

Soil Descriptions - Non Technical

2B--Ostrander Loam, 1 To 6 Percent Slopes

Component Description

Ostrander and similar soils

Extent: 100 percent of the unit
Geomorphic description: Moraine
Slope range: 1 to 6 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Loess over till
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 11.4 inches
Content of organic matter in the upper 10 inches: 4.0 percent
Typical profile:
Ap,A,AB--0 to 17 inches; loam
2Bw--17 to 53 inches; loam
2C--53 to 60 inches; loam

2C--Ostrander Loam, 6 To 12 Percent Slopes

Component Description

Ostrander and similar soils

Extent: 100 percent of the unit
Geomorphic description: Moraine
Slope range: 6 to 12 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Loess over till
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 11.4 inches
Content of organic matter in the upper 10 inches: 4.0 percent
Typical profile:
Ap,A,AB--0 to 17 inches; loam
2Bw--17 to 53 inches; loam
2C--53 to 60 inches; loam

7A--Hubbard Loamy Sand, 0 To 1 Percent Slopes

Component Description

Hubbard and similar soils

Extent: 100 percent of the unit
Geomorphic description: Outwash plain
Slope range: 0 to 1 percent
Surface layer texture: Loamy sand

Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.8 inches
Content of organic matter in the upper 10 inches: 3.5 percent
Typical profile:
A1,A2--0 to 16 inches; loamy sand
BA,Bw--16 to 38 inches; loamy sand
C--38 to 60 inches; sand

7B--Hubbard Loamy Sand, 1 To 6 Percent Slopes

Component Description

Hubbard and similar soils

Extent: 100 percent of the unit
Geomorphic description: Outwash plain
Slope range: 1 to 6 percent
Surface layer texture: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.8 inches
Content of organic matter in the upper 10 inches: 3.5 percent
Typical profile:
A1,A2--0 to 16 inches; loamy sand
BA,Bw--16 to 38 inches; loamy sand
C--38 to 60 inches; sand

7C--Hubbard Loamy Sand, 6 To 12 Percent Slopes

Component Description

Hubbard and similar soils

Extent: 100 percent of the unit
Geomorphic description: Outwash plain
Slope range: 6 to 12 percent
Surface layer texture: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.8 inches
Content of organic matter in the upper 10 inches: 3.5 percent
Typical profile:
A1,A2--0 to 16 inches; loamy sand
BA,Bw--16 to 38 inches; loamy sand
C--38 to 60 inches; sand

7D--Hubbard Loamy Sand, 12 To 18 Percent Slopes

Component Description

Hubbard and similar soils

Extent: 100 percent of the unit
Geomorphic description: Outwash plain
Slope range: 12 to 18 percent
Surface layer texture: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.8 inches
Content of organic matter in the upper 10 inches: 3.5 percent
Typical profile:
A1,A2--0 to 16 inches; loamy sand
BA,Bw--16 to 38 inches; loamy sand
C--38 to 60 inches; sand

8A--Sparta Loamy Fine Sand, 0 To 1 Percent Slopes

Component Description

Sparta and similar soils

Extent: 100 percent of the unit
Geomorphic description: Outwash plain
Slope range: 0 to 1 percent
Surface layer texture: Loamy fine sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.4 inches
Content of organic matter in the upper 10 inches: 1.5 percent
Typical profile:
Ap,A--0 to 10 inches; loamy fine sand
Bw--10 to 25 inches; fine sand
C--25 to 60 inches; fine sand

8B--Sparta Loamy Fine Sand, 1 To 6 Percent Slopes

Component Description

Sparta and similar soils

Extent: 100 percent of the unit
Geomorphic description: Outwash plain
Slope range: 1 to 6 percent
Surface layer texture: Loamy fine sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.4 inches
Content of organic matter in the upper 10 inches: 1.5 percent
Typical profile:
Ap,AB--0 to 10 inches; loamy fine sand
Bw--10 to 25 inches; fine sand
C--25 to 60 inches; fine sand

12C--Emmert Very Gravelly Sandy Loam, 3 To 15 Percent Slopes

Component Description

Emmert and similar soils

Extent: 100 percent of the unit
Geomorphic description: Moraine
Slope range: 3 to 15 percent
Surface layer texture: Very gravelly sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 2.2 inches
Content of organic matter in the upper 10 inches: 0.4 percent
Typical profile:
A--0 to 4 inches; very gravelly sandy loam
BA,Bw,C--4 to 60 inches; very gravelly sand

27A--Dickinson Sandy Loam, 0 To 2 Percent Slopes

Component Description

Dickinson and similar soils

Extent: 100 percent of the unit
Geomorphic description: Outwash plain
Slope range: 0 to 2 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 6.5 inches
Content of organic matter in the upper 10 inches: 1.5 percent
Typical profile:
Ap,A,AB--0 to 16 inches; sandy loam
Bw,BC--16 to 36 inches; sandy loam
C--36 to 60 inches; sand

27B--Dickinson Sandy Loam, 2 To 6 Percent Slopes

Component Description

Dickinson and similar soils

Extent: 100 percent of the unit
Geomorphic description: Outwash plain
Slope range: 2 to 6 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 6.5 inches
Content of organic matter in the upper 10 inches: 1.5 percent
Typical profile:

Ap,A,AB--0 to 16 inches; sandy loam
Bw,BC--16 to 36 inches; sandy loam
C--36 to 60 inches; sand

39A--Wadena Loam, 0 To 2 Percent Slopes

Component Description

Wadena and similar soils

Extent: 100 percent of the unit
Geomorphic description: Outwash plain
Slope range: 0 to 2 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 6.8 inches
Content of organic matter in the upper 10 inches: 4.5 percent
Typical profile:
Ap,A,AB--0 to 16 inches; loam
Bw--16 to 31 inches; loam
2BC,2C--31 to 60 inches; stratified gravelly coarse sand to sand

39B--Wadena Loam, 2 To 6 Percent Slopes

Component Description

Wadena and similar soils

Extent: 100 percent of the unit
Geomorphic description: Outwash plain
Slope range: 2 to 6 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 6.8 inches
Content of organic matter in the upper 10 inches: 4.5 percent
Typical profile:
Ap,A,AB--0 to 16 inches; loam
Bw--16 to 31 inches; loam
2BC,2C--31 to 60 inches; stratified gravelly coarse sand to sand

39B2--Wadena Loam, 2 To 6 Percent Slopes, Eroded

Component Description

Wadena, eroded and similar soils

Extent: 100 percent of the unit
Geomorphic description: Outwash plain
Slope range: 2 to 6 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Outwash
Flooding: None

Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 6.5 inches
Content of organic matter in the upper 10 inches: 2.4 percent
Typical profile:
Ap--0 to 9 inches; loam
Bw--9 to 31 inches; loam
2C--31 to 60 inches; stratified gravelly coarse sand to sand

39C--Wadena Loam, 6 To 12 Percent Slopes

Component Description

Wadena and similar soils

Extent: 100 percent of the unit
Geomorphic description: Outwash plain
Slope range: 6 to 12 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 6.6 inches
Content of organic matter in the upper 10 inches: 4.5 percent
Typical profile:
Ap,A--0 to 12 inches; loam
Bw--12 to 31 inches; loam
2C--31 to 60 inches; stratified gravelly coarse sand to sand

