Engineering Properties

This table gives the engineering classifications and the range of engineering properties for the layers of each soil in the survey area.

Hydrologic group is a group of soils having similar runoff potential under similar storm and cover conditions. Soil properties that influence runoff potential are those that influence the minimum rate of infiltration for a bare soil after prolonged wetting and when not frozen. These properties are depth to a seasonal high water table, saturated hydraulic conductivity after prolonged wetting, and depth to a layer with a very slow water transmission rate. Changes in soil properties caused by land management or climate changes also cause the hydrologic soil group to change. The influence of ground cover is treated independently. There are four hydrologic soil groups, A, B, C, and D, and three dual groups, A/D, B/D, and C/D. In the dual groups, the first letter is for drained areas and the second letter is for undrained areas.

The four hydrologic soil groups are described in the following paragraphs:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

Depth to the upper and lower boundaries of each layer is indicated.

Texture is given in the standard terms used by the U.S. Department of Agriculture. These terms are defined according to percentages of sand, silt, and clay in the fraction of the soil that is less than 2 millimeters in diameter. "Loam," for example, is soil that is 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand. If the content of particles coarser than sand is 15 percent or more, an appropriate modifier is added, for example, "gravelly."

Classification of the soils is determined according to the Unified soil classification system (ASTM, 2005) and the system adopted by the American Association of State Highway and Transportation Officials (AASHTO, 2004).

The Unified system classifies soils according to properties that affect their use as construction material. Soils are classified according to particle-size distribution of the fraction less than 3 inches in diameter and according to plasticity index, liquid limit, and organic matter content. Sandy and gravelly soils are identified as GW, GP, GM, GC, SW, SP, SM, and SC; silty and clayey soils as ML, CL, OL, MH, CH, and OH; and highly organic soils as PT. Soils exhibiting engineering properties of two groups can have a dual classification, for example, CL-ML.

The AASHTO system classifies soils according to those properties that affect roadway construction and maintenance. In this system, the fraction of a mineral soil that is less than 3 inches in diameter is classified in one of seven groups from A-1 through A-7 on the basis of particle-size distribution, liquid limit, and plasticity index. Soils in group A-1 are coarse grained and low in content of fines (silt and clay). At the other extreme, soils in group A-7 are fine grained. Highly organic soils are classified in group A-8 on the basis of visual inspection.

If laboratory data are available, the A-1, A-2, and A-7 groups are further classified as A-1-a, A-1-b, A-2-4, A-2-5, A-2-6, A-2-7, A-7-5, or A-7-6. As an additional refinement, the suitability of a soil as subgrade material can be indicated by a group index number. Group index numbers range from 0 for the best subgrade material to 20 or higher for the poorest.

Rock fragments larger than 10 inches in diameter and 3 to 10 inches in diameter are indicated as a percentage of the total soil on a dry-weight basis. The percentages are estimates determined mainly by converting volume percentage in the field to weight percentage.

Percentage (of soil particles) passing designated sieves is the percentage of the soil fraction less than 3 inches in diameter based on an ovendry weight. The sieves, numbers 4, 10, 40, and 200 (USA Standard Series), have openings of 4.76, 2.00, 0.420, and 0.074 millimeters, respectively. Estimates are based on laboratory tests of soils sampled in the survey area and in nearby areas and on estimates made in the field.

Liquid limit and *plasticity index* (Atterberg limits) indicate the plasticity characteristics of a soil. The estimates are based on test data from the survey area or from nearby areas and on field examination.

References:

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Report—Engineering Properties

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
AaB—Aaron silt loam, 2 to 6 percent slopes														
Aaron	85	C	0-9	Silt loam	CL, CL-ML	A-4, A-6	0	0	95-100	95-100	85-100	70-90	20-35	5-15
			9-40	Silty clay loam, silty clay, clay	CH, CL	A-7	0	0-5	90-100	90-100	85-100	80-100	45-70	22-43
			40-59	Silty clay loam, silty clay, channery silty clay	CL, CH	A-7	0	0-10	75-90	75-90	70-90	65-90	45-65	22-40
			59-63	Weathered bedrock	—	—	—	—	—	—	—	—	—	—
AeC—Allegheny variant loam, 8 to 15 percent slopes														
Allegheny variant	90	B	0-9	Loam	ML, CL-ML	A-4	0	0	95-100	85-100	75-95	55-75	15-24	NP-7
			9-58	Loam, silt loam, fine sandy loam	CL, CL-ML	A-4, A-6	0	0	90-100	80-100	70-100	50-90	20-40	5-20
			58-70	Loam, clay loam, sandy loam	SC, CL, CL-ML, ML	A-4, A-6	0	0-5	85-100	75-100	55-95	35-75	18-40	3-20

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
As—Ashton silt loam, occasionally flooded														
Ashton	90	B	0-9	Silt loam	CL, ML	A-4	0	0	95-100	90-100	75-100	60-95	15-35	NP-10
			9-43	Silt loam, silty clay loam	CL-ML, CL	A-4, A-6, A-7	0	0	95-100	90-100	85-100	75-100	25-42	5-20
			43-89	Fine sandy loam, silt loam, loam	CL, CL-ML, ML, SM	A-4, A-6	0	0-5	90-100	85-100	65-95	40-90	15-40	NP-20
BaB—Barkcamp gravelly sandy loam, 0 to 8 percent slopes														
Barkcamp	85	A	0-5	Gravelly sandy loam	ML, SC, SM, CL	A-1, A-2, A-4	0	0-15	65-85	45-80	35-75	20-65	15-30	NP-10
			5-60	Gravelly loam, very gravelly sandy loam, cobbly loamy sand	SC, SM, GC, GM	A-2, A-4, A-1	0	5-35	30-75	25-65	20-55	15-50	15-30	NP-10
BaD—Barkcamp gravelly sandy loam, 8 to 40 percent slopes														
Barkcamp	85	A	0-5	Gravelly sandy loam	ML, SC, SM, CL	A-4, A-1, A-2	0	0-15	65-85	45-80	35-75	20-65	15-30	NP-10
			5-60	Very gravelly sandy loam, cobbly loamy sand, gravelly loam	SM, GC, GM, SC	A-4, A-1, A-2	0	5-35	30-75	25-65	20-55	15-50	15-30	NP-10

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
BaF—Barkcamp very stony sandy loam, 40 to 70 percent slopes														
Barkcamp	85	A	0-5	Very stony sandy loam	GM, SM, GC-GM	A-1, A-2	0	20-50	55-85	45-80	30-55	15-35	15-20	NP-6
			5-60	Cobbly loamy sand, gravelly loam, very gravelly sandy loam	GM, SC, SM, GC	A-4, A-1, A-2	0	10-40	30-75	25-65	20-55	15-50	15-30	NP-10
BbB—Barkcamp very flaggy sandy loam, 0 to 8 percent slopes, very stony														
Barkcamp	85	A	0-1	Very flaggy sandy loam	GC-GM, GM, SC-SM, SM	A-1, A-2	0	20-50	55-85	45-80	30-55	15-35	0-20	NP-6
			1-80	Very flaggy sandy loam, extremely flaggy sandy loam, extremely flaggy loamy sand	GC, GM, SC, SM	A-1, A-2, A-4	0	10-40	30-75	25-65	20-55	15-50	0-30	NP-10

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
BbD—Barkcamp very flaggy sandy loam, 8 to 40 percent slopes, very stony														
Barkcamp	85	A	0-1	Very flaggy sandy loam	SC-SM, SM, GC-GM, GM	A-1, A-2	0	20-50	55-85	45-80	30-55	15-35	0-20	NP-6
			1-80	Very flaggy sandy loam, extremely flaggy sandy loam, extremely flaggy loamy sand	GC, GM, SC, SM	A-1, A-2, A-4	0	10-40	30-75	25-65	20-55	15-50	0-30	NP-10
BcB—Barkcamp clay loam, 0 to 8 percent slopes														
Barkcamp	90	A	0-8	Clay loam	CL, CL-ML	A-4, A-6	0	0-5	90-100	80-100	75-95	55-90	20-40	4-18
			8-60	Cobbly loamy sand, gravelly loam, very gravelly sandy loam	GC-GM, SC, SC-SM, GC	A-4, A-1, A-2	0	5-35	30-75	25-65	20-55	5-50	15-30	NP-10
BcD—Barkcamp clay loam, 8 to 25 percent slopes														
Barkcamp	85	A	0-8	Clay loam	CL, CL-ML	A-6, A-4	0	0-5	90-100	80-100	75-95	55-90	20-40	4-18
			8-60	Gravelly loam, very gravelly sandy loam, cobbly loamy sand	SC-SM, GC, GC-GM, SC	A-4, A-1, A-2	0	5-35	30-75	25-65	20-55	5-50	15-30	NP-10

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
BeB—Bethesda silt loam, 0 to 8 percent slopes														
Bethesda	85	C	0-8	Silt loam	CL-ML, ML, CL	A-6, A-4	0	0-5	85-100	80-100	70-100	51-90	25-40	4-14
			8-60	Channery clay loam, very gravelly silty clay loam	ML, CL, GC, GM	A-4, A-6, A-7, A-2	0	10-30	40-80	25-65	20-65	18-60	24-50	3-23
BeD—Bethesda silt loam, 8 to 25 percent slopes														
Bethesda	85	C	0-8	Silt loam	CL, CL-ML, ML	A-6, A-4	0	0-5	85-100	80-100	70-100	51-90	25-40	4-14
			8-60	Channery clay loam, very gravelly silty clay loam	CL, GC, GM, ML	A-6, A-7, A-2, A-4	0	10-30	40-80	25-65	20-65	18-60	24-50	3-23
BfB—Bethesda channery loam, 0 to 8 percent slopes														
Bethesda	90	C	0-4	Channery loam	GC-GM, GM, ML, CL-ML	A-6, A-4	0	0-15	65-90	55-80	50-80	35-75	25-40	4-14
			4-80	Very channery loam, very channery silty clay loam, very channery clay loam	GC-GM, GM, ML, CL	A-4, A-6, A-7, A-2	0	10-30	45-80	25-65	25-65	20-60	24-50	3-23

