



United States Department of Agriculture

Natural Resources
Conservation Service
4233 Bardstown Rd.,
Suite 100-A
Louisville, KY 40291

May 21, 2015

Ann Richard
Land Design & Development, Inc.
503 Washburn Avenue
Louisville, KY 40222

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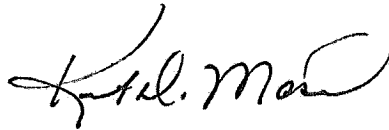
RE- Michaels Crossing Subdivision

Attached please find the soil and site evaluation report on the above referenced development proposal. The 46.8 acre parcel is currently being used for residential and open space purposes. A majority of the land is closely manicured with a predominance of fescue and bluegrass as the vegetative cover. The proposed development seeks to transform the site to 144 single family residential lots. The water resources on the property include a stream, Razor Branch which runs through the eastern quadrant of the property and two ponds, both of which are slated to remain as part of the development's open space.

There are some thin, shallow soils on the tract (Faywood, Shrouts, Caneyville and Beasley series) that have had their original surface layers removed by prior erosion activities. These fragile soils are very erodible once the protective surface covers are removed. These are also soils with significant clay based subsurface layers. The clays tend to erode easily because of poor infiltration, steeper slopes and the small particles detach easily and stay suspended in moving water. A sediment and erosion control plan should be put in place that recognizes the erodibility of these soils and the inability to successfully capture and suspend these small particles. The plan should recognize the value of phasing the amount of area disturbed, the value of maintaining existing ground covers and reestablishing vegetation or covers as soon as possible.

The riparian area along the creek has marginal supporting vegetation. To better support the changes associated with the anticipated runoff of the developed property, enhancing the buffer would be advisable. Preferably the buffer would consist of overhanging vegetation of trees and shrubs that would cool the stream and more developing root systems to anchor the soil along the stream corridor.

As plans are developed to address the site's natural resource concerns, it is critical to be considerate of the downstream impacts to both water quality and water quantity. If we can assist in this regard, please feel free to call on us.



Kurt D. Mason, CPESC
District Conservationist

Attachment (soils report)

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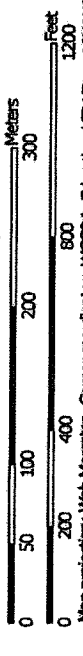
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Soil Map—Jefferson County, Kentucky
(Michaels Crossing)



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Map Scale: 1:4,580 if printed on A landscape (11" x 8.5") sheet.
Map projection: Web Mercator Corner coordinates: WGS84 Edge ticks: UTM Zone 16N WGS84



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

MAP LEGEND

- Area of Interest (AOI)
 - Area of Interest (AOI)
 - Soils
 - Soil Map Unit Polygons
 - Soil Map Unit Lines
 - Soil Map Unit Points
- Special Point Features
 - Blowout
 - Borrow Pit
 - Clay Spot
 - Closed Depression
 - Gravel Pit
 - Gravelly Spot
 - Landfill
 - Lava Flow
 - Marsh or swamp
 - Mine or Quarry
 - Miscellaneous Water
 - Perennial Water
 - Rock Outcrop
 - Saline Spot
 - Sandy Spot
 - Severely Eroded Spot
 - Sinkhole
 - Slide or Slip
 - Sodic Spot
- Water Features
 - Streams and Canals
- Transportation
 - Rails
 - Interstate Highways
 - US Routes
 - Major Roads
 - Local Roads
- Background
 - Aerial Photography
- Special Line Features
 - Spill Area
 - Stony Spot
 - Very Stony Spot
 - Wet Spot
 - Other

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MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Jefferson County, Kentucky
Survey Area Data: Version 13, Sep 17, 2014

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 24, 2014—Jul 5, 2014

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Jefferson County, Kentucky (KY111)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BeB	Beasley silt loam, 2 to 6 percent slopes	2.6	4.6%
BeC	Beasley silt loam, 6 to 12 percent slopes	16.3	30.2%
Bo	Boonewood silt loam, occasionally flooded	1.3	2.5%
CaD2	Carneyville silt loam, 12 to 25 percent slopes, eroded, very rocky	8.8	16.3%
CrA	Cridler silt loam, 0 to 2 percent slopes	0.1	0.1%
CrB	Cridler silt loam, 2 to 6 percent slopes	8.0	14.8%
FsF	Faywood-Shrouds-Beasley complex, 25 to 50 percent slopes	4.7	8.7%
NnB	Bedford silt loam, 2 to 6 percent slopes	4.5	8.3%
ShD3	Shrouds silt loam, 12 to 25 percent slopes, severely eroded, very rocky	6.4	11.9%
UIC	Urban land-Alic Udiarents complex, clayey substratum-over soft bedrock, 0 to 12 percent slopes	0.6	1.2%
UID	Urban land-Alic Udiarents complex, clayey substratum-over soft bedrock, 12 to 25 percent slopes	0.2	0.5%
UJC	Urban land-Alic Udiarents complex, clayey substratum-over hard bedrock, 0 to 12 percent slopes	0.2	0.4%
W	Water	0.3	0.5%
Totals for Area of Interest		53.9	100.0%

Water Features

This table gives estimates of various soil water features. The estimates are used in land use planning that involves engineering considerations.

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The four hydrologic soil groups are:

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.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas.

Surface runoff refers to the loss of water from an area by flow over the land surface. Surface runoff classes are based on slope, climate, and vegetative cover. The concept indicates relative runoff for very specific conditions. It is assumed that the surface of the soil is bare and that the retention of surface water resulting from irregularities in the ground surface is minimal. The classes are negligible, very low, low, medium, high, and very high.

The *months* in the table indicate the portion of the year in which a water table, ponding, and/or flooding is most likely to be a concern.

