

Table ENG-4. - Building Site Development

Frederick County, Virginia

The information in this table indicates the dominant soil condition, but does not eliminate the need for onsite investigation. The numbers in the value column range from 0.01 to 1.00. The larger the value, the greater the potential limitation. Limiting features in this report are limited to the top 5 limitations. Additional limitations may exist.

Map Symbol and Soil Name	Pct of Map Unit	Local Roads and Streets		Shallow Excavations		Lawns and Landscaping	
		Rating Class and Limiting Features	Value	Rating Class and Limiting Features	Value	Rating Class and Limiting Features	Value
1B:							
Berks	85	Not limited		Somewhat limited		Somewhat limited	
				Depth to soft bedrock	0.50	Depth to bedrock	0.50
				Cutbanks cave	0.10	Droughty	0.49
						Content of large stones	0.16
1C:							
Berks	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.37	Depth to soft bedrock	0.50	Depth to bedrock	0.50
				Slope	0.37	Droughty	0.49
				Cutbanks cave	0.10	Slope	0.37
2:							
Birdsboro	85	Somewhat limited		Somewhat limited		Not limited	
		Frost action	0.50	Depth to saturated zone	0.61		
		Flooding	0.40	Cutbanks cave	0.10		
3B:							
Blairton	75	Very limited		Very limited		Somewhat limited	
		Frost action	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.94
		Depth to saturated zone	0.94	Cutbanks cave	0.10	Depth to bedrock	0.06
				Depth to soft bedrock	0.06		
3C:							
Blairton	75	Very limited		Very limited		Somewhat limited	
		Frost action	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.94
		Depth to saturated zone	0.94	Slope	0.37	Slope	0.37
		Slope	0.37	Cutbanks cave	0.10	Depth to bedrock	0.06
4B:							
Buchanan	80	Somewhat limited		Very limited		Somewhat limited	
		Depth to thick cemented pan	0.80	Depth to thick cemented pan	1.00	Depth to cemented pan	0.79
		Frost action	0.50	Cutbanks cave	1.00	Droughty	0.69
		Depth to saturated zone	0.48	Depth to saturated zone	1.00	Depth to saturated zone	0.48
4C:							
Buchanan	80	Somewhat limited		Very limited		Somewhat limited	
		Depth to thick cemented pan	0.80	Depth to thick cemented pan	1.00	Depth to cemented pan	0.79
		Frost action	0.50	Cutbanks cave	1.00	Droughty	0.69
		Depth to saturated zone	0.48	Depth to saturated zone	1.00	Depth to saturated zone	0.48

Table ENG-4. - Building Site Development - Continued

Frederick County, Virginia

Map Symbol and Soil Name	Pct of Map Unit	Local Roads and Streets		Shallow Excavations		Lawns and Landscaping	
		Rating Class and Limiting Features	Value	Rating Class and Limiting Features	Value	Rating Class and Limiting Features	Value
5B:							
Carbo	85	Very limited		Very limited		Somewhat limited	
		Low strength	1.00	Depth to hard bedrock	1.00	Depth to bedrock	0.80
		Shrink-swell	1.00	Too clayey	1.00		
		Depth to hard bedrock	0.79	Cutbanks cave	0.10		
5C:							
Carbo	85	Very limited		Very limited		Somewhat limited	
		Low strength	1.00	Depth to hard bedrock	1.00	Depth to bedrock	0.80
		Shrink-swell	1.00	Too clayey	1.00	Slope	0.37
		Depth to hard bedrock	0.79	Slope	0.37		
6C:							
Carbo	50	Very limited		Very limited		Somewhat limited	
		Low strength	1.00	Depth to hard bedrock	1.00	Depth to bedrock	0.80
		Shrink-swell	1.00	Too clayey	1.00	Slope	0.16
		Depth to hard bedrock	0.79	Slope	0.16		
Oaklet	45	Very limited		Very limited		Somewhat limited	
		Low strength	1.00	Too clayey	1.00	Slope	0.04
		Shrink-swell	1.00	Cutbanks cave	0.10		
		Frost action	0.50	Slope	0.04		
Rock outcrop	3	Not Rated		Not Rated		Not Rated	
7C:							
Carbo	35	Very limited		Very limited		Somewhat limited	
		Low strength	1.00	Depth to hard bedrock	1.00	Depth to bedrock	0.80
		Shrink-swell	1.00	Too clayey	1.00	Slope	0.16
		Depth to hard bedrock	0.79	Slope	0.16		
Oaklet	30	Very limited		Very limited		Somewhat limited	
		Low strength	1.00	Too clayey	1.00	Slope	0.04
		Shrink-swell	1.00	Cutbanks cave	0.10		
		Frost action	0.50	Slope	0.04		
Rock outcrop	25	Not Rated		Not Rated		Not Rated	
8B:							
Chilhowie	80	Very limited		Very limited		Somewhat limited	
		Shrink-swell	1.00	Depth to hard bedrock	1.00	Depth to bedrock	0.71
		Low strength	1.00	Too clayey	0.88	Droughty	0.25
		Depth to hard bedrock	0.71	Cutbanks cave	0.10		
8C:							
Chilhowie	75	Very limited		Very limited		Somewhat limited	
		Shrink-swell	1.00	Depth to hard bedrock	1.00	Depth to bedrock	0.71
		Low strength	1.00	Too clayey	0.88	Slope	0.37
		Depth to hard bedrock	0.71	Slope	0.37	Droughty	0.25

