

Soil Survey of Knox County, Tennessee

Table 11.--Building Site Development, Part I

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
AmC: Apison-----	50	Somewhat limited Slope	0.04	Somewhat limited Depth to soft bedrock Slope	0.54 0.04	Very limited Slope	1.00
Montevallo-----	25	Somewhat limited Depth to soft bedrock Slope	0.50 0.04	Very limited Depth to soft bedrock Slope	1.00 0.04	Very limited Depth to soft bedrock Slope	1.00 1.00
AmD: Apison-----	72	Very limited Slope	1.00	Very limited Slope Depth to soft bedrock	1.00 0.54	Very limited Slope	1.00
Montevallo-----	20	Very limited Slope Depth to soft bedrock	1.00 0.50	Very limited Depth to soft bedrock Slope	1.00 1.00	Very limited Slope Depth to soft bedrock	1.00 1.00
AmE: Apison-----	55	Very limited Slope	1.00	Very limited Slope Depth to soft bedrock	1.00 0.54	Very limited Slope	1.00
Montevallo-----	35	Very limited Slope Depth to soft bedrock	1.00 0.50	Very limited Slope Depth to soft bedrock	1.00 1.00	Very limited Slope Depth to soft bedrock	1.00 1.00
AmF: Apison-----	58	Very limited Slope	1.00	Very limited Slope Depth to soft bedrock	1.00 0.54	Very limited Slope	1.00
Montevallo-----	25	Very limited Slope Depth to soft bedrock	1.00 0.50	Very limited Slope Depth to soft bedrock	1.00 1.00	Very limited Slope Depth to soft bedrock	1.00 1.00
Bd: Bloomingdale, drained-----	55	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.50

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Table 11.—Building Site Development, Part I—Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
CtB: Townley-----	35	Somewhat limited Shrink-swell	0.50	Somewhat limited Depth to soft bedrock Shrink-swell	0.64 0.50	Somewhat limited Shrink-swell	0.50
CtC: Corryton-----	73	Somewhat limited Shrink-swell Slope	0.50 0.04	Somewhat limited Shrink-swell Slope	0.50 0.04	Very limited Slope Shrink-swell	1.00 0.50
Townley-----	22	Somewhat limited Shrink-swell Slope	0.50 0.04	Somewhat limited Depth to soft bedrock Shrink-swell Slope	0.64 0.50 0.04	Very limited Slope Shrink-swell	1.00 0.50
CzC: Corryton-----	50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Slope Shrink-swell	0.88 0.50
Udorthents-----	25	Not rated		Not rated		Not rated	
Urban land-----	20	Not rated		Not rated		Not rated	
CzD: Corryton-----	50	Very limited Slope Shrink-swell	1.00 0.50	Very limited Slope Shrink-swell	1.00 0.50	Very limited Slope Shrink-swell	1.00 0.50
Udorthents-----	25	Not rated		Not rated		Not rated	
Urban land-----	20	Not rated		Not rated		Not rated	
DeB: Dewey-----	90	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50
DeC2: Dewey-----	68	Somewhat limited Shrink-swell Slope	0.50 0.04	Somewhat limited Shrink-swell Slope	0.50 0.04	Very limited Slope Shrink-swell	1.00 0.50
DeD2: Dewey-----	88	Very limited Slope Shrink-swell	1.00 0.50	Very limited Slope Shrink-swell	1.00 0.50	Very limited Slope Shrink-swell	1.00 0.50
DeE2: Dewey-----	85	Very limited Slope Shrink-swell	1.00 0.50	Very limited Slope Shrink-swell	1.00 0.50	Very limited Slope Shrink-swell	1.00 0.50
DgE3: Dewey-----	45	Very limited Slope Shrink-swell	1.00 0.50	Very limited Slope Shrink-swell	1.00 0.50	Very limited Slope Shrink-swell	1.00 0.50

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Table 11.--Building Site Development, Part I--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
FvC:							
Fullerton-----	53	Somewhat limited Shrink-swell Slope	0.50 0.04	Somewhat limited Shrink-swell Slope	0.50 0.04	Very limited Slope Shrink-swell	1.00 0.50
Minvale-----	38	Somewhat limited Slope	0.04	Somewhat limited Slope	0.04	Very limited Slope	1.00
FzC:							
Fullerton-----	50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Slope Shrink-swell	0.88 0.50
Udorthents-----	25	Not rated		Not rated		Not rated	
Urban land-----	20	Not rated		Not rated		Not rated	
FzD:							
Fullerton-----	50	Very limited Slope Shrink-swell	1.00 0.50	Very limited Slope Shrink-swell	1.00 0.50	Very limited Slope Shrink-swell	1.00 0.50
Udorthents-----	25	Not rated		Not rated		Not rated	
Urban land-----	20	Not rated		Not rated		Not rated	
He:							
Heiskell-----	75	Very limited Flooding	1.00	Very limited Flooding Depth to saturated zone	1.00 0.99	Very limited Flooding	1.00
HeB:							
Heiskell-----	70	Not limited		Very limited Depth to saturated zone	0.99	Not limited	
LoC:							
Loyston-----	70	Very limited Depth to hard bedrock Shrink-swell Depth to soft bedrock Slope	1.00 0.50 0.50 0.04	Very limited Depth to hard bedrock Depth to soft bedrock Shrink-swell Slope	1.00 1.00 0.50 0.04	Very limited Depth to hard bedrock Depth to soft bedrock Slope Shrink-swell	1.00 1.00 1.00 0.50
Rock outcrop---	30	Not rated		Not rated		Not rated	
LoE:							
Loyston-----	70	Very limited Slope Depth to hard bedrock Shrink-swell Depth to soft bedrock	1.00 1.00 0.50 0.50	Very limited Slope Depth to hard bedrock Depth to soft bedrock Shrink-swell	1.00 1.00 1.00 0.50	Very limited Slope Depth to hard bedrock Depth to soft bedrock Shrink-swell	1.00 1.00 1.00 0.50

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Table 11.—Building Site Development, Part II

