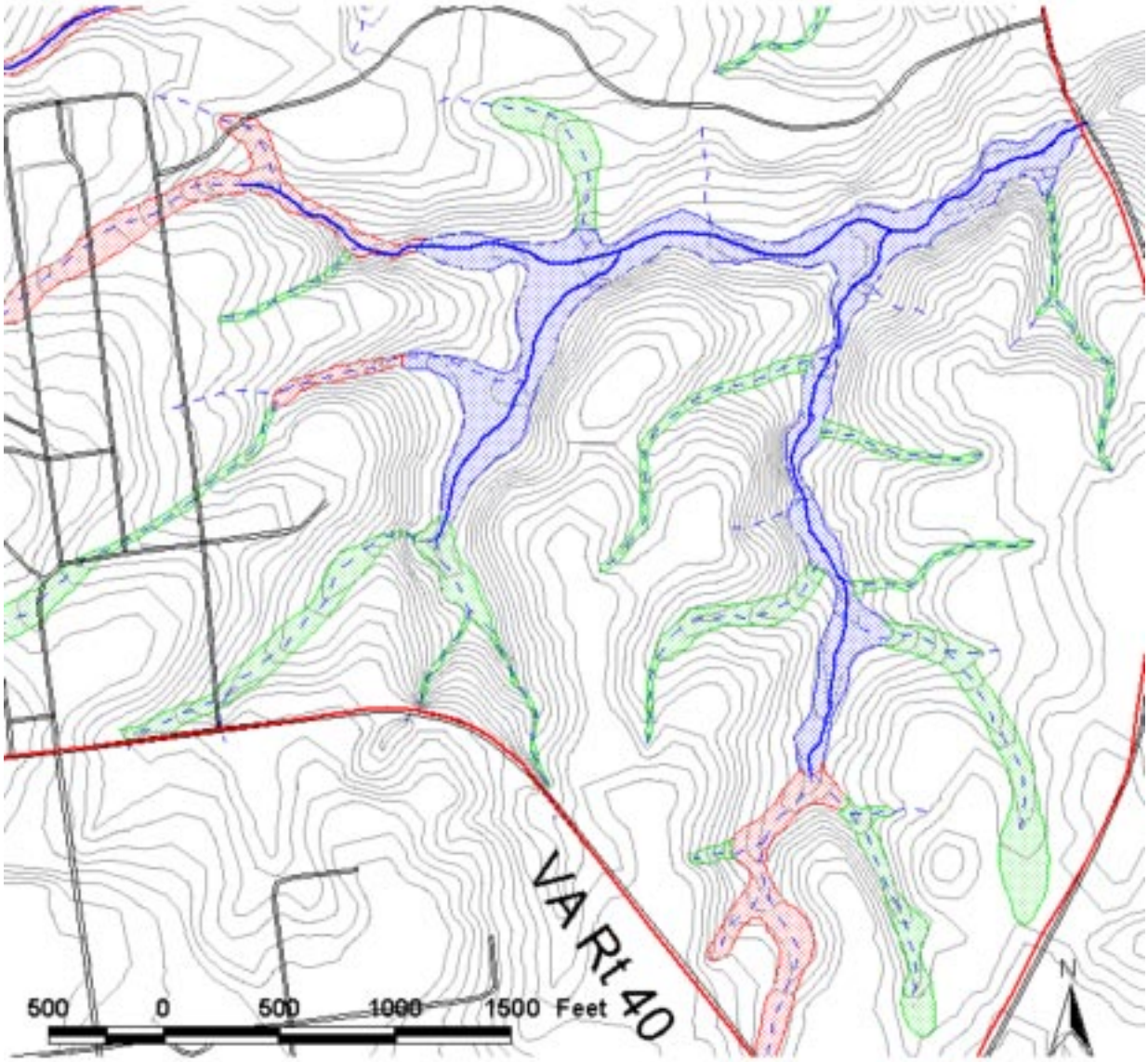

Figure 11. **Flooding frequency map**.

Soil characteristics in the MUIR data set were used to create new interpretative data. The index runoff class was calculated for each map unit for both bare and covered soil. The lower range of permeability for the most limiting layer in each named series was considered. The most limiting layer in most cases was the third layer containing the most clay content. The soil series containing the lowest permeability of the entire map unit was used as the worst case scenario for the entire map unit. The bulk density and texture of the most limiting layer was used to determine saturated hydraulic conductivity class. Slope gradient and saturated hydraulic conductivity class was then used to determine index surface runoff class for bare soil. The runoff class decreases one class for soils with ample vegetative cover. For example a map unit moves from high to medium as it goes from bare to covered. (Figures, tables and methods from Soil Survey Staff, 1993).

Figure 12 represents the map made from the index surface runoff class for bare soil. The complete runoff class tables for both bare and covered soil are in the Appendix as Table A6.

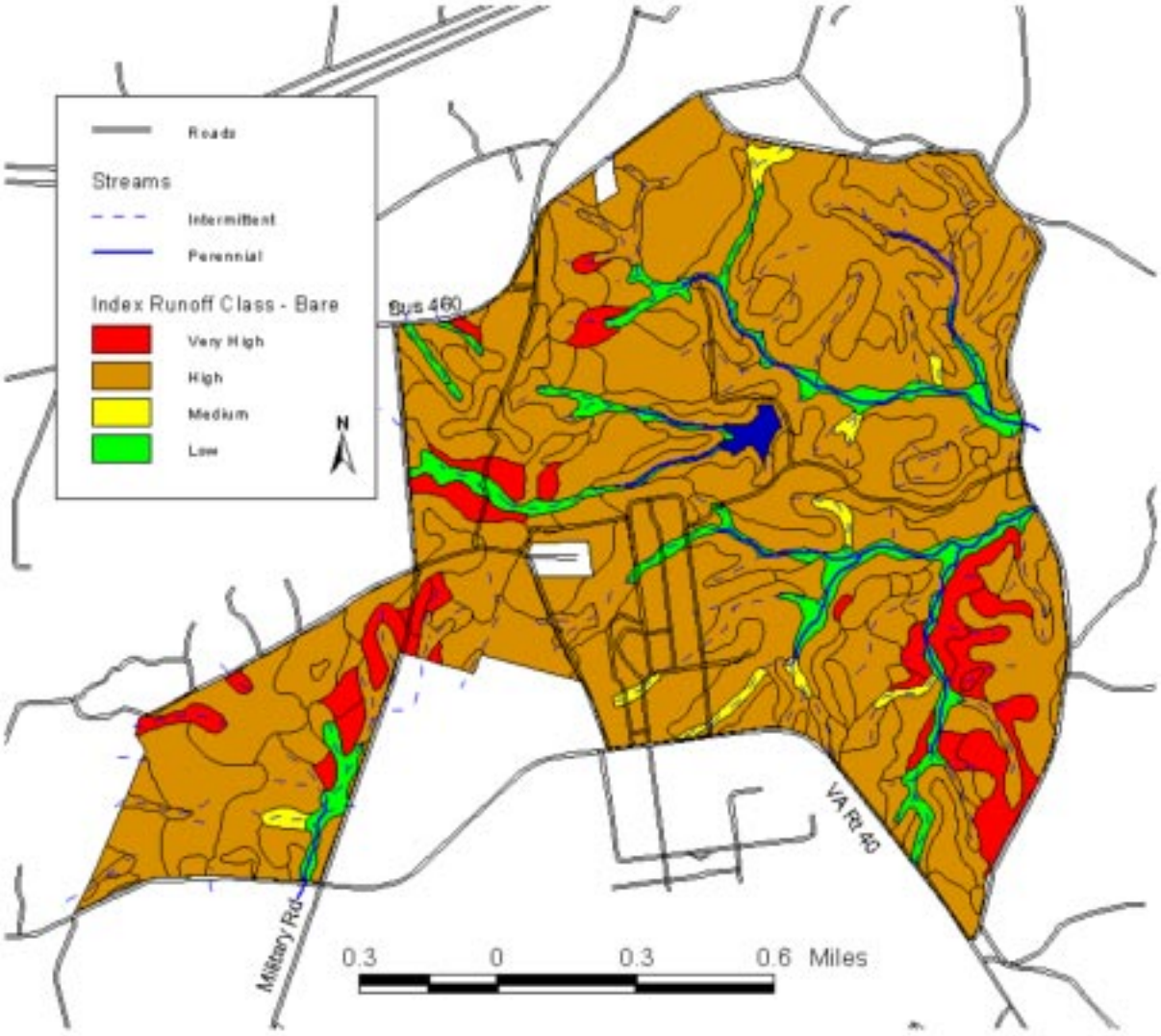

Figure 12. **Index Surface Runoff Class for bare soil**.

LAND-USE PLANNING

The main objective of this study was to provide information to the involved personnel to assist with their land-use planning process. The Center plans to create three large new research areas funded by income from a timber harvest of the area. A new crop research area, an agroforestry research area, and three large forage/livestock areas are to be created for the property. The overall project objectives include creating triplicate forage areas with similar soil characteristics

for research purposes. The center also wants to strategically locate agroforestry research and cropland expansion areas to utilize suitable soils and water resources. Another goal is to maximize the timber harvest income yet at the same time maintain the aesthetics of the Center. The final decisions were based on wise land use and protection of the environment.

A simple planning formula was used to determine the location and extent of the research areas. The soils were analyzed for suitability to each of the three research goals. Boulders and steep slopes were avoided. A predetermined buffer distance around streams and roads was also avoided. Proximity to water for livestock and irrigation purposes was considered. Wetlands were avoided as well as the airfield easement (see Figure 15). Existing roads and railroad track crossings that affected accessibility were also a decision factor.

Stream buffers were created to provide streamside management zones for protection from clear-cutting. 25-ft, 50-ft, and 75-ft buffers were created in ArcView™ on each side of every stream. The 50-ft buffer was used to protect intermittent streams and the 75-ft buffer protects perennial streams. For aesthetic purposes, a 75-ft buffer was left around the major roads. An example of the buffers is provided in Figure 13.

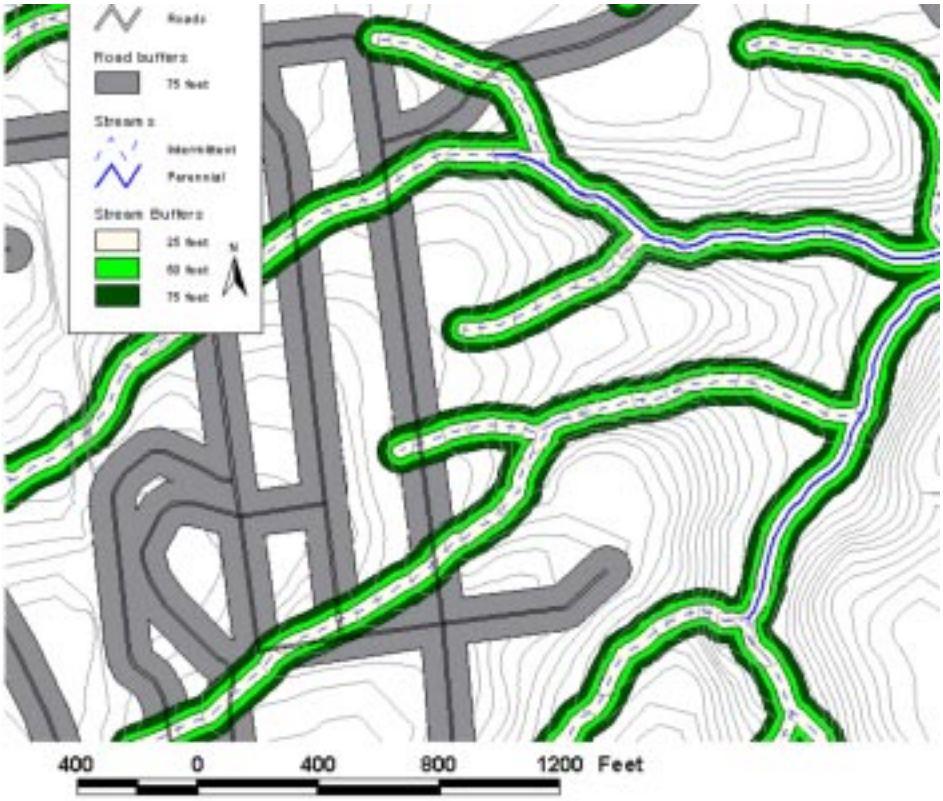

Figure 13. **Stream and Road Buffers**.

A map of the current land uses is proved in Figure 14. The final land use areas (Figure 15) were decided upon in a meeting in January 2000. The area west of Military Road was designated as the cropland expansion due to the low slopes and similarity of the soil characteristics. The livestock and forage area was assigned to the large northeast corner of the property due to area availability, ease of access, and good water resource potential. The southeast corner will be the new agroforestry area due to the lack of valuable timber, steeper slopes, and highly variable soil characteristics. The agroforestry area will utilize the existing timber in the future research, therefore only a partial timber harvest will be done and the stream buffers do not need to be considered.

Sites for potential water sources were determined by a site visit by local Natural Resource Conservation Service representatives. They utilized maps from our GIS in their decisions. Three potential pond sites were chosen, represented by the yellow triangles in Figure 15. Installing cisterns was a suggestion for an alternative to building a pond. These would function as underground collection tanks of surface runoff. The water collected could then be pumped up into livestock troughs or tanks for irrigation purposes. The orange circles indicate these potential sites in Figure 15.

In March, Dr. Thomas Gallagher and a crew of students completed a timber cruise of the area. The values are provided in Table 3 and the map of the blocks is provided in Figure 16. The total value of the timber in the property is $1,178,677.

Table 2. Estimated Timber Values by Block

TRACT	Pine Pulpwood Vol.(tons)	TOT $	Pine CNS Vol.(tons)	TOT $	Pine Sawtimber Vol.(tons)	TOT $	Hardwood Pulpwood Vol.(tons)	TOT $	Hardwood Sawtimber Vol.(MBF)	TOT $	Total Value
AAA	881	$7,929	782	$22,678	560	$29,120	954	$3,339	155	$21,700	$84,766
BBB	3313	$29,817	1409	$40,861	1721	$89,492	1205	$4,218	330	$46,200	$210,588
CCC	371	$3,339	100	$2,900	344	$17,888	1010	$3,535	109	$15,260	$42,922
DDD	838	$7,542	1950	$56,550	1722	$89,544	595	$2,083	188	$26,320	$182,039
GGG	2215	$19,935	1900	$55,100	4750	$247,000	926	$3,241	303	$42,420	$367,696
SUBTOT	7618	$68,562	6141	$178,089	9097	$473,044	4690	$16,415	1085	$151,900	$888,010
EEE	1021	$9,189	770	$22,330	1734	$90,168	1960	$6,860	1158	$162,120	$290,667
TOTAL	8639	$77,751	6911	$200,419	10831	$563,212	6650	$23,275	2243	$314,020	$1,178,677
Stumpage Values		$9.00		$29.00		$52.00		$3.50		$140.00	

Timber Values provided by Dr. Thomas V. Gallagher, Department of Forestry, Virginia Polytechnic Institute & State University
4/4/00

Figure 14. Current Land Use.