9B:

Table ENG-4. - Building Site Development - Continued

Frederick County, Virginia

Map Symbol and Soil Name	Pct of Map Unit	Local Roads and Streets		Shallow Excavations		Lawns and Landscaping	
		Rating Class and Limiting Features	Value	Rating Class and Limiting Features	Value	Rating Class and Limiting Features	Value
9B:							
Clearbrook	80	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Shrink-swell	0.50	Depth to soft bedrock	0.71	Droughty	0.73
		Frost action	0.50	Content of large stones	0.20	Depth to bedrock	0.71
9C:							
Clearbrook	75	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Shrink-swell	0.50	Depth to soft bedrock	0.71	Droughty	0.73
		Frost action	0.50	Slope	0.37	Depth to bedrock	0.71
10:							
Craigsville	85	Very limited		Somewhat limited		Very limited	
		Flooding	1.00	Flooding	0.80	Flooding	1.00
		Content of large stones	0.57	Content of large stones	0.57	Content of large stones	0.88
		Frost action	0.50	Cutbanks cave	0.10	Droughty	0.56
11C:							
Dekalb	80	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.37	Depth to hard bedrock	1.00	Slope	0.37
		Depth to hard bedrock	0.10	Slope	0.37	Gravel content	0.30
				Cutbanks cave	0.10	Depth to bedrock	0.10
12E:							
Dekalb	80	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Depth to hard bedrock	0.10	Slope	1.00	Gravel content	0.30
				Cutbanks cave	0.10	Depth to bedrock	0.10
13B:							
Frankstown	75	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Too clayey	0.13	Gravel content	0.55
		Shrink-swell	0.50	Cutbanks cave	0.10	Droughty	<0.01
		Frost action	0.50				
13C:							
Frankstown	75	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Slope	0.37	Gravel content	0.55
		Shrink-swell	0.50	Too clayey	0.13	Slope	0.37
		Frost action	0.50	Cutbanks cave	0.10	Droughty	<0.01
13D:							

Table ENG-4. - Building Site Development - Continued

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Map Symbol and Soil Name	Pct of Map Unit	Local Roads and Streets		Shallow Excavations		Lawns and Landscaping	
		Rating Class and Limiting Features	Value	Rating Class and Limiting Features	Value	Rating Class and Limiting Features	Value
13D:							
Frankstown	70	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Too clayey	0.13	Gravel content	0.55
		Shrink-swell	0.50	Cutbanks cave	0.10	Droughty	<0.01
13E:							
Frankstown	70	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Too clayey	0.13	Gravel content	0.55
		Shrink-swell	0.50	Cutbanks cave	0.10	Droughty	<0.01
14B:							
Frederick	45	Very limited		Very limited		Not limited	
		Shrink-swell	1.00	Too clayey	1.00		
		Low strength	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
Poplimento	40	Very limited		Somewhat limited		Not limited	
		Shrink-swell	1.00	Too clayey	0.13		
		Low strength	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
14C:							
Frederick	45	Very limited		Very limited		Somewhat limited	
		Shrink-swell	1.00	Too clayey	1.00	Slope	0.37
		Low strength	1.00	Slope	0.37		
		Frost action	0.50	Cutbanks cave	0.10		
Poplimento	40	Very limited		Somewhat limited		Somewhat limited	
		Shrink-swell	1.00	Slope	0.37	Slope	0.37
		Low strength	1.00	Too clayey	0.13		
		Frost action	0.50	Cutbanks cave	0.10		
14D:							
Frederick	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	1.00	Too clayey	1.00		
		Low strength	1.00	Cutbanks cave	0.10		
Poplimento	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	1.00	Too clayey	0.13		
		Low strength	1.00	Cutbanks cave	0.10		
15C:							
Frederick	55	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Too clayey	1.00	Gravel content	1.00
		Low strength	1.00	Slope	0.37	Slope	0.37
		Frost action	0.50	Cutbanks cave	0.10		