39C2--Wadena Loam, 6 To 12 Percent Slopes, Eroded

Component Description

Wadena, eroded and similar soils

Extent: 100 percent of the unit
Geomorphic description: Outwash plain
Slope range: 6 to 12 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 6.5 inches
Content of organic matter in the upper 10 inches: 2.4 percent
Typical profile:
Ap--0 to 9 inches; loam
Bw--9 to 31 inches; loam
2C--31 to 60 inches; stratified gravelly coarse sand to sand

39D--Wadena Loam, 12 To 18 Percent Slopes

Component Description

Wadena and similar soils

Extent: 100 percent of the unit
Geomorphic description: Outwash plain
Slope range: 12 to 18 percent

Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 6.6 inches
Content of organic matter in the upper 10 inches: 4.5 percent
Typical profile:
Ap,A--0 to 12 inches; loam
Bw--12 to 31 inches; loam
2C--31 to 60 inches; stratified gravelly coarse sand to sand

41A--Estherville Sandy Loam, 0 To 2 Percent Slopes

Component Description

Estherville and similar soils

Extent: 100 percent of the unit
Geomorphic description: Outwash plain
Slope range: 0 to 2 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.5 inches
Content of organic matter in the upper 10 inches: 3.0 percent
Typical profile:
Ap,AB--0 to 13 inches; sandy loam
Bw--13 to 21 inches; sandy loam
2BC,2C--21 to 60 inches; sand

41B--Estherville Sandy Loam, 2 To 6 Percent Slopes

Component Description

Estherville and similar soils

Extent: 100 percent of the unit
Geomorphic description: Outwash plain
Slope range: 2 to 6 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.5 inches
Content of organic matter in the upper 10 inches: 3.0 percent
Typical profile:
Ap,AB--0 to 13 inches; sandy loam
Bw--13 to 21 inches; sandy loam
2BC,2C--21 to 60 inches; sand

42C--Salida Gravelly Coarse Sandy Loam, 2 To 12 Percent Slopes

Component Description

Salida and similar soils

Extent: 100 percent of the unit
Geomorphic description: Outwash plain
Slope range: 2 to 12 percent
Surface layer texture: Gravelly coarse sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 2.4 inches
Content of organic matter in the upper 10 inches: 0.7 percent
Typical profile:
Ap--0 to 8 inches; gravelly coarse sandy loam
Bw--8 to 14 inches; gravelly loamy coarse sand
C--14 to 60 inches; gravelly sand

49B--Antigo Silt Loam, 1 To 8 Percent Slopes

Component Description

Antigo and similar soils

Extent: 100 percent of the unit
Geomorphic description: Outwash plain
Slope range: 1 to 8 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 6.2 inches
Content of organic matter in the upper 10 inches: 1.7 percent
Typical profile:
Ap--0 to 8 inches; silt loam
BA,Bw,Bt--8 to 24 inches; silt loam
2C--24 to 60 inches; sand

81B--Boone Loamy Fine Sand, 2 To 6 Percent Slopes

Component Description

Boone and similar soils

Extent: 100 percent of the unit
Geomorphic description: Hill
Slope range: 2 to 6 percent
Surface layer texture: Loamy fine sand
Depth to restrictive feature: Bedrock (paralithic): 20 to 40 inches
Drainage class: Excessively drained
Parent material: Siliceous sandy residuum
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 1.9 inches
Content of organic matter in the upper 10 inches: 0.4 percent
Typical profile:
A--0 to 3 inches; loamy fine sand
AC--3 to 8 inches; loamy fine sand
C--8 to 24 inches; fine sand

Cr--24 to 60 inches; weathered bedrock

81C--Boone Loamy Fine Sand, 6 To 12 Percent Slopes

Component Description

Boone and similar soils

Extent: 100 percent of the unit
Geomorphic description: Hill
Slope range: 6 to 12 percent
Surface layer texture: Loamy fine sand
Depth to restrictive feature: Bedrock (paralithic): 20 to 40 inches
Drainage class: Excessively drained
Parent material: Siliceous sandy residuum
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 1.9 inches
Content of organic matter in the upper 10 inches: 0.4 percent
Typical profile:
A--0 to 3 inches; loamy fine sand
AC--3 to 8 inches; loamy fine sand
C--8 to 24 inches; fine sand
Cr--24 to 60 inches; weathered bedrock

81E--Boone Loamy Fine Sand, 12 To 40 Percent Slopes

Component Description

Boone and similar soils

Extent: 100 percent of the unit
Geomorphic description: Hill
Slope range: 12 to 40 percent
Surface layer texture: Loamy fine sand
Depth to restrictive feature: Bedrock (paralithic): 20 to 40 inches
Drainage class: Excessively drained
Parent material: Siliceous sandy residuum
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 1.9 inches
Content of organic matter in the upper 10 inches: 0.4 percent
Typical profile:
A--0 to 3 inches; loamy fine sand
AC--3 to 8 inches; loamy fine sand
C--8 to 24 inches; fine sand
Cr--24 to 60 inches; weathered bedrock

94C--Terril Loam, 4 To 12 Percent Slopes

Component Description

Terril and similar soils

Extent: 100 percent of the unit
Geomorphic description: Swale
Slope range: 4 to 12 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Colluvium
Flooding: None

Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 11.7 inches
Content of organic matter in the upper 10 inches: 4.0 percent
Typical profile:
A1,A2,A3--0 to 36 inches; loam
Bw--36 to 48 inches; loam
C--48 to 60 inches; loam

98--Colo Silt Loam, Occasionally Flooded

Component Description

Colo, occasionally flooded and similar soils

Extent: 100 percent of the unit
Geomorphic description: Flood plain
Slope range: 0 to 2 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Poorly drained
Parent material: Alluvium
Flooding does not occur (months): January February September October November
December
Flooding is most likely (frequency, months): Occasional March April May June
July August
Wet soil moisture status is highest (depth, months): 0.5 foot, April
Wet soil moisture status is lowest (depth, months): 2.3 feet, September
Ponding: None
Available water capacity to a depth of 60 inches: 12.2 inches
Content of organic matter in the upper 10 inches: 4.0 percent
Typical profile:
A1,A2--0 to 20 inches; silt loam
A3,A4,A5,C--20 to 60 inches; silty clay loam

100A--Copaston Loam, 0 To 2 Percent Slopes

Component Description

Copaston and similar soils

Extent: 100 percent of the unit
Geomorphic description: Stream terrace
Slope range: 0 to 2 percent
Surface layer texture: Loam
Depth to restrictive feature: Bedrock (lithic): 12 to 20 inches
Drainage class: Well drained
Parent material: Alluvial sediment over bedrock
Flooding: None
Depth to wet soil moisture status: More than 1.2 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 2.7 inches
Content of organic matter in the upper 10 inches: 2.4 percent
Typical profile:
A--0 to 6 inches; loam
BA,Bw--6 to 15 inches; loam
2R--15 to 60 inches; unweathered bedrock