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
BfD—Bethesda channery loam, 8 to 25 percent slopes														
Bethesda	90	C	0-3	Channery loam	GM, ML, CL-ML, GC-GM	A-4, A-6	0	0-15	65-90	55-80	50-80	35-75	25-40	4-14
			3-80	Very channery silty clay loam, very channery clay loam, very channery loam	ML, CL, GC-GM, GM	A-6, A-7, A-2, A-4	0	10-30	45-80	25-65	25-65	20-60	24-50	3-23
BfF—Bethesda channery loam, 25 to 70 percent slopes														
Bethesda	90	C	0-3	Channery loam	GM, ML, CL-ML, GC-GM	A-6, A-4	0	0-15	65-90	55-80	50-80	35-75	25-40	4-14
			3-80	Very channery silty clay loam, very channery clay loam, very channery loam	ML, CL, GC-GM, GM	A-2, A-4, A-6, A-7	0	10-30	45-80	25-65	25-65	20-60	24-50	3-23
BgB—Bethesda channery silty clay loam, 0 to 8 percent slopes														
Bethesda	85	C	0-4	Channery silty clay loam	SC, CL, GC	A-6, A-7	0	5-20	65-90	50-80	45-80	35-75	35-50	12-24
			4-80	Extremely channery silty clay loam, very channery clay loam, very channery silty clay loam	GM, ML, CL, GC-GM	A-6, A-7, A-2, A-4	0	10-30	45-80	25-65	25-65	20-60	24-50	3-23

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
BgD—Bethesda channery silty clay loam, 8 to 25 percent slopes														
Bethesda	85	C	0-4	Channery silty clay loam	CL, GC, SC	A-6, A-7	0	5-20	65-90	50-80	45-80	35-75	35-50	12-24
			4-80	Very channery clay loam, very channery silty clay loam, extremely channery silty clay loam	GM, ML, CL, GC-GM	A-6, A-7, A-2, A-4	0	10-30	45-80	25-65	25-65	20-60	24-50	3-23
BgF—Bethesda channery silty clay loam, 25 to 70 percent slopes														
Bethesda	85	C	0-4	Channery silty clay loam	GC, SC, CL	A-7, A-6	0	5-20	65-90	50-80	45-80	35-75	35-50	12-24
			4-80	Very channery silty clay loam, extremely channery silty clay loam, very channery clay loam	ML, CL, GC-GM, GM	A-4, A-6, A-7, A-2	0	10-30	45-80	25-65	25-65	20-60	24-50	3-23
BhB—Bethesda shaly silty clay loam, 0 to 8 percent slopes														
Bethesda	85	C	0-5	Channery silty clay loam	GC, SC, CL	A-6, A-7	0	5-25	65-90	35-80	30-80	25-75	35-50	12-24
			5-60	Channery clay loam, very gravelly silty clay loam	GM, ML, CL, GC	A-6, A-7, A-2, A-4	0	10-30	40-80	25-65	20-65	18-60	24-50	3-23

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
BhD—Bethesda shaly silty clay loam, 8 to 25 percent slopes														
Bethesda	85	C	0-5	Channery silty clay loam	GC, SC, CL	A-6, A-7	0	5-25	65-90	35-80	30-80	25-75	35-50	12-24
			5-60	Channery clay loam, very gravelly silty clay loam	GM, ML, CL, GC	A-6, A-7, A-2, A-4	0	10-30	40-80	25-65	20-65	18-60	24-50	3-23
BhE—Bethesda shaly silty clay loam, 25 to 40 percent slopes														
Bethesda	80	C	0-5	Channery silty clay loam	GC, SC, CL	A-6, A-7	0	5-25	65-90	35-80	30-80	25-75	35-50	12-24
			5-60	Channery clay loam, very gravelly silty clay loam	ML, CL, GC, GM	A-7, A-2, A-4, A-6	0	10-30	40-80	25-65	20-65	18-60	24-50	3-23
BhF—Bethesda very cobbly silty clay loam, 40 to 70 percent slopes														
Bethesda	85	C	0-5	Very cobbly silty clay loam	CL, GC	A-7, A-6	0	55-65	70-90	55-75	50-70	45-65	35-50	12-24
			5-60	Channery clay loam, very gravelly silty clay loam	GC, GM, ML, CL	A-2, A-4, A-6, A-7	0	10-30	40-80	25-65	20-65	18-60	24-50	3-23

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
BsC—Brookside silty clay loam, 8 to 15 percent slopes														
Brookside	85	C	0-18	Silty clay loam	ML, CL	A-6, A-7	0	0-5	90-100	80-100	75-100	70-95	30-50	10-28
			18-55	Clay, silty clay loam, channery clay loam	CL, CH	A-6, A-7	0	0-15	80-95	70-90	65-85	50-85	35-70	15-40
			55-80	Channery clay loam, clay, silty clay	GC, SC, CH, CL	A-6, A-7	0	5-25	70-100	50-75	45-75	40-70	35-65	20-44
BsD—Brookside silty clay loam, 15 to 25 percent slopes														
Brookside	80	C	0-18	Silty clay loam	ML, CL	A-6, A-7	0	0-5	90-100	80-100	75-100	70-95	30-50	10-28
			18-55	Silty clay loam, channery clay loam, clay	CH, CL	A-6, A-7	0	0-15	80-95	70-90	65-85	50-85	35-70	15-40
			55-80	Channery clay loam, clay, silty clay	CH, CL	A-6, A-7	0	5-25	70-100	50-75	45-75	40-70	35-65	20-44
BsE—Brookside silty clay loam, 25 to 40 percent slopes														
Brookside	80	C	0-18	Silty clay loam	ML, CL	A-6, A-7	0	0-5	90-100	80-100	75-100	70-95	30-50	10-28
			18-55	Channery clay loam, clay, silty clay loam	CH, CL	A-7, A-6	0	0-15	80-95	70-90	65-85	50-85	35-70	15-40
			55-80	Channery clay loam, clay, silty clay	GC, SC, CH, CL	A-7, A-6	0	5-25	70-100	50-75	45-75	40-70	35-65	20-44

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
BuB—Brookside-Urban land complex, 3 to 15 percent slopes														
Brookside	45	C	0-18	Silty clay loam	CL, ML	A-6, A-7	0	0-5	90-100	80-100	75-100	70-95	30-50	10-28
			18-55	Silty clay loam, channery silty clay loam, clay	CH, CL	A-6, A-7	0	0-15	85-95	70-90	65-85	50-85	35-70	15-40
			55-80	Clay, silty clay, channery clay loam	CH, CL, GC, SC	A-6, A-7	0	5-25	70-100	50-75	45-75	40-70	35-65	20-44
BuD—Brookside-Urban land complex, 15 to 40 percent slopes														
Brookside	45	C	0-18	Silty clay loam	CL, ML	A-6, A-7	0	0-5	90-100	80-100	75-100	70-95	30-50	10-28
			18-55	Channery silty clay loam, clay, silty clay loam	CH, CL	A-7, A-6	0	0-15	85-95	70-90	65-85	40-85	35-70	15-40
			55-80	Channery clay loam, clay, silty clay	CL, GC, SC, CH	A-6, A-7	0	5-25	70-100	50-75	45-75	40-70	35-65	20-44
Cf—Chagrin loam, occasionally flooded														
Chagrin	90	B	0-9	Loam	ML, CL, CL-ML	A-4	0	0	95-100	85-100	80-100	70-90	20-35	2-10
			9-34	Silt loam, loam, sandy loam	SM, ML	A-2, A-4, A-6	0	0	90-100	75-100	55-90	30-80	20-40	NP-14
			34-80	Fine sandy loam, sandy loam, loam	SP-SM, ML, SM	A-2, A-4	0	0	75-100	65-100	40-85	10-80	20-40	NP-10

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
Cg—Chagrin silt loam, occasionally flooded														
Chagrin	75	B	0-9	Silt loam	ML, CL, CL-ML	A-4	0	0	95-100	90-100	80-100	70-90	20-35	2-10
			9-57	Silt loam, loam, sandy loam	ML, SM	A-4	0	0	90-100	85-100	75-90	45-85	20-40	NP-10
			57-62	Loam, sandy loam, silt loam	ML, SM	A-4, A-2	0	0	85-100	80-100	55-85	30-80	20-40	NP-10
ChB—Chili gravelly loam, 3 to 8 percent slopes														
Chili	85	B	0-9	Gravelly loam	GM, ML, SM	A-2, A-4	0	0	65-90	60-85	35-80	15-60	15-30	NP-7
			9-44	Loam, gravelly clay loam, gravelly loam	GM, ML, SM, CL	A-4, A-6, A-2	0	0	65-100	50-80	35-70	20-65	15-30	NP-12
			44-54	Very gravelly sandy loam, very gravelly loam, gravelly sandy loam	SM, GM	A-1, A-2	0	0-5	45-80	35-75	25-55	15-35	—	NP
			54-60	Stratified very gravelly sand to gravelly loamy sand	SP, GM, GW, SM	A-1	0	5-10	30-60	25-55	10-30	2-15	—	NP