Table ENG-4. - Building Site Development - Continued

Frederick County, Virginia

Map Symbol and Soil Name	Pct of Map Unit	Local Roads and Streets		Shallow Excavations		Lawns and Landscaping	
		Rating Class and Limiting Features	Value	Rating Class and Limiting Features	Value	Rating Class and Limiting Features	Value
15C:							
Poplimento	30	Very limited		Somewhat limited		Very limited	
		Shrink-swell	1.00	Slope	0.37	Gravel content	1.00
		Low strength	1.00	Too clayey	0.13	Slope	0.37
		Frost action	0.50	Cutbanks cave	0.10		
15D:							
Frederick	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	1.00	Too clayey	1.00	Gravel content	1.00
		Low strength	1.00	Cutbanks cave	0.10		
Poplimento	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	1.00	Too clayey	0.13	Gravel content	1.00
		Low strength	1.00	Cutbanks cave	0.10		
15E:							
Frederick	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	1.00	Too clayey	1.00	Gravel content	1.00
		Low strength	1.00	Cutbanks cave	0.10		
Poplimento	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	1.00	Too clayey	0.13	Gravel content	1.00
		Low strength	1.00	Cutbanks cave	0.10		
16B:							
Frederick	40	Very limited		Very limited		Not limited	
		Shrink-swell	1.00	Too clayey	1.00		
		Low strength	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
Poplimento	35	Very limited		Somewhat limited		Not limited	
		Shrink-swell	1.00	Too clayey	0.13		
		Low strength	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
Rock outcrop	3	Not Rated		Not Rated		Not Rated	
16C:							
Frederick	45	Very limited		Very limited		Somewhat limited	
		Shrink-swell	1.00	Too clayey	1.00	Slope	0.37
		Low strength	1.00	Slope	0.37		
		Frost action	0.50	Cutbanks cave	0.10		

Table ENG-4. - Building Site Development - Continued

Frederick County, Virginia

Map Symbol and Soil Name	Pct of Map Unit	Local Roads and Streets		Shallow Excavations		Lawns and Landscaping	
		Rating Class and Limiting Features	Value	Rating Class and Limiting Features	Value	Rating Class and Limiting Features	Value
16C:							
Poplimento	35	Very limited		Somewhat limited		Somewhat limited	
		Shrink-swell	1.00	Slope	0.37	Slope	0.37
		Low strength	1.00	Too clayey	0.13		
		Frost action	0.50	Cutbanks cave	0.10		
Rock outcrop	3	Not Rated		Not Rated		Not Rated	
16D:							
Frederick	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	1.00	Too clayey	1.00		
		Low strength	1.00	Cutbanks cave	0.10		
Poplimento	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	1.00	Too clayey	0.13		
		Low strength	1.00	Cutbanks cave	0.10		
Rock outcrop	3	Not Rated		Not Rated		Not Rated	
17C:							
Frederick	30	Very limited		Very limited		Somewhat limited	
		Shrink-swell	1.00	Too clayey	1.00	Slope	0.04
		Low strength	1.00	Cutbanks cave	0.10		
		Frost action	0.50	Slope	0.04		
Poplimento	25	Very limited		Somewhat limited		Somewhat limited	
		Shrink-swell	1.00	Too clayey	0.13	Slope	0.04
		Low strength	1.00	Cutbanks cave	0.10		
		Frost action	0.50	Slope	0.04		
Rock outcrop	25	Not Rated		Not Rated		Not Rated	
17E:							
Frederick	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	1.00	Too clayey	1.00		
		Low strength	1.00	Cutbanks cave	0.10		
Poplimento	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	1.00	Too clayey	0.13		
		Low strength	1.00	Cutbanks cave	0.10		
Rock outcrop	25	Not Rated		Not Rated		Not Rated	
18B:							