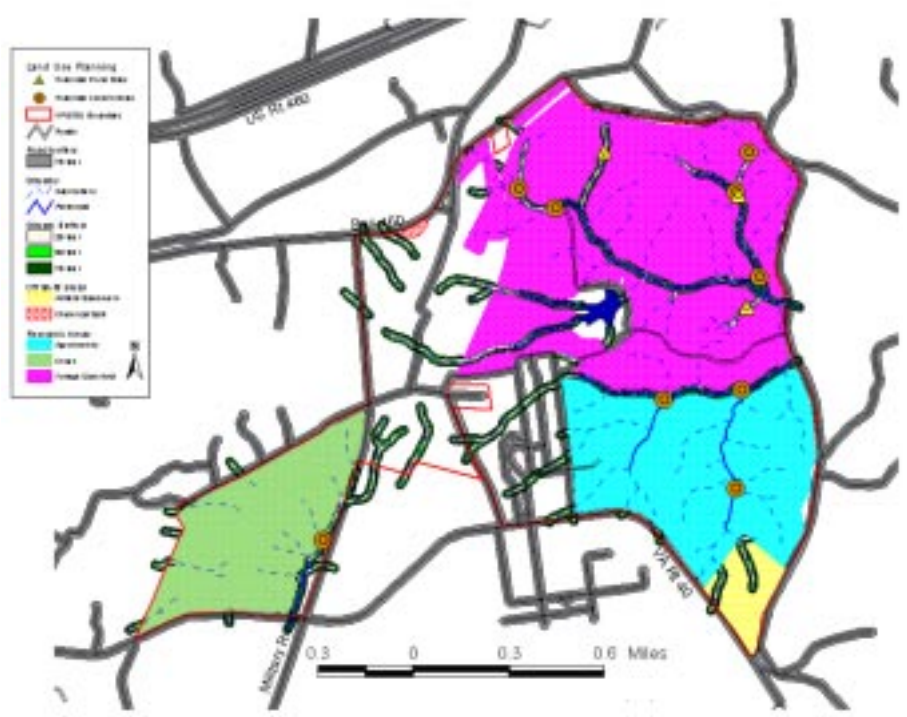

Figure 15. Proposed Research Areas.

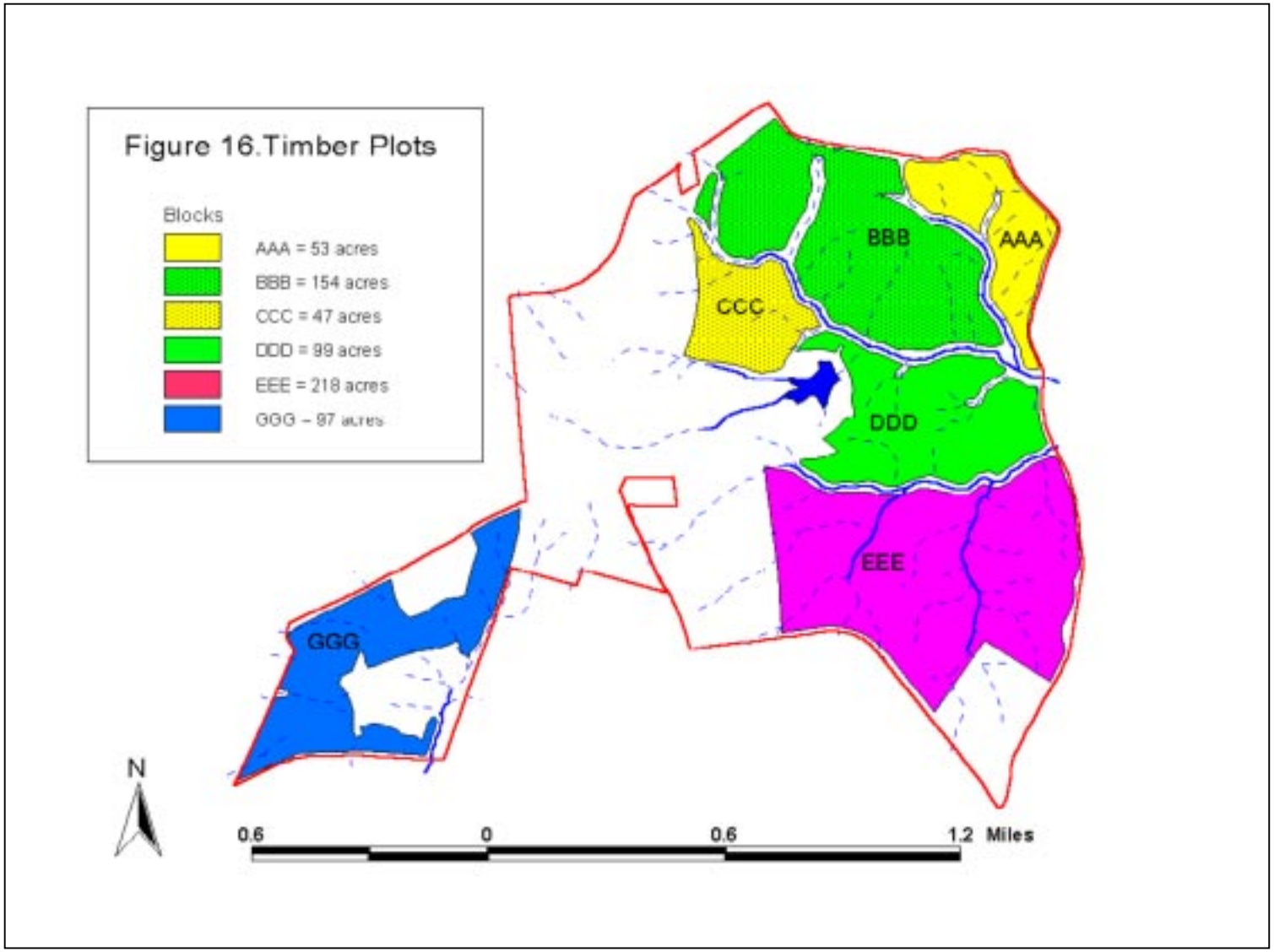
Figure 16.Timber Plots
Blocks
AAA = 53 acres
BBB = 154 acres
CCC = 47 acres
DDD = 99 acres
EEE = 218 acres
GGG – 97 acres
AAA
BBB
CCC
DDD
EEE
GGG
N
0.6
0
0.6
1.2 Miles

CONCLUSIONS

The GIS generated by this project, improved and updated the soils information available to the Center staff and greatly eased the decision making process. It will be easier for the Center to reproduce customized maps quickly on demand, allowing maps to be created and taken into the field when they are needed. For example, the crop researchers will be able to add attribute tables of past research results to a map of research plots.

The Center will use this GIS for any future land-use planning and in their future agricultural research endeavors. The decisions were made with a more accurate knowledge base and were more efficient thanks to the power of the GIS.

Using ESRI Internet Map Server™ this GIS will be available online in an interactive format. It will be possible to view these data layers from normal Internet browsers without any extra extensions or plug-ins. We hope to educate users about the importance of the relationship that soil has on the world around us.

As technology becomes more powerful and less expensive, GIS will expand into more businesses, homes, and schools. It is an excellent tool of visualization and analysis that serves to inform and educate.

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Table A1. Complete Soil Legend (contd)

Map	MUSYMBOL	Name	Soil	Soilpct	Inclusion	Slope	Erosion	Flooding
114B2	AWB	Appling-Wedowee sandy loams	Appling	50	1	2-7%	Moderate	
			Wedowee	30	1			
			Pacolet	4	2			
			Helena	4	2			
			Spotsylvania	4	2			
			Vance	4	2			
			Cecil	4	2			
114C2	AWC	Appling-Wedowee sandy loams	Appling	50	1	7-15%	Moderate	
			Wedowee	35	1			
			Pacolet	5	2			
			Helena	5	2			
			Cecil	5	2			
114C3	AWC3	Appling-Wedowee sandy clay loams	Appling	50	1	7-15%	Severe	
			Wedowee	35	1			
			Cecil	4	2			
			Helena	4	2			
			Pacolet	4	2			
			Vance	3	2			
210B2	CeB	Cecil sandy loams	Cecil	85	1	2-7%	Moderate	
			Pacolet	3	2			
			Helena	3	2			
			Spotsylvania	3	2			
			Appling	3	2			
			Wedowee	3	2			

Table A1. Complete Soil Legend (contd)

Map	MUSYMBOL	Name	Soil	Soilpct	Inclusion	Slope	Erosion	Flooding
210B3	CeB3	Cecil sandy clay loams	Cecil	85	1	2-7%	Severe	
			Helena	4	2			
			Appling	4	2			
			Pacolet	4	2			
			Wedowee	3	2			
210C2	CeC	Cecil sandy loams	Cecil	85	1	7-15%	Moderate	
			Wedowee	3	2			
			Pacolet	3	2			
			Helena	3	2			
			Appling	3	2			
65B1	CoB	Colfax sandy loams	Colfax	85	1	2-7%	Moderate	
			Helena	4	2			
			Durham	4	2			
			Worsham	4	2			
			Appling	3	2			
20A1	DNA	Dothan-Norfolk complex	Dothan	55	1	0-2%	Moderate	
			Norfolk	30	1			
			Cecil	5	2			
			Spotsylvania	5	2			
			Wedowee	5	2			
117Bl	DuB	Durham sandy loams	Durham	85	1	2-7%	Moderate	
			Appling	5	2			
			Colfax	5	2			
			Worsham	5	2			
117C2	DuC	Durham sandy loams	Durham	85	1	7-10%	Moderate	
			Helena	5	2			
			Appling	5	2			
			Colfax	5	2			

Table A1. Complete Soil Legend (contd)

Map	MUSYMBOL	Name	Soil	Soilpct	Inclusion	Slope	Erosion	Flooding
6B1	HeB	Helena sandy loams	Helena	85	1	2-7%	Moderate	
			Colfax	4	2			
			Vance	4	2			
			Worsham	4	2			
			Wedowee	3	2			
6C1	HeC	Helena sandy loams	Helena	85	1	7-15%	Moderate	
			Wedowee	4	2			
			Vance	4	2			
			Colfax	4	2			
			Appling	3	2			
9B1	SCBB	Spotsylvania-Cecil-Bourne sandy loams	Spotsylvania	40	1	2-7%	Moderate	
			Cecil	30	1			
			Bourne	20	1			
			Norfolk	4	2			
			Appling	3	2			
			Dothan	3	2			
19B3	SCBB3	Spotsylvania-Cecil-Bourne sandy loams	Spotsylvania	40	1	2-7%	Severe	
			Cecil	30	1			
			Bourne	20	1			
			Norfolk	4	2			
			Appling	3	2			
			Dothan	3	2			
8B+	StB	Starr fine sandy loams	Starr	85	1	2-7%	None	Rarely flooded
			Abell	8	2			
			Worsham	4	2			
			Helena	3	2			

Table A1. Complete Soil Legend (contd)

Map	MUSYMBOL	Name	Soil	Soilpct	Inclusion	Slope	Erosion	Flooding
29B1	SWBB	Spotsylvania-Wedowee-Bourne sandy loams	Spotsylvania	40	1	2-7%	Moderate	
			Wedowee	30	1			
			Bourne	20	1			
			Norfolk	4	2			
			Pacolet	3	2			
			Dothan	3	2			
5B1	VaB	Vance sandy loams	Vance	85	1	2-7%	Moderate	
			Helena	5	2			
			Appling	5	2			
			Wedowee	5	2			
75B2	VAWB	Vance-Appling-Wedowee sandy loams	Vance	30	1	2-7%	Moderate	
			Appling	25	1			
			Wedowee	20	1			
			Cecil	5	2			
			Pacolet	5	2			
			Helena	5	2			
			Ashlar	5	2			
			Wateree	5	2			
75C2	VAWC	Vance-Appling-Wedowee sandy loams	Vance	30	1	7-15%	Moderate	
			Wedowee	25	1			
			Appling	25	1			
			Cecil	4	2			
			Helena	4	2			
			Ashlar	4	2			
			Wateree	4	2			
			Zion	4	2			

Table A1. Complete Soil Legend (contd)

Map	MUSYMBOL	Name	Soil	Soilpct	Inclusion	Slope	Erosion	Flooding
53D2	WAD	Wateree-Ashlar sandy loams	Wateree	50	1	15-25%	Moderate	
			Ashlar	30	1			
			Wedowee	10	2			
			Pacolet	5	2			
			Appling	5	2			
Water	Water	Water						
53C2	WAWC	Wateree-Ashlar-Wedowee sandy loams	Wateree	40	1	7-15%	Moderate	
			Ashlar	30	1			
			Wedowee	20	2			
			Appling	4	2			
			Pacolet	3	2			
			Durham	3	2			
1A+	WCA	Wehadkee-Chewacla complex	Chewacla	40	1	0-2%	None	Frequently flooded
			Wehadkee	40	1			
			Starr	8	2			
			Worsham	8	2			
			Abell	4	2			
7B1	WCB	Wehadkee-Chewacla complex	Chewacla	40	1	0-4%	None	Occasionally flooded
			Wehadkee	40	1			
			Helena	7	2			
			Worsham	7	2			
			Colfax	3	2			
			Starr	3	2			

Table A1. Complete Soil Legend (contd)

Map	MUSYMBOL	Name	Soil	Soilpct	Inclusion	Slope	Erosion	Flooding
2B1	WeB	Wedowee sandy loams	Wedowee	85	1	2-7%	Moderate	
			Pacolet	3	2			
			Helena	3	2			
			Spotsylvania	3	2			
			Appling	3	2			
			Vance	3	2			
12B3	WeB3	Wedowee sandy clay loams	Wedowee	85	1	2-7%	Severe	
			Helena	4	2			
			Appling	4	2			
			Pacolet	4	2			
			Vance	3	2			
2C2	WeC	Wedowee sandy loams	Wedowee	85	1	7-15%	Moderate	
			Pacolet	4	2			
			Helena	4	2			
			Appling	4	2			
			Vance	3	2			
12C3	WeC3	Wedowee sandy clay loams	Wedowee	85	1	7-15%	Severe	
			Helena	4	2			
			Appling	4	2			
			Pacolet	4	2			
			Vance	3	2			
99	WhB3	Wheaton sandy clay loam	Wheaton	85	1	0-7%	None	
			Appling	4	2			
			Pacolet	4	2			
			Vance	4	2			
			Wedowee	3	2			

Table A1. Complete Soil Legend (contd)

Map	MUSYMBOL	Name	Soil	Soilpct	Inclusion	Slope	Erosion	Flooding
216B	WoB	Worsham sandy loams	Worsham	85	1	0-4%	None	Rarely flooded
			Helena	3	2			
			Abell	3	2			
			Colfax	3	2			
			Chewacla	3	2			
			Starr	3	2			
54C2	ZAC	Zion-Ashlar sandy loams	Zion	50	1	7-15%	Moderate	
			Ashlar	30	1			
			Wedowee	5	2			
			Helena	5	2			
			Wateree	5	2			
			Vance	5	2			
54D2	ZAD	Zion-Ashlar sandy loams	Zion	50	1	15-25%	Moderate	
			Ashlar	30	1			
			Wedowee	5	2			
			Helena	5	2			
			Wateree	5	2			

Table A2. Soil Phases and Counties.(cont.)

