

APPENDIX C

SOILS

APPENDIX C-1
Soil Associations Crossed by the Proposed Southeast Expansion Project

Soil Series	Cumulative Miles Traversed	Prime Farmland	Erosion Potential	Hydric Soils	Rock	Revegetation Potential	Drainage Characteristics	Severe Compaction Potential
Arundel-Cantuche complex, 25 to 60 percent slopes, stony	0.31	No	Severe	Yes	No	Fair	Well drained	No
Bibb and Chastain fine sandy loams (bibb and una)	2.30	No	Severe	Yes	No	Good	Poorly drained	No
Bibb fine sandy loam, frequently flooded	1.59	No	Severe	Yes	No	Fair	Poorly drained	No
Bibb soils	0.34	Yes	Severe	Yes	No	Good	Poorly drained	No
Bibb-luka complex, 0 to 1 percent slopes, frequently flooded	0.11	No	Severe	Yes	No	Good	Poorly drained	No
Boswell fine sandy loam, 2 to 5 percent slopes	0.36	Yes	Moderate	Yes	No	Good	Moderately well drained	No
Boswell fine sandy loam, 5 to 8 percent slopes	1.35	Yes	Moderate	Yes	No	Good	Moderately well drained	No
Boswell fine sandy loam, 8 to 12 percent slopes, eroded (sweatman)	0.62	No	Severe	Yes	No	Fair	Well drained	No
Boswell, Shubuta, and Cuthbert fine sandy loams, 12 to 45 percent slopes (sweatman)	2.50	No	Severe	Yes	No	Fair	Well drained	No
Boykin-Luverne-Smithdale complex, 15 to 35 percent slopes, eroded	3.54	No	Severe	Yes	No	Fair	Well drained	No
Cahaba fine sandy loam, 0 to 2 percent slopes	0.13	Yes	Low	Yes	No	Good	Well drained	No
Cahaba fine sandy loam, 2 to 5 percent slopes	0.07	Yes	Low	No	No	Good	Well drained	No
Eustis loamy sand, 12 to 35 percent slopes	1.59	No	Severe	Yes	No	Fair	Somewhat excessively drained	No
Eustis loamy sand, 5 to 8 percent slopes	0.48	Yes	Moderate	Yes	No	Fair	Somewhat excessively drained	No
Eustis loamy sand, 8 to 12 percent slopes	0.42	No	Severe	Yes	No	Fair	Somewhat excessively drained	No
Eustis loamy sand, terrace	1.11	Yes	Moderate	Yes	No	Good	Somewhat excessively drained	No
Eutaw-Vaiden clays, deep (louin)	1.61	No	Moderate	Yes	No	Good	Somewhat excessively drained	No

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Flint fine sandy loam, loamy substratum, 0 to 2 percent slopes (annemaine)	0.03	Yes	Low	Yes	No	Good	Moderately well drained	No
Freest loam, 2 to 5 percent slopes, eroded	0.23	Yes	Severe	No	No	Good	Moderately well drained	No
Freest loam, 5 to 8 percent slopes, eroded	0.06	Yes	Low	No	No	Good	Moderately well drained	No
Heidel sandy loam, 12 to 30 percent slopes	0.37	No	Severe	Yes	No	Fair	Well drained	No
Heidel sandy loam, 15 to 35 percent slopes	1.75	No	Severe	Yes	No	Fair	Well drained	No
Heidel sandy loam, 8 to 15 percent slopes	0.63	No	Moderate	Yes	No	Fair	Well drained	No
Heidel-Troup association, hilly	2.85	No	Severe	Yes	No	Fair	Well drained	No
Houlka clay	0.10	Yes	Low	Yes	No	Good	Somewhat poorly drained	No
luka fine sandy loam (ochlockonee)	0.09	Yes	Low	Yes	No	Fair	Well drained	No
Izagora fine sandy loam, 0 to 2 percent slopes, rarely flooded	0.18	Yes	Low	Yes	No	Fair	Moderately well drained	No
Jena fine sandy loam, occasionally flooded	1.78	Yes	Low	Yes	No	Good	Well drained	No
Johnston loam	0.08	No	Severe	Yes	No	Good	Very poorly drained	No
Kirkville fine sandy loam, occasionally flooded	1.53	Yes	Low	Yes	No	Good	Moderately well drained	No
Kirkville-Jena association, frequently flooded	1.17	No	Severe	Yes	No	Fair	Moderately well drained	No
Kirkville-Mantachie complex	3.18	No	Low	Yes	No	Good	Moderately well drained	No
Lakeland sand, 5 to 12 percent slopes	0.05	No	Severe	Yes	No	Fair	Well drained	No
Lakeland sand, 12 to 30 percent slopes	0.04	No	Severe	Yes	No	Fair	Well drained	No
Lauderdale-Arundel complex, 2 to 10 percent slopes, stony, eroded	0.05	No	Moderate	No	No	Fair	Well drained	No
Leaf fine sandy loam	0.23	No	Moderate	Yes	No	Fair	Poorly drained	No