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
AmC:							
Apison-----	50	Somewhat limited Low strength Slope	0.50 0.50	Very limited Cutbanks cave Depth to soft bedrock Slope	1.00 1.00 1.00	Somewhat limited Depth to bedrock Slope	0.50 0.50
Montevallo-----	30	Somewhat limited Depth to soft bedrock Slope	1.00 0.50	Very limited Depth to soft bedrock Cutbanks cave Slope	1.00 1.00 1.00 0.96	Very limited Depth to bedrock Droughty Gravel content Slope	1.00 1.00 1.00 0.96
AmD:							
Apison-----	80	Very limited Slope Low strength	1.00 1.00	Very limited Cutbanks cave Slope Depth to soft bedrock	1.00 1.00 1.00	Very limited Slope Depth to bedrock	1.00 1.00
Montevallo-----	20	Very limited Depth to soft bedrock Slope	1.00 1.00	Very limited Depth to soft bedrock Slope Cutbanks cave	1.00 1.00 1.00 1.00	Very limited Depth to bedrock Droughty Slope Gravel content	1.00 1.00 1.00 0.96
AmE:							
Apison-----	58	Very limited Slope Low strength	1.00 1.00	Very limited Slope Cutbanks cave Depth to soft bedrock	1.00 1.00 1.00	Very limited Slope Depth to bedrock	1.00 1.00
Montevallo-----	35	Very limited Slope Depth to soft bedrock	1.00 1.00	Very limited Depth to soft bedrock Slope Cutbanks cave	1.00 1.00 1.00 1.00	Very limited Depth to bedrock Slope Droughty Gravel content	1.00 1.00 1.00 0.96
AmF:							
Apison-----	60	Very limited Slope Low strength	1.00 1.00	Very limited Slope Cutbanks cave Depth to soft bedrock	1.00 1.00 1.00	Very limited Slope Depth to bedrock	1.00 1.00
Montevallo-----	20	Very limited Slope Depth to soft bedrock	1.00 1.00	Very limited Depth to soft bedrock Slope Cutbanks cave	1.00 1.00 1.00 1.00	Very limited Depth to bedrock Slope Droughty Gravel content	1.00 1.00 1.00 0.96

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Table 11.—Building Site Development, Part II—Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
CkD: Talbot-----	38	Very limited Low strength Slope Shrink-swell Depth to hard bedrock	1.00 1.00 0.50 0.29	Very limited Depth to hard bedrock Slope Too clayey Cutbanks cave	1.00 1.00 1.00 0.50 0.10	Very limited Slope Depth to bedrock Droughty	1.00 0.29 0.01
CoB: Corryton-----	85	Very limited Low strength Shrink-swell	1.00 0.50	Somewhat limited Cutbanks cave Too clayey	0.10 0.04	Not limited	
CoC: Corryton-----	85	Very limited Low strength Shrink-swell Slope	1.00 0.50 0.04	Somewhat limited Cutbanks cave Too clayey Slope	0.10 0.04 0.04	Somewhat limited Slope	0.04
CoD: Corryton-----	85	Very limited Low strength Slope Shrink-swell	1.00 1.00 0.50	Very limited Slope Cutbanks cave Too clayey	1.00 0.10 0.04	Very limited Slope	1.00
CtB: Corryton-----	60	Very limited Low strength Shrink-swell	1.00 0.50	Somewhat limited Cutbanks cave Too clayey	0.10 0.04	Not limited	
Townley-----	35	Very limited Low strength Shrink-swell	1.00 0.50	Somewhat limited Depth to soft bedrock Too clayey Cutbanks cave	0.64 0.50 0.10	Somewhat limited Depth to bedrock	0.65
CtC: Corryton-----	73	Very limited Low strength Shrink-swell Slope	1.00 0.50 0.04	Somewhat limited Cutbanks cave Too clayey Slope	0.10 0.04 0.04	Somewhat limited Slope	0.04
Townley-----	22	Very limited Low strength Shrink-swell Slope	1.00 0.50 0.04	Somewhat limited Depth to soft bedrock Too clayey Cutbanks cave Slope	0.64 0.50 0.10 0.04	Somewhat limited Depth to bedrock Slope	0.65 0.04
CzC: Corryton-----	50	Very limited Low strength Shrink-swell	1.00 0.50	Somewhat limited Cutbanks cave Too clayey	0.10 0.04	Not limited	
Udorthents-----	25	Not rated		Not rated		Not rated	
Urban land-----	20	Not rated		Not rated		Not rated	

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Table 11.—Building Site Development, Part II—Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
FuD2: Fullerton-----	90	Very limited Slope Shrink-swell Low strength	1.00 0.50 0.10	Very limited Cutbanks cave Slope Too clayey	1.00 1.00 0.50	Very limited Slope Gravel content Large stones content	1.00 0.24 0.08
FuE2: Fullerton-----	90	Very limited Slope Shrink-swell Low strength	1.00 0.50 0.10	Very limited Slope Cutbanks cave Too clayey	1.00 1.00 0.50	Very limited Slope Gravel content Large stones content	1.00 0.24 0.08
FvC: Fullerton-----	53	Somewhat limited Shrink-swell Low strength Slope	0.50 0.10 0.04	Very limited Cutbanks cave Too clayey Slope	1.00 0.50 0.04	Somewhat limited Gravel content Large stones content Slope	0.26 0.05 0.04
Minvale-----	38	Somewhat limited Slope	0.04	Very limited Cutbanks cave Slope	1.00 0.04	Somewhat limited Slope	0.04
FzC: Fullerton-----	50	Somewhat limited Shrink-swell Low strength	0.50 0.10	Very limited Cutbanks cave Too clayey	1.00 0.50	Somewhat limited Gravel content Large stones content	0.26 0.05
Udorthents-----	25	Not rated		Not rated		Not rated	
Urban land-----	20	Not rated		Not rated		Not rated	
FzD: Fullerton-----	50	Very limited Slope Shrink-swell Low strength	1.00 0.50 0.10	Very limited Cutbanks cave Slope Too clayey	1.00 1.00 0.50	Very limited Slope Gravel content Large stones content	1.00 0.26 0.05
Udorthents-----	25	Not rated		Not rated		Not rated	
Urban land-----	20	Not rated		Not rated		Not rated	
He: Heiskell-----	75	Very limited Flooding	1.00	Very limited Depth to saturated zone Flooding Cutbanks cave	0.99 0.60 0.10	Somewhat limited Flooding	0.60
HeB: Heiskell-----	70	Not limited		Very limited Depth to saturated zone Cutbanks cave	0.99 0.10	Not limited	

Soil Survey of Knox County, Tennessee

Table 12.—Sanitary Facilities, Part I

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields*		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
AmC: Apison-----	50	Very limited Depth to bedrock Slow water movement Slope	1.00 0.46 0.04	Very limited Depth to soft bedrock Slope Seepage	1.00 1.00 0.53
Montevallo-----	25	Very limited Depth to bedrock Slope	1.00 0.04	Very limited Depth to soft bedrock Slope Seepage	1.00 1.00 0.53
AmD: Apison-----	72	Very limited Depth to bedrock Slope Slow water movement	1.00 1.00 0.46	Very limited Depth to soft bedrock Slope Seepage	1.00 1.00 0.53
Montevallo-----	20	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Depth to soft bedrock Slope Seepage	1.00 1.00 0.53
AmE: Apison-----	55	Very limited Depth to bedrock Slope Slow water movement	1.00 1.00 0.46	Very limited Depth to soft bedrock Slope Seepage	1.00 1.00 0.53
Montevallo-----	35	Very limited Depth to bedrock Slope	1.00 1.00 1.00	Very limited Depth to soft bedrock Slope Seepage	1.00 1.00 0.53
AmF: Apison-----	58	Very limited Depth to bedrock Slope Slow water movement	1.00 1.00 0.46	Very limited Depth to soft bedrock Slope Seepage	1.00 1.00 0.53
Montevallo-----	25	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Depth to soft bedrock Slope Seepage	1.00 1.00 0.53

See footnote at end of table.