Table ENG-4. - Building Site Development - Continued

Frederick County, Virginia

Map Symbol and Soil Name	Pct of Map Unit	Local Roads and Streets		Shallow Excavations		Lawns and Landscaping	
		Rating Class and Limiting Features	Value	Rating Class and Limiting Features	Value	Rating Class and Limiting Features	Value
18B:							
Gainesboro	45	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Depth to hard bedrock	1.00	Droughty	0.84
		Depth to hard bedrock	0.29	Cutbanks cave	0.10	Depth to bedrock	0.29
						Gravel content	0.08
Lehew	30	Somewhat limited		Very limited		Somewhat limited	
		Content of large stones	0.53	Depth to hard bedrock	1.00	Droughty	0.49
		Depth to hard bedrock	0.10	Content of large stones	0.53	Depth to bedrock	0.10
				Cutbanks cave	0.10	Content of large stones	0.03
18C:							
Gainesboro	40	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Depth to hard bedrock	1.00	Droughty	0.84
		Slope	0.37	Slope	0.37	Slope	0.37
		Depth to hard bedrock	0.29	Cutbanks cave	0.10	Depth to bedrock	0.29
Lehew	35	Somewhat limited		Very limited		Somewhat limited	
		Content of large stones	0.53	Depth to hard bedrock	1.00	Droughty	0.49
		Slope	0.37	Content of large stones	0.53	Slope	0.37
		Depth to hard bedrock	0.10	Slope	0.37	Depth to bedrock	0.10
18D:							
Gainesboro	40	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00	Droughty	0.84
		Depth to hard bedrock	0.29	Cutbanks cave	0.10	Depth to bedrock	0.29
Lehew	40	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Content of large stones	0.53	Slope	1.00	Droughty	0.49
		Depth to hard bedrock	0.10	Content of large stones	0.53	Depth to bedrock	0.10
18E:							
Gainesboro	45	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00	Droughty	0.84
		Depth to hard bedrock	0.29	Cutbanks cave	0.10	Depth to bedrock	0.29
Lehew	40	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Content of large stones	0.53	Slope	1.00	Droughty	0.49
		Depth to hard bedrock	0.10	Content of large stones	0.53	Depth to bedrock	0.10

19C:

Table ENG-4. - Building Site Development - Continued

Frederick County, Virginia

Map Symbol and Soil Name	Pct of Map Unit	Local Roads and Streets		Shallow Excavations		Lawns and Landscaping	
		Rating Class and Limiting Features	Value	Rating Class and Limiting Features	Value	Rating Class and Limiting Features	Value
19C:							
Gilpin	75	Somewhat limited		Somewhat limited		Somewhat limited	
		Frost action	0.50	Slope	0.37	Slope	0.37
		Slope	0.37	Cutbanks cave	0.10	Content of large stones	0.08
				Depth to soft bedrock	0.03	Depth to bedrock	0.03
20B:							
Guernsey	85	Very limited		Very limited		Not limited	
		Frost action	1.00	Cutbanks cave	1.00		
		Shrink-swell	1.00	Depth to saturated zone	0.99		
		Low strength	1.00	Too clayey	0.13		
20C:							
Guernsey	85	Very limited		Very limited		Somewhat limited	
		Frost action	1.00	Cutbanks cave	1.00	Slope	0.37
		Shrink-swell	1.00	Depth to saturated zone	0.99		
		Low strength	1.00	Slope	0.37		
21C:							
Hayter	75	Somewhat limited		Somewhat limited		Very limited	
		Low strength	0.78	Slope	0.37	Content of large stones	1.00
		Shrink-swell	0.50	Content of large stones	0.31	Slope	0.37
		Frost action	0.50	Cutbanks cave	0.10		
21D:							
Hayter	80	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	0.78	Content of large stones	0.31	Content of large stones	1.00
		Shrink-swell	0.50	Cutbanks cave	0.10		
22C:							
Hayter	75	Somewhat limited		Somewhat limited		Very limited	
		Low strength	0.78	Content of large stones	0.73	Content of large stones	1.00
		Content of large stones	0.73	Slope	0.37	Slope	0.37
		Shrink-swell	0.50	Cutbanks cave	0.10		
22D:							
Hayter	75	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	0.78	Content of large stones	0.73	Content of large stones	1.00
		Content of large stones	0.73	Cutbanks cave	0.10		
22E:							