100B--Copaston Loam, 2 To 6 Percent Slopes

Component Description

Copaston and similar soils

Extent: 100 percent of the unit
Geomorphic description: Stream terrace
Slope range: 2 to 6 percent
Surface layer texture: Loam
Depth to restrictive feature: Bedrock (lithic): 12 to 20 inches
Drainage class: Well drained
Parent material: Alluvial sediment over bedrock
Flooding: None
Depth to wet soil moisture status: More than 1.2 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 2.7 inches
Content of organic matter in the upper 10 inches: 2.4 percent
Typical profile:
A--0 to 6 inches; loam
BA,Bw--6 to 15 inches; loam
2R--15 to 60 inches; unweathered bedrock

100C--Copaston Loam, 6 To 12 Percent Slopes

Component Description

Copaston and similar soils

Extent: 100 percent of the unit
Geomorphic description: Stream terrace
Slope range: 6 to 12 percent
Surface layer texture: Loam
Depth to restrictive feature: Bedrock (lithic): 12 to 20 inches
Drainage class: Well drained
Parent material: Alluvial sediment over bedrock
Flooding: None
Depth to wet soil moisture status: More than 1.2 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 2.7 inches
Content of organic matter in the upper 10 inches: 2.4 percent
Typical profile:
A--0 to 6 inches; loam
BA,Bw--6 to 15 inches; loam
2R--15 to 60 inches; unweathered bedrock

106B--Lester Loam, 2 To 6 Percent Slopes

Component Description

Lester and similar soils

Extent: 100 percent of the unit
Geomorphic description: Moraine
Slope range: 2 to 6 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Wet soil moisture status is highest (depth, months): 3.6 feet, April
Wet soil moisture status is lowest (depth, months): More than 5.0 feet, January
February July August September October December
Ponding: None
Available water capacity to a depth of 60 inches: 10.4 inches
Content of organic matter in the upper 10 inches: 2.1 percent
Typical profile:
Ap--0 to 6 inches; loam
BA,Bt,Bw--6 to 38 inches; clay loam
C--38 to 60 inches; loam

106C--Lester Loam, 6 To 12 Percent Slopes

Component Description

Lester and similar soils

Extent: 100 percent of the unit
Geomorphic description: Moraine
Slope range: 6 to 12 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 10.4 inches
Content of organic matter in the upper 10 inches: 1.8 percent
Typical profile:
Ap--0 to 6 inches; loam
BA,Bt,Bw--6 to 38 inches; clay loam
C--38 to 60 inches; loam

106C2--Lester Loam, 6 To 12 Percent Slopes, Eroded

Component Description

Lester, eroded and similar soils

Extent: 100 percent of the unit
Geomorphic description: Moraine
Slope range: 6 to 12 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 10.4 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Ap--0 to 6 inches; loam
BA,Bt,Bw--6 to 38 inches; clay loam
C--38 to 60 inches; loam

106D2--Lester Loam, 12 To 18 Percent Slopes, Eroded

Component Description

Lester, eroded and similar soils

Extent: 100 percent of the unit
Geomorphic description: Moraine
Slope range: 12 to 18 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 10.4 inches

Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Ap--0 to 6 inches; loam
BA,Bt,Bw--6 to 38 inches; clay loam
C--38 to 60 inches; loam

109--Cordova Silty Clay Loam

Component Description

Cordova and similar soils

Extent: 100 percent of the unit
Geomorphic description: Swale on moraine
Slope range: 0 to 2 percent
Surface layer texture: Silty clay loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Poorly drained
Parent material: Till
Flooding: None
Wet soil moisture status is highest (depth, months): 0.5 foot, April May
Wet soil moisture status is lowest (depth, months): 2.5 feet, February August
Ponding: None
Available water capacity to a depth of 60 inches: 10.3 inches
Content of organic matter in the upper 10 inches: 5.5 percent
Typical profile:
Ap,A,BA--0 to 20 inches; silty clay loam
Btg--20 to 34 inches; clay loam
C--34 to 60 inches; loam

113--Webster Clay Loam

Component Description

Webster and similar soils

Extent: 100 percent of the unit
Geomorphic description: Swale on moraine
Slope range: 0 to 2 percent
Surface layer texture: Clay loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Poorly drained
Parent material: Till
Flooding: None
Wet soil moisture status is highest (depth, months): 0.5 foot, April May
Wet soil moisture status is lowest (depth, months): 2.5 feet, February August
Ponding: None
Available water capacity to a depth of 60 inches: 10.6 inches
Content of organic matter in the upper 10 inches: 5.5 percent
Typical profile:
Ap,A--0 to 14 inches; clay loam
Bg--14 to 30 inches; clay loam
Cg--30 to 60 inches; clay loam

114--Glencoe Silty Clay Loam

Component Description

Glencoe and similar soils

Extent: 100 percent of the unit
Geomorphic description: Depression on moraine
Slope range: 0 to 1 percent
Surface layer texture: Silty clay loam

Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Till
Flooding: None
Wet soil moisture status is highest (depth, months): At the surface March April
Wet soil moisture status is lowest (depth, months): 2.0 feet, February August
Ponding is shallowest (depth, months): 0.5 foot, March
Ponding is deepest (depth, months): 1.0 foot, April
Available water capacity to a depth of 60 inches: 11.0 inches
Content of organic matter in the upper 10 inches: 7.5 percent
Typical profile:
A1,A2--0 to 21 inches; silty clay loam
A3--21 to 26 inches; clay loam
Bg--26 to 38 inches; clay loam
Cg--38 to 60 inches; clay loam

129--Cylinder Loam

Component Description

Cylinder and similar soils

Extent: 100 percent of the unit
Geomorphic description: Outwash plain
Slope range: 0 to 2 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat poorly drained
Parent material: Outwash
Flooding: None
Wet soil moisture status is highest (depth, months): 1.5 feet, April May
Wet soil moisture status is lowest (depth, months): 4.0 feet, February
Ponding: None
Available water capacity to a depth of 60 inches: 5.9 inches
Content of organic matter in the upper 10 inches: 4.0 percent
Typical profile:
Ap,AB--0 to 12 inches; loam
Bw--12 to 25 inches; loam
2Bw,2C--25 to 60 inches; sand

150B--Spencer Silt Loam, 2 To 6 Percent Slopes

Component Description

Spencer and similar soils

Extent: 100 percent of the unit
Geomorphic description: Moraine
Slope range: 2 to 6 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Loess over till
Flooding: None
Wet soil moisture status is highest (depth, months): 2.5 feet, April
Wet soil moisture status is lowest (depth, months): More than 5.0 feet, January
February July August September October
Ponding: None
Available water capacity to a depth of 60 inches: 9.9 inches
Content of organic matter in the upper 10 inches: 2.5 percent
Typical profile:
A--0 to 7 inches; silt loam
E--7 to 13 inches; silt loam
Bt--13 to 35 inches; silt loam

Bw--35 to 45 inches; silt loam
2C--45 to 60 inches; sandy loam

151C--Burkhardt Sandy Loam, 6 To 12 Percent Slopes

Component Description

Burkhardt and similar soils

Extent: 100 percent of the unit
Geomorphic description: Outwash plain
Slope range: 6 to 12 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.2 inches
Content of organic matter in the upper 10 inches: 2.5 percent
Typical profile:
A,AB--0 to 12 inches; sandy loam
Bw,BC--12 to 22 inches; sandy loam
2C--22 to 60 inches; stratified gravel to sand