Water table refers to a saturated zone in the soil. The water features table indicates, by month, depth to the top (*upper limit*) and base (*lower limit*) of the saturated zone in most years. Estimates of the upper and lower limits are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors or mottles (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

Ponding is standing water in a closed depression. Unless a drainage system is installed, the water is removed only by percolation, transpiration, or evaporation. The table indicates *surface water depth* and the *duration and frequency* of ponding. Duration is expressed as *very brief* if less than 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as none, rare, occasional, and frequent. *None* means that ponding is not probable; *rare* that it is unlikely but possible under unusual weather conditions (the chance of ponding is nearly 0 percent to 5 percent in any year); *occasional* that it occurs, on the average, once or less in 2 years (the chance of ponding is 5 to 50 percent in any year); and *frequent* that it occurs, on the average, more than once in 2 years (the chance of ponding is more than 50 percent in any year).

Flooding is the temporary inundation of an area caused by overflowing streams, by runoff from adjacent slopes, or by tides. Water standing for short periods after rainfall or snowmelt is not considered flooding, and water standing in swamps and marshes is considered ponding rather than flooding.

Duration and frequency are estimated. Duration is expressed as *extremely brief* if 0.1 hour to 4 hours, *very brief* if 4 hours to 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as none, very rare, rare, occasional, frequent, and very frequent. *None* means that flooding is not probable; *very rare* that it is very unlikely but possible under extremely unusual weather conditions (the chance of flooding is less than 1 percent in any year); *rare* that it is unlikely but possible under unusual weather conditions (the chance of flooding is 1 to 5 percent in any year); *occasional* that it occurs infrequently under normal weather conditions (the chance of flooding is 5 to 50 percent in any year); *frequent* that it is likely to occur often under normal weather conditions (the chance of flooding is more than 50 percent in any year but is less than 50 percent in all months in any year); and *very frequent* that it is likely to occur very often under normal weather conditions (the chance of flooding is more than 50 percent in all months of any year).

The information is based on evidence in the soil profile, namely thin strata of gravel, sand, silt, or clay deposited by floodwater; irregular decrease in organic matter content with increasing depth; and little or no horizon development.

Also considered are local information about the extent and levels of flooding and the relation of each soil on the landscape to historic floods. Information on the extent of flooding based on soil data is less specific than that provided by detailed engineering surveys that delineate flood-prone areas at specific flood frequency levels.

Report--Water Features

Absence of an entry indicates that the data were not estimated. The dash indicates no documented presence.

Water Features--Jefferson County, Kentucky										
Map unit symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				<i>Ft</i>	<i>Ft</i>	<i>Ft</i>				
BeB--Beasley silt loam, 2 to 6 percent slopes										
Beasley	C	High	January	--	--	--	--	None	--	None
			February	--	--	--	--	None	--	None
			March	--	--	--	--	None	--	None
			April	--	--	--	--	None	--	None
			May	--	--	--	--	None	--	None
			June	--	--	--	--	None	--	None
			July	--	--	--	--	None	--	None
			August	--	--	--	--	None	--	None
			September	--	--	--	--	None	--	None
			October	--	--	--	--	None	--	None
			November	--	--	--	--	None	--	None
			December	--	--	--	--	None	--	None

Water Features--Jefferson County, Kentucky										
Map unit symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				<i>ft</i>	<i>ft</i>	<i>ft</i>				
BeC--Beasley silt loam, 6 to 12 percent slopes										
Beasley	C	Very high	January	--	--	--	--	None	--	None
			February	--	--	--	--	None	--	None
			March	--	--	--	--	None	--	None
			April	--	--	--	--	None	--	None
			May	--	--	--	--	None	--	None
			June	--	--	--	--	None	--	None
			July	--	--	--	--	None	--	None
			August	--	--	--	--	None	--	None
			September	--	--	--	--	None	--	None
			October	--	--	--	--	None	--	None
			November	--	--	--	--	None	--	None
			December	--	--	--	--	None	--	None

Water Features--Jefferson County, Kentucky										
Map unit symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				<i>Fl</i>	<i>Fl</i>	<i>Fl</i>				
CrB--Crider silt loam, 2 to 6 percent slopes										
Crider	B	Low	January	--	--	--	--	None	--	None
			February	--	--	--	--	None	--	None
			March	--	--	--	--	None	--	None
			April	--	--	--	--	None	--	None
			May	--	--	--	--	None	--	None
			June	--	--	--	--	None	--	None
			July	--	--	--	--	None	--	None
			August	--	--	--	--	None	--	None
			September	--	--	--	--	None	--	None
			October	--	--	--	--	None	--	None
			November	--	--	--	--	None	--	None
			December	--	--	--	--	None	--	None

Water Features--Jefferson County, Kentucky										
Map unit symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				<i>Ft</i>	<i>Ft</i>	<i>Ft</i>				
FaD--Faywood silt loam, 12 to 25 percent slopes										
Faywood	D	Medium	January	--	--	--	--	None	--	None
			February	--	--	--	--	None	--	None
			March	--	--	--	--	None	--	None
			April	--	--	--	--	None	--	None
			May	--	--	--	--	None	--	None
			June	--	--	--	--	None	--	None
			July	--	--	--	--	None	--	None
			August	--	--	--	--	None	--	None
			September	--	--	--	--	None	--	None
			October	--	--	--	--	None	--	None
			November	--	--	--	--	None	--	None
			December	--	--	--	--	None	--	None

Water Features--Jefferson County, Kentucky										
Map unit symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				<i>Fl</i>	<i>Fl</i>	<i>Fl</i>				
NnB--Bedford silt loam, 2 to 6 percent slopes										
Bedford	C/D	Medium	January	1.5-2.7	1.7-3.0	--	--	None	--	None
			February	1.5-2.7	1.7-3.0	--	--	None	--	None
			March	1.5-2.7	1.7-3.0	--	--	None	--	None
			April	1.5-2.7	1.7-3.0	--	--	None	--	None
			May	1.5-2.7	1.7-3.0	--	--	None	--	None
			June	--	--	--	--	None	--	None
			July	--	--	--	--	None	--	None
			August	--	--	--	--	None	--	None
			September	--	--	--	--	None	--	None
			October	--	--	--	--	None	--	None
			November	--	--	--	--	None	--	None
			December	1.5-2.7	1.7-3.0	--	--	None	--	None