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Table 12.—Sanitary Facilities, Part I—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields*		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
CoB: Corryton-----	85	Very limited Slow water movement	1.00	Somewhat limited Seepage Slope	0.53 0.08
CoC: Corryton-----	85	Very limited Slow water movement Slope	1.00 0.04	Very limited Slope Seepage	1.00 0.53
CoD: Corryton-----	85	Very limited Slow water movement Slope	1.00 1.00	Very limited Slope Seepage	1.00 0.53
CtB: Corryton-----	60	Very limited Slow water movement	1.00	Somewhat limited Seepage Slope	0.53 0.08
Townley-----	35	Very limited Slow water movement Depth to bedrock	1.00 1.00	Very limited Depth to soft bedrock Slope	1.00 0.08
CtC: Corryton-----	73	Very limited Slow water movement Slope	1.00 0.04	Very limited Slope Seepage	1.00 0.53
Townley-----	22	Very limited Slow water movement Depth to bedrock Slope	1.00 1.00 0.04	Very limited Depth to soft bedrock Slope	1.00 1.00
CzC: Corryton-----	50	Very limited Slow water movement	1.00	Very limited Slope Seepage	1.00 0.53
Udorthents-----	25	Not rated		Not rated	
Urban land-----	20	Not rated		Not rated	
CzD: Corryton-----	50	Very limited Slow water movement Slope	1.00 1.00	Very limited Slope Seepage	1.00 0.53
Udorthents-----	25	Not rated		Not rated	
Urban land-----	20	Not rated		Not rated	
DeB: Dewey-----	90	Somewhat limited Slow water movement	0.46	Somewhat limited Seepage Slope	0.53 0.32

See footnote at end of table.

Soil Survey of Knox County, Tennessee

Table 12.—Sanitary Facilities, Part I—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields*		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
FzD:					
Udorthents-----	25	Not rated		Not rated	
Urban land-----	20	Not rated		Not rated	
He:					
Heiskell-----	75	Very limited Flooding Depth to saturated zone Slow water movement	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 0.53
HeB:					
Heiskell-----	70	Very limited Depth to saturated zone Slow water movement	1.00 1.00	Very limited Depth to saturated zone Seepage Slope	1.00 0.53 0.32
LoC:					
Loyston-----	70	Very limited Depth to bedrock Slope	1.00 0.04	Very limited Depth to hard bedrock Depth to soft bedrock Slope	1.00 1.00 1.00
Rock outcrop-----	30	Not rated		Not rated	
LoE:					
Loyston-----	70	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Depth to soft bedrock Slope	1.00 1.00 1.00
LrF:					
Loyston-----	35	Very limited Depth to bedrock Slope Large stones content	1.00 1.00 0.01	Very limited Depth to hard bedrock Depth to soft bedrock Slope	1.00 1.00 1.00
Nonaburg-----	28	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Depth to soft bedrock Slope	1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
LtC:					
Loyston-----	33	Very limited Depth to bedrock Slope	1.00 0.01	Very limited Depth to hard bedrock Depth to soft bedrock Slope	1.00 1.00 1.00

See footnote at end of table.

Soil Survey of Knox County, Tennessee

Table 12.—Sanitary Facilities, Part II

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
AmC:							
Apison-----	50	Very limited Depth to bedrock Slope	1.00 0.04	Very limited Depth to bedrock Slope	1.00 0.04	Very limited Depth to bedrock Slope	1.00 0.04
Montevallo-----	25	Very limited Depth to bedrock Slope	1.00 0.04	Very limited Depth to bedrock Slope	1.00 0.04	Very limited Depth to bedrock Gravel content Slope	1.00 0.72 0.04
AmD:							
Apison-----	72	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Depth to bedrock Slope	1.00 1.00
Montevallo-----	20	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Depth to bedrock Slope Gravel content	1.00 1.00 0.72
AmE:							
Apison-----	55	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Depth to bedrock Slope	1.00 1.00
Montevallo-----	35	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Depth to bedrock Slope Gravel content	1.00 1.00 0.72
AmF:							
Apison-----	58	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Depth to bedrock Slope	1.00 1.00
Montevallo-----	25	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Depth to bedrock Slope Gravel content	1.00 1.00 0.72
Bd:							
Bloomington, drained-----	55	Very limited Flooding Depth to saturated zone Too clayey	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Too clayey	1.00 1.00
Bloomington, undrained-----	30	Very limited Depth to saturated zone Too clayey Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Too clayey Ponding	1.00 1.00 1.00

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Table 12.—Sanitary Facilities, Part II—Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
CtB: Townley-----	35	Very limited Depth to bedrock Too clayey	1.00 1.00	Very limited Depth to bedrock	1.00	Very limited Depth to bedrock Too clayey Hard to compact	1.00 1.00 1.00
CtC: Corryton-----	73	Very limited Too clayey Slope	1.00 0.04	Somewhat limited Slope	0.04	Very limited Too clayey Hard to compact Slope	1.00 1.00 0.04
Townley-----	22	Very limited Depth to bedrock Too clayey Slope	1.00 1.00 0.04	Very limited Depth to bedrock Slope	1.00 0.04	Very limited Depth to bedrock Too clayey Hard to compact Slope	1.00 1.00 1.00 0.04
CzC: Corryton-----	50	Very limited Too clayey	1.00	Not limited		Very limited Too clayey Hard to compact	1.00 1.00
Udorthents-----	25	Not rated		Not rated		Not rated	
Urban land-----	20	Not rated		Not rated		Not rated	
CzD: Corryton-----	50	Very limited Too clayey Slope	1.00 1.00	Very limited Slope	1.00	Very limited Too clayey Hard to compact Slope	1.00 1.00 1.00
Udorthents-----	25	Not rated		Not rated		Not rated	
Urban land-----	20	Not rated		Not rated		Not rated	
DeB: Dewey-----	90	Somewhat limited Too clayey	0.50	Not limited		Somewhat limited Too clayey	0.50
DeC2: Dewey-----	68	Somewhat limited Too clayey Slope	0.50 0.04	Somewhat limited Slope	0.04	Somewhat limited Too clayey Slope	0.50 0.04
DeD2: Dewey-----	88	Very limited Slope Too clayey	1.00 0.50	Very limited Slope	1.00	Very limited Slope Too clayey	1.00 0.50
DeE2: Dewey-----	85	Very limited Slope Too clayey	1.00 0.50	Very limited Slope	1.00	Very limited Slope Too clayey	1.00 0.50