Soil	Surface Texture	Slope	Erosion	Flooding	Soillabl	s5id	COUNTY
Norfolk	loamy sand eroded	2-7%	Severe		NOLSEB	NC0037	Wake NC
Pacolet	sandy clay loam	2-7%	Severe		PASCLB	SC0015	Halifax
Pacolet	sandy clay loam	7-15%	Severe		PASCLC	SC0015	Halifax
Pacolet	sandy loam	2-7%	Moderate		PASLB	SC0015	Appomattox
Pacolet	sandy loam	7-15%	Moderate		PASLC	SC0015	Appomattox
Pacolet	sandy loam	15-25%	Moderate		PASLD	SC0015	Appomattox
Spotsylvania	sandy loam	2-7%	Moderate		SPSLB	VA0080	Chesterfield
Starr	fine sandy loam	0-4%	None	Occasion. flooded	STFSLA	SC0072	Nottaway
Starr	fine sandy loam	0-4%	None	Rarely flooded	STFSLB	SC0072	Nottaway
Vance	fine sandy loam	7-15%	Moderate		VAFSLC	NC0039	Chesterfield
Vance	sandy loam	2-7%	Moderate		VASLB	NC0039	Wake NC
Vance	sandy loam	7-15%	Moderate		VASLC	NC0039	Chesterfield
Vance	sandy loam eroded	0-7%	Severe		VASLEB	NC0039	Wake NC
Vance	sandy loam eroded	7-15%	Severe		VASLEC	NC0039	Wake NC
Wateree	sandy loam	7-15%	Moderate		WASLC	SC0091	Cumberland
Wateree	sandy loam	15-25%	Moderate		WASLD	SC0091	Cumberland
Wedowee	sandy loam	2-7%	Moderate		WDSLB	AL0046	Amelia
Wedowee	sandy loam	7-15%	Moderate		WDSLC	AL0046	Amelia
Wedowee	sandy loam	15-25%	Moderate		WDSLD	AL0046	Amelia
Wedowee	sandy loam eroded	0-7%	Severe		WDSLEB	AL0046	Wake NC
Wedowee	sandy loam eroded	7-15%	Severe		WDSLEC	AL0046	Wake NC
Wheaton	sandy clay loam	0-7%	Severe		WHSCLB	MD0135	Montgomery MD
Wehadkee	fine sandy loam	0-4%	None	Occasion. flooded	WKFSLA	NC0052	Catawba NC
Worsham	sandy loam	0-4%	None	Rarely flooded	WOSLB	VA0009	Nottaway
Zion	sandy loam	7-15%	Moderate		ZISLC	VA0042	Prince Edward
Zion	sandy loam	15-25%	Moderate		ZISLD	VA0042	Prince Edward

Table A3. Available Interpretation Tables and Maps

Interpretation				
Aquifer-fed excavated ponds				
Area sanitary landfill				
Camp areas				
Daily cover for landfill				
Drainage				
Dwellings with basements				
Dwellings without basements				
Embankments, dikes, and levees				
Grassed waterways				
Gravel				
Irrigation				
Lawns, landscaping, and golf fairways				
Local roads and streets				
Paths and trails				
Picnic areas				
Playgrounds				
Pond reservoir area				
Roadfill				
Sand				
Septic tank absorption fields				
Sewage lagoons				
Shallow excavations				
Small commercial buildings				
Terraces and diversions				
Topsoil				
Trench sanitary landfill				

Table A4.1 Ratings for Aquifer-fed Excavated Ponds

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
8B1	ACB	Appling-Cecil sandy loams	APSLB	Severe	no water		
18B3	ACB3	Appling-Cecil sandy clay loams	APSCLB	Severe	no water		
18C3	ACC3	Appling-Cecil sandy clay loams	APSCLC	Severe	no water		
1B2	ApB	Appling sandy loams	APSLB	Severe	no water		
110B	ASB	Abell-Starr fine sandy loams	STFSLB	Severe	no water		
114B2	AWB	Appling-Wedowee sandy loams	WDSLB	Severe	no water		
114C2	AWC	Appling-Wedowee sandy loams	WDSLC	Severe	no water		
114C3	AWC3	Appling-Wedowee sandy clay loams	WDSLEC	Severe	no water		
210B2	CeB	Cecil sandy loams	CESLB	Severe	no water		
210B3	CeB3	Cecil sandy clay loams	CESCLB	Severe	no water		
210C2	CeC	Cecil sandy loams	CESLC	Severe	no water		
65B1	CoB	Colfax sandy loams	COSLB	Severe	no water		
20A1	DNA	Dothan-Norfolk complex	DOSLA	Severe	no water		
117Bl	DuB	Durham sandy loams	DUSLB	Severe	no water		
117C2	DuC	Durham sandy loams	DUSLC	Severe	no water		
6B1	HeB	Helena sandy loams	HESLB	Severe	no water		
6C1	HeC	Helena sandy loams	HESLC	Severe	no water		
9B1	SCBB	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Severe	no water		
19B3	SCBB3	Spotsylvania-Cecil-Bourne sandy loams	SPSLB	Severe	no water		
8B+	StB	Starr fine sandy loams	STFSLB	Severe	no water		
29B1	SWBB	Spotsylvania-Wedowee-Bourne sandy loams	WDSLB	Severe	no water		
5B1	VaB	Vance sandy loams	VASLB	Severe	no water		
75B2	VAWB	Vance-Appling-Wedowee sandy loams	APSLB	Severe	no water		
75C2	VAWC	Vance-Appling-Wedowee sandy loams	WDSLC	Severe	no water		
53D2	WAD	Wateree-Ashlar sandy loams	WASLD	Severe	no water		
53C2	WAWC	Wateree-Ashlar-Wedowee sandy loams	WDSLC	Severe	no water		
1A+	WCA	Wehadkee-Chewacla complex	CHSLA	Moderate	slow refill		
7B1	WCB	Wehadkee-Chewacla complex	WKFSLA	Moderate	slow refill		

Table A 4.1 con't. Ratings for Aquifier-fed Excavated Ponds (cont'd).

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
2B1	WeB	Wedowee sandy loams	WDSLB	Severe	no water		
12B3	WeB3	Wedowee sandy clay loams	WDSLEB	Severe	no water		
2C2	WeC	Wedowee sandy loams	WDSLC	Severe	no water		
12C3	WeC3	Wedowee sandy clay loams	WDSLEC	Severe	no water		
99	WhB3	Wheaton sandy clay loam	WHSCLB	Severe	no water		
216B	WoB	Worsham sandy loams	WOSLB	Severe	slow refill		
54C2	ZAC	Zion-Ashlar sandy loams	ASSLC	Severe	no water		
54D2	ZAD	Zion-Ashlar sandy loams	ASSLD	Severe	no water		

Table A4.2 Ratings for Area Sanitary Landfill

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
8B1	ACB	Appling-Cecil sandy loams	CESLB	Slight			
18B3	ACB3	Appling-Cecil sandy clay loams	APSCLB	Slight			
18C3	ACC3	Appling-Cecil sandy clay loams	APSCLC	Moderate	slope		
1B2	ApB	Appling sandy loams	APSLB	Slight			
110B	ASB	Abell-Starr fine sandy loams	ABFSLB	Severe	seepage	wetness	
114B2	AWB	Appling-Wedowee sandy loams	WDSLB	Slight			
114C2	AWC	Appling-Wedowee sandy loams	WDSLC	Moderate	slope		
114C3	AWC3	Appling-Wedowee sandy clay loams	WDSLEC	Moderate	slope		
210B2	CeB	Cecil sandy loams	CESLB	Slight			
210B3	CeB3	Cecil sandy clay loams	CESCLB	Slight			
210C2	CeC	Cecil sandy loams	CESLC	Moderate	slope		
65B1	CoB	Colfax sandy loams	COSLB	Severe	wetness		
20A1	DNA	Dothan-Norfolk complex	NOLSA	Moderate	wetness		
117Bl	DuB	Durham sandy loams	DUSLB	Slight			
117C2	DuC	Durham sandy loams	DUSLC	Moderate	slope		
6B1	HeB	Helena sandy loams	HESLB	Moderate	wetness		
6C1	HeC	Helena sandy loams	HESLC	Moderate	wetness	slope	
9B1	SCBB	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Severe	wetness		
19B3	SCBB3	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Severe	wetness		
8B+	StB	Starr fine sandy loams	STFSLB	Moderate	flooding		
29B1	SWBB	Spotsylvania-Wedowee-Bourne sandy loams	BOSLB	Severe	wetness		
5B1	VaB	Vance sandy loams	VASLB	Slight			
75B2	VAWB	Vance-Appling-Wedowee sandy loams	APSLB	Slight			
75C2	VAWC	Vance-Appling-Wedowee sandy loams	WDSLC	Moderate	slope		
53D2	WAD	Wateree-Ashlar sandy loams	WASLD	Severe	depth to rock	seepage	slope
53C2	WAWC	Wateree-Ashlar-Wedowee sandy loams	ASSLC	Severe	depth to rock	seepage	

Table A4.2 Ratings for Area Sanitary Landfill (cont.)

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
1A+	WCA	Wehadkee-Chewacla complex	CHSLA	Severe	flooding	wetness	
7B1	WCB	Wehadkee-Chewacla complex	WKFSLA	Severe	flooding	wetness	
2B1	WeB	Wedowee sandy loams	WDSLB	Slight			
12B3	WeB3	Wedowee sandy clay loams	WDSLEB	Slight			
2C2	WeC	Wedowee sandy loams	WDSLC	Moderate	slope		
12C3	WeC3	Wedowee sandy clay loams	WDSLEC	Moderate	slope		
99	WhB3	Wheaton sandy clay loam	WHSCLB	Slight			
216B	WoB	Worsham sandy loams	WOSLB	Severe	wetness		
54C2	ZAC	Zion-Ashlar sandy loams	ASSLC	Severe	depth to rock	seepage	
54D2	ZAD	Zion-Ashlar sandy loams	ASSLD	Severe	depth to rock	seepage	slope

Table A4.3 Ratings for Camp Areas

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
8B1	ACB	Appling-Cecil sandy loams	CESLB	Slight			
18B3	ACB3	Appling-Cecil sandy clay loams	APSCLB	Slight			
18C3	ACC3	Appling-Cecil sandy clay loams	APSCLC	Moderate	slope		
1B2	ApB	Appling sandy loams	APSLB	Slight			
110B	ASB	Abell-Starr fine sandy loams	STFSLB	Severe	flooding		
114B2	AWB	Appling-Wedowee sandy loams	WDSLB	Slight			
114C2	AWC	Appling-Wedowee sandy loams	WDSLC	Moderate	slope		
114C3	AWC3	Appling-Wedowee sandy clay loams	WDSLEC	Moderate	slope		
210B2	CeB	Cecil sandy loams	CESLB	Slight			
210B3	CeB3	Cecil sandy clay loams	CESCLB	Slight			
210C2	CeC	Cecil sandy loams	CESLC	Moderate	slope		
65B1	CoB	Colfax sandy loams	COSLB	Severe	wetness		
20A1	DNA	Dothan-Norfolk complex	NOLSA	Slight			
117Bl	DuB	Durham sandy loams	DUSLB	Slight			
117C2	DuC	Durham sandy loams	DUSLC	Moderate	slope		
6B1	HeB	Helena sandy loams	HESLB	Moderate	wetness	percs slowly	
6C1	HeC	Helena sandy loams	HESLC	Moderate	slope	wetness	
9B1	SCBB	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Severe	percs slowly		
19B3	SCBB3	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Severe	percs slowly		
8B+	StB	Starr fine sandy loams	STFSLB	Severe	flooding		
29B1	SWBB	Spotsylvania-Wedowee-Bourne sandy loams	BOSLB	Severe	percs slowly		
5B1	VaB	Vance sandy loams	VASLB	Moderate	percs slowly		
75B2	VAWB	Vance-Appling-Wedowee sandy loams	VASLB	Moderate	percs slowly		
75C2	VAWC	Vance-Appling-Wedowee sandy loams	WDSLC	Moderate	slope		
53D2	WAD	Wateree-Ashlar sandy loams	WASLD	Severe	slope		

Table A4.3 Ratings for Camp Areas (cont.)

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
53C2	WAWC	Wateree-Ashlar-Wedowee sandy loams	WDSLC	Moderate	slope		
1A+	WCA	Wehadkee-Chewacla complex	CHSLA	Severe	flooding	wetness	
7B1	WCB	Wehadkee-Chewacla complex	WKFSLA	Severe	flooding	wetness	
2B1	WeB	Wedowee sandy loams	WDSLB	Slight			
12B3	WeB3	Wedowee sandy clay loams	WDSLEB	Slight			
2C2	WeC	Wedowee sandy loams	WDSLC	Moderate	slope		
12C3	WeC3	Wedowee sandy clay loams	WDSLEC	Moderate	slope		
99	WhB3	Wheaton sandy clay loam	WHSCLB	Slight			
216B	WoB	Worsham sandy loams	WOSLB	Severe	wetness	percs slowly	
54C2	ZAC	Zion-Ashlar sandy loams	ZISLC	Moderate	slope	percs slowly	
54D2	ZAD	Zion-Ashlar sandy loams	ASSLD	Severe	slope		

Table A4.4 Ratings for Daily Cover for Landfill

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
8B1	ACB	Appling-Cecil sandy loams	CESLB	Fair	too clayey	hard to pack	
18B3	ACB3	Appling-Cecil sandy clay loams	APSCLB	Fair	too clayey	hard to pack	
18C3	ACC3	Appling-Cecil sandy clay loams	APSCLC	Fair	too clayey	hard to pack	slope
1B2	ApB	Appling sandy loams	APSLB	Fair	too clayey	hard to pack	
110B	ASB	Abell-Starr fine sandy loams	ABFSLB	Fair	small stones	wetness	
114B2	AWB	Appling-Wedowee sandy loams	WDSLB	Fair	too clayey	hard to pack	
114C2	AWC	Appling-Wedowee sandy loams	WDSLC	Fair	too clayey	hard to pack	slope
114C3	AWC3	Appling-Wedowee sandy clay loams	WDSLEC	Fair	too clayey	hard to pack	slope
210B2	CeB	Cecil sandy loams	CESLB	Fair	too clayey	hard to pack	
210B3	CeB3	Cecil sandy clay loams	CESCLB	Fair	too clayey	hard to pack	
210C2	CeC	Cecil sandy loams	CESLC	Fair	too clayey	hard to pack	slope
65B1	CoB	Colfax sandy loams	COSLB	Poor	wetness		
20A1	DNA	Dothan-Norfolk complex	NOLSA	Fair	too clayey		
117Bl	DuB	Durham sandy loams	DUSLB	Good			
117C2	DuC	Durham sandy loams	DUSLC	Fair	slope		
6B1	HeB	Helena sandy loams	HESLB	Poor	too clayey	hard to pack	
6C1	HeC	Helena sandy loams	HESLC	Poor	too clayey	hard to pack	
9B1	SCBB	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Fair	too clayey	hard to pack	
19B3	SCBB3	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Fair	too clayey	hard to pack	
8B+	StB	Starr fine sandy loams	STFSLB	Fair	too clayey		
29B1	SWBB	Spotsylvania-Wedowee-Bourne sandy loams	BOSLB	Fair	too clayey	hard to pack	
5B1	VaB	Vance sandy loams	VASLB	Poor	too clayey	hard to pack	

Table A4.4 Ratings for Daily Cover for Landfill (cont.)