Table ENG-4. - Building Site Development - Continued

Frederick County, Virginia

Map Symbol and Soil Name	Pct of Map Unit	Local Roads and Streets		Shallow Excavations		Lawns and Landscaping	
		Rating Class and Limiting Features	Value	Rating Class and Limiting Features	Value	Rating Class and Limiting Features	Value
22E:							
Hayter	75	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	0.78	Content of large stones	0.73	Content of large stones	1.00
		Content of large stones	0.73	Cutbanks cave	0.10		
23C:							
Hazleton	75	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Cutbanks cave	1.00	Droughty	0.64
		Slope	0.37	Slope	0.37	Content of large stones	0.46
						Slope	0.37
23D:							
Hazleton	75	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	1.00	Droughty	0.64
						Content of large stones	0.46
23E:							
Hazleton	75	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	1.00	Droughty	0.64
						Content of large stones	0.46
24E:							
Hazleton	75	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	1.00	Droughty	0.64
						Content of large stones	0.46
25C:							
Laidig	75	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Depth to thick cemented pan	1.00	Slope	0.37
		Slope	0.37	Depth to saturated zone	0.90	Depth to cemented pan	0.06
		Depth to thick cemented pan	0.06	Slope	0.37	Content of large stones	0.01
25D:							
Laidig	75	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to thick cemented pan	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00	Depth to cemented pan	0.06
		Depth to thick cemented pan	0.06	Depth to saturated zone	0.90	Content of large stones	0.01
25E:							

Table ENG-4. - Building Site Development - Continued

Frederick County, Virginia

Map Symbol and Soil Name	Pct of Map Unit	Local Roads and Streets		Shallow Excavations		Lawns and Landscaping	
		Rating Class and Limiting Features	Value	Rating Class and Limiting Features	Value	Rating Class and Limiting Features	Value
25E:							
Laidig	75	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to thick cemented pan	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00	Depth to cemented pan	0.06
		Depth to thick cemented pan	0.06	Depth to saturated zone	0.90	Content of large stones	0.01
26C:							
Lehew	90	Somewhat limited		Very limited		Somewhat limited	
		Content of large stones	0.53	Depth to hard bedrock	1.00	Droughty	0.49
		Slope	0.37	Content of large stones	0.53	Slope	0.37
		Depth to hard bedrock	0.10	Slope	0.37	Depth to bedrock	0.10
26D:							
Lehew	90	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Content of large stones	0.53	Slope	1.00	Droughty	0.49
		Depth to hard bedrock	0.10	Content of large stones	0.53	Depth to bedrock	0.10
26E:							
Lehew	90	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Content of large stones	0.53	Slope	1.00	Droughty	0.49
		Depth to hard bedrock	0.10	Content of large stones	0.53	Depth to bedrock	0.10
27:							
Library	90	Very limited		Very limited		Very limited	
		Frost action	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Low strength	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Shrink-swell	1.00	Too clayey	0.50		
28:							
Lobdell	85	Very limited		Somewhat limited		Somewhat limited	
		Frost action	1.00	Depth to saturated zone	0.99	Flooding	0.60
		Flooding	1.00	Flooding	0.60		
				Cutbanks cave	0.10		
29:							
Massanetta	90	Very limited		Somewhat limited		Somewhat limited	
		Flooding	1.00	Depth to saturated zone	0.99	Flooding	0.60
		Low strength	0.78	Flooding	0.60		
		Frost action	0.50	Cutbanks cave	0.10		
30B:							