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Table 12.—Sanitary Facilities, Part II—Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
FuC2: Fullerton-----	90	Somewhat limited Too clayey Slope	0.50 0.04	Somewhat limited Slope	0.04	Somewhat limited Too clayey Hard to compact Gravel content Slope	0.50 0.50 0.24 0.04
FuD2, FuE2: Fullerton-----	90	Very limited Slope Too clayey	1.00 0.50	Very limited Slope	1.00	Very limited Slope Too clayey Hard to compact Gravel content	1.00 0.50 0.50 0.24
FvC: Fullerton-----	53	Somewhat limited Too clayey Slope	0.50 0.04	Somewhat limited Slope	0.04	Somewhat limited Too clayey Hard to compact Gravel content Slope	0.50 0.50 0.25 0.04
Minvale-----	38	Somewhat limited Too clayey Slope	0.50 0.04	Somewhat limited Slope	0.04	Somewhat limited Too clayey Gravel content Slope	0.50 0.19 0.04
FzC: Fullerton-----	50	Somewhat limited Too clayey	0.50	Not limited		Somewhat limited Too clayey Hard to compact Gravel content	0.50 0.50 0.25
Udorthents-----	25	Not rated		Not rated		Not rated	
Urban land-----	20	Not rated		Not rated		Not rated	
FzD: Fullerton-----	50	Very limited Slope Too clayey	1.00 0.50	Very limited Slope	1.00	Very limited Slope Too clayey Hard to compact Gravel content	1.00 0.50 0.50 0.25
Udorthents-----	25	Not rated		Not rated		Not rated	
Urban land-----	20	Not rated		Not rated		Not rated	
He: Heiskell-----	75	Very limited Flooding Depth to saturated zone Too clayey	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone	1.00 1.00	Somewhat limited Too clayey Depth to saturated zone	0.50 0.47
HeB: Heiskell-----	70	Very limited Depth to saturated zone Too clayey	1.00 0.50	Very limited Depth to saturated zone	1.00	Somewhat limited Too clayey Depth to saturated zone	0.50 0.47

Table 16.—Physical and Chemical Properties of the Soils

(Entries under "Erosion factors--T" apply to the entire profile. Absence of an entry indicates that data were not estimated)

Map symbol and soil name	Depth		Clay Pct	Moist bulk density g/cc	Permeability (Ksat) In/hr	Available water capacity In/in	Linear extensibility Pct		Organic matter Pct	Erosion factors			Soil reaction
	In	Pct					In/in	Pct		Kw	Kf	T	
AmC, AmD, AmE, AmF: Apison-----	0-10 10-29 29-33	7-27 18-40 ---	1.30-1.45 1.35-1.50 ---	0.6-2 0.6-2 ---	0.15-0.20 0.13-0.18 ---	0.0-2.9 0.0-2.9 ---	1.0-3.0 0.0-0.5 ---	.37 .37 ---	.37 .37 ---	3	4.5-5.5 4.5-5.5 ---		
Montevallo-----	0-3 3-19 19-23	12-27 12-27 ---	1.25-1.45 1.25-1.50 ---	0.6-2 0.6-2 ---	0.09-0.18 0.02-0.12 ---	0.0-2.9 0.0-2.9 ---	0.5-2.0 0.0-0.5 ---	.28 .32 ---	.32 .32 ---	2	4.5-6.0 4.5-6.0 ---		
Bd: Bloomington, drained-----	0-4 4-60	20-35 35-60	1.10-1.30 1.30-1.50	0.6-2 0.06-0.2	0.17-0.22 0.17-0.22	0.0-2.9 3.0-5.9	1.0-3.0 0.1-1.0	.37 .37	.37 .37	5	5.6-8.4 5.6-8.4		
Bloomington, undrained-----	0-4 4-60	20-35 35-60	1.10-1.30 1.30-1.50	0.6-2 0.06-0.2	0.17-0.22 0.17-0.22	0.0-2.9 3.0-5.9	1.0-3.0 0.1-1.0	.37 .37	.37 .37	5	5.6-8.4 5.6-8.4		
Bh: Bloomington-----	0-4 4-60	20-35 35-60	1.10-1.30 1.30-1.50	0.6-2 0.06-0.2	0.17-0.22 0.17-0.22	0.0-2.9 3.0-5.9	1.0-3.0 0.1-1.0	.37 .37	.37 .37	5	5.6-8.4 5.6-8.4		
Hamblen-----	0-6 6-67	15-25 18-35	1.30-1.45 1.30-1.45	0.6-2 0.6-2	0.18-0.20 0.17-0.20	0.0-2.9 0.0-2.9	1.0-3.0 0.1-0.5	.32 .32	.32 .32	5	5.1-7.3 5.1-7.3		
CcC, CcD, CcE: Coghill-----	0-2 2-6 6-34 34-60	---	---	2-6 2-6 0.6-2 0.6-2	---	---	---	---	---	5	---		
Corryton-----	0-6 6-13 13-61	8-27 27-40 35-60	1.30-1.50 1.35-1.55 1.35-1.55	0.6-2 0.6-2 0.2-0.6	0.15-0.24 0.16-0.24 0.12-0.22	0.0-2.9 0.0-2.9 3.0-5.9	0.5-2.0 0.5-1.0 0.0-0.5	.32 .32 .32	.32 .32 .32	5	4.5-6.0 4.5-6.0 4.5-6.0		
CeB3, CeC3, CeD3: Collegedale-----	0-7 7-62	27-45 40-60	1.40-1.60 1.45-1.60	0.2-0.6 0.2-0.6	0.14-0.20 0.12-0.16	3.0-5.9 3.0-5.9	1.0-2.0 0.0-0.5	.28 .24	.28 .24	5	4.5-5.5 4.5-5.5		