Water Features--Oldham County, Kentucky										
Map unit symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				<i>Ft</i>	<i>Ft</i>					
BeC--Beasley silt loam, 6 to 12 percent slopes										
Beasley	C	High	January	--	--	--	--	None	--	None
			February	--	--	--	--	None	--	None
			March	--	--	--	--	None	--	None
			April	--	--	--	--	None	--	None
			May	--	--	--	--	None	--	None
			June	--	--	--	--	None	--	None
			July	--	--	--	--	None	--	None
			August	--	--	--	--	None	--	None
			September	--	--	--	--	None	--	None
			October	--	--	--	--	None	--	None
			November	--	--	--	--	None	--	None
			December	--	--	--	--	None	--	None

Water Features--Oldham County, Kentucky										
Map unit symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				<i>ft</i>	<i>ft</i>					
BfC3--Beasley silty clay loam, 6 to 12 percent slopes, severely eroded										
Beasley, severely eroded	C	High	January	--	--	--	--	None	--	None
			February	--	--	--	--	None	--	None
			March	--	--	--	--	None	--	None
			April	--	--	--	--	None	--	None
			May	--	--	--	--	None	--	None
			June	--	--	--	--	None	--	None
			July	--	--	--	--	None	--	None
			August	--	--	--	--	None	--	None
			September	--	--	--	--	None	--	None
			October	--	--	--	--	None	--	None
			November	--	--	--	--	None	--	None
			December	--	--	--	--	None	--	None

Water Features--Oldham County, Kentucky										
Map unit symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				<i>Ft</i>	<i>Ft</i>	<i>Ft</i>				
BsE--Brassfield-Beasley silt loams, 20 to 30 percent slopes										
Brassfield	C	Very high	January	--	--	--	--	None	--	None
			February	--	--	--	--	None	--	None
			March	--	--	--	--	None	--	None
			April	--	--	--	--	None	--	None
			May	--	--	--	--	None	--	None
			June	--	--	--	--	None	--	None
			July	--	--	--	--	None	--	None
			August	--	--	--	--	None	--	None
			September	--	--	--	--	None	--	None
			October	--	--	--	--	None	--	None
			November	--	--	--	--	None	--	None

Water Features--Oldham County, Kentucky										
Map unit symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				<i>ft</i>	<i>ft</i>					
			December	--	--	--	--	None	--	None
Beasley	C	Very high	January	--	--	--	--	None	--	None
			February	--	--	--	--	None	--	None
			March	--	--	--	--	None	--	None
			April	--	--	--	--	None	--	None
			May	--	--	--	--	None	--	None
			June	--	--	--	--	None	--	None
			July	--	--	--	--	None	--	None
			August	--	--	--	--	None	--	None
			September	--	--	--	--	None	--	None
			October	--	--	--	--	None	--	None
			November	--	--	--	--	None	--	None
			December	--	--	--	--	None	--	None

Water Features--Oldham County, Kentucky										
Map unit symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				<i>ft</i>	<i>ft</i>	<i>ft</i>				
CbD--Caneyville-Beasley rocky silt loams, 12 to 30 percent slopes										
Caneyville	C	High	January	—	—	—	—	None	—	None
			February	—	—	—	—	None	—	None
			March	—	—	—	—	None	—	None
			April	—	—	—	—	None	—	None
			May	—	—	—	—	None	—	None
			June	—	—	—	—	None	—	None
			July	—	—	—	—	None	—	None
			August	—	—	—	—	None	—	None
			September	—	—	—	—	None	—	None
			October	—	—	—	—	None	—	None
			November	—	—	—	—	None	—	None

Water Features--Oldham County, Kentucky										
Map unit symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				<i>ft</i>	<i>ft</i>	<i>ft</i>				
			December	--	--	--	--	None	--	None
Beasley	C	High	January	--	--	--	--	None	--	None
			February	--	--	--	--	None	--	None
			March	--	--	--	--	None	--	None
			April	--	--	--	--	None	--	None
			May	--	--	--	--	None	--	None
			June	--	--	--	--	None	--	None
			July	--	--	--	--	None	--	None
			August	--	--	--	--	None	--	None
			September	--	--	--	--	None	--	None
			October	--	--	--	--	None	--	None
			November	--	--	--	--	None	--	None
			December	--	--	--	--	None	--	None

Water Features--Oldham County, Kentucky										
Map unit symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				<i>Fl</i>	<i>Fl</i>	<i>Fl</i>				
CrB--Crider silt loam, 2 to 6 percent slopes										
Crider	B	Medium	January	--	--	--	--	None	--	None
			February	--	--	--	--	None	--	None
			March	--	--	--	--	None	--	None
			April	--	--	--	--	None	--	None
			May	--	--	--	--	None	--	None
			June	--	--	--	--	None	--	None
			July	--	--	--	--	None	--	None
			August	--	--	--	--	None	--	None
			September	--	--	--	--	None	--	None
			October	--	--	--	--	None	--	None
			November	--	--	--	--	None	--	None
			December	--	--	--	--	None	--	None

Water Features—Oldham County, Kentucky										
Map unit symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				<i>Fl</i>	<i>Fl</i>	<i>Fl</i>				
CyF—Cynthiana-Faywood-Beasley complex, 30 to 60 percent slopes										
Cynthiana	D	Very high	January	—	—	—	—	None	—	None
			February	—	—	—	—	None	—	None
			March	—	—	—	—	None	—	None
			April	—	—	—	—	None	—	None
			May	—	—	—	—	None	—	None
			June	—	—	—	—	None	—	None
			July	—	—	—	—	None	—	None
			August	—	—	—	—	None	—	None
			September	—	—	—	—	None	—	None
			October	—	—	—	—	None	—	None
			November	—	—	—	—	None	—	None