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
75B2	VAWB	Vance-Appling-Wedowee sandy loams	APSLB	Poor	too clayey	hard to pack	
75C2	VAWC	Vance-Appling-Wedowee sandy loams	WDSLC	Poor	too clayey	hard to pack	
53D2	WAD	Wateree-Ashlar sandy loams	WASLD	Poor	depth to rock	small stones	slope
53C2	WAWC	Wateree-Ashlar-Wedowee sandy loams	ASSLC	Poor	depth to rock	small stones	
1A+	WCA	Wehadkee-Chewacla complex	CHSLA	Poor	hard to pack	wetness	
7B1	WCB	Wehadkee-Chewacla complex	WKFSLA	Poor	hard to pack	wetness	
2B1	WeB	Wedowee sandy loams	WDSLB	Fair	small stones		
12B3	WeB3	Wedowee sandy clay loams	WDSLEB	Fair	small stones		
2C2	WeC	Wedowee sandy loams	WDSLC	Fair	small stones	slope	
12C3	WeC3	Wedowee sandy clay loams	WDSLEC	Fair	small stones	slope	
99	WhB3	Wheaton sandy clay loam	WHSCLB	Fair	too clayey	hard to pack	
216B	WoB	Worsham sandy loams	WOSLB	Poor	too clayey	hard to pack	wetness
54C2	ZAC	Zion-Ashlar sandy loams	ASSLC	Poor	depth to rock	too clayey	hard to pack
54D2	ZAD	Zion-Ashlar sandy loams	ASSLD	Poor	depth to rock	small stones	slope

Table A4.5 Ratings for Drainage

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
8B1	ACB	Appling-Cecil sandy loams	CESLB	Limitation	deep to water		
18B3	ACB3	Appling-Cecil sandy clay loams	APSCLB	Limitation	deep to water		
18C3	ACC3	Appling-Cecil sandy clay loams	APSCLC	Limitation	deep to water		
1B2	ApB	Appling sandy loams	APSLB	Limitation	deep to water		
110B	ASB	Abell-Starr fine sandy loams	STFSLB	Limitation	deep to water		
114B2	AWB	Appling-Wedowee sandy loams	WDSLB	Limitation	deep to water		
114C2	AWC	Appling-Wedowee sandy loams	WDSLC	Limitation	deep to water		
114C3	AWC3	Appling-Wedowee sandy clay loams	WDSLEC	Limitation	deep to water		
210B2	CeB	Cecil sandy loams	CESLB	Limitation	deep to water		
210B3	CeB3	Cecil sandy clay loams	CESCLB	Limitation	deep to water		
210C2	CeC	Cecil sandy loams	CESLC	Limitation	deep to water		
65B1	CoB	Colfax sandy loams	COSLB	Limitation	percs slowly	slope	
20A1	DNA	Dothan-Norfolk complex	NOLSA	Limitation	deep to water		
117Bl	DuB	Durham sandy loams	DUSLB	Limitation	deep to water		
117C2	DuC	Durham sandy loams	DUSLC	Limitation	deep to water		
6B1	HeB	Helena sandy loams	HESLB	Limitation	percs slowly	slope	
6C1	HeC	Helena sandy loams	HESLC	Limitation	percs slowly	slope	
9B1	SCBB	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Limitation	percs slowly	slope	
19B3	SCBB3	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Limitation	percs slowly	slope	
8B+	StB	Starr fine sandy loams	STFSLB	Limitation	deep to water		
29B1	SWBB	Spotsylvania-Wedowee-Bourne sandy loams	BOSLB	Limitation	percs slowly	slope	

Table A4.5 Ratings for Drainage (cont.)

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
5B1	VaB	Vance sandy loams	VASLB	Limitation	deep to water		
75B2	VAWB	Vance-Appling-Wedowee sandy loams	VASLB	Limitation	deep to water		
75C2	VAWC	Vance-Appling-Wedowee sandy loams	WDSLC	Limitation	deep to water		
53D2	WAD	Wateree-Ashlar sandy loams	WASLD	Limitation	deep to water		
53C2	WAWC	Wateree-Ashlar-Wedowee sandy loams	WDSLC	Limitation	deep to water		
1A+	WCA	Wehadkee-Chewacla complex	CHSLA	Limitation	flooding		
7B1	WCB	Wehadkee-Chewacla complex	WKFSLA	Limitation	flooding		
2B1	WeB	Wedowee sandy loams	WDSLB	Limitation	deep to water		
12B3	WeB3	Wedowee sandy clay loams	WDSLEB	Limitation	deep to water		
2C2	WeC	Wedowee sandy loams	WDSLC	Limitation	deep to water		
12C3	WeC3	Wedowee sandy clay loams	WDSLEC	Limitation	deep to water		
99	WhB3	Wheaton sandy clay loam	WHSCLB	Limitation	deep to water		
216B	WoB	Worsham sandy loams	WOSLB	Limitation	percs slowly	slope	
54C2	ZAC	Zion-Ashlar sandy loams	ZISLC	Limitation	deep to water		
54D2	ZAD	Zion-Ashlar sandy loams	ASSLD	Limitation	deep to water		

Table A4.6 Ratings for Dwellings with Basements

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
8B1	ACB	Appling-Cecil sandy loams	CESLB	Slight w/L	incl. wetness	incl. shrink-swell	
18B3	ACB3	Appling-Cecil sandy clay loams	APSCLB	Slight w/L	incl. wetness	incl. shrink-swell	
18C3	ACC3	Appling-Cecil sandy clay loams	APSCLC	Mod w/L	slope	incl. wetness	incl. shrink-swell
1B2	ApB	Appling sandy loams	APSLB	Slight w/L	incl. wetness	incl. shrink-swell	
110B	ASB	Abell-Starr fine sandy loams	ABFSLB	Severe	flooding		
114B2	AWB	Appling-Wedowee sandy loams	WDSLB	Slight w/L	incl. wetness	incl. shrink-swell	
114C2	AWC	Appling-Wedowee sandy loams	WDSLC	Mod w/L	slope	incl. wetness	incl. shrink-swell
114C3	AWC3	Appling-Wedowee sandy clay loams	WDSLEC	Mod w/L	slope	incl. wetness	incl. shrink-swell
210B2	CeB	Cecil sandy loams	CESLB	Slight w/L	incl. wetness	incl. shrink-swell	
210B3	CeB3	Cecil sandy clay loams	CESCLB	Slight w/L	incl. wetness	incl. shrink-swell	
210C2	CeC	Cecil sandy loams	CESLC	Mod w/L	slope	incl. wetness	incl. shrink-swell
65B1	CoB	Colfax sandy loams	COSLB	Severe	wetness		
20A1	DNA	Dothan-Norfolk complex	NOLSA	Moderate	wetness		
117Bl	DuB	Durham sandy loams	DUSLB	Slight w/L	incl. wetness		
117C2	DuC	Durham sandy loams	DUSLC	Mod w/L	slope	incl. wetness	incl. shrink-swell
6B1	HeB	Helena sandy loams	HESLB	Severe	wetness	shrink-swell	
6C1	HeC	Helena sandy loams	HESLC	Severe	wetness	shrink-swell	

Table A4.6 Ratings for Dwellings with Basements (cont.)

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
9B1	SCBB	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Severe	wetness		
19B3	SCBB3	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Severe	wetness		
8B+	StB	Starr fine sandy loams	STFSLB	Severe	flooding		
29B1	SWBB	Spotsylvania-Wedowee-Bourne sandy loams	BOSLB	Severe	wetness		
5B1	VaB	Vance sandy loams	VASLB	Mod w/L	shrink-swell	incl. wetness	incl. depth to rock
75B2	VAWB	Vance-Appling-Wedowee sandy loams	APSLB	Moderate	shrink-swell		
75C2	VAWC	Vance-Appling-Wedowee sandy loams	WDSLC	Moderate	slope	shrink-swell	incl. Wetness
53D2	WAD	Wateree-Ashlar sandy loams	WASLD	Severe	depth to rock	slope	
53C2	WAWC	Wateree-Ashlar-Wedowee sandy loams	ASSLC	Severe	depth to rock		
1A+	WCA	Wehadkee-Chewacla complex	CHSLA	Severe	flooding	wetness	
7B1	WCB	Wehadkee-Chewacla complex	WKFSLA	Severe	flooding	wetness	
2B1	WeB	Wedowee sandy loams	WDSLB	Slight w/L	incl. wetness	incl. shrink-swell	
12B3	WeB3	Wedowee sandy clay loams	WDSLEB	Slight w/L	incl. wetness	incl. shrink-swell	
2C2	WeC	Wedowee sandy loams	WDSLC	Mod w/L	slope	incl. wetness	incl. shrink-swell
12C3	WeC3	Wedowee sandy clay loams	WDSLEC	Mod w/L	slope	incl. wetness	incl. shrink-swell
99	WhB3	Wheaton sandy clay loam	WHSCLB	Slight			
216B	WoB	Worsham sandy loams	WOSLB	Severe	wetness		
54C2	ZAC	Zion-Ashlar sandy loams	ASSLC	Severe	depth to rock	shrink-swell	
54D2	ZAD	Zion-Ashlar sandy loams	ASSLD	Severe	depth to rock	shrink-swell	slope

Table A4.7 Ratings for Dwellings Without Basements

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
8B1	ACB	Appling-Cecil sandy loams	CESLB	Slight			
18B3	ACB3	Appling-Cecil sandy clay loams	APSCLB	Slight			
18C3	ACC3	Appling-Cecil sandy clay loams	APSCLC	Moderate	slope		
1B2	ApB	Appling sandy loams	APSLB	Slight			
110B	ASB	Abell-Starr fine sandy loams	STFSLB	Severe	flooding		
114B2	AWB	Appling-Wedowee sandy loams	WDSLB	Slight			
114C2	AWC	Appling-Wedowee sandy loams	WDSLC	Moderate	slope		
114C3	AWC3	Appling-Wedowee sandy clay loams	WDSLEC	Moderate	slope		
210B2	CeB	Cecil sandy loams	CESLB	Slight			
210B3	CeB3	Cecil sandy clay loams	CESCLB	Slight			
210C2	CeC	Cecil sandy loams	CESLC	Moderate	slope		
65B1	CoB	Colfax sandy loams	COSLB	Severe	wetness		
20A1	DNA	Dothan-Norfolk complex	NOLSA	Slight			
117Bl	DuB	Durham sandy loams	DUSLB	Slight			
117C2	DuC	Durham sandy loams	DUSLC	Moderate	slope		
6B1	HeB	Helena sandy loams	HESLB	Severe	shrink-swell		
6C1	HeC	Helena sandy loams	HESLC	Severe	shrink-swell		
9B1	SCBB	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Moderate	wetness	shrink-swell	
19B3	SCBB3	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Moderate	wetness	shrink-swell	
8B+	StB	Starr fine sandy loams	STFSLB	Severe	flooding		
29B1	SWBB	Spotsylvania-Wedowee-Bourne sandy loams	BOSLB	Moderate	wetness		
5B1	VaB	Vance sandy loams	VASLB	Moderate	shrink-swell		
75B2	VAWB	Vance-Appling-Wedowee sandy loams	VASLB	Moderate	shrink-swell		
75C2	VAWC	Vance-Appling-Wedowee sandy loams	WDSLC	Moderate	shrink-swell	slope	
53D2	WAD	Wateree-Ashlar sandy loams	WASLD	Severe	slope		

Table A4.7 Ratings for Dwellings Without Basements (cont.)

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
53C2	WAWC	Wateree-Ashlar-Wedowee sandy loams	WDSLC	Moderate	slope	depth to rock	
1A+	WCA	Wehadkee-Chewacla complex	CHSLA	Severe	flooding	wetness	
7B1	WCB	Wehadkee-Chewacla complex	WKFSLA	Severe	flooding	wetness	
2B1	WeB	Wedowee sandy loams	WDSLB	Slight			
12B3	WeB3	Wedowee sandy clay loams	WDSLEB	Slight			
2C2	WeC	Wedowee sandy loams	WDSLC	Moderate	slope		
12C3	WeC3	Wedowee sandy clay loams	WDSLEC	Moderate	slope		
99	WhB3	Wheaton sandy clay loam	WHSCLB	Slight			
216B	WoB	Worsham sandy loams	WOSLB	Severe	wetness		
54C2	ZAC	Zion-Ashlar sandy loams	ZISLC	Severe	shrink-swell		
54D2	ZAD	Zion-Ashlar sandy loams	ASSLD	Severe	shrink-swell	slope	

Table A4.8 Ratings for Embankments, Dikes, and Levees

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
8B1	ACB	Appling-Cecil sandy loams	CESLB	Severe	piping	hard to pack	
18B3	ACB3	Appling-Cecil sandy clay loams	APSCLB	Severe	piping	hard to pack	
18C3	ACC3	Appling-Cecil sandy clay loams	APSCLC	Severe	piping	hard to pack	
1B2	ApB	Appling sandy loams	APSLB	Severe	hard to pack		
110B	ASB	Abell-Starr fine sandy loams	ABFSLB	Severe	piping		
114B2	AWB	Appling-Wedowee sandy loams	WDSLB	Severe	piping		
114C2	AWC	Appling-Wedowee sandy loams	WDSLC	Severe	piping		
114C3	AWC3	Appling-Wedowee sandy clay loams	WDSLEC	Severe	piping		
210B2	CeB	Cecil sandy loams	CESLB	Severe	piping	hard to pack	
210B3	CeB3	Cecil sandy clay loams	CESCLB	Severe	piping	hard to pack	
210C2	CeC	Cecil sandy loams	CESLC	Severe	piping	hard to pack	
65B1	CoB	Colfax sandy loams	COSLB	Severe	piping	wetness	
20A1	DNA	Dothan-Norfolk complex	NOLSA	Severe	piping		
117Bl	DuB	Durham sandy loams	DUSLB	Slight			
117C2	DuC	Durham sandy loams	DUSLC	Slight			
6B1	HeB	Helena sandy loams	HESLB	Severe	hard to pack		
6C1	HeC	Helena sandy loams	HESLC	Severe	hard to pack		
9B1	SCBB	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Severe	piping	hard to pack	
19B3	SCBB3	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Severe	piping	hard to pack	
8B+	StB	Starr fine sandy loams	STFSLB	Severe	piping		
29B1	SWBB	Spotsylvania-Wedowee-Bourne sandy loams	BOSLB	Severe	piping		
5B1	VaB	Vance sandy loams	VASLB	Severe	hard to pack		
75B2	VAWB	Vance-Appling-Wedowee sandy loams	APSLB	Severe	piping		

Table A4.8 Ratings for Embankments, Dikes, and Levees (cont.)