151D--Burkhardt Sandy Loam, 12 To 18 Percent Slopes

Component Description

Burkhardt and similar soils

Extent: 100 percent of the unit
Geomorphic description: Outwash plain
Slope range: 12 to 18 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.2 inches
Content of organic matter in the upper 10 inches: 2.5 percent
Typical profile:
A,AB--0 to 12 inches; sandy loam
Bw,BC--12 to 22 inches; sandy loam
2C--22 to 60 inches; stratified gravel to sand

155B--Chetek Sandy Loam, 3 To 8 Percent Slopes

Component Description

Chetek and similar soils

Extent: 100 percent of the unit
Geomorphic description: Moraine, Outwash plain
Slope range: 3 to 8 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 3.9 inches

Content of organic matter in the upper 10 inches: 1.5 percent

Typical profile:

A,AB--0 to 7 inches; sandy loam

Bt--7 to 14 inches; loam

2Bt--14 to 24 inches; gravelly loamy sand

2C--24 to 60 inches; stratified very gravelly coarse sand to sand

155C--Chetek Sandy Loam, 8 To 15 Percent Slopes

Component Description

Chetek and similar soils

Extent: 100 percent of the unit

Geomorphic description: Moraine, Outwash plain

Slope range: 8 to 15 percent

Surface layer texture: Sandy loam

Depth to restrictive feature: Very deep (more than 60 inches)

Drainage class: Somewhat excessively drained

Parent material: Outwash

Flooding: None

Depth to wet soil moisture status: More than 5.0 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 3.9 inches

Content of organic matter in the upper 10 inches: 1.5 percent

Typical profile:

A,AB--0 to 7 inches; sandy loam

Bt--7 to 14 inches; loam

2Bt--14 to 24 inches; gravelly loamy sand

2C--24 to 60 inches; stratified very gravelly coarse sand to sand

155E--Chetek Sandy Loam, 15 To 25 Percent Slopes

Component Description

Chetek and similar soils

Extent: 100 percent of the unit

Geomorphic description: Outwash plain, Moraine

Slope range: 15 to 25 percent

Surface layer texture: Sandy loam

Depth to restrictive feature: Very deep (more than 60 inches)

Drainage class: Somewhat excessively drained

Parent material: Outwash

Flooding: None

Depth to wet soil moisture status: More than 5.0 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 3.9 inches

Content of organic matter in the upper 10 inches: 1.5 percent

Typical profile:

A,AB--0 to 7 inches; sandy loam

Bt--7 to 14 inches; loam

2Bt--14 to 24 inches; gravelly loamy sand

2C--24 to 60 inches; stratified very gravelly coarse sand to sand

173F--Frontenac Silt Loam, 25 To 40 Percent Slopes

Component Description

Frontenac and similar soils

Extent: 100 percent of the unit

Geomorphic description: Hill
Slope range: 25 to 40 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Colluvial sediments over limestone residuum
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 7.5 inches
Content of organic matter in the upper 10 inches: 3.5 percent
Typical profile:
A,AB--0 to 11 inches; silt loam
Bw--11 to 24 inches; loam
2C--24 to 60 inches; flaggy loam

176--Garwin Silty Clay Loam

Component Description

Garwin and similar soils

Extent: 100 percent of the unit
Geomorphic description: Swale on moraine
Slope range: 0 to 2 percent
Surface layer texture: Silty clay loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Poorly drained
Parent material: Loess
Flooding: None
Wet soil moisture status is highest (depth, months): 0.5 foot, April May
Wet soil moisture status is lowest (depth, months): 2.5 feet, February August
Ponding: None
Available water capacity to a depth of 60 inches: 12.4 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
Ap,A--0 to 14 inches; silty clay loam
Bwg--14 to 28 inches; silty clay loam
BCg,Cg--28 to 60 inches; silt loam

177A--Gotham Loamy Fine Sand, 0 To 2 Percent Slopes

Component Description

Gotham and similar soils

Extent: 100 percent of the unit
Geomorphic description: Stream terrace, Outwash plain, Moraine
Slope range: 0 to 2 percent
Surface layer texture: Loamy fine sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 5.7 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Ap--0 to 9 inches; loamy fine sand
BA--9 to 25 inches; loamy fine sand
Bw,Bt--25 to 48 inches; loamy fine sand
C--48 to 60 inches; fine sand

177B--Gotham Loamy Fine Sand, 2 To 6 Percent Slopes

Component Description

Gotham and similar soils

Extent: 100 percent of the unit
Geomorphic description: Moraine, Outwash plain, Stream terrace
Slope range: 2 to 6 percent
Surface layer texture: Loamy fine sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 5.6 inches
Content of organic matter in the upper 10 inches: 1.1 percent
Typical profile:
Ap--0 to 8 inches; loamy fine sand
BA--8 to 24 inches; loamy fine sand
Bw,Bt--24 to 47 inches; loamy fine sand
C--47 to 60 inches; fine sand

177C--Gotham Loamy Fine Sand, 6 To 12 Percent Slopes

Component Description

Gotham and similar soils

Extent: 100 percent of the unit
Geomorphic description: Moraine, Outwash plain, Stream terrace
Slope range: 6 to 12 percent
Surface layer texture: Loamy fine sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 5.6 inches
Content of organic matter in the upper 10 inches: 1.1 percent
Typical profile:
Ap--0 to 7 inches; loamy fine sand
BA--7 to 23 inches; loamy fine sand
Bw,Bt--23 to 46 inches; loamy fine sand
C--46 to 60 inches; fine sand

189--Auburndale Silt Loam

Component Description

Auburndale and similar soils

Extent: 100 percent of the unit
Geomorphic description: Depression on moraine
Slope range: 0 to 1 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Glaciofluvial sediments over till
Flooding: None
Wet soil moisture status is highest (depth, months): At the surface April May June
Wet soil moisture status is lowest (depth, months): 1.5 feet, February

Ponding is shallowest (depth, months): 0.5 foot, June
Ponding is deepest (depth, months): 1.0 foot, March April May
Available water capacity to a depth of 60 inches: 11.5 inches
Content of organic matter in the upper 10 inches: 7.0 percent
Typical profile:
A1,A2--0 to 13 inches; silt loam
E1,E2--13 to 25 inches; silt loam
Btg--25 to 36 inches; silt loam
Cg--36 to 58 inches; loam
2C--58 to 60 inches; sandy loam

203B--Joy Silt Loam, 1 To 5 Percent Slopes

Component Description

Joy and similar soils

Extent: 100 percent of the unit
Geomorphic description: Hill
Slope range: 1 to 5 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat poorly drained
Parent material: Loess
Flooding: None
Wet soil moisture status is highest (depth, months): 1.5 feet, April May
Wet soil moisture status is lowest (depth, months): 4.9 feet, February August
Ponding: None
Available water capacity to a depth of 60 inches: 13.0 inches
Content of organic matter in the upper 10 inches: 3.0 percent
Typical profile:
Ap,A,AB--0 to 23 inches; silt loam
Bw,BC--23 to 55 inches; silt loam
C--55 to 60 inches; silt loam