Water Features--Oldham County, Kentucky										
Map unit symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				<i>Fl</i>	<i>Ft</i>	<i>Fl</i>				
			December	---	---	---	---	None	---	None
Faywood	C	Very high	January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Beasley	C	Very high	January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None

Water Features--Oldham County, Kentucky										
Map unit symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				<i>Fl</i>	<i>Fl</i>	<i>Fl</i>				
			December	---	---	---	---	None	---	None
Ln--Linside silt loam										
Linside, frequently flooded	B/D	Low	January	1.5-3.0	>6.0	---	---	None	Brief (2 to 7 days)	Frequent
			February	1.5-3.0	>6.0	---	---	None	Brief (2 to 7 days)	Frequent
			March	1.5-3.0	>6.0	---	---	None	Brief (2 to 7 days)	Frequent
			April	1.5-3.0	>6.0	---	---	None	Brief (2 to 7 days)	Frequent
			May	---	---	---	---	None	Brief (2 to 7 days)	Frequent
			December	1.5-3.0	>6.0	---	---	None	---	---
No--Nolin silt loam, 0 to 2 percent slopes, frequently flooded										
Nolin, frequently flooded	B	Low	January	---	---	---	---	None	Brief (2 to 7 days)	Frequent
			February	---	---	---	---	None	Brief (2 to 7 days)	Frequent
			March	---	---	---	---	None	Brief (2 to 7 days)	Frequent
			April	---	---	---	---	None	Brief (2 to 7 days)	Frequent
			May	---	---	---	---	None	Brief (2 to 7 days)	Frequent
			November	---	---	---	---	None	Brief (2 to 7 days)	Frequent
			December	---	---	---	---	None	Brief (2 to 7 days)	Frequent

Data Source Information

Soil Survey Area: Jefferson County, Kentucky
Survey Area Data: Version 13, Sep 17, 2014

Hydrologic Soil Group and Surface Runoff

This table gives estimates of various soil water features. The estimates are used in land use planning that involves engineering considerations.

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The four hydrologic soil groups are:

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.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas.

Surface runoff refers to the loss of water from an area by flow over the land surface. Surface runoff classes are based on slope, climate, and vegetative cover. The concept indicates relative runoff for very specific conditions. It is assumed that the surface of the soil is bare and that the retention of surface water resulting from irregularities in the ground surface is minimal. The classes are negligible, very low, low, medium, high, and very high.

Report—Hydrologic Soil Group and Surface Runoff

Absence of an entry indicates that the data were not estimated. The dash indicates no documented presence.

Hydrologic Soil Group and Surface Runoff--Jefferson County, Kentucky			
Map symbol and soil name	Pct. of map unit	Surface Runoff	Hydrologic Soil Group
BeB—Beasley silt loam, 2 to 6 percent slopes			
Beasley	80	High	C

Hydrologic Soil Group and Surface Runoff--Jefferson County, Kentucky			
Map symbol and soil name	Pct. of map unit	Surface Runoff	Hydrologic Soil Group
BeC—Beasley silt loam, 6 to 12 percent slopes			
Beasley	80	Very high	C
Bo—Boonewood silt loam, occasionally flooded			
Boonewood, occasionally flooded	90	Low	C/D
CaD2—Caneyville silt loam, 12 to 25 percent slopes, eroded, very rocky			
Caneyville	80	Medium	D
CrA—Crider silt loam, 0 to 2 percent slopes			
Crider	90	Low	B
CrB—Crider silt loam, 2 to 6 percent slopes			
Crider	90	Low	B
FsF—Faywood-Shrouts-Beasley complex, 25 to 50 percent slopes			
Faywood	40	High	D
Shrouts	30	Very high	D
Beasley	25	High	C
NnB—Bedford silt loam, 2 to 6 percent slopes			
Bedford	85	Medium	C/D
ShD3—Shrouts silt loam, 12 to 25 percent slopes, severely eroded, very rocky			
Shrouts, severely eroded	75	Very high	D
UjC—Urban land-Alfic Udarents complex, clayey substratum-over soft bedrock, 0 to 12 percent slopes			
Urban land	60	Very high	—
Alfic udarents	40	Very high	D
UID—Urban land-Alfic Udarents complex, clayey substratum-over soft bedrock, 12 to 25 percent slopes			
Urban land	60	Very high	—
Alfic udarents	40	Very high	D
UjC—Urban land-Alfic Udarents complex, clayey substratum-over hard bedrock, 0 to 12 percent slopes			
Urban land	60	Very high	—
Alfic udarents	40	Very high	D
W—Water			
Water	100	—	—

Data Source Information

Soil Survey Area: Jefferson County, Kentucky
 Survey Area Data: Version 13, Sep 17, 2014

Map Unit Description (Brief, Generated)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this report, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

The Map Unit Description (Brief, Generated) report displays a generated description of the major soils that occur in a map unit. Descriptions of non-soil (miscellaneous areas) and minor map unit components are not included. This description is generated from the underlying soil attribute data.

Additional information about the map units described in this report is available in other Soil Data Mart reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the Soil Data Mart reports define some of the properties included in the map unit descriptions.

Report—Map Unit Description (Brief, Generated)

Jefferson County, Kentucky

Map Unit: BeB—Beasley silt loam, 2 to 6 percent slopes

Component: Beasley (80%)

The Beasley component makes up 80 percent of the map unit. Slopes are 2 to 6 percent. This component is on ridges on uplands. The parent material consists of clayey residuum weathered from calcareous shale and/or calcareous siltstone. Depth to a root restrictive layer, bedrock, paralithic, is 40 to 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent.

Component: Nicholson (8%)

Generated brief soil descriptions are created for major components. The Nicholson soil is a minor component.