Soil Survey of Knox County, Tennessee

Table 16.—Physical and Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth		Clay Pct	Moist bulk density g/cc	Permeability (Ksat) In/hr	Available water capacity In/in	Linear extensibility Pct		Organic matter Pct	Erosion factors			Soil reaction
	In	Pct					In/in	Pct		Kw	Kf	T	
CgB: Collegedale-----	0-7	27-45	1.40-1.60	0.2-0.6	0.14-0.20	3.0-5.9	1.0-2.0	.28	.28	5	4.5-5.5		
	7-62	40-60	1.45-1.60	0.2-0.6	0.12-0.16	3.0-5.9	0.0-0.5	.24	.24		4.5-5.5		
Loyston-----	0-3	27-60	1.20-1.40	0.6-2	0.15-0.20	3.0-5.9	1.0-4.0	.37	.37	1	6.1-7.8		
	3-10	40-60	1.35-1.60	0.2-0.6	0.08-0.15	3.0-5.9	0.1-1.0	.28	.28		6.1-7.8		
	10-15	---	---	---	---	---	---	---	---		---		
	15-39	---	---	---	---	---	---	---	---		---		
Rock outcrop.													
CkC, CkD: Collegedale-----	0-7	27-45	1.40-1.60	0.2-0.6	0.14-0.20	3.0-5.9	1.0-2.0	.28	.28	5	4.5-5.5		
	7-62	40-60	1.45-1.60	0.2-0.6	0.12-0.16	3.0-5.9	0.0-0.5	.24	.24		4.5-5.5		
Talbott-----	0-3	27-40	1.35-1.55	0.6-2	0.10-0.16	3.0-5.9	0.5-1.0	.32	.32	2	5.1-6.0		
	3-32	40-60	1.40-1.60	0.2-0.6	0.10-0.14	3.0-5.9	0.5-1.0	.24	.24		5.1-6.0		
	32-39	---	---	---	---	---	---	---	---		---		
CoB, CoC, CoD: Corryton-----	0-6	8-27	1.30-1.50	0.6-2	0.15-0.24	0.0-2.9	0.5-2.0	.32	.32	5	4.5-6.0		
	6-13	27-40	1.35-1.55	0.6-2	0.16-0.24	0.0-2.9	0.5-1.0	.32	.32		4.5-6.0		
	13-61	35-60	1.35-1.55	0.2-0.6	0.12-0.22	3.0-5.9	0.0-0.5	.32	.32		4.5-6.0		
CtB, CtC: Corryton-----	0-6	8-27	1.30-1.50	0.6-2	0.15-0.24	0.0-2.9	0.5-2.0	.32	.32	5	4.5-6.0		
	6-13	27-40	1.35-1.55	0.6-2	0.16-0.24	0.0-2.9	0.5-1.0	.32	.32		4.5-6.0		
	13-61	35-60	1.35-1.55	0.2-0.6	0.12-0.22	3.0-5.9	0.0-0.5	.32	.32		4.5-6.0		
Townley-----	0-4	12-27	1.30-1.60	0.6-2	0.12-0.14	0.0-2.9	0.5-2.0	.37	.37	3	3.6-5.5		
	4-28	40-60	1.30-1.60	0.06-0.2	0.12-0.18	3.0-5.9	0.0-0.5	.28	.32		3.6-5.5		
	28-50	---	---	---	---	---	---	---	---		---		
CzC, CzD: Corryton-----	0-6	8-27	1.30-1.50	0.6-2	0.15-0.24	0.0-2.9	0.5-2.0	.32	.32	5	4.5-6.0		
	6-13	27-40	1.35-1.55	0.6-2	0.16-0.24	0.0-2.9	0.5-1.0	.32	.32		4.5-6.0		
	13-61	35-60	1.35-1.55	0.2-0.6	0.12-0.22	3.0-5.9	0.0-0.5	.32	.32		4.5-6.0		
Udorthents.													
Urban land.													
DeB: Dewey-----	0-5	17-27	1.35-1.50	0.6-2	0.18-0.20	0.0-2.9	1.0-3.0	.32	.32	5	4.5-6.0		
	5-9	27-40	1.35-1.55	0.6-2	0.16-0.24	0.0-2.9	0.5-1.0	.32	.32		4.5-6.0		
	9-66	35-50	1.45-1.55	0.6-2	0.12-0.18	3.0-5.9	0.0-0.5	.24	.24		4.5-6.0		

Soil Survey of Knox County, Tennessee

Table 16.—Physical and Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth		Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility		Organic matter	Erosion factors			Soil reaction
	In	Pct					In/in	Pct		Kw	Kf	T	
EvB: Etawah-----	0-10	15-27	1.30-1.45	0.6-2	0.15-0.20	0.0-2.9	0.5-3.0	.32	.32	5	4.5-6.0		
	10-64	25-50	1.40-1.55	0.6-2	0.16-0.20	0.0-2.9	0.0-0.5	.32	.32		4.5-6.0		
Minvale-----	0-9	20-35	1.40-1.55	0.6-2	0.12-0.18	0.0-2.9	0.0-0.5	.28	.32	5	4.5-5.5		
	9-60	27-45	1.40-1.55	0.6-2	0.11-0.17	0.0-2.9	0.0-0.5	.28	.32		4.5-5.5		
FuC2, FuD2, FuE2: Fullerton-----	0-20	18-35	1.45-1.55	0.6-2	0.10-0.15	0.0-2.9	0.0-0.5	.24	.28	5	4.5-5.5		
	20-60	40-60	1.45-1.55	0.6-2	0.10-0.14	3.0-5.9	0.0-0.5	.20	.24		4.5-5.5		
FvC: Fullerton-----	0-20	15-27	1.45-1.55	0.6-2	0.10-0.16	0.0-2.9	0.5-2.0	.20	.32	5	4.5-5.5		
	20-60	40-60	1.45-1.55	0.6-2	0.10-0.14	3.0-5.9	0.0-0.5	.20	.28		4.5-5.5		
Minvale-----	0-9	20-35	1.40-1.55	0.6-2	0.12-0.18	0.0-2.9	0.0-0.5	.28	.32	5	4.5-5.5		
	9-60	27-45	1.40-1.55	0.6-2	0.11-0.17	0.0-2.9	0.0-0.5	.28	.32		4.5-5.5		
FzC, FzD: Fullerton-----	0-20	15-27	1.45-1.55	0.6-2	0.10-0.16	0.0-2.9	0.5-2.0	.20	.32	5	4.5-5.5		
	20-60	40-60	1.45-1.55	0.6-2	0.10-0.14	3.0-5.9	0.0-0.5	.20	.28		4.5-5.5		
Udorthents. Urban land.													
He, HeB: Heiskell-----	0-18	7-27	1.30-1.45	0.6-2	0.18-0.20	0.0-2.9	1.0-3.0	.32	.32	5	5.1-7.3		
	18-46	27-40	1.30-1.45	0.2-0.6	0.17-0.20	0.0-2.9	0.1-1.0	.32	.32		5.1-7.3		
	46-67	12-60	1.30-1.50	0.2-0.6	0.17-0.22	3.0-5.9	0.1-1.0	.37	.37		5.6-8.4		
LoC: Loyston-----	0-3	27-60	1.20-1.40	0.6-2	0.15-0.20	3.0-5.9	1.0-4.0	.37	.37	1	6.1-7.8		
	3-10	40-60	1.35-1.60	0.2-0.6	0.08-0.15	3.0-5.9	0.1-1.0	.28	.28		6.1-7.8		
	10-15	---	---	---	---	---	---	---	---		---		
15-39	---	---	---	---	---	---	---	---	---		---		
Rock outcrop.													
LoE: Loyston-----	0-3	27-60	1.20-1.40	0.6-2	0.15-0.20	3.0-5.9	1.0-4.0	.37	.37	1	6.1-7.8		
	3-10	40-60	1.35-1.60	0.2-0.6	0.08-0.15	3.0-5.9	0.1-1.0	.28	.28		6.1-7.8		
	10-15	---	---	---	---	---	---	---	---		---		
15-39	---	---	---	---	---	---	---	---	---		---		