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Luverne sandy loam, 1 to 5 percent slopes	0.14	Yes	Moderate	No	No	Good	Well drained	No
Mantachie loam, occasionally flooded	0.32	Yes	Low	Yes	No	Good	Somewhat poorly drained	No
Mantachie soils, local alluvium	0.68	Yes	Low	Yes	No	Good	Moderately well drained	No
Mantachie, Bibb, and luka soils (kirkville, kinston, iuka)	2.03	No	Severe	Yes	No	Good	Moderately well drained	No
Mantachie-Mathiston association, frequently flooded	0.79	No	Severe	Yes	No	Good	Somewhat poorly drained	No
Mashulaville fine sandy loam, terrace	0.22	Yes	Moderate	Yes	No	Good	Poorly drained	No
McCrary-Deerford complex, 0 to 2 percent slopes, occasionally flooded	0.05	No	Moderate	Yes	No	Fair	Poorly drained	No
McLaurin loamy sand, 2 to 5 percent slopes	0.72	Yes	Low	No	No	Good	Well drained	No
McLaurin loamy sand, 5 to 8 percent slopes	0.56	Yes	Moderate	Yes	No	Good	Well drained	No
Ochlockonee, Kinston, and luka soils, 0 to 1 percent slopes, frequently flooded	0.25	No	Severe	Yes	No	Good	well drained	No
Ora fine sandy loam, 2 to 5 percent slopes	1.39	Yes	Low	No	No	Fair	Moderately well drained	No
Ora fine sandy loam, 5 to 8 percent slopes	1.11	Yes	Moderate	Yes	No	Fair	Moderately well drained	No
Ora fine sandy loam, 8 to 12 percent slopes, eroded	0.61	No	Moderate	Yes	No	Fair	Moderately well drained	No
Ora loam, 2 to 5 percent slopes, eroded	0.21	Yes	Low	Yes	No	Fair	Moderately well drained	No
Ora loam, 5 to 8 percent slopes, eroded	0.31	Yes	Moderate	No	No	Fair	Moderately well drained	No
Orangeburg fine sandy loam, 12 to 17 percent slopes (smithdale)	0.09	No	Severe	Yes	No	Fair	Well drained	No
Orangeburg fine sandy loam, 17 to 35 percent slopes (smithdale)	0.23	No	Severe	Yes	No	Fair	Well drained	No

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Petal and Smithdale soils, 15 to 35 percent slopes	2.44	No	Severe	Yes	No	Fair	Moderately well drained	No
Petal and Smithdale soils, 8 to 15 percent slopes	3.76	No	Moderate	Yes	No	Fair	Moderately well drained	No
Pheba fine sandy loam, 0 to 2 percent slopes (stough)	0.17	Yes	Low	Yes	No	Good	Somewhat poorly drained	No
Prentiss fine sandy loam, 0 to 2 percent slopes	1.20	Yes	Low	Yes	No	Good	Moderately well drained	No
Prentiss fine sandy loam, 2 to 5 percent slopes	0.58	Yes	Low	No	No	Good	Moderately well drained	No
Providence silt loam, 2 to 5 percent slopes, eroded	0.04	Yes	Low	No	No	Good	Moderately well drained	No
Providence silt loam, 5 to 8 percent slopes, eroded	0.70	Yes	Moderate	Yes	No	Good	Moderately well drained	No
Quitman fine sandy loam, 0 to 2 percent slopes, occasionally flooded	0.41	Yes	Low	Yes	No	Good	Somewhat poorly drained	No
Quitman loam, 0 to 2 percent slopes	1.42	Yes	Low	Yes	No	Good	Somewhat poorly drained	No
Quitman-Jena-Trebloc association, flooded	2.89	Yes	Low	Yes	No	Good	Somewhat poorly drained	No
Ruston fine sandy loam, 12 to 17 percent slopes (smithdale)	0.48	No	Severe	Yes	No	Fair	Well drained	No
Ruston fine sandy loam, 17 to 35 percent slopes (smithdale)	0.66	No	Severe	Yes	No	Fair	Well drained	No
Ruston fine sandy loam, 2 to 5 percent slopes	2.96	Yes	Moderate	No	No	Good	Well drained	No
Ruston fine sandy loam, 5 to 8 percent slopes	3.22	Yes	Moderate	Yes	No	Good	Well drained	No
Ruston fine sandy loam, 8 to 12 percent slopes (smithdale)	1.07	Yes	Moderate	Yes	No	Fair	Well drained	No
Savannah fine sandy loam, 0 to 2 percent slopes	0.28	Yes	Low	Yes	No	Fair	Moderately well drained	No