Component: Faywood (7%)

Generated brief soil descriptions are created for major components. The Faywood soil is a minor component.

Component: Shrouts (5%)

Generated brief soil descriptions are created for major components. The Shrouts soil is a minor component.

Map Unit: BeC—Beasley silt loam, 6 to 12 percent slopes**Component: Beasley (80%)**

The Beasley component makes up 80 percent of the map unit. Slopes are 6 to 12 percent. This component is on ridges on uplands. The parent material consists of clayey residuum weathered from calcareous shale and/or calcareous siltstone. Depth to a root restrictive layer, bedrock, paralithic, is 40 to 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent.

Component: Nicholson (8%)

Generated brief soil descriptions are created for major components. The Nicholson soil is a minor component.

Component: Faywood (7%)

Generated brief soil descriptions are created for major components. The Faywood soil is a minor component.

Component: Shrouts (5%)

Generated brief soil descriptions are created for major components. The Shrouts soil is a minor component.

Map Unit: Bo—Boonewood silt loam, occasionally flooded**Component: Boonewood, occasionally flooded (90%)**

The Boonewood, occasionally flooded component makes up 90 percent of the map unit. Slopes are 0 to 4 percent. This component is on flood plains on valleys. The parent material consists of mixed fine-silty alluvium over limestone. Depth to a root restrictive layer, bedrock, lithic, is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is occasionally flooded. It is not ponded. A seasonal zone of water saturation is at 23 inches during January, February, March, April, May, November, December. Organic matter content in the surface horizon is about 4 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria.

Component: Nolin (4%)

Generated brief soil descriptions are created for major components. The Nolin soil is a minor component.

Component: Lindside (3%)

Generated brief soil descriptions are created for major components. The Lindside soil is a minor component.

Component: Newark (3%)

Generated brief soil descriptions are created for major components. The Newark soil is a minor component.

Map Unit: CaD2—Caneyville silt loam, 12 to 25 percent slopes, eroded, very rocky

Component: Caneyville (80%)

The Caneyville component makes up 80 percent of the map unit. Slopes are 12 to 25 percent. This component is on hills on karst uplands. The parent material consists of clayey residuum weathered from limestone. Depth to a root restrictive layer, bedrock, lithic, is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria.

Component: Beasley (7%)

Generated brief soil descriptions are created for major components. The Beasley soil is a minor component.

Component: Faywood (6%)

Generated brief soil descriptions are created for major components. The Faywood soil is a minor component.

Component: Rock outcrop (4%)

Generated brief soil descriptions are created for major components. The Rock outcrop soil is a minor component.

Component: Shrouts (3%)

Generated brief soil descriptions are created for major components. The Shrouts soil is a minor component.

Map Unit: CrA—Crider silt loam, 0 to 2 percent slopes**Component: Crider (90%)**

The Crider component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on ridges on karst uplands. The parent material consists of thin fine-silty loess over clayey residuum weathered from limestone and dolomite. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 1. This soil does not meet hydric criteria.

Component: Caneyville (7%)

Generated brief soil descriptions are created for major components. The Caneyville soil is a minor component.

Component: Nicholson (3%)

Generated brief soil descriptions are created for major components. The Nicholson soil is a minor component.

Map Unit: CrB—Crider silt loam, 2 to 6 percent slopes**Component: Crider (90%)**

The Crider component makes up 90 percent of the map unit. Slopes are 2 to 6 percent. This component is on ridges on karst uplands. The parent material consists of thin fine-silty loess over clayey residuum weathered from limestone and dolomite. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria.

Component: Caneyville (7%)

Generated brief soil descriptions are created for major components. The Caneyville soil is a minor component.

Component: Nicholson (3%)

Generated brief soil descriptions are created for major components. The Nicholson soil is a minor component.

Map Unit: FsF—Faywood-Shrouts-Beasley complex, 25 to 50 percent slopes**Component: Faywood (40%)**

The Faywood component makes up 40 percent of the map unit. Slopes are 25 to 50 percent. This component is on hills on uplands. The parent material consists of clayey residuum weathered from limestone and shale. Depth to a root restrictive layer, bedrock, lithic, is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria.

Component: Shrouts (30%)

The Shrouts component makes up 30 percent of the map unit. Slopes are 25 to 50 percent. This component is on hills on uplands. The parent material consists of clayey residuum weathered from calcareous shale and/or siltstone. Depth to a root restrictive layer, bedrock, paralithic, is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria.

Component: Beasley (25%)

The Beasley component makes up 25 percent of the map unit. Slopes are 25 to 50 percent. This component is on hills on uplands. The parent material consists of clayey residuum weathered from calcareous shale and/or calcareous siltstone. Depth to a root restrictive layer, bedrock, paralithic, is 40 to 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent.

Component: Caneyville (3%)

Generated brief soil descriptions are created for major components. The Caneyville soil is a minor component.

Component: Woolper (2%)

Generated brief soil descriptions are created for major components. The Woolper soil is a minor component.

Map Unit: NnB—Bedford silt loam, 2 to 6 percent slopes**Component: Bedford (85%)**

The Bedford component makes up 85 percent of the map unit. Slopes are 2 to 6 percent. This component is on hills, karst. The parent material consists of noncalcareous loess over loamy noncalcareous loess over clayey residuum. Depth to a root restrictive layer, fragipan, is 21 to 35 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 21 inches during January, February, March, April, May, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria.

Component: Crider (10%)

Generated brief soil descriptions are created for major components. The Crider soil is a minor component.

Component: Lawrence (5%)

Generated brief soil descriptions are created for major components. The Lawrence soil is a minor component.