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
75C2	VAWC	Vance-Appling-Wedowee sandy loams	WDSLC	Severe	piping		
53D2	WAD	Wateree-Ashlar sandy loams	WASLD	Severe	seepage	piping	
53C2	WAWC	Wateree-Ashlar-Wedowee sandy loams	ASSLC	Severe	seepage	piping	
1A+	WCA	Wehadkee-Chewacla complex	CHSLA	Severe	piping	hard to pack	wetness
7B1	WCB	Wehadkee-Chewacla complex	WKFSLA	Severe	piping	hard to pack	wetness
2B1	WeB	Wedowee sandy loams	WDSLB	Severe	piping		
12B3	WeB3	Wedowee sandy clay loams	WDSLEB	Severe	piping		
2C2	WeC	Wedowee sandy loams	WDSLC	Severe	piping		
12C3	WeC3	Wedowee sandy clay loams	WDSLEC	Severe	piping		
99	WhB3	Wheaton sandy clay loam	WHSCLB	Severe	hard to pack		
216B	WoB	Worsham sandy loams	WOSLB	Severe	wetness		
54C2	ZAC	Zion-Ashlar sandy loams	ASSLC	Severe	seepage	piping	
54D2	ZAD	Zion-Ashlar sandy loams	ASSLD	Severe	seepage	piping	

Table A4.9 Ratings for Grassed Waterways

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
8B1	ACB	Appling-Cecil sandy loams	CESLB	Favorable			
18B3	ACB3	Appling-Cecil sandy clay loams	APSCLB	Favorable			
18C3	ACC3	Appling-Cecil sandy clay loams	APSCLC	Limitation	slope		
1B2	ApB	Appling sandy loams	APSLB	Favorable			
110B	ASB	Abell-Starr fine sandy loams	STFSLB	Favorable			
114B2	AWB	Appling-Wedowee sandy loams	WDSLB	Favorable			
114C2	AWC	Appling-Wedowee sandy loams	WDSLC	Limitation	slope		
114C3	AWC3	Appling-Wedowee sandy clay loams	WDSLEC	Limitation	slope		
210B2	CeB	Cecil sandy loams	CESLB	Favorable			
210B3	CeB3	Cecil sandy clay loams	CESCLB	Favorable			
210C2	CeC	Cecil sandy loams	CESLC	Limitation	slope		
65B1	CoB	Colfax sandy loams	COSLB	Limitation	wetness	droughty	
20A1	DNA	Dothan-Norfolk complex	NOLSA	Limitation	droughty		
117Bl	DuB	Durham sandy loams	DUSLB	Favorable			
117C2	DuC	Durham sandy loams	DUSLC	Limitation	slope		
6B1	HeB	Helena sandy loams	HESLB	Limitation	percs slowly		
6C1	HeC	Helena sandy loams	HESLC	Limitation	slope	percs slowly	
9B1	SCBB	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Limitation	erodes easily	rooting depth	percs slowly
19B3	SCBB3	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Limitation	erodes easily	rooting depth	percs slowly
8B+	StB	Starr fine sandy loams	STFSLB	Favorable			
29B1	SWBB	Spotsylvania-Wedowee-Bourne sandy loams	BOSLB	Limitation	erodes easily	rooting depth	percs slowly
5B1	VaB	Vance sandy loams	VASLB	Limitation	percs slowly		
75B2	VAWB	Vance-Appling-Wedowee sandy loams	VASLB	Limitation	percs slowly		
75C2	VAWC	Vance-Appling-Wedowee sandy loams	WDSLC	Limitation	slope	percs slowly	
53D2	WAD	Wateree-Ashlar sandy loams	WASLD	Limitation	slope	drought y	depth to rock

Table A4.9 Ratings for Grassed Waterways (cont.)

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
53C2	WAWC	Wateree-Ashlar-Wedowee sandy loams	WDSLC	Limitation	slope	drought y	depth to rock
1A+	WCA	Wehadkee-Chewacla complex	CHSLA	Limitation	wetness		
7B1	WCB	Wehadkee-Chewacla complex	WKFSLA	Limitation	wetness		
2B1	WeB	Wedowee sandy loams	WDSLB	Favorable			
12B3	WeB3	Wedowee sandy clay loams	WDSLEB	Favorable			
2C2	WeC	Wedowee sandy loams	WDSLC	Limitation	slope		
12C3	WeC3	Wedowee sandy clay loams	WDSLEC	Limitation	slope		
99	WhB3	Wheaton sandy clay loam	WHSCLB	Favorable			
216B	WoB	Worsham sandy loams	WOSLB	Limitation	wetness	percs slowly	
54C2	ZAC	Zion-Ashlar sandy loams	ZISLC	Limitation	slope	drought y	depth to rock
54D2	ZAD	Zion-Ashlar sandy loams	ASSLD	Limitation	slope	drought y	depth to rock

Table A4.10 Ratings for Gravel

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
8B1	ACB	Appling-Cecil sandy loams	CESLB	Improbable	excess fines		
18B3	ACB3	Appling-Cecil sandy clay loams	APSCLB	Improbable	excess fines		
18C3	ACC3	Appling-Cecil sandy clay loams	APSCLC	Improbable	excess fines		
1B2	ApB	Appling sandy loams	APSLB	Improbable	excess fines		
110B	ASB	Abell-Starr fine sandy loams	ABFSLB	Improbable	excess fines		
114B2	AWB	Appling-Wedowee sandy loams	WDSLB	Improbable	excess fines		
114C2	AWC	Appling-Wedowee sandy loams	WDSLC	Improbable	excess fines		
114C3	AWC3	Appling-Wedowee sandy clay loams	WDSLEC	Improbable	excess fines		
210B2	CeB	Cecil sandy loams	CESLB	Improbable	excess fines		
210B3	CeB3	Cecil sandy clay loams	CESCLB	Improbable	excess fines		
210C2	CeC	Cecil sandy loams	CESLC	Improbable	excess fines		
65B1	CoB	Colfax sandy loams	COSLB	Improbable	excess fines		
20A1	DNA	Dothan-Norfolk complex	NOLSA	Improbable	excess fines		
117Bl	DuB	Durham sandy loams	DUSLB	Improbable	excess fines		
117C2	DuC	Durham sandy loams	DUSLC	Improbable	excess fines		
6B1	HeB	Helena sandy loams	HESLB	Improbable	excess fines		
6C1	HeC	Helena sandy loams	HESLC	Improbable	excess fines		
9B1	SCBB	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Improbable	excess fines		
19B3	SCBB3	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Improbable	excess fines		
8B+	StB	Starr fine sandy loams	STFSLB	Improbable	excess fines		

Table A4.10 Ratings for Gravel (cont.)

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
29B1	SWBB	Spotsylvania-Wedowee-Bourne sandy loams	BOSLB	Improbable	excess fines		
5B1	VaB	Vance sandy loams	VASLB	Improbable	excess fines		
75B2	VAWB	Vance-Appling-Wedowee sandy loams	APSLB	Improbable	excess fines		
75C2	VAWC	Vance-Appling-Wedowee sandy loams	WDSLC	Improbable	excess fines		
53D2	WAD	Wateree-Ashlar sandy loams	WASLD	Improbable	excess fines		
53C2	WAWC	Wateree-Ashlar-Wedowee sandy loams	ASSLC	Improbable	excess fines		
1A+	WCA	Wehadkee-Chewacla complex	CHSLA	Improbable	excess fines		
7B1	WCB	Wehadkee-Chewacla complex	WKFSLA	Improbable	excess fines		
2B1	WeB	Wedowee sandy loams	WDSLB	Improbable	excess fines		
12B3	WeB3	Wedowee sandy clay loams	WDSLEB	Improbable	excess fines		
2C2	WeC	Wedowee sandy loams	WDSLC	Improbable	excess fines		
12C3	WeC3	Wedowee sandy clay loams	WDSLEC	Improbable	excess fines		
99	WhB3	Wheaton sandy clay loam	WHSCLB	Improbable	excess fines		
216B	WoB	Worsham sandy loams	WOSLB	Improbable	excess fines		
54C2	ZAC	Zion-Ashlar sandy loams	ASSLC	Improbable	excess fines		
54D2	ZAD	Zion-Ashlar sandy loams	ASSLD	Improbable	excess fines		

Table A4.11 Ratings for Irrigation

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
8B1	ACB	Appling-Cecil sandy loams	CESLB	Limitation	slope	soil blowing	
18B3	ACB3	Appling-Cecil sandy clay loams	APSCLB	Limitation	slope	soil blowing	
18C3	ACC3	Appling-Cecil sandy clay loams	APSCLC	Limitation	slope		
1B2	ApB	Appling sandy loams	APSLB	Limitation	slope		
110B	ASB	Abell-Starr fine sandy loams	STFSLB	Limitation	slope	flooding	
114B2	AWB	Appling-Wedowee sandy loams	WDSLB	Limitation	slope		
114C2	AWC	Appling-Wedowee sandy loams	WDSLC	Limitation	slope		
114C3	AWC3	Appling-Wedowee sandy clay loams	WDSLEC	Limitation	slope		
210B2	CeB	Cecil sandy loams	CESLB	Limitation	slope	soil blowing	
210B3	CeB3	Cecil sandy clay loams	CESCLB	Limitation	slope	soil blowing	
210C2	CeC	Cecil sandy loams	CESLC	Limitation	slope	soil blowing	
65B1	CoB	Colfax sandy loams	COSLB	Limitation	slope	wetness	droughty
20A1	DNA	Dothan-Norfolk complex	NOLSA	Limitation	fast intake	droughty	
117Bl	DuB	Durham sandy loams	DUSLB	Favor. w/L	incl. wetness	incl. slope	
117C2	DuC	Durham sandy loams	DUSLC	Favor. w/L	incl. wetness	incl. slope	
6B1	HeB	Helena sandy loams	HESLB	Limitation	slope	wetness	percs slowly
6C1	HeC	Helena sandy loams	HESLC	Limitation	slope	wetness	percs slowly
9B1	SCBB	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Limitation	wetness	soil blowing	percs slowly
19B3	SCBB3	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Limitation	wetness	soil blowing	percs slowly
8B+	StB	Starr fine sandy loams	STFSLB	Limitation	slope	flooding	
29B1	SWBB	Spotsylvania-Wedowee-Bourne sandy loams	BOSLB	Limitation	wetness	soil blowing	percs slowly
5B1	VaB	Vance sandy loams	VASLB	Limitation	slope	percs slowly	soil blowing

Table A4.11 Ratings for Irrigation (cont.)

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
75B2	VAWB	Vance-Appling-Wedowee sandy loams	VASLB	Limitation	slope	percs slowly	soil blowing
75C2	VAWC	Vance-Appling-Wedowee sandy loams	WDSLC	Limitation	slope	percs slowly	soil blowing
53D2	WAD	Wateree-Ashlar sandy loams	WASLD	Limitation	slope	droughty	soil blowing
53C2	WAWC	Wateree-Ashlar-Wedowee sandy loams	WDSLC	Limitation	slope	droughty	soil blowing
1A+	WCA	Wehadkee-Chewacla complex	CHSLA	Limitation	wetness	soil blowing	flooding
7B1	WCB	Wehadkee-Chewacla complex	WKFSLA	Limitation	wetness	soil blowing	flooding
2B1	WeB	Wedowee sandy loams	WDSLB	Limitation	slope		
12B3	WeB3	Wedowee sandy clay loams	WDSLEB	Limitation	slope		
2C2	WeC	Wedowee sandy loams	WDSLC	Limitation	slope		
12C3	WeC3	Wedowee sandy clay loams	WDSLEC	Limitation	slope		
99	WhB3	Wheaton sandy clay loam	WHSCLB	Limitation	slope		
216B	WoB	Worsham sandy loams	WOSLB	Limitation	wetness	percs slowly	slope
54C2	ZAC	Zion-Ashlar sandy loams	ZISLC	Limitation	slope	droughty	soil blowing
54D2	ZAD	Zion-Ashlar sandy loams	ASSLD	Limitation	slope	droughty	soil blowing

Table A4.12 Ratings for Lawns, Landscaping, and Golf Fairways

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
8B1	ACB	Appling-Cecil sandy loams	CESLB	Slight			
18B3	ACB3	Appling-Cecil sandy clay loams	APSCLB	Slight			
18C3	ACC3	Appling-Cecil sandy clay loams	APSCLC	Moderate	slope		
1B2	ApB	Appling sandy loams	APSLB	Slight			
110B	ASB	Abell-Starr fine sandy loams	ABFSLB	Moderate	flooding		
114B2	AWB	Appling-Wedowee sandy loams	WDSLB	Slight			
114C2	AWC	Appling-Wedowee sandy loams	WDSLC	Moderate	slope		
114C3	AWC3	Appling-Wedowee sandy clay loams	WDSLEC	Moderate	slope		
210B2	CeB	Cecil sandy loams	CESLB	Slight			
210B3	CeB3	Cecil sandy clay loams	CESCLB	Slight			
210C2	CeC	Cecil sandy loams	CESLC	Moderate	slope		
65B1	CoB	Colfax sandy loams	COSLB	Severe	wetness		
20A1	DNA	Dothan-Norfolk complex	NOLSA	Moderate	droughty		
117Bl	DuB	Durham sandy loams	DUSLB	Slight			
117C2	DuC	Durham sandy loams	DUSLC	Moderate	slope		
6B1	HeB	Helena sandy loams	HESLB	Moderate	wetness		
6C1	HeC	Helena sandy loams	HESLC	Moderate	wetness	slope	
9B1	SCBB	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Moderate	wetness		
19B3	SCBB3	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Moderate	wetness		
8B+	StB	Starr fine sandy loams	STFSLB	Moderate	flooding		
29B1	SWBB	Spotsylvania-Wedowee-Bourne sandy loams	BOSLB	Moderate	wetness		
5B1	VaB	Vance sandy loams	VASLB	Slight			
75B2	VAWB	Vance-Appling-Wedowee sandy loams	APSLB	Slight			
75C2	VAWC	Vance-Appling-Wedowee sandy loams	WDSLC	Moderate	slope		
53D2	WAD	Wateree-Ashlar sandy loams	WASLD	Severe	slope		
53C2	WAWC	Wateree-Ashlar-Wedowee sandy loams	ASSLC	Moderate	droughty	slope	depth to rock

Table A4.12 Ratings for Lawns, Landscaping, and Golf Fairways (cont.)

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
1A+	WCA	Wehadkee-Chewacla complex	CHSLA	Severe	wetness	flooding	
7B1	WCB	Wehadkee-Chewacla complex	WKFSLA	Severe	wetness	flooding	
2B1	WeB	Wedowee sandy loams	WDSLB	Slight			
12B3	WeB3	Wedowee sandy clay loams	WDSLEB	Slight			
2C2	WeC	Wedowee sandy loams	WDSLC	Moderate	slope		
12C3	WeC3	Wedowee sandy clay loams	WDSLEC	Moderate	slope		
99	WhB3	Wheaton sandy clay loam	WHSCLB	Slight			
216B	WoB	Worsham sandy loams	WOSLB	Severe	wetness		
54C2	ZAC	Zion-Ashlar sandy loams	ASSLC	Moderate	droughty	slope	depth to rock
54D2	ZAD	Zion-Ashlar sandy loams	ASSLD	Severe	slope		

Table A4.13 Ratings for Paths and Trails

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
8B1	ACB	Appling-Cecil sandy loams	CESLB	Slight			
18B3	ACB3	Appling-Cecil sandy clay loams	APSCLB	Slight			
18C3	ACC3	Appling-Cecil sandy clay loams	APSCLC	Slight			
1B2	ApB	Appling sandy loams	APSLB	Slight			
110B	ASB	Abell-Starr fine sandy loams	STFSLB	Slight			
114B2	AWB	Appling-Wedowee sandy loams	WDSLB	Slight			
114C2	AWC	Appling-Wedowee sandy loams	WDSLC	Slight			
114C3	AWC3	Appling-Wedowee sandy clay loams	WDSLEC	Slight			
210B2	CeB	Cecil sandy loams	CESLB	Slight			
210B3	CeB3	Cecil sandy clay loams	CESCLB	Slight			
210C2	CeC	Cecil sandy loams	CESLC	Slight			
65B1	CoB	Colfax sandy loams	COSLB	Severe	wetness		
20A1	DNA	Dothan-Norfolk complex	NOLSA	Slight			
117Bl	DuB	Durham sandy loams	DUSLB	Slight			
117C2	DuC	Durham sandy loams	DUSLC	Slight			
6B1	HeB	Helena sandy loams	HESLB	Moderate	wetness		
6C1	HeC	Helena sandy loams	HESLC	Moderate	wetness		
9B1	SCBB	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Moderate	wetness		
19B3	SCBB3	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Moderate	wetness		
8B+	StB	Starr fine sandy loams	STFSLB	Slight			
29B1	SWBB	Spotsylvania-Wedowee-Bourne sandy loams	BOSLB	Moderate	wetness		
5B1	VaB	Vance sandy loams	VASLB	Slight			
75B2	VAWB	Vance-Appling-Wedowee sandy loams	VASLB	Slight			
75C2	VAWC	Vance-Appling-Wedowee sandy loams	WDSLC	Slight			
53D2	WAD	Wateree-Ashlar sandy loams	WASLD	Moderate	slope		
53C2	WAWC	Wateree-Ashlar-Wedowee sandy loams	WDSLC	Slight			

Table A4.13 Ratings for Paths and Trails (cont.)