208--Kato Silty Clay Loam

Component Description

Kato and similar soils

Extent: 100 percent of the unit
Geomorphic description: Flat on outwash plain
Slope range: 0 to 1 percent
Surface layer texture: Silty clay loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Poorly drained
Parent material: Outwash
Flooding: None
Wet soil moisture status is highest (depth, months): 0.5 foot, April May
Wet soil moisture status is lowest (depth, months): 2.5 feet, February August
Ponding: None
Available water capacity to a depth of 60 inches: 7.7 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
Ap,A,ABg--0 to 23 inches; silty clay loam
Bg--23 to 30 inches; silt loam
2BCg,2Cg--30 to 60 inches; sand

213B--Klinger Silt Loam, 1 To 5 Percent Slopes

Component Description

Klinger and similar soils

Extent: 100 percent of the unit
Geomorphic description: Moraine
Slope range: 1 to 5 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat poorly drained
Parent material: Loess over till
Flooding: None
Wet soil moisture status is highest (depth, months): 1.5 feet, April May
Wet soil moisture status is lowest (depth, months): 4.9 feet, February August
Ponding: None
Available water capacity to a depth of 60 inches: 11.6 inches
Content of organic matter in the upper 10 inches: 5.0 percent
Typical profile:
Ap,A--0 to 13 inches; silt loam
Bt--13 to 28 inches; loam
2Bt,2Bw,2C--28 to 60 inches; loam

226--Lawson Silt Loam

Component Description

Lawson and similar soils

Extent: 100 percent of the unit
Geomorphic description: Flood plain
Slope range: 0 to 2 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat poorly drained
Parent material: Alluvium
Flooding does not occur (months): January February September October November
December
Flooding is most likely (frequency, months): Occasional March April May June
July August
Wet soil moisture status is highest (depth, months): 1.5 feet, April
Wet soil moisture status is lowest (depth, months): 4.5 feet, September
Ponding: None
Available water capacity to a depth of 60 inches: 12.1 inches
Content of organic matter in the upper 10 inches: 5.0 percent
Typical profile:
A1,A2--0 to 15 inches; silt loam
AC--15 to 30 inches; silt loam
Cg--30 to 60 inches; silt loam

239--Le Sueur Loam

Component Description

Le sueur and similar soils

Extent: 100 percent of the unit
Geomorphic description: Moraine
Slope range: 1 to 3 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat poorly drained
Parent material: Till
Flooding: None
Wet soil moisture status is highest (depth, months): 1.5 feet, April May
Wet soil moisture status is lowest (depth, months): 4.9 feet, February August
Ponding: None
Available water capacity to a depth of 60 inches: 10.7 inches

Content of organic matter in the upper 10 inches: 5.0 percent

Typical profile:

Ap,A--0 to 10 inches; loam

Bt,BC--10 to 53 inches; clay loam

C--53 to 60 inches; loam

250--Kennebec Silt Loam

Component Description

Kennebec and similar soils

Extent: 100 percent of the unit

Geomorphic description: Outwash plain

Slope range: 0 to 2 percent

Surface layer texture: Silt loam

Depth to restrictive feature: Very deep (more than 60 inches)

Drainage class: Moderately well drained

Parent material: Glaciofluvial sediments

Flooding: None

Wet soil moisture status is highest (depth, months): 3.0 feet, April

Wet soil moisture status is lowest (depth, months): More than 5.0 feet, January

February July August September October

Ponding: None

Available water capacity to a depth of 60 inches: 13.4 inches

Content of organic matter in the upper 10 inches: 5.5 percent

Typical profile:

Ap,A1,A2--0 to 41 inches; silt loam

C--41 to 60 inches; silt loam

251D--Marlean Loam, 12 To 18 Percent Slopes

Component Description

Marlean and similar soils

Extent: 100 percent of the unit

Geomorphic description: Hill

Slope range: 12 to 18 percent

Surface layer texture: Loam

Depth to restrictive feature: Very deep (more than 60 inches)

Drainage class: Well drained

Parent material: Loamy residuum over bedrock

Flooding: None

Depth to wet soil moisture status: More than 5.0 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 6.0 inches

Content of organic matter in the upper 10 inches: 2.1 percent

Typical profile:

A--0 to 5 inches; loam

Bw--5 to 11 inches; loam

2C--11 to 42 inches; very channery loam

2R--42 to 60 inches; unweathered bedrock

251E--Marlean Loam, 18 To 25 Percent Slopes

Component Description

Marlean and similar soils

Extent: 100 percent of the unit

Geomorphic description: Hill

Slope range: 18 to 25 percent

Surface layer texture: Loam

Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Loamy residuum over bedrock
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 6.0 inches
Content of organic matter in the upper 10 inches: 2.1 percent
Typical profile:
A--0 to 5 inches; loam
Bw--5 to 11 inches; loam
2C--11 to 42 inches; very channery loam
2R--42 to 60 inches; unweathered bedrock

252--Marshan Silty Clay Loam

Component Description

Marshan and similar soils

Extent: 100 percent of the unit
Geomorphic description: Flat on outwash plain, Flat on stream terrace
Slope range: 0 to 2 percent
Surface layer texture: Silty clay loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Poorly drained
Parent material: Glaciolacustrine sediments over outwash
Flooding: None
Wet soil moisture status is highest (depth, months): 0.5 foot, April May
Wet soil moisture status is lowest (depth, months): 2.5 feet, February August
Ponding: None
Available water capacity to a depth of 60 inches: 7.1 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
A1,A2--0 to 14 inches; silty clay loam
BA,Bg--14 to 32 inches; loam
2C--32 to 60 inches; sand

253--Maxcreek Silty Clay Loam

Component Description

Maxcreek and similar soils

Extent: 100 percent of the unit
Geomorphic description: Swale on moraine
Slope range: 0 to 1 percent
Surface layer texture: Silty clay loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Poorly drained
Parent material: Glaciolacustrine sediments over till
Flooding: None
Wet soil moisture status is highest (depth, months): 0.5 foot, April May
Wet soil moisture status is lowest (depth, months): 2.5 feet, February August
Ponding: None
Available water capacity to a depth of 60 inches: 11.5 inches
Content of organic matter in the upper 10 inches: 7.0 percent
Typical profile:
Ap,A,AB--0 to 17 inches; silty clay loam
Bg1,Bg2--17 to 30 inches; silty clay loam
2C--30 to 60 inches; loam

255--Mayer Silt Loam

Component Description

Mayer and similar soils

Extent: 100 percent of the unit
Geomorphic description: Flat on outwash plain, Flat on stream terrace
Slope range: 0 to 2 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Poorly drained
Parent material: Outwash
Flooding: None
Wet soil moisture status is highest (depth, months): 0.5 foot, April May
Wet soil moisture status is lowest (depth, months): 2.5 feet, February August
Ponding: None
Available water capacity to a depth of 60 inches: 7.0 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
Ap,A--0 to 17 inches; silt loam
Bg,BC--17 to 31 inches; loam
2C--31 to 60 inches; gravelly loamy sand