Map Unit: ShD3—Shrouts silt loam, 12 to 25 percent slopes, severely eroded, very rocky**Component: Shrouts, severely eroded (75%)**

The Shrouts, severely eroded component makes up 75 percent of the map unit. Slopes are 12 to 25 percent. This component is on hills on uplands. The parent material consists of clayey residuum weathered from calcareous shale and/or siltstone. Depth to a root restrictive layer, bedrock, paralithic, is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria.

Component: Beasley (8%)

Generated brief soil descriptions are created for major components. The Beasley soil is a minor component.

Component: Faywood (7%)

Generated brief soil descriptions are created for major components. The Faywood soil is a minor component.

Component: Rock outcrop (5%)

Generated brief soil descriptions are created for major components. The Rock outcrop soil is a minor component.

Component: Caneyville (5%)

Generated brief soil descriptions are created for major components. The Caneyville soil is a minor component.

Map Unit: UiC—Urban land-Alfic Udarents complex, clayey substratum-over soft bedrock, 0 to 12 percent slopes

Component: Urban land (60%)

Generated brief soil descriptions are created for major soil components. The Urban land is a miscellaneous area.

Component: Alfic Udarents (40%)

The Alfic Udarents component makes up 40 percent of the map unit. Slopes are 0 to 12 percent. This component is on ridges on uplands. The parent material consists of clayey residuum weathered from calcareous shale and/or calcareous siltstone. Depth to a root restrictive layer, bedrock, paralithic, is 40 to 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 0 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent.

Map Unit: UiD—Urban land-Alfic Udarents complex, clayey substratum-over soft bedrock, 12 to 25 percent slopes

Component: Urban land (60%)

Generated brief soil descriptions are created for major soil components. The Urban land is a miscellaneous area.

Component: Alfic Udarents (40%)

The Alfic Udarents component makes up 40 percent of the map unit. Slopes are 12 to 25 percent. This component is on ridges on uplands. The parent material consists of clayey residuum weathered from calcareous shale and/or calcareous siltstone. Depth to a root restrictive layer, bedrock, paralithic, is 40 to 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 0 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent.

Map Unit: UjC—Urban land-Alfic Udarents complex, clayey substratum-over hard bedrock, 0 to 12 percent slopes

Component: Urban land (60%)

Generated brief soil descriptions are created for major soil components. The Urban land is a miscellaneous area.

Component: Alfic Udarents (40%)

The Alfic Udarents component makes up 40 percent of the map unit. Slopes are 0 to 12 percent. This component is on ridges on karst uplands. The parent material consists of thin fine-silty loess over clayey residuum weathered from limestone and dolomite. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 0 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

Map Unit: W—Water

Component: Water (100%)

Generated brief soil descriptions are created for major soil components. The Water is a miscellaneous area.

Data Source Information

Soil Survey Area: Jefferson County, Kentucky
Survey Area Data: Version 13, Sep 17, 2014

Selected Soil Interpretations

This report allows the customer to produce a report showing the results of the soil interpretation(s) of his or her choice. It is useful when a standard report that displays the results of the selected interpretation(s) is not available.

When customers select this report, they are presented with a list of interpretations with results for the selected map units. The customer may select up to three interpretations to be presented in table format.

For a description of the particular interpretations and their criteria, use the "Selected Survey Area Interpretation Descriptions" report.

Report—Selected Soil Interpretations

Selected Soil Interpretations—Jefferson County, Kentucky							
Map symbol and soil name	Pct. of map unit	Eng - dwellings with basements		Eng - lawn, landscape, golf fairway		Eng - local roads and streets	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
BeB—Beasley silt loam, 2 to 6 percent slopes							
Beasley	80	Somewhat limited		Somewhat limited		Very limited	
		Shrink-swell	0.50	Dusty	0.08	Low strength	1.00
						Shrink-swell	0.50
BeC—Beasley silt loam, 6 to 12 percent slopes							
Beasley	80	Somewhat limited		Somewhat limited		Very limited	
		Shrink-swell	0.50	Dusty	0.08	Low strength	1.00
		Slope	0.04	Slope	0.04	Shrink-swell	0.50
						Slope	0.04
Bo—Boonewood silt loam, occasionally flooded							
Boonewood, occasionally flooded	90	Very limited		Somewhat limited		Very limited	
		Flooding	1.00	Flooding	0.60	Flooding	1.00
		Depth to saturated zone	1.00	Low exchange capacity	0.50	Low strength	1.00
		Depth to hard bedrock	1.00	Depth to bedrock	0.46	Depth to hard bedrock	0.46
				Depth to saturated zone	0.28	Depth to saturated zone	0.28
				Droughty	0.16		

Selected Soil Interpretations--Jefferson County, Kentucky							
Map symbol and soil name	Pct. of map unit	Eng - dwellings with basements		Eng - lawn, landscape, golf fairway		Eng - local roads and streets	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
CaD2--Caneyville silt loam, 12 to 25 percent slopes, eroded, very rocky							
Caneyville	80	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Slope	1.00	Low strength	1.00
		Slope	1.00	Depth to bedrock	0.46	Slope	1.00
		Shrink-swell	0.50	Dusty	0.08	Shrink-swell	0.50
						Depth to hard bedrock	0.46
CrA--Crider silt loam, 0 to 2 percent slopes							
Crider	90	Not limited		Somewhat limited		Very limited	
				Low exchange capacity	0.50	Low strength	1.00
				Dusty	0.08		
CrB--Crider silt loam, 2 to 6 percent slopes							
Crider	90	Not limited		Somewhat limited		Very limited	
				Low exchange capacity	0.50	Low strength	1.00
				Dusty	0.08		
FsF--Faywood-Shrouts-Beasley complex, 25 to 50 percent slopes							
Faywood	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	1.00	Depth to bedrock	0.54	Low strength	1.00
		Shrink-swell	0.50	Dusty	0.08	Depth to hard bedrock	0.54
						Shrink-swell	0.50
Shrouts	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Depth to bedrock	0.10	Low strength	1.00
		Depth to soft bedrock	0.10	Dusty	0.08	Shrink-swell	0.50
Beasley	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Dusty	0.08	Low strength	1.00
						Shrink-swell	0.50