commonly indicates a feature that affects use or management. For example, Bloomingdale silt loam, 0 to 2 percent slopes, occasionally flooded, is a phase of the Bloomingdale series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes. A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Coghill-Corryton complex, 12 to 25 percent slopes, is an example.

This survey includes *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Urban land is an example.

Table 4 gives the acreage and proportionate extent of each map unit. Other tables give properties of the soils and the limitations, capabilities, and potentials for many uses. The Glossary defines many of the terms used in describing the soils or miscellaneous areas.

AmC—Apison-Montevallo complex, 5 to 12 percent slopes

Setting

Landscape position: Ridgetops and shoulders

Major use: Most areas are in woodland consisting mainly of mixed hardwoods

Composition

Apison soil and similar components: 50 to 75 percent

Montevallo soil and similar components: 15 to 25 percent

Minor components: 0 to 35 percent

Minor Components

Contrasting: Coghill and Corryton soils

Similar: Nonaburg and Townley soils

Typical Profile

Apison

Surface layer:

0 to 4 inches—partially decomposed hardwood litter

4 to 7 inches—dark grayish brown gravelly silt loam

Subsurface layer:

7 to 10 inches—yellowish brown gravelly loam

Subsoil:

10 to 21 inches—yellowish brown gravelly loam

21 to 29 inches—dark yellowish brown very gravelly loam

Substratum:

29 inches—weathered shale bedrock

Montevallo

Surface layer:

0 to 1 inch—mat of hardwood leaves and twigs

1 to 3 inches—brown channery silt loam

Subsoil:

3 to 14 inches—brownish yellow very channery silt loam

Substratum:

14 to 19 inches—brownish yellow extremely channery silt loam

19 inches—tilted, moderately soft shale that has yellowish brown silt loam between fractures

Soil Properties and Qualities

Drainage class: Well drained

Permeability: Moderate

Available water capacity: Apison—low; Montevallo—very low

Depth to seasonal high water table: More than 6 feet

Flooding: None

Soil reaction: Apison—very strongly acid or strongly acid; Montevallo—very strongly acid to moderately acid

Depth to bedrock: Apison—20 to 40 inches; Montevallo—7 to 20 inches

Shrink-swell potential: Low

Use and Management

Cropland

Suitability: Poorly suited

Management measures and considerations:

- The hazard of erosion is moderate when cultivated crops are grown.
- Conservation tillage, crop residue management, contour farming, and the use of cover crops help to control erosion, increase infiltration rates, and maintain soil tilth.
- Regular crop rotation is necessary in most sloping areas.

Pasture and hay

Suitability: Moderately suited

Management measures and considerations:

- The main limitation affecting pasture and hay is the limited available water capacity.
- Good pasture management helps to control erosion and maintain productivity. Good management includes liming and fertilizing according to soil test recommendations, controlling weeds, and avoiding overgrazing.

Urban development

Suitability: Poorly suited

Management measures and considerations:

- The main limitation affecting urban uses is the limited depth to bedrock, especially in areas of the Montevallo soil. Because of the severity of the limitation, there can be considerable expense in designing and installing structures or facilities that function properly.

Interpretive Group

Land capability classification: 4e

AmD—Apison-Montevallo complex, 12 to 25 percent slopes

Setting

Landscape position: Ridgetops, shoulders, and lower side slopes

Major use: Most areas are in woodland consisting mainly of mixed hardwoods

Composition

Apison soil and similar components: 70 to 85 percent

Montevallo soil and similar components: 15 to 25 percent

Minor components: 0 to 15 percent

Minor Components

Contrasting: Coghill and Corryton soils

Similar: Nonaburg and Townley soils

Typical Profile

Apison

Surface layer:

0 to 4 inches—partially decomposed hardwood litter

4 to 7 inches—dark grayish brown gravelly silt loam

Subsurface layer:

7 to 10 inches—yellowish brown gravelly loam

Subsoil:

10 to 21 inches—yellowish brown gravelly loam

21 to 29 inches—dark yellowish brown very gravelly loam

Substratum:

29 inches—weathered shale bedrock

Montevallo

Surface layer:

0 to 1 inch—mat of hardwood leaves and twigs

1 to 3 inches—brown channery silt loam

Subsoil:

3 to 14 inches—brownish yellow very channery silt loam

Substratum:

14 to 19 inches—brownish yellow extremely channery silt loam

19 inches—tilted, moderately soft shale that has yellowish brown silt loam between fractures

Soil Properties and Qualities

Drainage class: Well drained

Permeability: Moderate

Available water capacity: Apison—low; Montevallo—very low

Depth to seasonal high water table: More than 6 feet

Flooding: None

Soil reaction: Apison—very strongly acid or strongly acid; Montevallo—very strongly acid to moderately acid

Depth to bedrock: Apison—20 to 40 inches; Montevallo—7 to 20 inches

Shrink-swell potential: Low

Use and Management

Cropland

Suitability: Poorly suited

Management measures and considerations:

- The hazard of erosion is severe when cultivated crops are grown.