Table ENG-4. - Building Site Development - Continued

Frederick County, Virginia

Map Symbol and Soil Name	Pct of Map Unit	Local Roads and Streets		Shallow Excavations		Lawns and Landscaping	
		Rating Class and Limiting Features	Value	Rating Class and Limiting Features	Value	Rating Class and Limiting Features	Value
30B:							
Monongahela	85	Somewhat limited		Very limited		Very limited	
		Frost action	0.50	Cutbanks cave	1.00	Depth to cemented pan	1.00
		Depth to saturated zone	0.03	Depth to saturated zone	1.00	Droughty	0.84
				Depth to thin cemented pan	1.00	Gravel content	0.26
31B:							
Nicholson	85	Very limited		Very limited		Somewhat limited	
		Low strength	1.00	Depth to saturated zone	1.00	Depth to cemented pan	0.95
		Depth to saturated zone	0.19	Depth to thin cemented pan	0.95	Content of large stones	0.46
				Cutbanks cave	0.10	Depth to saturated zone	0.19
32B:							
Oaklet	85	Very limited		Very limited		Not limited	
		Low strength	1.00	Too clayey	1.00		
		Shrink-swell	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
32C:							
Oaklet	75	Very limited		Very limited		Somewhat limited	
		Low strength	1.00	Too clayey	1.00	Slope	0.37
		Shrink-swell	1.00	Slope	0.37		
		Frost action	0.50	Cutbanks cave	0.10		
33C:							
Opequon	50	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Shrink-swell	1.00	Cutbanks cave	0.10	Droughty	1.00
		Frost action	0.50	Slope	0.04	Too clayey	1.00
Chilhowie	40	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Depth to hard bedrock	1.00	Too clayey	1.00
		Low strength	1.00	Too clayey	0.88	Depth to bedrock	0.71
		Depth to hard bedrock	0.71	Cutbanks cave	0.10	Droughty	0.30
Rock outcrop	3	Not Rated		Not Rated		Not Rated	
33E:							
Opequon	50	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	1.00	Cutbanks cave	0.10	Droughty	1.00

Table ENG-4. - Building Site Development - Continued

Frederick County, Virginia

Map Symbol and Soil Name	Pct of Map Unit	Local Roads and Streets		Shallow Excavations		Lawns and Landscaping	
		Rating Class and Limiting Features	Value	Rating Class and Limiting Features	Value	Rating Class and Limiting Features	Value
33E:							
Chilhowie	40	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Shrink-swell	1.00	Slope	1.00	Too clayey	1.00
		Low strength	1.00	Too clayey	0.88	Depth to bedrock	0.71
Rock outcrop	3	Not Rated		Not Rated		Not Rated	
34:							
Pagebrook	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Cutbanks cave	1.00	Flooding	1.00
		Shrink-swell	1.00	Depth to saturated zone	0.95		
		Low strength	1.00	Flooding	0.80		
35:							
Pagebrook	95	Very limited		Very limited		Very limited	
		Flooding	1.00	Cutbanks cave	1.00	Flooding	1.00
		Shrink-swell	1.00	Depth to saturated zone	0.95		
		Low strength	1.00	Flooding	0.80		
36:							
Pits	100	Not Rated		Not Rated		Not Rated	
37D:							
Schaffemaker	90	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Depth to hard bedrock	0.29	Cutbanks cave	1.00	Droughty	0.71
				Slope	1.00	Depth to bedrock	0.29
37E:							
Schaffemaker	90	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Depth to hard bedrock	0.29	Slope	1.00	Droughty	0.71
				Cutbanks cave	1.00	Depth to bedrock	0.29
38B:							
Sequoia	80	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Cutbanks cave	0.10	Depth to bedrock	0.01
		Shrink-swell	0.50	Depth to soft bedrock	0.01		
38C:							
Sequoia	75	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Slope	0.37	Slope	0.37
		Shrink-swell	0.50	Cutbanks cave	0.10	Depth to bedrock	0.01
		Slope	0.37	Depth to soft bedrock	0.01		
38D:							