Selected Soil Interpretations--Jefferson County, Kentucky							
Map symbol and soil name	Pct. of map unit	Eng - dwellings with basements		Eng - lawn, landscape, golf fairway		Eng - local roads and streets	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
NnB--Bedford silt loam, 2 to 6 percent slopes							
Bedford	85	Very limited		Somewhat limited		Very limited	
		Depth to saturated zone	1.00	Low exchange capacity	0.75	Depth to thin cemented pan	1.00
		Depth to thin cemented pan	1.00	Depth to saturated zone	0.43	Frost action	1.00
		Shrink-swell	0.23	Dusty	0.07	Low strength	1.00
						Shrink-swell	0.50
						Depth to saturated zone	0.43
ShD3--Shrouts silt loam, 12 to 25 percent slopes, severely eroded, very rocky							
Shrouts, severely eroded	75	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Low strength	1.00
		Shrink-swell	0.50	Depth to bedrock	0.10	Slope	1.00
		Depth to soft bedrock	0.10	Dusty	0.08	Shrink-swell	0.50
Uic--Urban land-Alfic Udarents complex, clayey substratum-over soft bedrock, 0 to 12 percent slopes							
Urban land	60	Not rated		Not rated		Not rated	
Alfic udarents	40	Somewhat limited		Very limited		Very limited	
		Shrink-swell	0.50	Too dense	1.00	Low strength	1.00
				Too clayey	1.00	Shrink-swell	0.50
				Dusty	0.08		
				Large stones content	0.01		

Selected Soil Interpretations--Jefferson County, Kentucky							
Map symbol and soil name	Pct. of map unit	Eng - dwellings with basements		Eng - lawn, landscape, golf fairway		Eng - local roads and streets	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
U1D—Urban land-Alfic Udarents complex, clayey substratum-over soft bedrock, 12 to 25 percent slopes							
Urban land	60	Not rated		Not rated		Not rated	
Alfic udarents	40	Very limited		Very limited		Very limited	
		Slope	1.00	Too dense	1.00	Low strength	1.00
		Shrink-swell	0.50	Slope	1.00	Slope	1.00
				Too clayey	1.00	Shrink-swell	0.50
				Dusty	0.08		
				Large stones content	0.01		
U1C—Urban land-Alfic Udarents complex, clayey substratum-over hard bedrock, 0 to 12 percent slopes							
Urban land	60	Not rated		Not rated		Not rated	
Alfic udarents	40	Somewhat limited		Very limited		Very limited	
		Shrink-swell	0.09	Too dense	1.00	Low strength	1.00
				Low exchange capacity	0.50	Shrink-swell	0.01
				Dusty	0.08		
W—Water							
Water	100	Not rated		Not rated		Not rated	

Data Source Information

Soil Survey Area: Jefferson County, Kentucky
 Survey Area Data: Version 13, Sep 17, 2014

Selected Soil Interpretations

This report allows the customer to produce a report showing the results of the soil interpretation(s) of his or her choice. It is useful when a standard report that displays the results of the selected interpretation(s) is not available.

When customers select this report, they are presented with a list of interpretations with results for the selected map units. The customer may select up to three interpretations to be presented in table format.

For a description of the particular interpretations and their criteria, use the "Selected Survey Area Interpretation Descriptions" report.

Report—Selected Soil Interpretations

Selected Soil Interpretations--Jefferson County, Kentucky							
Map symbol and soil name	Pct. of map unit	Eng - dwellings w/o basements		Eng - shallow excavations		Eng - small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
BeB—Beasley silt loam, 2 to 6 percent slopes							
Beasley	80	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Too clayey	0.13	Shrink-swell	0.50
				Dusty	0.08		
				Unstable excavation walls	0.01		
BeC—Beasley silt loam, 6 to 12 percent slopes							
Beasley	80	Somewhat limited		Somewhat limited		Very limited	
		Shrink-swell	0.50	Too clayey	0.13	Slope	1.00
		Slope	0.04	Dusty	0.08	Shrink-swell	0.50
				Slope	0.04		
				Unstable excavation walls	0.01		

Selected Soil Interpretations--Jefferson County, Kentucky							
Map symbol and soil name	Pct. of map unit	Eng - dwellings w/o basements		Eng - shallow excavations		Eng - small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Bo--Boonewood silt loam, occasionally flooded							
Boonewood, occasionally flooded	90	Very limited		Very limited		Very limited	
		Flooding	1.00	Depth to hard bedrock	1.00	Flooding	1.00
		Depth to saturated zone	0.56	Depth to saturated zone	1.00	Depth to saturated zone	0.56
		Depth to hard bedrock	0.46	Flooding	0.60	Depth to hard bedrock	0.46
				Dusty	0.07		
				Unstable excavation walls	0.01		
CaD2--Caneyville silt loam, 12 to 25 percent slopes, eroded, very rocky							
Caneyville	80	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Shrink-swell	0.50	Slope	1.00	Shrink-swell	0.50
		Depth to hard bedrock	0.46	Too clayey	0.50	Depth to hard bedrock	0.46
				Dusty	0.08		
				Unstable excavation walls	0.01		
CrA--Crider silt loam, 0 to 2 percent slopes							
Crider	90	Not limited		Somewhat limited		Not limited	
				Dusty	0.08		
				Unstable excavation walls	0.01		
CrB--Crider silt loam, 2 to 6 percent slopes							
Crider	90	Not limited		Somewhat limited		Not limited	
				Dusty	0.08		
				Unstable excavation walls	0.01		