- Conservation tillage, crop residue management, contour farming, and the use of cover crops help to control erosion, increase infiltration rates, and maintain soil tilth.

Pasture and hay

Suitability: Poorly suited

Management measures and considerations:

- The slope and the limited available water capacity restrict the use of these soils for hay.
- Good pasture management is essential in controlling erosion and maintaining productivity. Good management includes liming and fertilizing according to soil test recommendations, controlling weeds, and avoiding overgrazing.

Urban development

Suitability: Poorly suited

Management measures and considerations:

- The limitations affecting most urban uses are the slope and the limited depth to bedrock, especially in areas of the Montevallo soil. Because of the severity of the limitations, there can be considerable expense in designing and installing structures or facilities that function properly.

Interpretive Group

Land capability classification: 6e

AmE—Apison-Montevallo complex, 25 to 35 percent slopes, rocky

Setting

Landscape position: Shoulders, side slopes, and backslopes

Major use: Most areas are in woodland consisting mainly of mixed hardwoods

Composition

Apison soil and similar components: 50 to 70 percent

Montevallo soil and similar components: 20 to 50 percent

Minor components: 0 to 28 percent

Minor Components

Contrasting: Coghill and Corryton soils and areas of rock outcrop

Similar: Nonaburg and Townley soils

Typical Profile

Apison

Surface layer:

0 to 4 inches—partially decomposed hardwood litter

4 to 7 inches—dark grayish brown gravelly silt loam

Subsurface layer:

7 to 10 inches—yellowish brown gravelly loam

Subsoil:

10 to 21 inches—yellowish brown gravelly loam

21 to 29 inches—dark yellowish brown very gravelly loam

Substratum:

29 inches—weathered shale bedrock

Montevallo

Surface layer:

0 to 1 inch—mat of hardwood leaves and twigs

1 to 3 inches—brown channery silt loam

Subsoil:

3 to 14 inches—brownish yellow very channery silt loam

Substratum:

14 to 19 inches—brownish yellow extremely channery silt loam

19 inches—tilted, moderately soft shale that has yellowish brown silt loam between fractures

Soil Properties and Qualities

Drainage class: Well drained

Permeability: Moderate

Available water capacity: Apison—low; Montevallo—very low

Depth to seasonal high water table: More than 6 feet

Flooding: None

Soil reaction: Apison—very strongly acid or strongly acid; Montevallo—very strongly acid to moderately acid

Depth to bedrock: Apison—20 to 40 inches; Montevallo—7 to 20 inches

Shrink-swell potential: Low

Use and Management

Cropland

Suitability: Unsited

Management measures and considerations:

- Because of the severe hazard of erosion and the equipment use limitation caused by the slope, crop production is impractical.

Pasture and hay

Suitability for pasture: Poorly suited

Suitability for hay: Unsited

Management measures and considerations:

- Because of the moisture deficiency due to the limited depth to bedrock and the equipment use limitation on steep slopes, establishing and maintaining hayland or pasture is difficult.

Urban development

Suitability: Poorly suited

Management measures and considerations:

- The limitations affecting most urban uses are the slope and the limited depth to bedrock, especially in areas of the Montevallo soil. Because of the severity of the limitations, there can be considerable expense in designing and installing structures or facilities that function properly.

Interpretive Group

Land capability classification: 7s

AmF—Apison-Montevallo complex, 35 to 75 percent slopes, rocky

Setting

Landscape position: Shoulders, side slopes, and backslopes

Major use: Most areas are in woodland consisting mainly of mixed hardwoods

Composition

Apison soil and similar components: 50 to 70 percent

Montevallo soil and similar components: 20 to 30 percent

Minor components: 10 to 28 percent

Minor Components

Contrasting: Coghill and Corryton soils and areas of rock outcrop

Similar: Nonaburg and Townley soils

Typical Profile

Apison

Surface layer:

0 to 4 inches—partially decomposed hardwood litter

4 to 7 inches—dark grayish brown gravelly silt loam

Subsurface layer:

7 to 10 inches—yellowish brown gravelly loam

Subsoil:

10 to 21 inches—yellowish brown gravelly loam

21 to 29 inches—dark yellowish brown very gravelly loam

Substratum:

29 inches—weathered shale bedrock

Montevallo

Surface layer:

0 to 1 inch—mat of hardwood leaves and twigs

1 to 3 inches—brown channery silt loam

Subsoil:

3 to 14 inches—brownish yellow very channery silt loam

Substratum:

14 to 19 inches—brownish yellow extremely channery silt loam

19 inches—tilted, moderately soft shale that has yellowish brown silt loam between fractures

Soil Properties and Qualities

Drainage class: Well drained

Permeability: Moderate

Available water capacity: Apison—low; Montevallo—very low

Depth to seasonal high water table: More than 6 feet

Flooding: None

Soil reaction: Apison—very strongly acid or strongly acid; Montevallo—very strongly acid to moderately acid

Depth to bedrock: Apison—20 to 40 inches; Montevallo—7 to 20 inches

Shrink-swell potential: Low

Use and Management

Cropland

Suitability: Unsited

Management measures and considerations:

- Because of the severe hazard of erosion and the equipment use limitation caused by the slope, crop production is impractical.

Pasture and hay

Suitability for pasture: Poorly suited

Suitability for hay: Unsited

Management measures and considerations:

- Because of the moisture deficiency due to the limited depth to bedrock and the equipment use limitation on very steep or extremely steep slopes, establishing and maintaining hayland or pasture is difficult.

Urban development

Suitability: Poorly suited

Management measures and considerations:

- The limitations affecting most urban uses are the slope and the limited depth to bedrock, especially in areas of the Montevallo soil. Because of the severity of the limitations, there can be considerable expense in designing and installing structures or facilities that function properly.

Interpretive Group

Land capability classification: 7s

Bd—Bloomingdale silt loam, 0 to 2 percent slopes, occasionally flooded

Setting

Landscape position: Flood plains

Major use: Pasture or idle land

Note: In its natural state, many areas of this soil pond water for significant periods during the year and support hydrophytic vegetation. Many areas have been artificially drained by subsurface tile and/or ditches. Where not drained, or where artificial drainage has not been maintained, many areas have reverted to a ponded condition. It was not practical to separate ponded and non-ponded areas during mapping.