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
CmB—Chili-Urban land complex, 0 to 8 percent slopes														
Chili	50	B	0-9	Gravelly loam	ML, SM, GM	A-2, A-4	0	0	65-90	60-85	35-80	15-60	15-30	NP-7
			9-44	Gravelly loam, loam, gravelly clay loam	SC, SM, CL, ML	A-4, A-6, A-2	0	0	65-100	50-80	35-70	20-65	15-30	NP-12
			44-54	Gravelly sandy loam, very gravelly sandy loam, very gravelly loam	GM, SM	A-1, A-2	0	0-5	45-80	35-75	25-55	15-35	—	NP
			54-60	Stratified very gravelly sand to gravelly loamy sand	GM, GW, SM, SP	A-1	0	5-10	30-60	25-55	10-30	2-15	—	NP
CuB—Culleoka silt loam, 3 to 8 percent slopes														
Culleoka	80	B	0-8	Silt loam	ML, CL, CL-ML	A-4	0	0-10	90-100	85-100	70-100	55-95	15-35	NP-10
			8-25	Silt loam, channery loam, silty clay loam	CL, CL-ML, ML	A-6, A-4	0	5-25	80-95	75-95	65-95	55-90	20-40	2-20
			25-33	Very channery loam, very flaggy silty clay loam, flaggy loam	GC, GM, ML, CL	A-4, A-6, A-2	0	10-60	50-95	40-90	35-90	30-85	20-40	2-20
			33-35	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
CuC—Culleoka silt loam, 8 to 15 percent slopes														
Culleoka	80	B	0-8	Silt loam	CL, CL-ML, ML	A-4	0	0-10	90-100	85-100	70-100	55-95	15-35	NP-10
			8-25	Silt loam, channery loam, silty clay loam	CL-ML, ML, CL	A-4, A-6	0	5-25	80-95	75-95	65-95	55-90	20-40	2-20
			25-33	Very flaggy silty clay loam, flaggy loam, very channery loam	ML, CL, GC, GM	A-4, A-6, A-2	0	10-60	50-95	40-90	35-90	30-85	20-40	2-20
			33-35	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—
DeC—Dekalb channery loam, 6 to 15 percent slopes														
Dekalb	85	B	0-8	Channery loam	GM, ML, SM, CL-ML	A-4, A-1, A-2	0	0-30	50-90	45-80	40-75	20-55	10-32	NP-10
			8-27	Very channery sandy loam, channery sandy loam, very channery loam	SM, GC-GM, GM, ML	A-2, A-4, A-1	0	5-40	50-85	40-80	40-75	20-55	15-32	NP-9
			27-32	Very flaggy loamy sand, extremely channery sandy loam, flaggy sandy loam	GM, SC, SM, GC	A-4, A-1, A-2	0	10-50	45-85	25-75	20-65	15-40	15-32	NP-9
			32-36	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
DkB—Dekalb loam, 3 to 8 percent slopes														
Dekalb	80	B	0-6	Loam	CL-ML, ML	A-4	0	0-5	80-90	75-85	70-80	50-70	15-32	NP-7
			6-28	Very channery loam, channery loam, very channery sandy loam	ML, SM, GC-GM, GM	A-2, A-4	0	5-40	50-85	40-80	40-75	20-55	15-32	NP-7
			28-30	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—
DkC—Dekalb loam, 8 to 15 percent slopes														
Dekalb	80	B	0-6	Loam	CL-ML, ML	A-4	0	0-5	80-90	75-85	70-80	50-70	15-32	NP-7
			6-28	Channery loam, very channery sandy loam, very channery loam	SM, GC-GM, GM, ML	A-4, A-2	0	5-40	50-85	40-80	40-75	20-55	15-32	NP-7
			28-30	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—
DkD—Dekalb loam, 15 to 25 percent slopes														
Dekalb	85	B	0-6	Loam	CL-ML, ML	A-4	0	0-5	80-90	75-85	70-80	50-70	15-32	NP-7
			6-28	Channery loam, very channery sandy loam, very channery loam	GC-GM, GM, ML, SM	A-2, A-4	0	5-40	50-85	40-80	40-75	20-55	15-32	NP-7
			28-30	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
DkE—Dekalb loam, 25 to 40 percent slopes														
Dekalb	80	B	0-6	Loam	CL-ML, ML	A-4	0	0-5	80-90	75-85	70-80	50-70	15-32	NP-7
			6-28	Channery loam, very channery sandy loam, very channery loam	ML, SM, GC-GM, GM	A-2, A-4	0	5-40	50-85	40-80	40-75	20-55	15-32	NP-7
			28-30	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—
DmF—Dekalb moderately channery loam, 40 to 70 percent slopes														
Dekalb	80	B	0-5	Channery loam	CL-ML, GM, ML, SM	A-2, A-4	0	0-30	50-90	45-80	40-75	20-55	15-32	NP-7
			5-25	Very channery loam, channery loam, very channery sandy loam	GC-GM, GM, ML, SM	A-4, A-2	0	5-40	50-85	40-80	40-75	20-55	15-32	NP-7
			25-27	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
DnC—Dekalb channery loam, 8 to 15 percent slopes														
Dekalb	85	B	0-7	Channery loam	CL-ML, GM, ML, SM	A-1, A-2, A-4	0	0-30	50-90	45-80	40-75	20-55	10-32	NP-10
			7-26	Channery sandy loam, channery loam, very channery sandy loam	GC-GM, GM, ML, SM	A-1, A-2, A-4	0	5-40	50-85	40-80	40-75	20-55	15-32	NP-9
			26-34	Channery sandy loam, flaggy sandy loam, extremely channery sandy loam	GM, SC, SM, GC	A-1, A-2, A-4	0	10-50	45-85	25-75	20-65	15-40	15-32	NP-9
			34-39	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
DnD—Dekalb channery loam, 15 to 25 percent slopes														
Dekalb	85	B	0-7	Channery loam	CL-ML, GM, ML, SM	A-1, A-2, A-4	0	0-30	50-90	45-80	40-75	20-55	10-32	NP-10
			7-28	Channery loam, very channery sandy loam, channery sandy loam	GC-GM, GM, ML, SM	A-4, A-1, A-2	0	5-40	50-85	40-80	40-75	20-55	15-32	NP-9
			28-35	Extremely channery sandy loam, channery sandy loam, flaggy sandy loam	SC, SM, GC, GM	A-4, A-1, A-2	0	10-50	45-85	25-75	20-65	15-40	15-32	NP-9
			35-39	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
DnE—Dekalb channery loam, 25 to 40 percent slopes														
Dekalb	85	B	0-5	Channery loam	CL-ML, GM, ML, SM	A-4, A-1, A-2	0	0-30	50-90	45-80	40-75	20-55	10-32	NP-10
			5-28	Extremely flaggy sandy loam, very channery sandy loam, channery sandy loam	GC-GM, GM, ML, SM	A-1, A-2, A-4	0	5-40	50-85	40-80	40-75	20-55	15-32	NP-9
			28-33	Extremely flaggy loamy sand, channery sandy loam, flaggy sandy loam	SC, SM, GC, GM	A-1, A-2, A-4	0	10-50	45-85	25-75	20-65	15-40	15-32	NP-9
			33-35	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
DoF—Dekalb channery loam, 25 to 70 percent slopes, very stony														
Dekalb	85	B	0-3	Channery loam	CL-ML, GM, ML, SM	A-2, A-4, A-1	0-6	10-30	50-90	45-80	40-75	20-55	10-32	NP-10
			3-29	Very channery loam, channery loam, very flaggy sandy loam	SM, GC-GM, GM, ML	A-2, A-4, A-1	0	5-40	50-85	40-75	40-75	20-55	15-32	NP-9
			29-37	Channery sandy loam, flaggy sandy loam, extremely flaggy sandy loam	SM, GC, GM, SC	A-1, A-2, A-4	0-1	10-50	45-85	25-75	20-65	15-40	15-32	NP-9
			37-40	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—
DuB—Duncannon-Urban land complex, 0 to 15 percent slopes														
Duncannon	55	B	0-8	Silt loam	ML, CL-ML	A-4	0	0	95-100	90-100	85-100	70-100	17-30	NP-5
			8-95	Very fine sandy loam, silt loam, loam	CL, ML	A-4	0	0	95-100	90-100	85-100	70-100	17-30	NP-8

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
EbB—Elba silty clay loam, 3 to 8 percent slopes														
Elba	85	C	0-9	Silty clay loam	CL-ML, CL	A-4, A-6	0	0-10	95-100	90-100	85-100	75-95	25-40	6-15
			9-42	Silty clay loam, clay, channery silty clay	CH, CL	A-7	0	0-20	75-100	70-100	65-95	60-95	45-75	30-45
			42-54	Very channery silty clay loam, channery silty clay loam, clay	CH, CL	A-7	0	5-45	70-100	65-95	60-95	60-90	40-65	25-40
			54-56	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—
EbC—Elba silty clay loam, 8 to 15 percent slopes														
Elba	80	C	0-9	Silty clay loam	CL, CL-ML	A-4, A-6	0	0-10	95-100	90-100	85-100	75-95	25-40	6-15
			9-42	Silty clay loam, clay, channery silty clay	CL, CH	A-7	0	0-20	75-100	70-100	65-95	60-95	45-75	30-45
			42-54	Very channery silty clay loam, channery silty clay loam, clay	CH, CL	A-7	0	5-45	70-100	65-95	60-95	60-90	40-65	25-40
			54-56	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
EbD—Elba silty clay loam, 15 to 25 percent slopes														
Elba	80	C	0-9	Silty clay loam	CL, CL-ML	A-4, A-6	0	0-10	95-100	90-100	85-100	75-95	25-40	6-15
			9-42	Silty clay loam, clay, channery silty clay	CH, CL	A-7	0	0-20	75-100	70-100	65-95	60-95	45-75	30-45
			42-54	Clay, very channery silty clay loam, channery silty clay loam	CH, CL	A-7	0	5-45	70-100	65-95	60-95	60-90	40-65	25-40
			54-56	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—
EbE—Elba silty clay loam, 25 to 40 percent slopes														
Elba	80	C	0-9	Silty clay loam	CL, CL-ML	A-4, A-6	0	0-10	95-100	90-100	85-100	75-95	25-40	6-15
			9-42	Silty clay loam, clay, channery silty clay	CH, CL	A-7	0	0-20	75-100	70-100	65-95	60-95	45-75	30-45
			42-54	Channery silty clay loam, clay, very channery silty clay loam	CH, CL	A-7	0	5-45	70-100	65-95	60-95	60-90	40-65	25-40
			54-56	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
ElB—Elkinsville silt loam, 3 to 8 percent slopes														
Elkinsville	95	B	0-9	Silt loam	CL, CL-ML	A-6, A-4	0	0	100	100	90-100	70-90	25-40	5-15
			9-56	Silt loam, silty clay loam	CL	A-4, A-6	0	0	100	100	85-100	65-90	30-40	8-18
			56-68	Silty clay loam, loam, sandy clay loam	CL	A-4, A-6	0	0	100	100	80-100	50-90	30-40	8-18
ElC—Elkinsville silt loam, 8 to 15 percent slopes														
Elkinsville	75	B	0-9	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	90-100	70-90	25-40	5-15
			9-56	Silt loam, silty clay loam	CL	A-4, A-6	0	0	100	100	85-100	65-90	30-40	8-18
			56-68	Silty clay loam, loam, sandy clay loam	CL	A-4, A-6	0	0	100	100	80-100	50-90	30-40	8-18
ElD—Elkinsville silt loam, 15 to 25 percent slopes														
Elkinsville	80	B	0-9	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	90-100	70-90	25-40	5-15
			9-56	Silt loam, silty clay loam	CL	A-6, A-4	0	0	100	100	85-100	65-90	30-40	8-18
			56-68	Sandy clay loam, silty clay loam, loam	CL	A-4, A-6	0	0	100	100	80-100	50-90	30-40	8-18