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
1A+	WCA	Wehadkee-Chewacla complex	CHSLA	Severe	wetness		
7B1	WCB	Wehadkee-Chewacla complex	WKFSLA	Severe	wetness		
2B1	WeB	Wedowee sandy loams	WDSLB	Slight			
12B3	WeB3	Wedowee sandy clay loams	WDSLEB	Slight			
2C2	WeC	Wedowee sandy loams	WDSLC	Slight			
12C3	WeC3	Wedowee sandy clay loams	WDSLEC	Slight			
99	WhB3	Wheaton sandy clay loam	WHSCLB	Slight			
216B	WoB	Worsham sandy loams	WOSLB	Severe	wetness		
54C2	ZAC	Zion-Ashlar sandy loams	ZISLC	Slight			
54D2	ZAD	Zion-Ashlar sandy loams	ASSLD	Moderate	slope		

Table A4.14 Ratings for Picnic Areas

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
8B1	ACB	Appling-Cecil sandy loams	CESLB	Slight			
18B3	ACB3	Appling-Cecil sandy clay loams	APSCLB	Slight			
18C3	ACC3	Appling-Cecil sandy clay loams	APSCLC	Moderate	slope		
1B2	ApB	Appling sandy loams	APSLB	Slight			
110B	ASB	Abell-Starr fine sandy loams	ABFSLB	Moderate	wetness		
114B2	AWB	Appling-Wedowee sandy loams	WDSLB	Slight			
114C2	AWC	Appling-Wedowee sandy loams	WDSLC	Moderate	slope		
114C3	AWC3	Appling-Wedowee sandy clay loams	WDSLEC	Moderate	slope		
210B2	CeB	Cecil sandy loams	CESLB	Slight			
210B3	CeB3	Cecil sandy clay loams	CESCLB	Slight			
210C2	CeC	Cecil sandy loams	CESLC	Moderate	slope		
65B1	CoB	Colfax sandy loams	COSLB	Severe	wetness		
20A1	DNA	Dothan-Norfolk complex	NOLSA	Slight			
117Bl	DuB	Durham sandy loams	DUSLB	Slight			
117C2	DuC	Durham sandy loams	DUSLC	Moderate	slope		
6B1	HeB	Helena sandy loams	HESLB	Moderate	wetness	percs slowly	
6C1	HeC	Helena sandy loams	HESLC	Moderate	slope	wetness	percs slowly
9B1	SCBB	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Severe	percs slowly		
19B3	SCBB3	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Severe	percs slowly		
8B+	StB	Starr fine sandy loams	STFSLB	Slight			
29B1	SWBB	Spotsylvania-Wedowee-Bourne sandy loams	BOSLB	Severe	percs slowly		
5B1	VaB	Vance sandy loams	VASLB	Moderate	percs slowly		
75B2	VAWB	Vance-Appling-Wedowee sandy loams	APSLB	Moderate	percs slowly		
75C2	VAWC	Vance-Appling-Wedowee sandy loams	WDSLC	Moderate	slope		
53D2	WAD	Wateree-Ashlar sandy loams	WASLD	Severe	slope		

Table A4.14 Ratings for Picnic Areas (cont.)

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
53C2	WAWC	Wateree-Ashlar-Wedowee sandy loams	ASSLC	Moderate	slope		
1A+	WCA	Wehadkee-Chewacla complex	CHSLA	Severe	wetness		
7B1	WCB	Wehadkee-Chewacla complex	WKFSLA	Severe	wetness		
2B1	WeB	Wedowee sandy loams	WDSLB	Slight			
12B3	WeB3	Wedowee sandy clay loams	WDSLEB	Slight			
2C2	WeC	Wedowee sandy loams	WDSLC	Moderate	slope		
12C3	WeC3	Wedowee sandy clay loams	WDSLEC	Moderate	slope		
99	WhB3	Wheaton sandy clay loam	WHSCLB	Slight			
216B	WoB	Worsham sandy loams	WOSLB	Severe	wetness	percs slowly	
54C2	ZAC	Zion-Ashlar sandy loams	ASSLC	Moderate	slope	percs slowly	
54D2	ZAD	Zion-Ashlar sandy loams	ASSLD	Severe	slope		

Table A4.15 Ratings for Playgrounds

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
8B1	ACB	Appling-Cecil sandy loams	CESLB	Moderate	slope	small stones	
18B3	ACB3	Appling-Cecil sandy clay loams	APSCLB	Moderate	slope	small stones	
18C3	ACC3	Appling-Cecil sandy clay loams	APSCLC	Severe	slope		
1B2	ApB	Appling sandy loams	APSLB	Moderate	slope	small stones	
110B	ASB	Abell-Starr fine sandy loams	STFSLB	Moderate	slope	small stones	wetness
114B2	AWB	Appling-Wedowee sandy loams	WDSLB	Moderate	slope	small stones	
114C2	AWC	Appling-Wedowee sandy loams	WDSLC	Severe	slope		
114C3	AWC3	Appling-Wedowee sandy clay loams	WDSLEC	Severe	slope		
210B2	CeB	Cecil sandy loams	CESLB	Moderate	slope	small stones	
210B3	CeB3	Cecil sandy clay loams	CESCLB	Moderate	slope	small stones	
210C2	CeC	Cecil sandy loams	CESLC	Severe	slope		
65B1	CoB	Colfax sandy loams	COSLB	Severe	wetness		
20A1	DNA	Dothan-Norfolk complex	NOLSA	Slight			
117Bl	DuB	Durham sandy loams	DUSLB	Moderate	slope		
117C2	DuC	Durham sandy loams	DUSLC	Severe	slope		
6B1	HeB	Helena sandy loams	HESLB	Moderate	slope	wetness	percs slowly
6C1	HeC	Helena sandy loams	HESLC	Severe	slope		
9B1	SCBB	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Moderate	slope	small stones	wetness
19B3	SCBB3	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Moderate	slope	small stones	wetness
8B+	StB	Starr fine sandy loams	STFSLB	Moderate	slope		
29B1	SWBB	Spotsylvania-Wedowee-Bourne sandy loams	BOSLB	Moderate	slope	small stones	wetness
5B1	VaB	Vance sandy loams	VASLB	Moderate	slope	small stones	
75B2	VAWB	Vance-Appling-Wedowee sandy loams	VASLB	Moderate	slope	small stones	

Table A4.15 Ratings for Playgrounds (cont.)

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
75C2	VAWC	Vance-Appling-Wedowee sandy loams	WDSLC	Severe	slope		
53D2	WAD	Wateree-Ashlar sandy loams	WASLD	Severe	slope		
53C2	WAWC	Wateree-Ashlar-Wedowee sandy loams	WDSLC	Severe	slope		
1A+	WCA	Wehadkee-Chewacla complex	CHSLA	Severe	wetness	flooding	
7B1	WCB	Wehadkee-Chewacla complex	WKFSLA	Severe	wetness	flooding	
2B1	WeB	Wedowee sandy loams	WDSLB	Moderate	slope	small stones	
12B3	WeB3	Wedowee sandy clay loams	WDSLEB	Moderate	slope	small stones	
2C2	WeC	Wedowee sandy loams	WDSLC	Severe	slope		
12C3	WeC3	Wedowee sandy clay loams	WDSLEC	Severe	slope		
99	WhB3	Wheaton sandy clay loam	WHSCLB	Moderate	slope	small stones	
216B	WoB	Worsham sandy loams	WOSLB	Severe	wetness	percs slowly	
54C2	ZAC	Zion-Ashlar sandy loams	ZISLC	Severe	slope		
54D2	ZAD	Zion-Ashlar sandy loams	ASSLD	Severe	slope		

Table A4.16 Ratings for Pond Reservoir Areas

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
8B1	ACB	Appling-Cecil sandy loams	CESLB	Moderate	seepage	slope	
18B3	ACB3	Appling-Cecil sandy clay loams	APSCLB	Moderate	seepage	slope	
18C3	ACC3	Appling-Cecil sandy clay loams	APSCLC	Severe	slope		
1B2	ApB	Appling sandy loams	APSLB	Moderate	seepage	slope	
110B	ASB	Abell-Starr fine sandy loams	ABFSLB	Severe	seepage		
114B2	AWB	Appling-Wedowee sandy loams	WDSLB	Moderate	seepage	slope	
114C2	AWC	Appling-Wedowee sandy loams	WDSLC	Severe	slope		
114C3	AWC3	Appling-Wedowee sandy clay loams	WDSLEC	Severe	slope		
210B2	CeB	Cecil sandy loams	CESLB	Moderate	seepage	slope	
210B3	CeB3	Cecil sandy clay loams	CESCLB	Moderate	seepage	slope	
210C2	CeC	Cecil sandy loams	CESLC	Severe	slope		
65B1	CoB	Colfax sandy loams	COSLB	Moderate	seepage	slope	
20A1	DNA	Dothan-Norfolk complex	NOLSA	Moderate	seepage		
117Bl	DuB	Durham sandy loams	DUSLB	Slight			
117C2	DuC	Durham sandy loams	DUSLC	Slight			
6B1	HeB	Helena sandy loams	HESLB	Moderate	slope		
6C1	HeC	Helena sandy loams	HESLC	Severe	slope		
9B1	SCBB	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Moderate	seepage	slope	
19B3	SCBB3	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Moderate	seepage	slope	
8B+	StB	Starr fine sandy loams	STFSLB	Moderate	seepage		
29B1	SWBB	Spotsylvania-Wedowee-Bourne sandy loams	BOSLB	Moderate	seepage	slope	
5B1	VaB	Vance sandy loams	VASLB	Moderate	slope		
75B2	VAWB	Vance-Appling-Wedowee sandy loams	APSLB	Moderate	seepage	slope	
75C2	VAWC	Vance-Appling-Wedowee sandy loams	WDSLC	Severe	slope		
53D2	WAD	Wateree-Ashlar sandy loams	WASLD	Severe	seepage	slope	
53C2	WAWC	Wateree-Ashlar-Wedowee sandy loams	ASSLC	Severe	seepage	slope	

Table A4.16 Ratings for Pond Reservoir Areas (cont.)

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
1A+	WCA	Wehadkee-Chewacla complex	CHSLA	Moderate	seepage		
7B1	WCB	Wehadkee-Chewacla complex	WKFSLA	Moderate	seepage		
2B1	WeB	Wedowee sandy loams	WDSLB	Moderate	seepage	slope	
12B3	WeB3	Wedowee sandy clay loams	WDSLEB	Moderate	seepage	slope	
2C2	WeC	Wedowee sandy loams	WDSLC	Severe	slope		
12C3	WeC3	Wedowee sandy clay loams	WDSLEC	Severe	slope		
99	WhB3	Wheaton sandy clay loam	WHSCLB	Moderate	seepage	slope	
216B	WoB	Worsham sandy loams	WOSLB	Moderate	slope		
54C2	ZAC	Zion-Ashlar sandy loams	ASSLC	Severe	seepage	slope	
54D2	ZAD	Zion-Ashlar sandy loams	ASSLD	Severe	seepage	slope	

Table A4.17 Ratings for Roadfill

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
8B1	ACB	Appling-Cecil sandy loams	CESLB	Fair	low strength		
18B3	ACB3	Appling-Cecil sandy clay loams	APSCLB	Fair	low strength		
18C3	ACC3	Appling-Cecil sandy clay loams	APSCLC	Fair	low strength		
1B2	ApB	Appling sandy loams	APSLB	Fair	low strength		
110B	ASB	Abell-Starr fine sandy loams	STFSLB	Fair	low strength	shrink-swell	
114B2	AWB	Appling-Wedowee sandy loams	WDSLB	Fair	low strength		
114C2	AWC	Appling-Wedowee sandy loams	WDSLC	Fair	low strength		
114C3	AWC3	Appling-Wedowee sandy clay loams	WDSLEC	Fair	low strength		
210B2	CeB	Cecil sandy loams	CESLB	Fair	low strength		
210B3	CeB3	Cecil sandy clay loams	CESCLB	Fair	low strength		
210C2	CeC	Cecil sandy loams	CESLC	Fair	low strength		
65B1	CoB	Colfax sandy loams	COSLB	Poor	wetness		
20A1	DNA	Dothan-Norfolk complex	NOLSA	Good			
117Bl	DuB	Durham sandy loams	DUSLB	Good			
117C2	DuC	Durham sandy loams	DUSLC	Good			
6B1	HeB	Helena sandy loams	HESLB	Poor	shrink-swell	low strength	
6C1	HeC	Helena sandy loams	HESLC	Poor	shrink-swell	low strength	
9B1	SCBB	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Poor	low strength		
19B3	SCBB3	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Poor	low strength		
8B+	StB	Starr fine sandy loams	STFSLB	Fair	low strength	shrink-swell	
29B1	SWBB	Spotsylvania-Wedowee-Bourne sandy loams	BOSLB	Poor	low strength		
5B1	VaB	Vance sandy loams	VASLB	Poor	low strength		

Table A4.17 Ratings for Roadfill (cont.)

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
75B2	VAWB	Vance-Appling-Wedowee sandy loams	VASLB	Poor	low strength		
75C2	VAWC	Vance-Appling-Wedowee sandy loams	WDSLC	Poor	low strength		
53D2	WAD	Wateree-Ashlar sandy loams	WASLD	Poor	depth to rock		
53C2	WAWC	Wateree-Ashlar-Wedowee sandy loams	WDSLC	Poor	depth to rock		
1A+	WCA	Wehadkee-Chewacla complex	CHSLA	Poor	low strength	wetness	
7B1	WCB	Wehadkee-Chewacla complex	WKFSLA	Poor	low strength	wetness	
2B1	WeB	Wedowee sandy loams	WDSLB	Good			
12B3	WeB3	Wedowee sandy clay loams	WDSLEB	Good			
2C2	WeC	Wedowee sandy loams	WDSLC	Good			
12C3	WeC3	Wedowee sandy clay loams	WDSLEC	Good			
99	WhB3	Wheaton sandy clay loam	WHSCLB	Fair	low strength		
216B	WoB	Worsham sandy loams	WOSLB	Poor	wetness	low strength	low strength
54C2	ZAC	Zion-Ashlar sandy loams	ZISLC	Poor	depth to rock	shrink-swell	low strength
54D2	ZAD	Zion-Ashlar sandy loams	ASSLD	Poor	depth to rock	shrink-swell	low strength

Table A4.18 Ratings for Local Roads and Streets

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
8B1	ACB	Appling-Cecil sandy loams	CESLB	Moderate	low strength		
18B3	ACB3	Appling-Cecil sandy clay loams	APSCLB	Moderate	low strength		
18C3	ACC3	Appling-Cecil sandy clay loams	APSCLC	Moderate	low strength	slope	
1B2	ApB	Appling sandy loams	APSLB	Moderate	low strength		
110B	ASB	Abell-Starr fine sandy loams	ABFSLB	Moderate	shrink-swell	low strength	flooding
114B2	AWB	Appling-Wedowee sandy loams	WDSLB	Moderate	low strength		
114C2	AWC	Appling-Wedowee sandy loams	WDSLC	Moderate	low strength	slope	
114C3	AWC3	Appling-Wedowee sandy clay loams	WDSLEC	Moderate	low strength	slope	
210B2	CeB	Cecil sandy loams	CESLB	Moderate	low strength		
210B3	CeB3	Cecil sandy clay loams	CESCLB	Moderate	low strength		
210C2	CeC	Cecil sandy loams	CESLC	Moderate	low strength	slope	
65B1	CoB	Colfax sandy loams	COSLB	Severe	wetness		
20A1	DNA	Dothan-Norfolk complex	NOLSA	Slight			
117Bl	DuB	Durham sandy loams	DUSLB	Slight			
117C2	DuC	Durham sandy loams	DUSLC	Moderate	slope		
6B1	HeB	Helena sandy loams	HESLB	Severe	shrink-swell	low strength	
6C1	HeC	Helena sandy loams	HESLC	Severe	shrink-swell	low strength	
9B1	SCBB	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Severe	low strength		
19B3	SCBB3	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Severe	low strength		
8B+	StB	Starr fine sandy loams	STFSLB	Moderate	shrink-swell	low strength	flooding
29B1	SWBB	Spotsylvania-Wedowee-Bourne sandy loams	BOSLB	Severe	low strength		
5B1	VaB	Vance sandy loams	VASLB	Severe	low strength		

Table A4.18 Ratings for Local Roads and Streets (cont.)