279B--Otterholt Silt Loam, 1 To 6 Percent Slopes

Component Description

Otterholt and similar soils

Extent: 100 percent of the unit
Geomorphic description: Moraine
Slope range: 1 to 6 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Loess over till
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 9.5 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
A--0 to 2 inches; silt loam
E,BE--2 to 15 inches; silt loam
Bt--15 to 35 inches; silt loam
2C--35 to 60 inches; sandy loam

279C--Otterholt Silt Loam, 6 To 15 Percent Slopes

Component Description

Otterholt and similar soils

Extent: 100 percent of the unit
Geomorphic description: Moraine
Slope range: 6 to 15 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Loess over till
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 9.5 inches
Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

A--0 to 2 inches; silt loam
E, BE--2 to 15 inches; silt loam
Bt--15 to 35 inches; silt loam
2C--35 to 60 inches; sandy loam

283A--Plainfield Loamy Sand, 0 To 2 Percent Slopes

Component Description

Plainfield and similar soils

Extent: 100 percent of the unit
Geomorphic description: Stream terrace, Outwash plain
Slope range: 0 to 2 percent
Surface layer texture: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.2 inches
Content of organic matter in the upper 10 inches: 0.6 percent
Typical profile:
A--0 to 4 inches; loamy sand
Bw, BC, C--4 to 60 inches; sand

283B--Plainfield Loamy Sand, 2 To 6 Percent Slopes

Component Description

Plainfield and similar soils

Extent: 100 percent of the unit
Geomorphic description: Stream terrace, Outwash plain
Slope range: 2 to 6 percent
Surface layer texture: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.2 inches
Content of organic matter in the upper 10 inches: 0.6 percent
Typical profile:
A--0 to 4 inches; loamy sand
Bw, BC, C--4 to 60 inches; sand

283D--Plainfield Loamy Sand, 6 To 18 Percent Slopes

Component Description

Plainfield and similar soils

Extent: 100 percent of the unit
Geomorphic description: Stream terrace, Outwash plain
Slope range: 6 to 18 percent
Surface layer texture: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None

Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.2 inches
Content of organic matter in the upper 10 inches: 0.6 percent
Typical profile:
A--0 to 4 inches; loamy sand
Bw,BC,C--4 to 60 inches; sand

285A--Port Byron Silt Loam, 0 To 2 Percent Slopes

Component Description

Port byron and similar soils

Extent: 100 percent of the unit
Geomorphic description: Hill
Slope range: 0 to 2 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Loess
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 12.9 inches
Content of organic matter in the upper 10 inches: 3.0 percent
Typical profile:
Ap,A,AB--0 to 19 inches; silt loam
Bw--19 to 52 inches; silt loam
C--52 to 60 inches; silt loam

285B--Port Byron Silt Loam, 2 To 6 Percent Slopes

Component Description

Port byron and similar soils

Extent: 100 percent of the unit
Geomorphic description: Hill
Slope range: 2 to 6 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Loess
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 12.9 inches
Content of organic matter in the upper 10 inches: 3.0 percent
Typical profile:
Ap,A,AB--0 to 16 inches; silt loam
Bw--16 to 36 inches; silt loam
C--36 to 60 inches; silt loam

285C--Port Byron Silt Loam, 6 To 12 Percent Slopes

Component Description

Port byron and similar soils

Extent: 100 percent of the unit
Geomorphic description: Hill
Slope range: 6 to 12 percent
Surface layer texture: Silt loam

Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Loess
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 12.9 inches
Content of organic matter in the upper 10 inches: 3.0 percent
Typical profile:
Ap,A,AB--0 to 14 inches; silt loam
Bw--14 to 44 inches; silt loam
C--44 to 60 inches; silt loam

299A--Rockton Loam, 0 To 2 Percent Slopes

Component Description

Rockton and similar soils

Extent: 100 percent of the unit
Geomorphic description: Hill
Slope range: 0 to 2 percent
Surface layer texture: Loam
Depth to restrictive feature: Bedrock (paralithic): 20 to 40 inches
Drainage class: Well drained
Parent material: Alluvial sediments over bedrock
Flooding: None
Depth to wet soil moisture status: More than 2.9 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 6.8 inches
Content of organic matter in the upper 10 inches: 4.0 percent
Typical profile:
A,AB--0 to 16 inches; loam
Bt--16 to 35 inches; clay loam
2R--35 to 60 inches; weathered bedrock

299B--Rockton Loam, 2 To 6 Percent Slopes

Component Description

Rockton and similar soils

Extent: 100 percent of the unit
Geomorphic description: Hill
Slope range: 2 to 6 percent
Surface layer texture: Loam
Depth to restrictive feature: Bedrock (paralithic): 20 to 40 inches
Drainage class: Well drained
Parent material: Alluvial sediments over bedrock
Flooding: None
Depth to wet soil moisture status: More than 2.9 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 6.8 inches
Content of organic matter in the upper 10 inches: 4.0 percent
Typical profile:
A,AB--0 to 16 inches; loam
Bt--16 to 35 inches; clay loam
2R--35 to 60 inches; weathered bedrock

299C--Rockton Loam, 6 To 12 Percent Slopes

Component Description

Rockton and similar soils

Extent: 100 percent of the unit
Geomorphic description: Hill
Slope range: 6 to 12 percent
Surface layer texture: Loam
Depth to restrictive feature: Bedrock (paralithic): 20 to 40 inches
Drainage class: Well drained
Parent material: Alluvial sediments over bedrock
Flooding: None
Depth to wet soil moisture status: More than 2.9 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 6.8 inches
Content of organic matter in the upper 10 inches: 4.0 percent
Typical profile:
A,AB--0 to 16 inches; loam
Bt--16 to 35 inches; clay loam
2R--35 to 60 inches; weathered bedrock

301B--Lindstrom Silt Loam, 1 To 4 Percent Slopes

Component Description

Lindstrom and similar soils

Extent: 100 percent of the unit
Geomorphic description: Hill
Slope range: 1 to 4 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Loess
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 12.6 inches
Content of organic matter in the upper 10 inches: 4.0 percent
Typical profile:
Ap,A,AB--0 to 34 inches; silt loam
Bw--34 to 60 inches; silt loam

313--Spillville Loam, Occasionally Flooded

Component Description

Spillville, occasionally flooded and similar soils

Extent: 100 percent of the unit
Geomorphic description: Flood plain
Slope range: 0 to 2 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Alluvium
Flooding does not occur (months): January February September October November
December
Flooding is most likely (frequency, months): Occasional March April May June
July August
Wet soil moisture status is highest (depth, months): 3.0 feet, April
Wet soil moisture status is lowest (depth, months): More than 5.0 feet, January
February July August September October
Ponding: None
Available water capacity to a depth of 60 inches: 11.6 inches
Content of organic matter in the upper 10 inches: 5.0 percent
Typical profile:

A1,A2,A3--0 to 48 inches; loam
A4--48 to 60 inches; loam

317--Oshawa Silty Clay Loam

Component Description

Oshawa and similar soils

Extent: 100 percent of the unit
Geomorphic description: Oxbow on flood plain
Slope range: 0 to 1 percent
Surface layer texture: Silty clay loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Alluvium
Flooding does not occur (months): January February September October November
December
Flooding is most likely (frequency, months): Frequent March April May June
Wet soil moisture status: At the surface all year
Ponding is shallowest (depth, months): 1.0 foot, January February March August
September October
Ponding is deepest (depth, months): 2.0 feet, May June
Available water capacity to a depth of 60 inches: 11.5 inches
Content of organic matter in the upper 10 inches: 7.0 percent
Typical profile:
Ag--0 to 37 inches; silty clay loam
Cg--37 to 60 inches; silty clay loam

318--Mayer Loam, Swales

Component Description

Mayer, swales and similar soils

Extent: 100 percent of the unit
Geomorphic description: Depression on stream terrace, Depression on outwash plain
Slope range: 0 to 2 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Outwash
Flooding: None
Wet soil moisture status is highest (depth, months): At the surface March April
Wet soil moisture status is lowest (depth, months): 2.0 feet, February August
Ponding is shallowest (depth, months): 0.5 foot, March
Ponding is deepest (depth, months): 1.0 foot, April
Available water capacity to a depth of 60 inches: 7.7 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
Ap,A--0 to 19 inches; loam
Bg,BC--19 to 36 inches; loam
2C--36 to 60 inches; gravelly loamy sand

320B--Tallula Silt Loam, 2 To 6 Percent Slopes

Component Description

Tallula and similar soils

Extent: 100 percent of the unit
Geomorphic description: Hill
Slope range: 2 to 6 percent
Surface layer texture: Silt loam

Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Loess
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 12.7 inches
Content of organic matter in the upper 10 inches: 2.8 percent
Typical profile:
Ap--0 to 9 inches; silt loam
Bw,BC--9 to 27 inches; silt loam
C--27 to 60 inches; silt loam

320C2--Tallula Silt Loam, 6 To 12 Percent Slopes, Eroded

Component Description

Tallula, eroded and similar soils

Extent: 100 percent of the unit
Geomorphic description: Hill
Slope range: 6 to 12 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Loess
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 12.7 inches
Content of organic matter in the upper 10 inches: 1.9 percent
Typical profile:
Ap--0 to 9 inches; silt loam
Bw,BC--9 to 27 inches; silt loam
C--27 to 60 inches; silt loam

342B--Kingsley Sandy Loam, 3 To 8 Percent Slopes

Component Description

Kingsley and similar soils

Extent: 100 percent of the unit
Geomorphic description: Moraine
Slope range: 3 to 8 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 8.4 inches
Content of organic matter in the upper 10 inches: 2.0 percent
Typical profile:
A--0 to 8 inches; sandy loam
E--8 to 12 inches; loamy sand
Bt,Bw--12 to 38 inches; sandy loam
C--38 to 60 inches; sandy loam

342C--Kingsley Sandy Loam, 8 To 15 Percent Slopes

Component Description

Kingsley and similar soils

Extent: 100 percent of the unit
Geomorphic description: Moraine
Slope range: 8 to 15 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 8.4 inches
Content of organic matter in the upper 10 inches: 2.0 percent
Typical profile:
A--0 to 8 inches; sandy loam
E--8 to 12 inches; loamy sand
Bt,Bw--12 to 38 inches; sandy loam
C--38 to 60 inches; sandy loam

342E--Kingsley Sandy Loam, 15 To 25 Percent Slopes

Component Description

Kingsley and similar soils

Extent: 100 percent of the unit
Geomorphic description: Moraine
Slope range: 15 to 25 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 8.4 inches
Content of organic matter in the upper 10 inches: 2.8 percent
Typical profile:
A--0 to 8 inches; sandy loam
E--8 to 12 inches; loamy sand
Bt,Bw--12 to 38 inches; sandy loam
C--38 to 60 inches; sandy loam

342F--Kingsley Sandy Loam, 25 To 40 Percent Slopes

Component Description

Kingsley and similar soils

Extent: 100 percent of the unit
Geomorphic description: Moraine
Slope range: 25 to 40 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 8.4 inches
Content of organic matter in the upper 10 inches: 2.8 percent
Typical profile:
A--0 to 8 inches; sandy loam

E--8 to 12 inches; loamy sand
Bt,Bw--12 to 38 inches; sandy loam
C--38 to 60 inches; sandy loam

344--Quam Silt Loam

Component Description

Quam and similar soils

Extent: 100 percent of the unit
Geomorphic description: Depression on moraine
Slope range: 0 to 1 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Glaciolacustine sediments
Flooding: None
Wet soil moisture status is highest (depth, months): At the surface April May June
Wet soil moisture status is lowest (depth, months): 1.5 feet, February
Ponding is shallowest (depth, months): 0.5 foot, June
Ponding is deepest (depth, months): 1.0 foot, March April May
Available water capacity to a depth of 60 inches: 11.5 inches
Content of organic matter in the upper 10 inches: 10.5 percent
Typical profile:
A1--0 to 12 inches; silt loam
A2,Ab--12 to 45 inches; silt loam
Cg--45 to 60 inches; silt loam

377B--Merton Silt Loam, 1 To 6 Percent Slopes

Component Description

Merton and similar soils

Extent: 100 percent of the unit
Geomorphic description: Moraine
Slope range: 1 to 6 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat poorly drained
Parent material: Loess over till
Flooding: None
Wet soil moisture status is highest (depth, months): 1.5 feet, April May
Wet soil moisture status is lowest (depth, months): 4.9 feet, February August
Ponding: None
Available water capacity to a depth of 60 inches: 12.2 inches
Content of organic matter in the upper 10 inches: 5.0 percent
Typical profile:
Ap,AB--0 to 15 inches; silt loam
2Bt--15 to 37 inches; loam
2BC,2C--37 to 60 inches; loam

378--Maxfield Silty Clay Loam

Component Description

Maxfield and similar soils

Extent: 100 percent of the unit
Geomorphic description: Swale on moraine
Slope range: 0 to 2 percent
Surface layer texture: Silty clay loam
Depth to restrictive feature: Very deep (more than 60 inches)

Drainage class: Poorly drained
Parent material: Loess over till
Flooding: None
Wet soil moisture status is highest (depth, months): 0.5 foot, April May
Wet soil moisture status is lowest (depth, months): 2.5 feet, February August
Ponding: None
Available water capacity to a depth of 60 inches: 11.7 inches
Content of organic matter in the upper 10 inches: 7.0 percent
Typical profile:
Ap,A,AB--0 to 21 inches; silty clay loam
Bg--21 to 27 inches; silty clay loam
2B,2C--27 to 60 inches; loam

382B--Blooming Silt Loam, 1 To 6 Percent Slopes

Component Description

Blooming and similar soils

Extent: 100 percent of the unit
Geomorphic description: Moraine
Slope range: 1 to 6 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Loess over till
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 11.8 inches
Content of organic matter in the upper 10 inches: 2.8 percent
Typical profile:
Ap--0 to 9 inches; silt loam
Bt--9 to 21 inches; silty clay loam
2Bt--21 to 48 inches; sandy clay loam
2C--48 to 60 inches; loam