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
FbB—Fairpoint gravelly clay loam, 0 to 8 percent slopes														
Fairpoint	80	C	0-5	Gravelly clay loam	SC, CL, GC	A-6, A-7	0	5-15	55-90	45-85	40-85	35-80	35-50	12-24
			5-60	Very channery silty clay loam, very gravelly clay loam, gravelly clay loam	GC, SC, CL, CL-ML	A-5, A-6, A-7, A-4	0	15-30	55-75	25-65	20-65	15-60	25-50	4-24
FbD—Fairpoint gravelly clay loam, 8 to 25 percent slopes														
Fairpoint	85	C	0-5	Gravelly clay loam	GC, SC, CL	A-6, A-7	0	5-15	55-90	45-85	40-85	35-80	35-50	12-24
			5-60	Very gravelly clay loam, gravelly clay loam, very channery silty clay loam	CL, CL-ML, GC, SC	A-6, A-7, A-4, A-5	0	15-30	55-75	25-65	20-65	15-60	25-50	4-24
FcB—Fairpoint silty clay loam, 0 to 8 percent slopes														
Fairpoint	80	C	0-8	Silty clay loam	CL	A-6, A-7	0	0-5	90-100	80-100	70-95	60-95	35-50	12-24
			8-60	Very gravelly clay loam, gravelly clay loam, very channery silty clay loam	GC, SC, CL, CL-ML	A-2, A-4, A-6, A-7	0	15-30	55-75	25-65	20-65	15-60	25-50	4-24

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
FcD—Fairpoint silty clay loam, 8 to 25 percent slopes														
Fairpoint	80	C	0-8	Silty clay loam	CL	A-7, A-6	0	0-5	90-100	80-100	70-95	60-95	35-50	12-24
			8-60	Gravelly clay loam, very channery silty clay loam, very gravelly clay loam	CL-ML, GC, SC, CL	A-2, A-4, A-6, A-7	0	15-30	55-75	25-65	20-65	15-60	25-50	4-24
FtA—Fitchville silt loam, 0 to 3 percent slopes														
Fitchville	85	C/D	0-10	Silt loam	CL-ML, ML	A-6, A-4	0	0	100	100	95-100	85-95	24-40	4-16
			10-52	Silt loam, silty clay loam	ML, CL	A-7, A-4, A-6	0	0	100	100	90-100	80-100	28-50	5-23
			52-70	Silt loam, loam, silty clay loam	ML, CL, CL-ML	A-4, A-6	0	0	95-100	90-100	85-100	60-100	20-40	3-18
GbB—Gilpin silt loam, 2 to 8 percent slopes														
Gilpin	85	C	0-9	Silt loam	CL-ML, CL	A-4, A-6	0	0-5	80-95	75-90	70-85	65-80	20-40	4-15
			9-26	Channery loam, channery silt loam, silty clay loam	CL, CL-ML, GC, SC	A-4, A-6, A-2	0	0-30	50-95	45-90	35-85	30-80	20-40	4-15
			26-33	Channery loam, very channery loam, extremely channery loam	GC-GM, GC	A-1, A-2, A-4, A-6	0	0-35	25-55	20-50	15-45	15-40	20-40	4-15
			33-41	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
GbC—Gilpin silt loam, 8 to 15 percent slopes														
Gilpin	85	C	0-8	Silt loam	CL, CL-ML	A-4, A-6	0	0-5	80-95	75-90	70-85	65-80	20-40	4-15
			8-24	Silty clay loam, channery loam, channery silty clay loam	CL, CL-ML, GC, SC	A-2, A-4, A-6	0	0-30	50-95	45-90	35-85	30-80	20-40	4-15
			24-28	Channery loam, very channery loam, extremely channery loam	GC, GC-GM	A-6, A-1, A-2, A-4	0	0-35	25-55	20-50	15-45	15-40	20-40	4-15
			28-35	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—
GnB—Gilpin silt loam, 2 to 6 percent slopes														
Gilpin	85	C	0-6	Silt loam	CL, CL-ML	A-6, A-4	0	0-5	80-95	75-90	70-85	65-80	20-40	4-15
			6-24	Silty clay loam, channery silty clay loam, silt loam	CL-ML, GC, SC, CL	A-4, A-6, A-2	0	0-30	50-95	45-90	35-85	30-80	20-40	4-15
			24-30	Channery loam, very channery silt loam, very channery silty clay loam	GC, GC-GM	A-2, A-4, A-6, A-1	0	0-35	25-55	20-50	15-45	15-40	20-40	4-15
			30-35	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
GnC—Gilpin silt loam, 6 to 15 percent slopes														
Gilpin	85	C	0-6	Silt loam	CL, CL-ML	A-4, A-6	0	0-5	80-95	75-90	70-85	65-80	20-40	4-15
			6-24	Silt loam, silty clay loam, channery silty clay loam	GC, SC, CL, CL-ML	A-6, A-2, A-4	0	0-30	50-95	45-90	35-85	30-80	20-40	4-15
			24-30	Channery loam, very channery silt loam, very channery silty clay loam	GC, GC-GM	A-6, A-1, A-2, A-4	0	0-35	25-55	20-50	15-45	15-40	20-40	4-15
			30-35	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
GpC—Gilpin-Lowell complex, 6 to 15 percent slopes														
Gilpin	55	C	0-4	Silt loam	CL-ML, CL	A-4, A-6	0	0-5	80-95	75-90	70-85	65-80	20-40	4-15
			4-21	Silty clay loam, silt loam, channery silt loam	GC, SC, CL, CL-ML	A-4, A-6, A-2	0	0-30	50-95	45-90	35-85	30-80	20-40	4-15
			21-24	Very channery silt loam, very channery silty clay loam, channery silt loam	GC, GC-GM	A-2, A-4, A-6, A-1	0	0-35	25-55	20-50	15-45	15-40	20-40	4-15
			24-26	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—
Lowell	30	C	0-4	Silt loam	CL-ML, ML, CL	A-4	0	0	100	95-100	90-100	85-100	22-32	3-10
			4-55	Silty clay, clay, silty clay loam	CH, CL, MH	A-6, A-7	0	0	100	95-100	90-100	85-100	35-65	15-32
			55-60	Clay, silty clay	CL, MH, CH	A-7	0-10	0-10	95-100	90-100	85-100	75-100	45-75	20-40
			60-62	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
GpD—Gilpin-Lowell complex, 15 to 25 percent slopes														
Gilpin	55	C	0-4	Silt loam	CL, CL-ML	A-4, A-6	0	0-5	80-95	75-90	70-85	65-80	20-40	4-15
			4-21	Silt loam, channery silt loam, silty clay loam	CL-ML, GC, SC, CL	A-6, A-2, A-4	0	0-30	50-95	45-90	35-85	30-80	20-40	4-15
			21-24	Very channery silt loam, very channery silty clay loam, channery silt loam	GC-GM, GC	A-2, A-4, A-6, A-1	0	0-35	25-55	20-50	15-45	15-40	20-40	4-15
			24-26	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—
Lowell	30	C	0-4	Silt loam	CL-ML, ML, CL	A-4	0	0	100	95-100	90-100	85-100	22-32	3-10
			4-55	Silty clay, clay, silty clay loam	MH, CH, CL	A-6, A-7	0	0	100	95-100	90-100	85-100	35-65	15-32
			55-60	Silty clay, clay	CH, CL, MH	A-7	0-10	0-10	95-100	90-100	85-100	75-100	45-75	20-40
			60-62	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
He—Hartshorn silt loam, occasionally flooded														
Hartshorn	85	B	0-24	Silt loam	SM, CL, ML, SC	A-4	0	0-5	80-100	75-100	60-90	45-80	20-32	NP-10
			24-40	Very gravelly loamy sand, very gravelly sandy loam, very gravelly sand	SM, SP-SM, GM, GP-GM	A-2, A-1	0	0-15	40-80	30-50	20-50	12-30	—	NP
			40-42	Weathered bedrock	—	—	—	—	—	—	—	—	—	—
KaB—Kanawha loam, 2 to 6 percent slopes														
Kanawha	85	B	0-10	Loam	CL, CL-ML, ML	A-4	0	0	80-100	75-100	65-100	50-90	28-35	2-10
			10-40	Loam, clay loam	CL, ML, SC, SM	A-4, A-6, A-2	0	0	80-100	60-100	50-100	25-80	20-40	5-15
			40-80	Very gravelly sandy loam, gravelly loam, very gravelly loam	SM, GC-GM, GM	A-1, A-2, A-4	0	0	55-90	30-65	20-55	10-45	0-25	NP-5
KeB—Keene silt loam, 2 to 6 percent slopes														
Keene	85	C	0-10	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	95-100	90-100	85-100	70-95	25-36	4-12
			10-30	Silt loam, silty clay loam	ML, CL, CL-ML	A-4, A-6	0	0	95-100	90-100	85-100	75-100	25-40	6-18
			30-50	Silty clay loam, silty clay	CH, CL	A-7, A-6	0	0-5	95-100	75-100	70-95	65-90	30-55	10-28
			50-80	Channery silty clay loam, silty clay, clay	CH, CL	A-6, A-7	0	5-20	65-100	55-100	55-90	50-85	30-55	10-28