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
75B2	VAWB	Vance-Appling-Wedowee sandy loams	APSLB	Severe	low strength		
75C2	VAWC	Vance-Appling-Wedowee sandy loams	WDSLC	Severe	low strength		
53D2	WAD	Wateree-Ashlar sandy loams	WASLD	Severe	slope		
53C2	WAWC	Wateree-Ashlar-Wedowee sandy loams	ASSLC	Moderate	low strength	slope	
1A+	WCA	Wehadkee-Chewacla complex	CHSLA	Severe	low strength	wetness	flooding
7B1	WCB	Wehadkee-Chewacla complex	WKFSLA	Severe	low strength	wetness	flooding
2B1	WeB	Wedowee sandy loams	WDSLB	Moderate	low strength		
12B3	WeB3	Wedowee sandy clay loams	WDSLEB	Moderate	low strength		
2C2	WeC	Wedowee sandy loams	WDSLC	Moderate	low strength	slope	
12C3	WeC3	Wedowee sandy clay loams	WDSLEC	Moderate	low strength	slope	
99	WhB3	Wheaton sandy clay loam	WHSCLB	Moderate	low strength		
216B	WoB	Worsham sandy loams	WOSLB	Severe	wetness	low strength	
54C2	ZAC	Zion-Ashlar sandy loams	ASSLC	Severe	shrink-swell	low strength	
54D2	ZAD	Zion-Ashlar sandy loams	ASSLD	Severe	shrink-swell	low strength	Slope

Table A4.19 Ratings for Sand

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
8B1	ACB	Appling-Cecil sandy loams	CESLB	Improbable	excess fines		
18B3	ACB3	Appling-Cecil sandy clay loams	APSCLB	Improbable	excess fines		
18C3	ACC3	Appling-Cecil sandy clay loams	APSCLC	Improbable	excess fines		
1B2	ApB	Appling sandy loams	APSLB	Improbable	excess fines		
110B	ASB	Abell-Starr fine sandy loams	STFSLB	Improbable	excess fines		
114B2	AWB	Appling-Wedowee sandy loams	WDSLB	Improbable	excess fines		
114C2	AWC	Appling-Wedowee sandy loams	WDSLC	Improbable	excess fines		
114C3	AWC3	Appling-Wedowee sandy clay loams	WDSLEC	Improbable	excess fines		
210B2	CeB	Cecil sandy loams	CESLB	Improbable	excess fines		
210B3	CeB3	Cecil sandy clay loams	CESCLB	Improbable	excess fines		
210C2	CeC	Cecil sandy loams	CESLC	Improbable	excess fines		
65B1	CoB	Colfax sandy loams	COSLB	Improbable	excess fines		
20A1	DNA	Dothan-Norfolk complex	NOLSA	Improbable	excess fines		
117Bl	DuB	Durham sandy loams	DUSLB	Improbable	excess fines		
117C2	DuC	Durham sandy loams	DUSLC	Improbable	excess fines		
6B1	HeB	Helena sandy loams	HESLB	Improbable	excess fines		
6C1	HeC	Helena sandy loams	HESLC	Improbable	excess fines		
9B1	SCBB	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Improbable	excess fines		
19B3	SCBB3	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Improbable	excess fines		
8B+	StB	Starr fine sandy loams	STFSLB	Improbable	excess fines		

Table A4.19 Ratings for Sand (cont.)

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
29B1	SWBB	Spotsylvania-Wedowee-Bourne sandy loams	BOSLB	Improbable	excess fines		
5B1	VaB	Vance sandy loams	VASLB	Improbable	excess fines		
75B2	VAWB	Vance-Appling-Wedowee sandy loams	VASLB	Improbable	excess fines		
75C2	VAWC	Vance-Appling-Wedowee sandy loams	WDSLC	Improbable	excess fines		
53D2	WAD	Wateree-Ashlar sandy loams	WASLD	Improbable	excess fines		
53C2	WAWC	Wateree-Ashlar-Wedowee sandy loams	WDSLC	Improbable	excess fines		
1A+	WCA	Wehadkee-Chewacla complex	CHSLA	Improbable	excess fines		
7B1	WCB	Wehadkee-Chewacla complex	WKFSLA	Improbable	excess fines		
2B1	WeB	Wedowee sandy loams	WDSLB	Improbable	excess fines		
12B3	WeB3	Wedowee sandy clay loams	WDSLEB	Improbable	excess fines		
2C2	WeC	Wedowee sandy loams	WDSLC	Improbable	excess fines		
12C3	WeC3	Wedowee sandy clay loams	WDSLEC	Improbable	excess fines		
99	WhB3	Wheaton sandy clay loam	WHSCLB	Improbable	excess fines		
216B	WoB	Worsham sandy loams	WOSLB	Improbable	excess fines		
54C2	ZAC	Zion-Ashlar sandy loams	ZISLC	Improbable	excess fines		
54D2	ZAD	Zion-Ashlar sandy loams	ASSLD	Improbable	excess fines		

Table A4.20 Ratings for Septic Tank Absorption Fields

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
8B1	ACB	Appling-Cecil sandy loams	CESLB	Mod w/L	percs slowly	incl wetness	
18B3	ACB3	Appling-Cecil sandy clay loams	APSCLB	Mod w/L	percs slowly	incl wetness	
18C3	ACC3	Appling-Cecil sandy clay loams	APSCLC	Mod w/L	percs slowly	slope	incl wetness
1B2	ApB	Appling sandy loams	APSLB	Mod w/L	percs slowly	incl wetness	
110B	ASB	Abell-Starr fine sandy loams	ABFSLB	Severe	wetness		
114B2	AWB	Appling-Wedowee sandy loams	WDSLB	Mod w/L	percs slowly	incl wetness	
114C2	AWC	Appling-Wedowee sandy loams	WDSLC	Mod w/L	percs slowly	slope	incl wetness
114C3	AWC3	Appling-Wedowee sandy clay loams	WDSLEC	Mod w/L	percs slowly	slope	incl wetness
210B2	CeB	Cecil sandy loams	CESLB	Mod w/L	percs slowly	incl wetness	
210B3	CeB3	Cecil sandy clay loams	CESCLB	Mod w/L	percs slowly	incl wetness	
210C2	CeC	Cecil sandy loams	CESLC	Mod w/L	percs slowly	slope	incl wetness
65B1	CoB	Colfax sandy loams	COSLB	Severe	wetness	percs slowly	
20A1	DNA	Dothan-Norfolk complex	NOLSA	Severe	wetness	percs slowly	
117Bl	DuB	Durham sandy loams	DUSLB	Mod w/L	percs slowly	incl wetness	
117C2	DuC	Durham sandy loams	DUSLC	Mod w/L	percs slowly	slope	incl wetness
6B1	HeB	Helena sandy loams	HESLB	Severe	wetness	percs slowly	
6C1	HeC	Helena sandy loams	HESLC	Severe	wetness	percs slowly	
9B1	SCBB	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Severe	wetness	percs slowly	
19B3	SCBB3	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Severe	wetness	percs slowly	
8B+	StB	Starr fine sandy loams	STFSLB	Mod w/L	flooding	incl wetness	

Table A4.20 Ratings for Septic Tank Absorption Fields (cont.)

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
29B1	SWBB	Spotsylvania-Wedowee-Bourne sandy loams	BOSLB	Severe	wetness	percs slowly	
5B1	VaB	Vance sandy loams	VASLB	Severe	percs slowly		
75B2	VAWB	Vance-Appling-Wedowee sandy loams	APSLB	Severe	percs slowly		
75C2	VAWC	Vance-Appling-Wedowee sandy loams	WDSLC	Severe	percs slowly		
3D2	WAD	Wateree-Ashlar sandy loams	WASLD	Severe	depth to rock	slope	
53C2	WAWC	Wateree-Ashlar-Wedowee sandy loams	ASSLC	Severe	depth to rock		
1A+	WCA	Wehadkee-Chewacla complex	CHSLA	Severe	flooding	wetness	
7B1	WCB	Wehadkee-Chewacla complex	WKFSLA	Severe	flooding	wetness	
2B1	WeB	Wedowee sandy loams	WDSLB	Mod w/L	percs slowly	incl wetness	
12B3	WeB3	Wedowee sandy clay loams	WDSLEB	Mod w/L	percs slowly	incl wetness	
2C2	WeC	Wedowee sandy loams	WDSLC	Mod w/L	percs slowly	slope	incl wetness
12C3	WeC3	Wedowee sandy clay loams	WDSLEC	Mod w/L	percs slowly	slope	incl wetness
99	WhB3	Wheaton sandy clay loam	WHSCLB	Mod w/L	percs slowly	incl wetness	
216B	WoB	Worsham sandy loams	WOSLB	Severe	percs slowly	wetness	
54C2	ZAC	Zion-Ashlar sandy loams	ASSLC	Severe	depth to rock	percs slowly	
54D2	ZAD	Zion-Ashlar sandy loams	ASSLD	Severe	depth to rock	percs slowly	

Table A4.21 Ratings for Sewage Lagoons

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
8B1	ACB	Appling-Cecil sandy loams	CESLB	Moderate	seepage	slope	
18B3	ACB3	Appling-Cecil sandy clay loams	APSCLB	Moderate	seepage	slope	
18C3	ACC3	Appling-Cecil sandy clay loams	APSCLC	Severe	slope		
1B2	ApB	Appling sandy loams	APSLB	Moderate	seepage	slope	
110B	ASB	Abell-Starr fine sandy loams	STFSLB	Severe	flooding		
114B2	AWB	Appling-Wedowee sandy loams	WDSLB	Moderate	seepage	slope	
114C2	AWC	Appling-Wedowee sandy loams	WDSLC	Severe	slope		
114C3	AWC3	Appling-Wedowee sandy clay loams	WDSLEC	Severe	slope		
210B2	CeB	Cecil sandy loams	CESLB	Moderate	seepage	slope	
210B3	CeB3	Cecil sandy clay loams	CESCLB	Moderate	seepage	slope	
210C2	CeC	Cecil sandy loams	CESLC	Severe	slope		
65B1	CoB	Colfax sandy loams	COSLB	Severe	wetness		
20A1	DNA	Dothan-Norfolk complex	NOLSA	Moderate	seepage	wetness	
117Bl	DuB	Durham sandy loams	DUSLB	Moderate	seepage		
117C2	DuC	Durham sandy loams	DUSLC	Severe	slope		
6B1	HeB	Helena sandy loams	HESLB	Moderate	slope		
6C1	HeC	Helena sandy loams	HESLC	Severe	slope		
9B1	SCBB	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Severe	wetness		
19B3	SCBB3	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Severe	wetness		
8B+	StB	Starr fine sandy loams	STFSLB	Severe	flooding		
29B1	SWBB	Spotsylvania-Wedowee-Bourne sandy loams	BOSLB	Severe	wetness		
5B1	VaB	Vance sandy loams	VASLB	Moderate	slope		
75B2	VAWB	Vance-Appling-Wedowee sandy loams	VASLB	Moderate	seepage	slope	
75C2	VAWC	Vance-Appling-Wedowee sandy loams	WDSLC	Severe	slope		
53D2	WAD	Wateree-Ashlar sandy loams	WASLD	Severe	seepage	depth to rock	slope

Table A4.21 Ratings for Sewage Lagoons (cont.)

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
53C2	WAWC	Wateree-Ashlar-Wedowee sandy loams	WDSLC	Severe	seepage	depth to rock	slope
1A+	WCA	Wehadkee-Chewacla complex	CHSLA	Severe	flooding	wetness	
7B1	WCB	Wehadkee-Chewacla complex	WKFSLA	Severe	flooding	wetness	
2B1	WeB	Wedowee sandy loams	WDSLB	Moderate	seepage	slope	
12B3	WeB3	Wedowee sandy clay loams	WDSLEB	Moderate	seepage	slope	
2C2	WeC	Wedowee sandy loams	WDSLC	Severe	slope		
12C3	WeC3	Wedowee sandy clay loams	WDSLEC	Severe	slope		
9	WhB3	Wheaton sandy clay loam	WHSCLB	Moderate	seepage	slope	
216B	WoB	Worsham sandy loams	WOSLB	Moderate	slope		
54C2	ZAC	Zion-Ashlar sandy loams	ZISLC	Severe	seepage	depth to rock	slope
54D2	ZAD	Zion-Ashlar sandy loams	ASSLD	Severe	seepage	depth to rock	slope

Table A4.22 Ratings for Shallow Excavations

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
8B1	ACB	Appling-Cecil sandy loams	CESLB	Moderate	too clayey		
18B3	ACB3	Appling-Cecil sandy clay loams	APSCLB	Moderate	too clayey		
18C3	ACC3	Appling-Cecil sandy clay loams	APSCLC	Moderate	too clayey	slope	
1B2	ApB	Appling sandy loams	APSLB	Moderate	too clayey		
110B	ASB	Abell-Starr fine sandy loams	ABFSLB	Severe	wetness		
114B2	AWB	Appling-Wedowee sandy loams	WDSLB	Moderate	too clayey		
114C2	AWC	Appling-Wedowee sandy loams	WDSLC	Moderate	too clayey	slope	
114C3	AWC3	Appling-Wedowee sandy clay loams	WDSLEC	Moderate	too clayey	slope	
210B2	CeB	Cecil sandy loams	CESLB	Moderate	too clayey		
210B3	CeB3	Cecil sandy clay loams	CESCLB	Moderate	too clayey		
210C2	CeC	Cecil sandy loams	CESLC	Moderate	too clayey	slope	
65B1	CoB	Colfax sandy loams	COSLB	Severe	wetness		
20A1	DNA	Dothan-Norfolk complex	NOLSA	Moderate	wetness		
117Bl	DuB	Durham sandy loams	DUSLB	Slight			
117C2	DuC	Durham sandy loams	DUSLC	Moderate	slope		
6B1	HeB	Helena sandy loams	HESLB	Severe	wetness		
6C1	HeC	Helena sandy loams	HESLC	Severe	wetness		
9B1	SCBB	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Severe	wetness		
19B3	SCBB3	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Severe	wetness		
8B+	StB	Starr fine sandy loams	STFSLB	Slight			
29B1	SWBB	Spotsylvania-Wedowee-Bourne sandy loams	BOSLB	Severe	wetness		
5B1	VaB	Vance sandy loams	VASLB	Moderate	too clayey		
75B2	VAWB	Vance-Appling-Wedowee sandy loams	APSLB	Moderate	too clayey		

Table A4.22 Ratings for Shallow Excavations (cont.)