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Savannah fine sandy loam, 2 to 5 percent slopes	3.13	Yes	Low	No	No	Fair	Moderately well drained	No
Savannah fine sandy loam, 5 to 8 percent slopes	0.99	Yes	Moderate	Yes	No	Fair	Moderately well drained	No
Savannah loam, 2 to 5 percent slopes, eroded	1.57	Yes	Low	No	No	Fair	Moderately well drained	No
Savannah loam, 5 to 8 percent slopes, eroded	1.85	Yes	Moderate	Yes	No	Fair	Moderately well drained	No
Savannah silt loam, 2 to 5 percent slopes	0.12	Yes	Low	No	No	Fair	Well drained	No
Shubuta fine sandy loam, 2 to 5 percent slopes	0.24	Yes	Low	No	No	Good	Well drained	No
Shubuta fine sandy loam, 5 to 8 percent slopes	2.68	Yes	Moderate	Yes	No	Good	Well drained	No
Shubuta fine sandy loam, 8 to 12 percent slopes	0.69	Yes	Moderate	Yes	No	Fair	Well drained	No
Shubuta sandy clay loam, 5 to 8 percent slopes, severely eroded	0.02	No	Moderate	Yes	No	Good	Well drained	No
Shubuta sandy clay loam, 8 to 12 percent slopes, severely eroded	0.15	No	Severe	Yes	No	Fair	Well drained	No
Smithdale fine sandy loam, 15 to 35 percent slopes	7.41	No	Severe	Yes	No	Fair	Well drained	No
Smithdale fine sandy loam, 8 to 12 percent slopes, eroded	0.35	Yes	Moderate	Yes	No	Fair	Well drained	No
Smithdale fine sandy loam, 8 to 15 percent slopes	2.27	No	Moderate	Yes	No	Fair	Well drained	No
Smithdale loamy fine sand, 5 to 15 percent slopes	0.66	No	Moderate	Yes	No	Fair	Well drained	No
Smithdale sandy loam, 2 to 5 percent slopes	1.04	Yes	Low	No	No	Good	Well drained	No
Smithdale-Lucy association, 12 to 40 percent slopes	3.35	No	Severe	Yes	No	Fair	Well drained	No
Smithdale-Lucy association, hilly	0.06	No	Severe	Yes	No	Fair	Well drained	No
Stough fine sandy loam	0.36	Yes	Low	Yes	No	Good	Somewhat poorly drained	No
Stough fine sandy loam, 0 to 2 percent slopes	1.92	Yes	Low	Yes	No	Good	Somewhat poorly drained	No
Stough loam, 0 to 2 percent slopes	2.10	Yes	Low	Yes	No	Good	Somewhat poorly drained	No

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Sumter clay, 5 to 12 percent slopes, severely eroded	0.40	No	Severe	Yes	No	Fair	Well drained	No
Sumter clay, 5 to 8 percent slopes, eroded	0.08	Yes	Moderate	Yes	No	Good	Well drained	No
Susquehanna fine sandy loam, 2 to 5 percent slopes	0.09	Yes	Moderate	No	No	Good	Somewhat poorly drained	No
Susquehanna fine sandy loam, 5 to 8 percent slopes, eroded	0.90	Yes	Severe	Yes	No	Good	Somewhat poorly drained	No
Sweatman association, hilly	2.66	No	Severe	Yes	No	Fair	Well drained	No
Sweatman fine sandy loam, 15 to 35 percent slopes	0.11	No	Severe	Yes	No	Fair	Well drained	No
Sweatman fine sandy loam, 2 to 5 percent slopes	0.74	Yes	Moderate	No	No	Good	Well drained	No
Sweatman fine sandy loam, 8 to 17 percent slopes, eroded	4.16	No	Severe	Yes	No	Fair	Well drained	No
Sweatman-Smithdale complex, 8 to 20 percent slopes, eroded	0.08	No	Severe	Yes	No	Fair	Well drained	No
Tilden fine sandy loam, 0 to 2 percent slopes (savannah)	0.17	Yes	Low	Yes	No	Good	Moderately well drained	No
Tilden fine sandy loam, 2 to 5 percent slopes, eroded (savannah)	0.16	Yes	Low	No	No	Fair	Moderately well drained	No
Trebloc silt loam, frequently flooded	0.83	Yes	Severe	Yes	No	Good	Poorly drained	No
Una and Urbo soils, frequently flooded	1.11	No	Moderate	Yes	No	Fair	Poorly drained	No
Vaiden and Oktibbeha silt loams, deep, 2 to 5 percent slopes	0.33	Yes	Moderate	No	No	Good	Somewhat poorly drained	No
Vaiden and Oktibbeha silt loams, deep, 5 to 8 percent slopes	1.76	Yes	Moderate	Yes	No	Good	Somewhat poorly drained	No
Vaiden clay, deep, 0 to 2 percent slopes	0.22	Yes	Moderate	Yes	No	Good	Somewhat poorly drained	No
Vaiden clay, deep, 2 to 5 percent slopes, eroded	0.11	Yes	Moderate	No	No	Good	Somewhat poorly drained	No
Vaiden clay, deep, 5 to 8 percent slopes, eroded	0.20	Yes	Moderate	Yes	No	Good	Somewhat poorly drained	No