Selected Soil Interpretations--Jefferson County, Kentucky							
Map symbol and soil name	Pct. of map unit	Eng - dwellings w/o basements		Eng - shallow excavations		Eng - small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
FsF--Faywood-Shrouts-Beasley complex, 25 to 50 percent slopes							
Faywood	40	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Depth to hard bedrock	0.54	Slope	1.00	Depth to hard bedrock	0.54
		Shrink-swell	0.50	Dusty	0.08	Shrink-swell	0.50
				Too clayey	0.02		
				Unstable excavation walls	0.01		
Shrouts	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Depth to soft bedrock	0.10	Shrink-swell	0.50
				Too clayey	0.08		
				Dusty	0.08		
				Unstable excavation walls	0.01		
Beasley	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Too clayey	0.13	Shrink-swell	0.50
				Dusty	0.08		
				Unstable excavation walls	0.01		
NnB--Bedford silt loam, 2 to 6 percent slopes							
Bedford	85	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.77	Depth to thin cemented pan	1.00	Depth to thin cemented pan	1.00
		Depth to thin cemented pan	0.50	Depth to saturated zone	1.00	Depth to saturated zone	0.77
		Shrink-swell	0.50	Too clayey	1.00	Shrink-swell	0.50
		Depth to thick cemented pan	0.10	Dusty	0.07	Depth to thick cemented pan	0.10
				Unstable excavation walls	0.01		

Selected Soil Interpretations--Jefferson County, Kentucky							
Map symbol and soil name	Pct. of map unit	Eng - dwellings w/o basements		Eng - shallow excavations		Eng - small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
ShD3—Shrouts silt loam, 12 to 25 percent slopes, severely eroded, very rocky							
Shrouts, severely eroded	75	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Depth to soft bedrock	0.10	Shrink-swell	0.50
				Too clayey	0.08		
				Dusty	0.08		
				Unstable excavation walls	0.01		
UIC—Urban land-Alfic Udarents complex, clayey substratum-over soft bedrock, 0 to 12 percent slopes							
Urban land	60	Not rated		Not rated		Not rated	
Alfic udarents	40	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Too clayey	0.13	Slope	0.50
				Dusty	0.08	Shrink-swell	0.50
				Unstable excavation walls	0.01		
UID—Urban land-Alfic Udarents complex, clayey substratum-over soft bedrock, 12 to 25 percent slopes							
Urban land	60	Not rated		Not rated		Not rated	
Alfic udarents	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Too clayey	0.13	Shrink-swell	0.50
				Dusty	0.08		
				Unstable excavation walls	0.01		

Selected Soil Interpretations--Jefferson County, Kentucky							
Map symbol and soil name	Pct. of map unit	Eng - dwellings w/o basements		Eng - shallow excavations		Eng - small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
UjC--Urban land-Alfic Udarents complex, clayey substratum-over hard bedrock, 0 to 12 percent slopes							
Urban land	60	Not rated		Not rated		Not rated	
Alfic udarents	40	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.01	Too clayey	0.50	Slope	0.50
				Dusty	0.08	Shrink-swell	0.01
				Unstable excavation walls	0.01		
W--Water							
Water	100	Not rated		Not rated		Not rated	

Data Source Information

Soil Survey Area: Jefferson County, Kentucky
 Survey Area Data: Version 13, Sep 17, 2014

Hydrologic Soil Group and Surface Runoff

This table gives estimates of various soil water features. The estimates are used in land use planning that involves engineering considerations.

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The four hydrologic soil groups are:

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.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas.

Surface runoff refers to the loss of water from an area by flow over the land surface. Surface runoff classes are based on slope, climate, and vegetative cover. The concept indicates relative runoff for very specific conditions. It is assumed that the surface of the soil is bare and that the retention of surface water resulting from irregularities in the ground surface is minimal. The classes are negligible, very low, low, medium, high, and very high.

Report—Hydrologic Soil Group and Surface Runoff

Absence of an entry indicates that the data were not estimated. The dash indicates no documented presence.

Hydrologic Soil Group and Surface Runoff--Jefferson County, Kentucky			
Map symbol and soil name	Pct. of map unit	Surface Runoff	Hydrologic Soil Group
BeB—Beasley silt loam, 2 to 6 percent slopes			
Beasley	80	High	C

Hydrologic Soil Group and Surface Runoff—Jefferson County, Kentucky			
Map symbol and soil name	Pct. of map unit	Surface Runoff	Hydrologic Soil Group
BeC—Beasley silt loam, 6 to 12 percent slopes			
Beasley	80	Very high	C
Bo—Boonewood silt loam, occasionally flooded			
Boonewood, occasionally flooded	90	Low	C/D
CaD2—Caneyville silt loam, 12 to 25 percent slopes, eroded, very rocky			
Caneyville	80	Medium	D
CrA—Crider silt loam, 0 to 2 percent slopes			
Crider	90	Low	B
CrB—Crider silt loam, 2 to 6 percent slopes			
Crider	90	Low	B
FsF—Faywood-Shrouts-Beasley complex, 25 to 50 percent slopes			
Faywood	40	High	D
Shrouts	30	Very high	D
Beasley	25	High	C
NnB—Bedford silt loam, 2 to 6 percent slopes			
Bedford	85	Medium	C/D
ShD3—Shrouts silt loam, 12 to 25 percent slopes, severely eroded, very rocky			
Shrouts, severely eroded	75	Very high	D
UjC—Urban land-Alfic Udarents complex, clayey substratum-over soft bedrock, 0 to 12 percent slopes			
Urban land	60	Very high	—
Alfic udarents	40	Very high	D
UjD—Urban land-Alfic Udarents complex, clayey substratum-over soft bedrock, 12 to 25 percent slopes			
Urban land	60	Very high	—
Alfic udarents	40	Very high	D
UjC—Urban land-Alfic Udarents complex, clayey substratum-over hard bedrock, 0 to 12 percent slopes			
Urban land	60	Very high	—
Alfic udarents	40	Very high	D
W—Water			
Water	100	—	—

Data Source Information

Soil Survey Area: Jefferson County, Kentucky
 Survey Area Data: Version 13, Sep 17, 2014