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
LeB—Lowell silt loam, 3 to 8 percent slopes														
Lowell	90	C	0-7	Silt loam	CL-ML, ML, CL	A-4, A-6	0	0	100	95-100	85-100	70-90	22-40	4-12
			7-18	Silty clay loam	CL	A-6, A-7	0	0-2	95-100	95-100	90-100	80-95	34-42	15-22
			18-42	Silty clay, clay	CH, CL	A-6, A-7	0	0-5	95-100	90-100	80-100	75-95	35-65	14-45
			42-50	Gravelly silty clay loam, channery silty clay	GC, CL	A-6, A-7	0	5-20	65-90	55-80	50-80	45-75	30-45	15-30
			50-52	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—
LeC—Lowell silt loam, 8 to 15 percent slopes														
Lowell	80	C	0-7	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	95-100	85-100	70-90	22-40	4-12
			7-18	Silty clay loam	CL	A-6, A-7	0	0-2	95-100	95-100	90-100	80-95	34-42	15-22
			18-42	Silty clay, clay	CH, CL	A-6, A-7	0	0-5	95-100	90-100	80-100	75-95	35-65	14-45
			42-50	Channery silty clay, gravelly silty clay loam	CL, GC	A-6, A-7	0	5-20	65-90	55-80	50-80	45-75	30-45	15-30
			50-52	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
LeD—Lowell silt loam, 15 to 25 percent slopes														
Lowell	80	C	0-7	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	95-100	85-100	70-90	22-40	4-12
			7-18	Silty clay loam	CL	A-6, A-7	0	0-2	95-100	95-100	90-100	80-95	34-42	15-22
			18-42	Silty clay, clay	CH, CL	A-6, A-7	0	0-5	95-100	90-100	80-100	75-95	35-65	14-45
			42-50	Gravelly silty clay loam, channery silty clay	CL, GC	A-6, A-7	0	5-20	65-90	55-80	50-80	45-75	30-45	15-30
			50-52	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—
LeE—Lowell silt loam, 25 to 40 percent slopes														
Lowell	85	C	0-7	Silt loam	CL-ML, ML, CL	A-4, A-6	0	0	100	95-100	85-100	70-90	22-40	4-12
			7-18	Silty clay loam	CL	A-7, A-6	0	0-2	95-100	95-100	90-100	80-95	34-42	15-22
			18-42	Silty clay, clay	CH, CL	A-6, A-7	0	0-5	95-100	90-100	80-100	75-95	35-65	14-45
			42-50	Gravelly silty clay loam, channery silty clay	GC, CL	A-6, A-7	0	5-20	65-90	55-80	50-80	45-75	30-45	15-30
			50-52	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
LeF—Lowell silt loam, 40 to 70 percent slopes														
Lowell	85	C	0-7	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	95-100	85-100	70-90	22-40	4-12
			7-18	Silty clay loam	CL	A-7, A-6	0	0-2	95-100	95-100	90-100	80-95	34-42	15-22
			18-42	Silty clay, clay	CH, CL	A-7, A-6	0	0-5	95-100	90-100	80-100	75-95	35-65	14-45
			42-50	Channery silty clay, gravelly silty clay loam	CL, GC	A-6, A-7	0	5-20	65-90	55-80	50-80	45-75	30-45	15-30
			50-52	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—
LgC—Lowell silt loam, 6 to 15 percent slopes														
Lowell	85	C	0-7	Silt loam	ML, CL, CL-ML	A-4	0	0	100	95-100	90-100	85-100	22-32	3-10
			7-44	Silty clay, clay, silty clay loam	CH, CL, MH	A-6, A-7	0	0	100	95-100	90-100	85-100	35-65	15-32
			44-52	Silty clay, clay	MH, CH, CL	A-7	0-10	0-10	95-100	90-100	85-100	75-100	45-75	20-40
			52-54	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
LoB—Lowell-Westmoreland silt loams, 3 to 8 percent slopes														
Lowell	45	C	0-7	Silt loam	CL, CL-ML, ML	A-6, A-4	0	0	100	95-100	85-100	70-90	22-40	4-12
			7-18	Silty clay loam	CL	A-7, A-6	0	0-2	95-100	95-100	90-100	80-95	34-42	15-22
			18-42	Silty clay, clay	CL, CH	A-6, A-7	0	0-5	95-100	90-100	80-100	75-95	35-65	14-45
			42-50	Channery silty clay, gravelly silty clay loam	GC, CL	A-6, A-7	0	5-20	65-90	55-80	50-80	45-75	30-45	15-30
			50-52	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—
Westmoreland	35	B	0-8	Silt loam	ML, CL	A-4	0	0	85-100	80-100	75-95	60-95	15-35	NP-10
			8-28	Channery loam, silt loam, clay loam	GM, ML, CL, GC	A-6, A-7, A-4	0	0-15	65-100	55-95	50-90	45-85	22-45	2-20
			28-50	Channery clay loam, very channery clay loam, very channery loam	SC, SM, GC, GM	A-4, A-6, A-1, A-2	0	0-20	25-95	20-95	15-90	15-80	20-40	2-20
			50-52	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
LoC—Lowell-Westmoreland silt loams, 8 to 15 percent slopes														
Lowell	45	C	0-7	Silt loam	ML, CL, CL-ML	A-4, A-6	0	0	100	95-100	85-100	70-90	22-40	4-12
			7-18	Silty clay loam	CL	A-7, A-6	0	0-2	95-100	95-100	90-100	80-95	34-42	15-22
			18-42	Clay, silty clay	CH, CL	A-6, A-7	0	0-5	95-100	90-100	80-100	75-95	35-65	14-45
			42-50	Channery silty clay, gravelly silty clay loam	CL, GC	A-6, A-7	0	5-20	65-90	55-80	50-80	45-75	30-45	15-30
			50-52	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—
Westmoreland	35	B	0-8	Silt loam	ML, CL	A-4	0	0	85-100	80-100	75-95	60-95	15-35	NP-10
			8-28	Clay loam, channery loam, silt loam	GC, GM, ML, CL	A-4, A-6, A-7	0	0-15	65-100	55-95	50-90	45-85	22-45	2-20
			28-50	Very channery loam, channery clay loam, very channery clay loam	GC, GM, SC, SM	A-1, A-2, A-4, A-6	0	0-20	25-95	20-95	15-90	15-80	20-40	2-20
			50-52	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
LoD—Lowell-Westmoreland silt loams, 15 to 25 percent slopes														
Lowell	45	C	0-7	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	95-100	85-100	70-90	22-40	4-12
			7-18	Silty clay loam	CL	A-6, A-7	0	0-2	95-100	95-100	90-100	80-95	34-42	15-22
			18-42	Silty clay, clay	CH, CL	A-6, A-7	0	0-5	95-100	90-100	80-100	75-95	35-65	14-45
			42-50	Gravelly silty clay loam, channery silty clay	CL, GC	A-6, A-7	0	5-20	65-90	55-80	50-80	45-75	30-45	15-30
			50-52	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—
Westmoreland	35	B	0-8	Silt loam	CL, ML	A-4	0	0	85-100	80-100	75-95	60-95	15-35	NP-10
			8-28	Silt loam, clay loam, channery loam	GM, ML, CL, GC	A-7, A-4, A-6	0	0-15	65-100	55-95	50-90	45-85	22-45	2-20
			28-50	Very channery clay loam, very channery loam, channery clay loam	SC, SM, GC, GM	A-4, A-6, A-1, A-2	0	0-20	25-95	20-95	15-90	15-80	20-40	2-20
			50-52	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
LoE—Lowell-Westmoreland silt loams, 25 to 40 percent slopes														
Lowell	45	C	0-7	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	95-100	85-100	70-90	22-40	4-12
			7-18	Silty clay loam	CL	A-6, A-7	0	0-2	95-100	95-100	90-100	80-95	34-42	15-22
			18-42	Silty clay, clay	CL, CH	A-6, A-7	0	0-5	95-100	90-100	80-100	75-95	35-65	14-45
			42-50	Gravelly silty clay loam, channery silty clay	CL, GC	A-7, A-6	0	5-20	65-90	55-80	50-80	45-75	30-45	15-30
			50-52	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—
Westmoreland	35	B	0-8	Silt loam	CL, ML	A-4	0	0	85-100	80-100	75-95	60-95	15-35	NP-10
			8-28	Channery loam, silt loam, clay loam	GC, GM, ML, CL	A-4, A-6, A-7	0	0-15	65-100	55-95	50-90	45-85	22-45	2-20
			28-50	Very channery loam, channery clay loam, very channery clay loam	GC, GM, SC, SM	A-1, A-2, A-4, A-6	0	0-20	25-95	20-95	15-90	15-80	20-40	2-20
			50-52	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
LoF—Lowell-Westmoreland silt loams, 40 to 70 percent slopes														
Lowell	45	C	0-7	Silt loam	ML, CL, CL-ML	A-4, A-6	0	0	100	95-100	85-100	70-90	22-40	4-12
			7-18	Silty clay loam	CL	A-6, A-7	0	0-2	95-100	95-100	90-100	80-95	34-42	15-22
			18-42	Clay, silty clay	CL, CH	A-7, A-6	0	0-5	95-100	90-100	80-100	75-95	35-65	14-45
			42-50	Channery silty clay, gravelly silty clay loam	GC, CL	A-7, A-6	0	5-20	65-90	55-80	50-80	45-75	30-45	15-30
			50-52	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—
Westmoreland	35	B	0-8	Silt loam	ML, CL	A-4	0	0	85-100	80-100	75-95	60-95	15-35	NP-10
			8-28	Clay loam, channery loam, silt loam	GM, ML, CL, GC	A-4, A-6, A-7	0	0-15	65-100	55-95	50-90	45-85	22-45	2-20
			28-50	Very channery loam, channery clay loam, very channery clay loam	SC, SM, GC, GM	A-4, A-6, A-1, A-2	0	0-20	25-95	20-95	15-90	15-80	20-40	2-20
			50-52	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
LpF—Lowell-Westmoreland silt loams, benched, 30 to 70 percent slopes														
Lowell	45	C	0-7	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	95-100	85-100	70-90	22-40	4-12
			7-18	Silty clay loam	CL	A-6, A-7	0	0-2	95-100	95-100	90-100	80-95	34-42	15-22
			18-42	Silty clay, clay	CL, CH	A-6, A-7	0	0-5	95-100	90-100	80-100	75-95	35-65	14-45
			42-50	Gravelly silty clay loam, channery silty clay	CL, GC	A-7, A-6	0	5-20	65-90	55-80	50-80	45-75	30-45	15-30
			50-52	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—
Westmoreland	35	B	0-8	Silt loam	ML, CL	A-4	0	0	85-100	80-100	75-95	60-95	15-35	NP-10
			8-28	Silt loam, clay loam, channery loam	GC, GM, ML, CL	A-6, A-7, A-4	0	0-15	65-100	55-95	50-90	45-85	22-45	2-20
			28-50	Channery clay loam, very channery clay loam, very channery loam	GC, GM, SC, SM	A-1, A-2, A-4, A-6	0	0-20	25-95	20-95	15-90	15-80	20-40	2-20
			50-52	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—
Md—Melvin silt loam, ponded														
Melvin	90	B/D	0-9	Silt loam	CL, CL-ML, ML	A-4	0	0	95-100	90-100	80-100	80-95	25-35	4-10
			9-22	Silt loam, silty clay loam	CL, CL-ML	A-4, A-6	0	0	95-100	90-100	80-100	80-95	25-40	5-20
			22-80	Silty clay loam, loam, silt loam	CL, CL-ML	A-6, A-4	0	0	85-100	80-100	70-100	60-95	25-40	5-20