Table ENG-4. - Building Site Development - Continued

Frederick County, Virginia

Map Symbol and Soil Name	Pct of Map Unit	Local Roads and Streets		Shallow Excavations		Lawns and Landscaping	
		Rating Class and Limiting Features	Value	Rating Class and Limiting Features	Value	Rating Class and Limiting Features	Value
38D:							
Sequoia	75	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Cutbanks cave	0.10	Depth to bedrock	0.01
		Shrink-swell	0.50	Depth to soft bedrock	0.01		
39B:							
Swimley	90	Very limited		Very limited		Not limited	
		Low strength	1.00	Too clayey	1.00		
		Frost action	0.50	Cutbanks cave	0.10		
39C:							
Swimley	90	Very limited		Very limited		Somewhat limited	
		Low strength	1.00	Too clayey	1.00	Slope	0.37
		Frost action	0.50	Slope	0.37		
		Slope	0.37	Cutbanks cave	0.10		
40B:							
Timberville	80	Very limited		Somewhat limited		Very limited	
		Flooding	1.00	Flooding	0.80	Flooding	1.00
		Low strength	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
41B:							
Weikert	50	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Frost action	0.50	Cutbanks cave	0.10	Droughty	1.00
						Gravel content	0.17
Berks	40	Not limited		Somewhat limited		Somewhat limited	
				Depth to soft bedrock	0.50	Depth to bedrock	0.50
				Cutbanks cave	0.10	Droughty	0.49
						Content of large stones	0.16
41C:							
Weikert	50	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Frost action	0.50	Slope	0.37	Droughty	1.00
		Slope	0.37	Cutbanks cave	0.10	Slope	0.37
Berks	40	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.37	Depth to soft bedrock	0.50	Depth to bedrock	0.50
				Slope	0.37	Droughty	0.49
				Cutbanks cave	0.10	Slope	0.37
41D:							

Table ENG-4. - Building Site Development - Continued

Frederick County, Virginia

Map Symbol and Soil Name	Pct of Map Unit	Local Roads and Streets		Shallow Excavations		Lawns and Landscaping	
		Rating Class and Limiting Features	Value	Rating Class and Limiting Features	Value	Rating Class and Limiting Features	Value
41D:							
Weikert	55	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.10	Droughty	1.00
Berks	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.50	Depth to bedrock	0.50
				Cutbanks cave	0.10	Droughty	0.49
41E:							
Weikert	60	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.10	Droughty	1.00
Berks	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.50	Depth to bedrock	0.50
				Cutbanks cave	0.10	Droughty	0.49
42C:							
Weikert	50	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Frost action	0.50	Slope	0.37	Droughty	1.00
		Slope	0.37	Cutbanks cave	0.10	Slope	0.37
Berks	40	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.37	Depth to soft bedrock	0.50	Depth to bedrock	0.50
				Slope	0.37	Droughty	0.49
				Cutbanks cave	0.10	Slope	0.37
42D:							
Weikert	55	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.10	Droughty	1.00
Berks	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.50	Depth to bedrock	0.50
				Cutbanks cave	0.10	Droughty	0.49
42E:							
Weikert	60	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.10	Droughty	1.00

Table ENG-4. - Building Site Development - Continued

Frederick County, Virginia

Map Symbol and Soil Name	Pct of Map Unit	Local Roads and Streets		Shallow Excavations		Lawns and Landscaping	
		Rating Class and Limiting Features	Value	Rating Class and Limiting Features	Value	Rating Class and Limiting Features	Value
42E:							
Berks	30	Very limited Slope	1.00	Very limited Slope Depth to soft bedrock Cutbanks cave	1.00 0.50 0.10	Very limited Slope Depth to bedrock Droughty	1.00 0.50 0.49
43:							
Wheeling	80	Somewhat limited Frost action Flooding	0.50 0.40	Somewhat limited Cutbanks cave	0.10	Not limited	
44B:							
Zoar	75	Very limited Low strength Shrink-swell Frost action	1.00 0.50 0.50	Very limited Cutbanks cave Depth to saturated zone	1.00 1.00	Somewhat limited Depth to saturated zone	0.19
44C:							
Zoar	75	Very limited Low strength Shrink-swell Frost action	1.00 0.50 0.50	Very limited Cutbanks cave Depth to saturated zone Slope	1.00 1.00 0.37	Somewhat limited Slope Depth to saturated zone	0.37 0.19
DAM:							
Dam	100	Not Rated		Not Rated		Not Rated	
W:							
Water	100	Not Rated		Not Rated		Not Rated	