Composition

Bloomingdale soil and similar components: 85 to 95 percent

Minor components: 5 to 15 percent

Minor Components

Contrasting: Hamblen and Steadman soils

Similar: Somewhat poorly drained soils

Typical Profile

Surface layer:

0 to 4 inches—dark grayish brown silt loam

Subsoil:

18 to 27 inches—yellowish brown silty clay loam

27 to 46 inches—yellowish brown and gray silty clay loam

Substratum:

46 to 67 inches—gray and light yellowish brown silt loam

Soil Properties and Qualities

Drainage class: Moderately well drained

Permeability: Moderately slow

Available water capacity: High

Depth to seasonal high water table: 2 to 3 feet

Flooding: Occasional

Soil reaction: Moderately acid to slightly alkaline

Depth to bedrock: More than 60 inches

Shrink-swell potential: Low

Use and Management

Cropland

Suitability: Moderately suited

Management measures and considerations:

- Wetness delays planting or hinders harvesting operations in some years, especially where the soil is susceptible to ponding.
- Crop species that require a short growing season and can tolerate wetness are best suited to this soil.

Pasture and hay

Suitability: Moderately suited

Management measures and considerations:

- Wetness hinders early hay cutting operations in some years, especially where the soil is susceptible to ponding.
- Permitting grazing when the soil is saturated can cause compaction of the soil surface, which can result in slower infiltration rates and loss of the stand.
- Proper stocking rates, pasture rotation, deferred grazing, and a well planned clipping and harvesting schedule are important management practices.

Urban development

Suitability: Poorly suited

Management measures and considerations:

- The flooding and wetness are limitations that are difficult to overcome.

Interpretive Group

Land capability classification: 2w

HeB—Heiskell silt loam, 2 to 5 percent slopes

Setting

Landscape position: Upland drainageways

Major use: Most areas are cleared and used as pasture or hay

Composition

Heiskell soil and similar components: 60 to 80 percent

Minor components: 20 to 40 percent

Minor Components

Contrasting: Bloomingdale, Emory, and Rockdell soils

Similar: Hamblen and Steadman soils

Typical Profile

Surface layer:

0 to 12 inches—brown and dark yellowish brown silt loam

Subsurface layer:

12 to 18 inches—yellowish brown silt loam

Subsoil:

18 to 27 inches—yellowish brown silty clay loam

27 to 46 inches—yellowish brown and gray silty clay loam

Substratum:

46 to 67 inches—gray and light yellowish brown silt loam

Soil Properties and Qualities

Drainage class: Moderately well drained

Permeability: Moderately slow

Available water capacity: High

Depth to seasonal high water table: 2 to 3 feet

Flooding: None

Soil reaction: Moderately acid to slightly alkaline

Depth to bedrock: More than 60 inches

Shrink-swell potential: Low

Use and Management

Cropland

Suitability: Moderately suited

Management measures and considerations:

- Wetness in the root zone is the major limitation affecting crop production, especially the production of deep-rooted crops.
- The use of terraces, grassed waterways, field borders, and filter strips in the appropriate places can help to prevent the sediment in runoff water from entering streams and bodies of water.

Pasture and hay

Suitability: Well suited

Management measures and considerations:

- This soil has few limitations affecting pasture and hay.

Urban development

Suitability: Poorly suited

Management measures and considerations:

- The main limitations affecting urban uses are the wetness and the moderately slow permeability in the lower part of the subsoil in some areas. Because of the severity of the limitations, there is considerable expense in the design and construction of structures or facilities that function properly.

Interpretive Group

Land capability classification: 2w

Management measures and considerations:

- The low available water capacity caused by the limited depth to bedrock of the Townley soil is a concern when establishing and maintaining hay and pasture.

Urban development

Suitability: Moderately suited

Management measures and considerations:

- The limitations affecting most urban uses are the moderately slow permeability, the moderate shrink-swell potential in the subsoil, and the limited depth to bedrock of the Townley soil. These limitations can sometimes be minimized with careful design and construction.

Interpretive Group

Land capability classification: 3e

CtC—Corryton-Townley complex, 5 to 12 percent slopes

Setting

Landscape position: Ridgetops and shoulders

Major use: Most areas are cleared and used for hay, pasture, or cropland

Composition

Corryton soil and similar components: 60 to 90 percent

Townley soil and similar components: 15 to 30 percent

Minor components: 10 to 25 percent

Minor Components

Contrasting: Heiskell and Nonaburg soils

Similar: Coghill and Dewey soils

Typical Profile

Corryton

Surface layer:

0 to 6 inches—yellowish brown loam

Subsurface layer:

6 to 13 inches—yellowish brown clay loam

Subsoil:

13 to 33 inches—yellowish brown and strong brown clay

33 to 43 inches—strong brown silty clay

43 to 61 inches—mottled strong brown, red, brownish yellow, and light gray clay

Townley

Surface layer:

0 to 4 inches—brown silt loam

Subsoil:

4 to 17 inches—brown and yellowish red clay

17 to 28 inches—yellowish red channery clay

Substratum:

28 to 33 inches—yellowish red extremely channery clay

33 inches—shale bedrock

Soil Properties and Qualities

Drainage class: Well drained

Permeability: Moderately slow

Available water capacity: Corryton—high; Townley—low

Depth to seasonal high water table: More than 6 feet

Flooding: None

Soil reaction: Corryton—very strongly acid to moderately acid (except in limed areas);
Townley—extremely acid to strongly acid

Depth to bedrock: Corryton—more than 60 inches; Townley—20 to 40 inches

Shrink-swell potential: Moderate

Use and Management

Cropland

Suitability: Well suited

Management measures and considerations:

- The hazard of erosion is moderate when cultivated crops are grown.
- Conservation tillage, crop residue management, contour farming, and the use of cover crops help to control erosion, increase infiltration rates, and maintain soil tilth.
- The use of terraces, grassed waterways, field borders, and filter strips in the appropriate places can help to prevent the sediment in runoff water from entering streams and bodies of water.

Pasture and hay

Suitability: Well suited

Management measures and considerations:

- The low available water capacity caused by the limited depth to bedrock of the Townley soil is a concern when establishing and maintaining hay and pasture.

Urban development

Suitability: Moderately suited

Management measures and considerations:

- The limitations affecting most urban uses are the moderately slow permeability, the moderate shrink-swell potential in the subsoil, and the limited depth to bedrock of the Townley soil. These limitations can sometimes be minimized with careful design and construction.
- The slope is an additional limitation that can often be overcome by adequate design of structures and facilities.

Interpretive Group

Land capability classification: 4e

CzC—Corryton-Udorthents-Urban land complex, 2 to 12 percent slopes

Setting

Landscape position: Upland ridges

Major use: Residential and commercial development

Composition

Corryton soil and similar components: 50 to 70 percent

Udorthents and similar components: 15 to 20 percent