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
MnB—Morristown clay loam, 0 to 8 percent slopes														
Morristown	80	C	0-8	Clay loam	CL	A-6, A-7	0	0-5	90-100	80-100	70-95	60-95	35-50	12-24
			8-60	Very gravelly clay loam, gravelly loam, channery clay loam	CL, CL-ML, GC, GC-GM	A-7, A-2, A-4, A-6	0	10-25	40-75	30-65	25-65	20-60	25-50	4-24
MnD—Morristown clay loam, 8 to 25 percent slopes														
Morristown	80	C	0-8	Clay loam	CL	A-7, A-6	0	0-5	90-100	80-100	70-95	60-95	35-50	12-24
			8-60	Very gravelly clay loam, gravelly loam, channery clay loam	GC, GC-GM, CL, CL-ML	A-2, A-4, A-6, A-7	0	10-25	40-75	30-65	25-65	20-60	25-50	4-24
MnE—Morristown clay loam, 25 to 40 percent slopes														
Morristown	80	C	0-8	Clay loam	CL	A-6, A-7	0	0-5	90-100	80-100	70-95	60-95	35-50	12-24
			8-60	Very gravelly clay loam, gravelly loam, channery clay loam	GC-GM, CL, CL-ML, GC	A-4, A-6, A-7, A-2	0	10-25	40-75	30-65	25-65	20-60	25-50	4-24

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
MoB—Morristown stony clay loam, 0 to 8 percent slopes														
Morristown	90	C	0-5	Gravelly clay loam	CL, GC, SC	A-6, A-7	0	10-25	70-95	50-80	50-75	40-70	35-50	12-24
			5-60	Very gravelly clay loam, gravelly loam, channery clay loam	CL-ML, GC, GC-GM, CL	A-7, A-2, A-4, A-6	0	10-25	40-75	30-65	25-65	20-60	25-50	4-24
MoD—Morristown stony clay loam, 8 to 25 percent slopes														
Morristown	90	C	0-5	Gravelly clay loam	SC, CL, GC	A-6, A-7	0	10-25	70-95	50-80	50-75	40-70	35-50	12-24
			5-60	Gravelly loam, channery clay loam, very gravelly clay loam	CL-ML, GC, GC-GM, CL	A-2, A-4, A-6, A-7	0	10-25	40-75	30-65	25-65	20-60	25-50	4-24
MoE—Morristown stony clay loam, 25 to 40 percent slopes														
Morristown	85	C	0-5	Gravelly clay loam	CL, GC, SC	A-6, A-7	0	10-25	70-95	50-80	50-75	40-70	35-50	12-24
			5-60	Channery clay loam, very gravelly clay loam, gravelly loam	CL, CL-ML, GC, GC-GM	A-2, A-4, A-6, A-7	0	10-25	40-75	30-65	25-65	20-60	25-50	4-24

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
MoF—Morristown very stony clay loam, 40 to 70 percent slopes														
Morristown	85	C	0-5	Very stony clay loam	SC, CL, GC	A-6, A-7	0	15-40	70-95	50-80	50-75	40-70	35-50	12-24
			5-60	Cobbly loam, very cobbly clay loam, very gravelly silty clay loam	GC, GC-GM, CL, CL-ML	A-2, A-4, A-6, A-7	0	10-25	40-75	30-65	25-65	20-60	25-50	4-24
MpB—Morristown silty clay loam, 0 to 8 percent slopes														
Morristown	85	C	0-12	Silty clay loam	CL	A-7, A-6	0	0-5	90-100	80-100	70-95	60-95	35-50	12-24
			12-80	Extremely channery silty clay loam, very channery clay loam	CL-ML, GC, GC-GM, CL	A-7, A-2, A-4, A-6	0	10-25	35-75	25-65	20-65	15-60	25-50	4-24
MpD—Morristown silty clay loam, 8 to 25 percent slopes														
Morristown	90	C	0-12	Silty clay loam	CL	A-6, A-7	0	0-5	90-100	80-100	70-95	60-95	35-50	12-24
			12-80	Very channery clay loam, extremely channery silty clay loam	GC-GM, CL, CL-ML, GC	A-4, A-6, A-7, A-2	0	10-25	35-75	25-65	20-65	15-60	25-50	4-24

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
MrB—Morristown channery silty clay loam, 0 to 8 percent slopes, stony														
Morristown	85	C	0-7	Channery silty clay loam	CL, GC, SC	A-6, A-7	0	5-20	70-95	50-80	50-75	40-70	35-50	12-24
			7-80	Very channery silty clay loam, extremely channery silty clay loam	GC-GM, CL, CL-ML, GC	A-2, A-4, A-6, A-7	0	10-25	35-75	25-65	20-65	15-60	25-50	4-24
MrD—Morristown channery silty clay loam, 8 to 25 percent slopes, stony														
Morristown	85	C	0-7	Channery silty clay loam	CL, GC, SC	A-7, A-6	0	5-20	70-95	50-80	50-75	40-70	35-50	12-24
			7-80	Very channery silty clay loam, extremely channery silty clay loam	CL-ML, GC, GC-GM, CL	A-7, A-2, A-4, A-6	0	10-25	35-75	25-65	20-65	15-60	25-50	4-24
MrE—Morristown channery silty clay loam, 25 to 40 percent slopes, stony														
Morristown	85	C	0-7	Channery silty clay loam	CL, GC, SC	A-6, A-7	0	5-20	70-95	50-80	50-75	40-70	35-50	12-24
			7-80	Very channery silty clay loam, extremely channery silty clay loam	GC, GC-GM, CL, CL-ML	A-6, A-7, A-2, A-4	0	10-25	35-75	25-65	20-65	15-60	25-50	4-24

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
MsF—Morristown channery silt loam, 25 to 70 percent slopes, bouldery														
Morristown	85	C	0-5	Channery silt loam	SC-SM, CL-ML, GC, SC	A-6, A-4	0	5-20	70-95	50-80	45-75	35-65	20-40	4-18
			5-80	Extremely channery silty clay loam, very channery silt loam	CL-ML, GC, GC-GM, CL	A-6, A-7, A-2, A-4	0	10-25	35-75	25-65	20-65	15-60	25-50	4-24
Ne—Newark silt loam, frequently flooded														
Newark	85	B/D	0-8	Silt loam	CL, CL-ML, ML	A-4	0	0	95-100	90-100	80-100	55-95	15-32	NP-10
			8-34	Silt loam, silty clay loam	CL-ML, ML, CL	A-7, A-4, A-6	0	0	95-100	90-100	85-100	70-95	22-42	4-20
			34-60	Silty clay loam, silt loam	CL-ML, ML, CL	A-7, A-4, A-6	0	0-3	75-100	70-100	65-100	55-95	22-42	4-20
Nm—Newark silt loam, ponded														
Newark	90	B/D	0-7	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	95-100	90-100	80-100	60-90	22-35	3-12
			7-38	Silt loam, silty clay loam	CL-ML, CL	A-4, A-6	0	0	95-100	90-100	85-100	70-95	25-40	5-20
			38-60	Silt loam, silty clay loam	CL, CL-ML	A-6, A-4	0	0-3	85-100	80-100	75-100	60-95	25-40	5-20

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
Nn—Newark Variant silt loam, frequently flooded														
Newark variant	80	B/D	0-8	Silt loam	CL, CL-ML, ML	A-4	0	0	90-100	85-100	75-100	50-90	20-35	3-12
			8-26	Silt loam, clay loam, gravelly loam	CL-ML, ML, SC-SM, CL	A-4	0	0-5	70-100	60-95	50-95	35-85	20-30	3-10
			26-45	Gravelly sandy loam, very gravelly loamy sand	GP-GM, SM, SP-SM, GM	A-1, A-2-4	0	0-15	20-80	20-70	10-50	5-30	—	NP
			45-49	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—
No—Nolin variant silt loam, occasionally flooded														
Nolin variant	80	B	0-10	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	90-100	80-100	65-90	20-35	3-15
			10-41	Silt loam, silty clay loam	CL, CL-ML, ML	A-4, A-6	0	0	100	90-100	75-100	60-90	20-40	3-20
			41-66	Silt loam, fine sandy loam	CL, CL-ML, ML	A-4, A-6	0	0	100	90-100	75-100	60-90	20-40	3-20
Nu—Nolin variant-Urban land complex														
Nolin variant	40	B	0-10	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	90-100	80-100	65-90	20-35	3-15
			10-41	Loam, silty clay loam, silt loam	CL-ML, ML, CL	A-4, A-6	0	0	100	90-100	75-100	60-90	20-40	3-20
			41-66	Loam, silty clay loam, silt loam	CL-ML, ML, CL	A-4, A-6	0	0	100	90-100	75-100	60-90	20-40	3-20

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
OmB—Omulga silt loam, 2 to 6 percent slopes														
Omulga, mixed mineralogy substratum phase	85	D	0-9	Silt loam	ML, CL, CL-ML	A-4, A-6	0	0	95-100	90-100	85-100	65-90	25-35	5-15
			9-27	Silt loam, silty clay loam	CL-ML, ML, CL	A-4, A-6, A-7	0	0	95-100	90-100	85-100	65-100	25-45	5-20
			27-49	Silty clay loam, silt loam	ML, CL, CL-ML	A-4, A-6	0	0	85-100	80-100	75-95	60-90	20-40	5-20
			49-67	Silty clay loam, silt loam	ML, CL, CL-ML	A-4, A-6, A-7	0	0	85-100	80-100	75-95	70-90	20-45	5-20
			67-79	Silt loam, silty clay, silty clay loam	ML, CL-ML, CH	A-7, A-6	0	0	80-100	75-100	65-95	50-90	30-50	8-30
OtB—Otwell silt loam, 3 to 8 percent slopes														
Otwell	90	D	0-9	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	90-100	70-95	25-35	5-15
			9-30	Silty clay loam, silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	90-100	70-95	25-40	5-20
			30-56	Silty clay loam, loam, silt loam	CL	A-6, A-7	0	0	95-100	95-100	85-100	65-90	35-50	20-30
			56-81	Silty clay loam, silt loam, loam	CL	A-6, A-7	0	0	95-100	90-100	85-100	80-95	35-50	15-25