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Vaiden clay, deep, 8 to 12 percent slopes, eroded	0.04	No	Severe	Yes	No	Fair	Somewhat poorly drained	No
Wahee fine sandy loam (izagora)	0.85	Yes	Low	Yes	No	Good	Moderately well drained	No

Notes:

- A Erosion potential based on land capability subclass. High potential includes Subclasses Ve through VIIIe. Moderate potential includes Subclasses IIIe and IVe. Low potential includes all other subclasses.
- B Includes areas where rock may be found within 60 inches below ground surface.
- C Parameters of classification of soils with poor revegetation potential include those that are highly acidic, soils with slopes greater than 8 percent, and soils with greater than 15 percent coarse fragments (rocks and stones) in the surface layer of soil.
- D Soils with clay loam or finer textures and somewhat poor to very poor drainage characteristics are considered to have severe compaction potential.

APPENDIX C-2
Soils at Aboveground Facilities on the Proposed Southeast Expansion Project

Facility	MP	Soil Series	Prime Farmland	Erosion Potential ^A	Hydric/ Non-Hydric	Rock ^B	Revegetation Potential ^C	Drainage Characteristics	Severe Compaction Potential ^D
Compressor Stations									
Delhi Compressor Station	NA	Grenada silt loam	Yes	Moderate	Non-Hydric	No	Good	Moderately well drained	No
Harrisville Compressor Station	0.0	Smithdale fine sandy loam, 15 to 35 percent slopes	No	Severe	Hydric	No	Fair	Well drained	No
Destin Compressor Station	82.9	Mantachie, Bibb and luka soils	No	Severe	Hydric	No	Good	Moderately well drained	No
Meter and Regulation Facilities									
CenterPoint M&R Station	NA	Grenada silt loam	Yes	Moderate	Non-Hydric	No	Good	Moderately well	No
Southern Natural M&R Station	45.7	Stough fine sandy loam, 0 to 2 percent slopes	Yes	Low	Hydric	No	Good	Somewhat poorly drained	No
Tennessee Gas M&R Station	72.5	Heidel-Troup association, hilly	No	Severe	Hydric	No	Fair	Well drained	No
Destin M&R Station	82.9	Mantachie, Bibb, and luka soils	No	Severe	Hydric	No	Good	Moderately well drained	No
Transco M&R Station	110.8	Boykin-Luverne-Smithdale complex, 15 to 35 percent slopes	No	Severe	Hydric	No	Fair	Well drained	No
Valves and Other Facilities									
Mainline Valve No. 1	0.0	Smithdale fine sandy loam, 15 to 35 percent slopes	No	Severe	Hydric	No	Fair	Well drained	No
Mainline Valve No. 2	14.9	Savannah loam, 5 to 8 percent slope	Yes	Moderate	Hydric	No	Fair	Moderately well drained	No
Mainline Valve No. 3	30.3	Ora fine sandy loam, 2 to 5 percent slopes	Yes	Low	Non-hydric	No	Fair	Moderately well drained	No
Mainline Valve No. 4	45.7	Stough fine sandy loam, 0 to 2 percent slopes	Yes	Low	Hydric	No	Good	Somewhat poorly drained	No
Mainline Valve No. 5	60.0	Heidel-Troup association, hilly	No	Severe	Hydric	No	Fair	Well drained	No
Side Valve	72.4	Sweatman association, hilly	No	Severe	Hydric	No	Fair	Well drained	no

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Facility	MP	Soil Series	Prime Farmland	Erosion Potential^A	Hydric/ Non-Hydric	Rock^B	Revegetation Potential^C	Drainage Characteristics	Severe Compaction Potential^D
Mainline Valve No. 6	75.4	McLaurin loamy sand, 2 to 5 percent slopes	Yes	Low	Non-Hydric	No	Good	Well drained	No
Mainline Valve No. 7	91.3	Savannah fine sandy loam, 5 to 8 percent slopes	Yes	Moderate	Hydric	No	Fair	Moderately well drained	No
Mainline Valve No. 8	110.8	Boykin-Luverne-Smithdale complex, 15 to 35 percent slopes	No	Severe	Hydric	No	Fair	Well drained	No