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
75C2	VAWC	Vance-Appling-Wedowee sandy loams	WDSLC	Moderate	too clayey	slope	
53D2	WAD	Wateree-Ashlar sandy loams	WASLD	Severe	cutbanks cave	slope	
53C2	WAWC	Wateree-Ashlar-Wedowee sandy loams	ASSLC	Severe	cutbanks cave		
1A+	WCA	Wehadkee-Chewacla complex	CHSLA	Severe	wetness		
7B1	WCB	Wehadkee-Chewacla complex	WKFSLA	Severe	wetness		
2B1	WeB	Wedowee sandy loams	WDSLB	Moderate	too clayey		
12B3	WeB3	Wedowee sandy clay loams	WDSLEB	Moderate	too clayey		
2C2	WeC	Wedowee sandy loams	WDSLC	Moderate	too clayey	slope	
12C3	WeC3	Wedowee sandy clay loams	WDSLEC	Moderate	too clayey	slope	
99	WhB3	Wheaton sandy clay loam	WHSCLB	Moderate	too clayey		
216B	WoB	Worsham sandy loams	WOSLB	Severe	wetness		
54C2	ZAC	Zion-Ashlar sandy loams	ASSLC	Severe	depth to rock		
54D2	ZAD	Zion-Ashlar sandy loams	ASSLD	Severe	depth to rock	slope	

Table A4.23 Ratings for Small Commercial Buildings

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
8B1	ACB	Appling-Cecil sandy loams	CESLB	Moderate	slope		
18B3	ACB3	Appling-Cecil sandy clay loams	APSCLB	Moderate	slope		
18C3	ACC3	Appling-Cecil sandy clay loams	APSCLC	Severe	slope		
1B2	ApB	Appling sandy loams	APSLB	Moderate	slope		
110B	ASB	Abell-Starr fine sandy loams	STFSLB	Severe	flooding		
114B2	AWB	Appling-Wedowee sandy loams	WDSLB	Moderate	slope		
114C2	AWC	Appling-Wedowee sandy loams	WDSLC	Severe	slope		
114C3	AWC3	Appling-Wedowee sandy clay loams	WDSLEC	Severe	slope		
210B2	CeB	Cecil sandy loams	CESLB	Moderate	slope		
210B3	CeB3	Cecil sandy clay loams	CESCLB	Moderate	slope		
210C2	CeC	Cecil sandy loams	CESLC	Severe	slope		
65B1	CoB	Colfax sandy loams	COSLB	Severe	wetness		
20A1	DNA	Dothan-Norfolk complex	NOLSA	Slight			
117Bl	DuB	Durham sandy loams	DUSLB	Moderate	slope		
117C2	DuC	Durham sandy loams	DUSLC	Severe	slope		
6B1	HeB	Helena sandy loams	HESLB	Severe	shrink-swell		
6C1	HeC	Helena sandy loams	HESLC	Severe	shrink-swell	slope	
9B1	SCBB	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Moderate	shrink-swell	slope	
19B3	SCBB3	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Moderate	shrink-swell	slope	
8B+	StB	Starr fine sandy loams	STFSLB	Severe	flooding		
29B1	SWBB	Spotsylvania-Wedowee-Bourne sandy loams	BOSLB	Moderate	shrink-swell	slope	
5B1	VaB	Vance sandy loams	VASLB	Moderate	shrink-swell	slope	
75B2	VAWB	Vance-Appling-Wedowee sandy loams	VASLB	Moderate	shrink-swell	slope	
75C2	VAWC	Vance-Appling-Wedowee sandy loams	WDSLC	Severe	slope		
53D2	WAD	Wateree-Ashlar sandy loams	WASLD	Severe	slope		

Table A4.23 Ratings for Small Commercial Buildings (cont.)

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
53C2	WAWC	Wateree-Ashlar-Wedowee sandy loams	WDSLC	Severe	slope		
1A+	WCA	Wehadkee-Chewacla complex	CHSLA	Severe	flooding	wetness	
7B1	WCB	Wehadkee-Chewacla complex	WKFSLA	Severe	flooding	wetness	
2B1	WeB	Wedowee sandy loams	WDSLB	Moderate	slope		
12B3	WeB3	Wedowee sandy clay loams	WDSLEB	Moderate	slope		
2C2	WeC	Wedowee sandy loams	WDSLC	Severe	slope		
12C3	WeC3	Wedowee sandy clay loams	WDSLEC	Severe	slope		
99	WhB3	Wheaton sandy clay loam	WHSCLB	Moderate	slope		
216B	WoB	Worsham sandy loams	WOSLB	Severe	wetness		
54C2	ZAC	Zion-Ashlar sandy loams	ZISLC	Severe	shrink-swell	slope	
54D2	ZAD	Zion-Ashlar sandy loams	ASSLD	Severe	shrink-swell	slope	

Table A4.24 Ratings for Terraces and Diversions

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
8B1	ACB	Appling-Cecil sandy loams	CESLB	Limitation	soil blowing		
18B3	ACB3	Appling-Cecil sandy clay loams	APSCLB	Limitation	soil blowing		
18C3	ACC3	Appling-Cecil sandy clay loams	APSCLC	Limitation	slope		
1B2	ApB	Appling sandy loams	APSLB	Limitation	soil blowing		
110B	ASB	Abell-Starr fine sandy loams	ABFSLB	Limitation	wetness		
114B2	AWB	Appling-Wedowee sandy loams	WDSLB	Limitation	soil blowing		
114C2	AWC	Appling-Wedowee sandy loams	WDSLC	Limitation	slope	soil blowing	
114C3	AWC3	Appling-Wedowee sandy clay loams	WDSLEC	Limitation	slope		
210B2	CeB	Cecil sandy loams	CESLB	Limitation	soil blowing		
210B3	CeB3	Cecil sandy clay loams	CESCLB	Limitation	soil blowing		
210C2	CeC	Cecil sandy loams	CESLC	Limitation	slope	soil blowing	
65B1	CoB	Colfax sandy loams	COSLB	Limitation	wetness	rooting depth	
20A1	DNA	Dothan-Norfolk complex	NOLSA	Limitation	soil blowing		
117Bl	DuB	Durham sandy loams	DUSLB	Favorable			
117C2	DuC	Durham sandy loams	DUSLC	Limitation	slope		
6B1	HeB	Helena sandy loams	HESLB	Limitation	wetness	percs slowly	
6C1	HeC	Helena sandy loams	HESLC	Limitation	slope	wetness	percs slowly
9B1	SCBB	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Limitation	erodes easily	wetness	rooting depth
19B3	SCBB3	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Limitation	erodes easily	wetness	rooting depth
8B+	StB	Starr fine sandy loams	STFSLB	Favorable			
29B1	SWBB	Spotsylvania-Wedowee-Bourne sandy loams	BOSLB	Limitation	erodes easily	wetness	rooting depth

Table A4.24 Ratings for Terraces and Diversions (cont.)

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
5B1	VaB	Vance sandy loams	VASLB	Limitation	percs slowly		
75B2	VAWB	Vance-Appling-Wedowee sandy loams	APSLB	Limitation	percs slowly		
75C2	VAWC	Vance-Appling-Wedowee sandy loams	WDSLC	Limitation	slope	percs slowly	
53D2	WAD	Wateree-Ashlar sandy loams	WASLD	Limitation	slope	depth to rock	soil blowing
53C2	WAWC	Wateree-Ashlar-Wedowee sandy loams	ASSLC	Limitation	slope	depth to rock	soil blowing
1A+	WCA	Wehadkee-Chewacla complex	CHSLA	Limitation	wetness	soil blowing	
7B1	WCB	Wehadkee-Chewacla complex	WKFSLA	Limitation	wetness	soil blowing	
2B1	WeB	Wedowee sandy loams	WDSLB	Favorable			
12B3	WeB3	Wedowee sandy clay loams	WDSLEB	Favorable			
2C2	WeC	Wedowee sandy loams	WDSLC	Limitation	slope		
12C3	WeC3	Wedowee sandy clay loams	WDSLEC	Limitation	slope		
99	WhB3	Wheaton sandy clay loam	WHSCLB	Favorable			
216B	WoB	Worsham sandy loams	WOSLB	Limitation	wetness	percs slowly	
54C2	ZAC	Zion-Ashlar sandy loams	ASSLC	Limitation	slope	depth to rock	soil blowing
54D2	ZAD	Zion-Ashlar sandy loams	ASSLD	Limitation	slope	depth to rock	soil blowing

Table A4.25 Ratings for Topsoil

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
8B1	ACB	Appling-Cecil sandy loams	CESLB	Poor	too clayey		
18B3	ACB3	Appling-Cecil sandy clay loams	APSCLB	Poor	too clayey		
18C3	ACC3	Appling-Cecil sandy clay loams	APSCLC	Poor	too clayey		
1B2	ApB	Appling sandy loams	APSLB	Poor	too clayey		
110B	ASB	Abell-Starr fine sandy loams	STFSLB	Fair	too clayey		
114B2	AWB	Appling-Wedowee sandy loams	WDSLB	Poor	too clayey		
114C2	AWC	Appling-Wedowee sandy loams	WDSLC	Poor	too clayey		
114C3	AWC3	Appling-Wedowee sandy clay loams	WDSLEC	Poor	too clayey		
210B2	CeB	Cecil sandy loams	CESLB	Poor	too clayey		
210B3	CeB3	Cecil sandy clay loams	CESCLB	Poor	too clayey		
210C2	CeC	Cecil sandy loams	CESLC	Poor	too clayey		
65B1	CoB	Colfax sandy loams	COSLB	Poor	wetness		
20A1	DNA	Dothan-Norfolk complex	NOLSA	Fair	too clayey	small stones	small stones
117Bl	DuB	Durham sandy loams	DUSLB	Fair	too clayey		
117C2	DuC	Durham sandy loams	DUSLC	Fair	too clayey	slope	slope
6B1	HeB	Helena sandy loams	HESLB	Poor	too clayey		
6C1	HeC	Helena sandy loams	HESLC	Poor	too clayey		
9B1	SCBB	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Poor	thin layer		
19B3	SCBB3	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Poor	thin layer		
8B+	StB	Starr fine sandy loams	STFSLB	Fair	too clayey		

Table A4.25 Ratings for Topsoil (cont.)

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
29B1	SWBB	Spotsylvania-Wedowee-Bourne sandy loams	BOSLB	Poor	too clayey		
5B1	VaB	Vance sandy loams	VASLB	Poor	too clayey		
75B2	VAWB	Vance-Appling-Wedowee sandy loams	VASLB	Poor	too clayey		
75C2	VAWC	Vance-Appling-Wedowee sandy loams	WDSLC	Poor	too clayey		
53D2	WAD	Wateree-Ashlar sandy loams	WASLD	Poor	small stones	slope	slope
53C2	WAWC	Wateree-Ashlar-Wedowee sandy loams	WDSLC	Poor	too clayey		
1A+	WCA	Wehadkee-Chewacla complex	CHSLA	Poor	wetness		
7B1	WCB	Wehadkee-Chewacla complex	WKFSLA	Poor	wetness		
2B1	WeB	Wedowee sandy loams	WDSLB	Poor	too clayey		
12B3	WeB3	Wedowee sandy clay loams	WDSLEB	Poor	too clayey		
2C2	WeC	Wedowee sandy loams	WDSLC	Poor	too clayey		
12C3	WeC3	Wedowee sandy clay loams	WDSLEC	Poor	too clayey		
99	WhB3	Wheaton sandy clay loam	WHSCLB	Poor	too clayey		
216B	WoB	Worsham sandy loams	WOSLB	Poor	wetness	too clayey	too clayey
54C2	ZAC	Zion-Ashlar sandy loams	ZISLC	Poor	small stones		
54D2	ZAD	Zion-Ashlar sandy loams	ASSLD	Poor	small stones	slope	slope

Table A4.26 Ratings for Trench Sanitary Landfills

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
8B1	ACB	Appling-Cecil sandy loams	CESLB	Moderate	too clayey		
18B3	ACB3	Appling-Cecil sandy clay loams	APSCLB	Moderate	too clayey		
18C3	ACC3	Appling-Cecil sandy clay loams	APSCLC	Moderate	slope	too clayey	
1B2	ApB	Appling sandy loams	APSLB	Moderate	too clayey		
110B	ASB	Abell-Starr fine sandy loams	ABFSLB	Severe	seepage	wetness	
114B2	AWB	Appling-Wedowee sandy loams	WDSLB	Moderate	too clayey		
114C2	AWC	Appling-Wedowee sandy loams	WDSLC	Moderate	slope	too clayey	
114C3	AWC3	Appling-Wedowee sandy clay loams	WDSLEC	Moderate	slope	too clayey	
210B2	CeB	Cecil sandy loams	CESLB	Moderate	too clayey		
210B3	CeB3	Cecil sandy clay loams	CESCLB	Moderate	too clayey		
210C2	CeC	Cecil sandy loams	CESLC	Moderate	slope	too clayey	
65B1	CoB	Colfax sandy loams	COSLB	Severe	wetness		
20A1	DNA	Dothan-Norfolk complex	NOLSA	Severe	wetness		
117Bl	DuB	Durham sandy loams	DUSLB	Slight			
117C2	DuC	Durham sandy loams	DUSLC	Moderate	slope		
6B1	HeB	Helena sandy loams	HESLB	Severe	wetness	too clayey	
6C1	HeC	Helena sandy loams	HESLC	Severe	wetness	too clayey	
9B1	SCBB	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Severe	wetness		
19B3	SCBB3	Spotsylvania-Cecil-Bourne sandy loams	BOSLB	Severe	wetness		
8B+	StB	Starr fine sandy loams	STFSLB	Moderate	flooding		
29B1	SWBB	Spotsylvania-Wedowee-Bourne sandy loams	BOSLB	Severe	wetness		
5B1	VaB	Vance sandy loams	VASLB	Severe	too clayey		

Table A4.26 Ratings for Trench Sanitary Landfills (cont.)

Map	MU SYMBOL	Name	Soillabl	rating	restct1	restct2	restct3
75B2	VAWB	Vance-Appling-Wedowee sandy loams	APSLB	Severe	too clayey		
75C2	VAWC	Vance-Appling-Wedowee sandy loams	WDSLC	Severe	too clayey		
53D2	WAD	Wateree-Ashlar sandy loams	WASLD	Severe	depth to rock	seepage	slope
53C2	WAWC	Wateree-Ashlar-Wedowee sandy loams	ASSLC	Severe	depth to rock	seepage	
1A+	WCA	Wehadkee-Chewacla complex	CHSLA	Severe	flooding	wetness	
7B1	WCB	Wehadkee-Chewacla complex	WKFSLA	Severe	flooding	wetness	
2B1	WeB	Wedowee sandy loams	WDSLB	Slight			
12B3	WeB3	Wedowee sandy clay loams	WDSLEB	Slight			
2C2	WeC	Wedowee sandy loams	WDSLC	Moderate	slope		
12C3	WeC3	Wedowee sandy clay loams	WDSLEC	Moderate	slope		
99	WhB3	Wheaton sandy clay loam	WHSCLB	Moderate	too clayey		
216B	WoB	Worsham sandy loams	WOSLB	Severe	wetness	too clayey	
54C2	ZAC	Zion-Ashlar sandy loams	ASSLC	Severe	depth to rock	seepage	
54D2	ZAD	Zion-Ashlar sandy loams	ASSLD	Severe	depth to rock	seepage	slope