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
OtC—Otwell silt loam, 8 to 15 percent slopes														
Otwell	95	D	0-9	Silt loam	CL, CL-ML	A-6, A-4	0	0	100	100	90-100	70-95	25-35	5-15
			9-30	Silty clay loam, silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	90-100	70-95	25-40	5-20
			30-56	Silt loam, silty clay loam, loam	CL	A-7, A-6	0	0	95-100	95-100	85-100	65-90	35-50	20-30
			56-81	Loam, silty clay loam, silt loam	CL	A-6, A-7	0	0	95-100	90-100	85-100	80-95	35-50	15-25
RcC—Richland loam, 8 to 15 percent slopes														
Richland	85	B	0-5	Loam	CL, CL-ML, ML	A-4, A-6	0	0-10	90-100	75-90	60-85	55-80	16-35	3-20
			5-55	Channery clay loam, loam, channery loam	GM, SC, SM, CL	A-6, A-7, A-4	0	5-15	80-95	70-90	55-90	35-75	30-45	9-18
			55-80	Silty clay loam, channery clay loam, very channery loam	GM, SM, CL, GC	A-4, A-6, A-7	0	5-15	65-90	40-85	40-85	35-75	30-45	9-18

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
RcD—Richland loam, 15 to 25 percent slopes														
Richland	85	B	0-5	Loam	CL, CL-ML, ML	A-4, A-6	0	0-10	90-100	75-90	60-85	55-80	16-35	3-20
			5-55	Channery clay loam, loam, channery loam	CL, GM, SC, SM	A-6, A-7, A-4	0	5-15	80-95	70-90	55-90	35-75	30-45	9-18
			55-80	Channery clay loam, very channery loam, silty clay loam	CL, GC, GM, SM	A-4, A-6, A-7	0	5-15	65-90	40-85	40-85	35-75	30-45	9-18
RcE—Richland moderately stony loam, 25 to 40 percent slopes														
Richland	80	B	0-5	Stony loam	CL, ML, SC, SM	A-6, A-2, A-4	0	5-20	80-90	60-80	50-75	30-70	16-35	3-20
			5-55	Loam, channery loam, channery clay loam	SC, SM, CL, GM	A-4, A-6, A-7	0	5-15	80-95	70-90	55-90	35-75	30-45	9-18
			55-80	Very channery loam, silty clay loam, channery clay loam	GM, SM, CL, GC	A-4, A-6, A-7	0	5-15	65-90	40-85	40-85	35-75	30-45	9-18

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
RhB—Richland silt loam, 3 to 8 percent slopes														
Richland	85	B	0-5	Silt loam	CL-ML, ML, CL	A-4, A-6	0	0-10	90-100	75-90	60-85	55-80	16-35	3-20
			5-55	Silt loam, clay loam, channery clay loam	SC, SM, CL, GM	A-7, A-4, A-6	0	5-15	80-95	70-90	55-90	35-75	30-45	9-18
			55-80	Channery clay loam, very channery loam, silty clay loam	GC, GM, SM, CL	A-4, A-6, A-7	0	5-15	65-90	40-85	40-85	35-75	30-45	9-18
RkC—Richland channery loam, 8 to 15 percent slopes														
Richland	80	B	0-4	Channery loam	CL, CL-ML, ML, SC	A-4, A-6	0	5-15	80-95	65-80	55-80	40-70	16-35	3-20
			4-55	Channery loam, clay loam, channery clay loam	SM, CL, ML, SC	A-7, A-4, A-6	0	5-15	80-95	65-95	55-90	35-75	30-45	9-18
			55-80	Very channery loam, channery loam, channery clay loam	SM, CL, GC, GM	A-4, A-6, A-7	0	5-15	65-90	40-85	40-85	35-75	30-45	9-18

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
RkD—Richland channery loam, 15 to 25 percent slopes														
Richland	80	B	0-5	Channery loam	ML, SC, CL, CL-ML	A-4, A-6	0	5-15	80-95	65-80	55-80	40-70	16-35	3-20
			5-58	Loam, clay loam, channery clay loam	CL, ML, SC, SM	A-4, A-6, A-7	0	5-15	80-95	65-95	55-90	35-75	30-45	9-18
			58-80	Channery clay loam, very channery loam, silty clay loam	CL, GC, GM, SM	A-4, A-6, A-7	0	5-15	65-90	40-85	40-85	35-75	30-45	9-18
RnC—Richland silt loam, 6 to 15 percent slopes														
Richland	85	B	0-12	Silt loam	CL-ML, ML, CL	A-4, A-6	0	0-10	90-100	80-95	70-95	50-90	16-35	3-20
			12-52	Silt loam, clay loam, gravelly clay loam	SM, CL, ML, SC	A-6, A-7, A-4	0	5-15	80-95	65-95	55-90	35-75	30-45	9-18
			52-80	Very gravelly loam, gravelly clay loam, gravelly loam	GC, GM, SM, CL	A-6, A-7, A-4	0	5-15	65-90	40-85	40-85	35-75	30-45	9-18

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
UpB—Upshur silt loam, 2 to 6 percent slopes														
Upshur	85	C	0-8	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	95-100	95-100	85-100	65-90	25-40	5-15
			8-39	Clay, silty clay	CL, MH, CH	A-7	0	0	95-100	95-100	90-100	85-100	45-70	20-40
			39-72	Silty clay loam, silty clay, clay	CH, CL, MH, ML	A-6, A-7	0	0	80-100	65-100	60-100	55-95	35-55	11-25
			72-77	Weathered bedrock	—	—	—	—	—	—	—	—	—	—
WgB—Wellston silt loam, 2 to 8 percent slopes														
Wellston	85	B	0-9	Silt loam	ML	A-4	0	0	95-100	90-100	85-100	70-95	25-35	3-10
			9-37	Silt loam, silty clay loam	CL-ML, CL	A-4, A-6	0	0-5	75-100	70-100	60-95	60-90	25-40	5-20
			37-47	Clay loam, silt loam, loam	CL-ML, SC, SC-SM, CL	A-4, A-6	0	0-10	65-90	65-90	60-90	40-65	20-35	5-15
			47-72	Weathered bedrock	—	—	—	—	—	—	—	—	—	—

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
WhB—Wellston silt loam, 3 to 8 percent slopes														
Wellston	85	B	0-8	Silt loam	ML	A-4	0	0	95-100	90-100	85-100	70-95	25-35	3-10
			8-29	Silt loam, silty clay loam	CL-ML, CL	A-6, A-4	0	0-5	75-100	70-100	60-95	60-90	25-40	5-20
			29-59	Very gravelly silt loam, loam, gravelly silt loam	SC-SM, CL, CL-ML, SC	A-4, A-6	0	0-10	65-90	65-90	60-90	40-65	20-35	5-15
			59-67	Weathered bedrock	—	—	—	—	—	—	—	—	—	—
			67-69	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—
WhC—Wellston silt loam, 8 to 15 percent slopes														
Wellston	75	B	0-8	Silt loam	ML	A-4	0	0	95-100	90-100	85-100	70-95	25-35	3-10
			8-29	Silt loam, silty clay loam	CL, CL-ML	A-4, A-6	0	0-5	75-100	70-100	60-95	60-90	25-40	5-20
			29-59	Loam, gravelly silt loam, very gravelly silt loam	SC, SC-SM, CL, CL-ML	A-6, A-4	0	0-10	65-90	65-90	60-90	40-65	20-35	5-15
			59-67	Weathered bedrock	—	—	—	—	—	—	—	—	—	—
			67-69	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
WjB—Westmore silt loam, 2 to 8 percent slopes														
Westmore	85	C	0-8	Silt loam	CL-ML, ML, CL	A-4	0	0	100	90-100	80-100	70-95	22-35	4-10
			8-26	Silty clay loam, silt loam	CL, ML	A-6, A-7	0	0-5	95-100	90-100	85-100	80-90	30-50	11-20
			26-64	Clay, silty clay, silty clay loam	CH, CL	A-6, A-7	0	0-15	80-100	65-95	60-90	55-90	38-70	18-40
			64-72	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—
WkB—Westmore silt loam, 3 to 8 percent slopes														
Westmore	80	C	0-8	Silt loam	CL-ML, ML, CL	A-4	0	0	100	90-100	80-100	70-95	22-35	4-10
			8-25	Silty clay loam, silt loam	CL, ML	A-7, A-6	0	0-5	95-100	90-100	85-100	80-90	30-50	11-20
			25-50	Silty clay, channery silty clay loam, clay	CH, CL	A-6, A-7	0	0-15	80-100	65-95	60-90	55-90	38-70	17-40
			50-61	Weathered bedrock	—	—	—	—	—	—	—	—	—	—

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
WkC—Westmore silt loam, 8 to 15 percent slopes														
Westmore	80	C	0-8	Silt loam	ML, CL, CL-ML	A-4	0	0	100	90-100	80-100	70-95	22-35	4-10
			8-25	Silty clay loam, silt loam	ML, CL	A-6, A-7	0	0-5	95-100	90-100	85-100	80-90	30-50	11-20
			25-50	Clay, silty clay, channery silty clay loam	CL, CH	A-6, A-7	0	0-15	80-100	65-95	60-90	55-90	38-70	17-40
			50-61	Weathered bedrock	—	—	—	—	—	—	—	—	—	—
WkD—Westmore silt loam, 15 to 25 percent slopes														
Westmore	85	C	0-8	Silt loam	CL, CL-ML, ML	A-4	0	0	100	90-100	80-100	70-95	22-35	4-10
			8-25	Silty clay loam, silt loam	CL, ML	A-6, A-7	0	0-5	95-100	90-100	85-100	80-90	30-50	11-20
			25-50	Clay, silty clay, channery silty clay loam	CH, CL	A-7, A-6	0	0-15	80-100	65-95	60-90	55-90	38-70	17-40
			50-61	Weathered bedrock	—	—	—	—	—	—	—	—	—	—

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
WIC—Westmoreland silt loam, 6 to 15 percent slopes														
Westmoreland	85	B	0-4	Silt loam	ML, CL	A-4, A-6	0	0	85-100	80-100	75-95	60-95	15-35	NP-10
			4-40	Channery silt loam, silt loam, channery loam	ML, CL, GC, GM	A-4, A-6, A-7	0	0-15	65-100	55-95	50-90	45-85	22-45	2-20
			40-50	Very channery loam, very channery silt loam, very channery clay loam	GM, SC, SM, GC	A-2, A-4, A-6, A-1	0	0-20	25-95	20-95	15-90	15-80	20-40	2-20
			50-52	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—
WmB—Westmoreland silt loam, 3 to 8 percent slopes														
Westmoreland	85	B	0-8	Silt loam	CL, ML	A-4	0	0	85-100	80-100	75-95	60-95	0-35	NP-10
			8-50	Silt loam, clay loam, channery clay loam	GM, ML, CL, GC	A-4, A-6, A-7	0	0-15	65-100	55-95	50-90	45-85	22-45	2-20
			50-52	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—
WmC—Westmoreland silt loam, 8 to 15 percent slopes														
Westmoreland	85	B	0-8	Silt loam	CL, ML	A-4	0	0	85-100	80-100	75-95	60-95	0-35	NP-10
			8-50	Clay loam, channery clay loam, silt loam	CL, GC, GM, ML	A-4, A-6, A-7	0	0-15	65-100	55-95	50-90	45-85	22-45	2-20
			50-52	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
WmD—Westmoreland silt loam, 15 to 25 percent slopes														
Westmoreland	85	B	0-8	Silt loam	CL, ML	A-4	0	0	85-100	80-100	75-95	60-95	0-35	NP-10
			8-50	Clay loam, channery clay loam, silt loam	ML, CL, GC, GM	A-4, A-6, A-7	0	0-15	65-100	55-95	50-90	45-85	22-45	2-20
			50-52	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—
WmE—Westmoreland silt loam, 25 to 40 percent slopes														
Westmoreland	80	B	0-8	Silt loam	CL, ML	A-4	0	0	85-100	80-100	75-95	60-95	0-35	NP-10
			8-50	Silt loam, clay loam, channery clay loam	GM, ML, CL, GC	A-7, A-4, A-6	0	0-15	65-100	55-95	50-90	45-85	22-45	2-20
			50-52	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—
WmF—Westmoreland silt loam, 40 to 70 percent slopes														
Westmoreland	85	B	0-8	Silt loam	CL, ML	A-4	0	0	85-100	80-100	75-95	60-95	0-35	NP-10
			8-50	Channery clay loam, silt loam, clay loam	CL, GC, GM, ML	A-4, A-6, A-7	0	0-15	65-100	55-95	50-90	45-85	22-45	2-20
			50-52	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
WnF—Westmoreland-Berks complex, 40 to 70 percent slopes														
Westmoreland	55	B	0-6	Silt loam	CL, ML	A-4, A-6	0	0	85-100	80-100	75-95	60-95	0-35	NP-10
			6-37	Silty clay loam, silt loam, channery silt loam	GM, ML, CL, GC	A-4, A-6, A-7	0	0-15	65-100	55-95	50-90	45-85	22-45	2-20
			37-46	Very channery loam, very channery silt loam, extremely channery silt loam	GC, GM, SC, SM	A-2, A-4, A-6, A-1	0	0-20	25-95	20-95	15-90	15-80	20-40	2-20
			46-48	Weathered bedrock	—	—	—	—	—	—	—	—	—	—
Berks	30	B	0-5	Channery silt loam	GC, GM, ML, SC	A-2, A-4	0	0-20	50-80	45-70	40-60	30-55	25-36	5-10
			5-23	Channery loam, very channery silt loam, extremely channery silt loam	SC, SM, GC, GM	A-2, A-4, A-1	0	0-30	40-80	35-70	25-60	20-45	25-36	5-10
			23-27	Very channery loam, extremely channery silt loam, channery loam	GC-GM, GM, SM	A-1, A-2	0	0-40	35-65	25-55	20-40	15-35	24-38	2-10
			27-31	Weathered bedrock	—	—	—	—	—	—	—	—	—	—

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
WoC—Westmoreland-Upshur complex, 8 to 15 percent slopes														
Westmoreland	45	B	0-8	Silt loam	ML, CL	A-4	0	0	85-100	80-100	75-95	60-95	0-35	NP-10
			8-50	Channery clay loam, silt loam, clay loam	CL, GC, GM, ML	A-7, A-4, A-6	0	0-15	65-100	55-95	50-90	45-85	22-45	2-20
			50-52	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—
Upshur	35	C	0-6	Silty clay loam	CL, ML	A-6, A-7	0	0	95-100	95-100	90-100	80-95	35-50	11-25
			6-28	Clay, silty clay	CL, MH, CH	A-7	0	0	95-100	95-100	90-100	85-100	45-70	18-40
			28-60	Silty clay, clay, silty clay loam	CL, MH, ML	A-7, A-6	0	0	80-100	65-100	60-100	55-95	35-55	11-25
WoD—Westmoreland-Upshur complex, 15 to 25 percent slopes														
Westmoreland	50	B	0-8	Silt loam	CL, ML	A-4	0	0	85-100	80-100	75-95	60-95	0-35	NP-10
			8-50	Silt loam, clay loam, channery clay loam	GM, ML, CL, GC	A-6, A-7, A-4	0	0-15	65-100	55-95	50-90	45-85	22-45	2-20
			50-52	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—
Upshur	30	C	0-6	Silty clay loam	CL, ML	A-7, A-6	0	0	95-100	95-100	90-100	80-95	35-50	11-25
			6-28	Silty clay, clay	CL, MH, CH	A-7	0	0	95-100	95-100	90-100	85-100	45-70	18-40
			28-60	Clay, silty clay loam, silty clay	CL, MH, ML	A-7, A-6	0	0	80-100	65-100	60-100	55-95	35-55	11-25

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
WrE—Westmoreland-Dekalb complex, 25 to 40 percent slopes														
Westmoreland	55	B	0-4	Loam	CL, ML	A-6, A-4	0	0	85-100	80-100	75-95	60-95	15-35	NP-10
			4-32	Loam, clay loam, channery clay loam	GM, ML, CL, GC	A-7, A-4, A-6	0	0-15	65-100	55-95	50-90	45-85	22-45	2-20
			32-48	Extremely channery loam, very channery loam, very channery silt loam	SM, GC, GM, SC	A-6, A-1, A-2, A-4	0	0-20	25-95	20-95	15-90	15-80	20-40	2-20
			48-50	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—
Dekalb	30	B	0-4	Channery fine sandy loam	SM, CL-ML, GM, ML	A-1, A-2, A-4	0	0-30	50-90	45-80	40-75	20-55	10-32	NP-10
			4-32	Channery sandy loam, very channery sandy loam, channery fine sandy loam	GM, ML, SM, GC-GM	A-1, A-2, A-4	0	5-40	50-85	40-80	40-75	20-55	15-32	NP-9
			32-37	Flaggy sandy loam, very flaggy loamy sand, extremely channery sandy loam	GC, GM, SC, SM	A-1, A-2, A-4	0	10-50	45-85	25-75	20-65	15-40	15-32	NP-9
			37-40	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
WrF—Westmoreland-Dekalb complex, 40 to 70 percent slopes														
Westmoreland	55	B	0-4	Loam	CL, ML	A-6, A-4	0	0	85-100	80-100	75-95	60-95	15-35	NP-10
			4-32	Loam, clay loam, channery clay loam	GM, ML, CL, GC	A-4, A-6, A-7	0	0-15	65-100	55-95	50-90	45-85	22-45	2-20
			32-48	Very channery silt loam, extremely channery loam, very channery loam	SM, GC, GM, SC	A-4, A-6, A-1, A-2	0	0-20	25-95	20-95	15-90	15-80	20-40	2-20
			48-50	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—
Dekalb	30	B	0-4	Channery fine sandy loam	SM, CL-ML, GM, ML	A-1, A-2, A-4	0	0-30	50-90	45-80	40-75	20-55	10-32	NP-10
			4-32	Channery fine sandy loam, channery sandy loam, very channery sandy loam	SM, GC-GM, GM, ML	A-2, A-4, A-1	0	5-40	50-85	40-80	40-75	20-55	15-32	NP-9
			32-37	Extremely channery sandy loam, flaggy sandy loam, very flaggy loamy sand	GM, SC, SM, GC	A-2, A-4, A-1	0	10-50	45-85	25-75	20-65	15-40	15-32	NP-9
			37-40	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—

Engineering Properties–Belmont County, Ohio														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*Pct*	*Pct*					*Pct*	
ZnB—Zanesville silt loam, 3 to 8 percent slopes														
Zanesville	80	C	0-8	Silt loam	CL, CL-ML, ML	A-6, A-4	0	0	95-100	95-100	90-100	80-100	25-40	4-15
			8-25	Silt loam, silty clay loam	CL, CL-ML	A-4, A-6	0	0	95-100	95-100	90-100	80-100	25-40	5-20
			25-46	Silt loam, silty clay loam	CL, CL-ML, ML	A-4, A-6	0	0-3	90-100	85-100	80-100	60-100	20-40	2-20
			46-59	Sandy clay loam, gravelly silty clay loam, channery clay loam	CL, GM, SC, SM	A-4, A-6, A-1-b, A-2	0	0-10	65-100	50-95	40-95	20-85	20-40	2-20
			59-61	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—
ZnC—Zanesville silt loam, 8 to 15 percent slopes														
Zanesville	80	C	0-8	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	95-100	95-100	90-100	80-100	25-40	4-15
			8-25	Silty clay loam, silt loam	CL, CL-ML	A-4, A-6	0	0	95-100	95-100	90-100	80-100	25-40	5-20
			25-46	Silt loam, silty clay loam	ML, CL, CL-ML	A-4, A-6	0	0-3	90-100	85-100	80-100	60-100	20-40	2-20
			46-59	Channery clay loam, sandy clay loam, gravelly silty clay loam	CL, GM, SC, SM	A-6, A-1-b, A-2, A-4	0	0-10	65-100	50-95	40-95	20-85	20-40	2-20
			59-61	Unweathered bedrock	—	—	—	—	—	—	—	—	—	—

Data Source Information

Soil Survey Area: Belmont County, Ohio
Survey Area Data: Version 11, Dec 20, 2013