408--Faxon Silty Clay Loam

Component Description

Faxon and similar soils

Extent: 100 percent of the unit
Geomorphic description: Flood plain, Stream terrace
Slope range: 0 to 2 percent
Surface layer texture: Silty clay loam
Depth to restrictive feature: Bedrock (lithic): 20 to 40 inches
Drainage class: Poorly drained
Parent material: Alluvium over bedrock
Flooding does not occur (months): January February March July August September
October November December
Flooding is most likely (frequency, months): Frequent April May
Wet soil moisture status is highest (depth, months): 0.5 foot, April
Wet soil moisture status is lowest (depth, months): 2.3 feet, September
Ponding: None
Available water capacity to a depth of 60 inches: 7.6 inches
Content of organic matter in the upper 10 inches: 8.0 percent
Typical profile:
A--0 to 28 inches; silty clay loam
2Cg--28 to 37 inches; flaggy loam
2R--37 to 60 inches; unweathered bedrock

409B--Etter Fine Sandy Loam, 2 To 6 Percent Slopes

Component Description

Etter and similar soils

Extent: 100 percent of the unit
Geomorphic description: Hill
Slope range: 2 to 6 percent
Surface layer texture: Fine sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Glacial drift over sandy residuum
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 6.6 inches
Content of organic matter in the upper 10 inches: 2.0 percent
Typical profile:
Ap,A--0 to 15 inches; fine sandy loam
Bw--15 to 21 inches; fine sandy loam
2C--21 to 60 inches; fine sand

409C--Etter Fine Sandy Loam, 6 To 12 Percent Slopes

Component Description

Etter and similar soils

Extent: 100 percent of the unit
Geomorphic description: Hill
Slope range: 6 to 12 percent
Surface layer texture: Fine sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Glacial drift over sandy residuum
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 6.6 inches
Content of organic matter in the upper 10 inches: 1.5 percent
Typical profile:
Ap,A--0 to 15 inches; fine sandy loam
Bw--15 to 21 inches; fine sandy loam
2C--21 to 60 inches; fine sand

411A--Waukegan Silt Loam, 0 To 1 Percent Slopes

Component Description

Waukegan and similar soils

Extent: 100 percent of the unit
Geomorphic description: Outwash plain, Stream terrace
Slope range: 0 to 1 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Glaciofluvial sediments over outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 7.1 inches
Content of organic matter in the upper 10 inches: 3.5 percent
Typical profile:

Ap,AB--0 to 13 inches; silt loam
Bt--13 to 28 inches; silt loam
2BC,2C--28 to 60 inches; gravelly sand

411B--Waukegan Silt Loam, 1 To 6 Percent Slopes

Component Description

Waukegan and similar soils

Extent: 100 percent of the unit
Geomorphic description: Outwash plain, Stream terrace
Slope range: 1 to 6 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Glaciofluvial sediments over outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 7.1 inches
Content of organic matter in the upper 10 inches: 3.5 percent
Typical profile:
Ap,AB--0 to 13 inches; silt loam
Bt--13 to 28 inches; silt loam
2BC,2C--28 to 60 inches; gravelly sand

411C--Waukegan Silt Loam, 6 To 12 Percent Slopes

Component Description

Waukegan and similar soils

Extent: 100 percent of the unit
Geomorphic description: Outwash plain, Stream terrace
Slope range: 6 to 12 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Glaciofluvial sediments over outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 7.1 inches
Content of organic matter in the upper 10 inches: 3.5 percent
Typical profile:
Ap,AB--0 to 13 inches; silt loam
Bt--13 to 28 inches; silt loam
2BC,2C--28 to 60 inches; gravelly sand

414--Hamel Silt Loam

Component Description

Hamel and similar soils

Extent: 100 percent of the unit
Geomorphic description: Swale on moraine
Slope range: 0 to 3 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Poorly drained
Parent material: Colluvium over till
Flooding: None

Wet soil moisture status is highest (depth, months): 0.5 foot, April May
Wet soil moisture status is lowest (depth, months): 2.5 feet, February August
Ponding: None
Available water capacity to a depth of 60 inches: 11.0 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
Ap,A--0 to 16 inches; silt loam
Btg--16 to 40 inches; silty clay loam
C--40 to 60 inches; loam

415A--Kanaranzi Loam, 0 To 2 Percent Slopes

Component Description

Kanaranzi and similar soils

Extent: 100 percent of the unit
Geomorphic description: Outwash plain
Slope range: 0 to 2 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.6 inches
Content of organic matter in the upper 10 inches: 3.2 percent
Typical profile:
Ap--0 to 9 inches; loam
Bw--9 to 19 inches; loam
2BC,2C--19 to 60 inches; coarse sand

415B--Kanaranzi Loam, 2 To 6 Percent Slopes

Component Description

Kanaranzi and similar soils

Extent: 100 percent of the unit
Geomorphic description: Outwash plain
Slope range: 2 to 6 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.6 inches
Content of organic matter in the upper 10 inches: 3.2 percent
Typical profile:
Ap--0 to 9 inches; loam
Bw--9 to 19 inches; loam
2BC,2C--19 to 60 inches; coarse sand

415C--Kanaranzi Loam, 6 To 12 Percent Slopes

Component Description

Kanaranzi and similar soils

Extent: 100 percent of the unit
Geomorphic description: Outwash plain

Slope range: 6 to 12 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.6 inches
Content of organic matter in the upper 10 inches: 3.2 percent
Typical profile:
Ap--0 to 9 inches; loam
Bw--9 to 19 inches; loam
2BC,2C--19 to 60 inches; coarse sand

449B--Crystal Lake Silt Loam, 1 To 8 Percent Slopes

Component Description

Crystal lake and similar soils

Extent: 100 percent of the unit
Geomorphic description: Moraine
Slope range: 1 to 8 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Glaciolacustine sediments
Flooding: None
Wet soil moisture status is highest (depth, months): 2.5 feet, April
Wet soil moisture status is lowest (depth, months): More than 5.0 feet, January
February July August September October
Ponding: None
Available water capacity to a depth of 60 inches: 12.3 inches
Content of organic matter in the upper 10 inches: 2.8 percent
Typical profile:
Ap--0 to 9 inches; silt loam
Bt--9 to 40 inches; silty clay loam
C--40 to 60 inches; stratified fine sand to silty clay loam

454B--Mahtomedi Loamy Sand, 3 To 8 Percent Slopes

Component Description

Mahtomedi and similar soils

Extent: 100 percent of the unit
Geomorphic description: Moraine, Outwash plain
Slope range: 3 to 8 percent
Surface layer texture: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.1 inches
Content of organic matter in the upper 10 inches: 0.5 percent
Typical profile:
A--0 to 5 inches; loamy sand
Bw--5 to 35 inches; coarse sand
C--35 to 60 inches; sand

454C--Mahtomedi Loamy Sand, 8 To 15 Percent Slopes

Component Description

Mahtomedi and similar soils

Extent: 100 percent of the unit
Geomorphic description: Moraine, Outwash plain
Slope range: 8 to 15 percent
Surface layer texture: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.1 inches
Content of organic matter in the upper 10 inches: 0.5 percent
Typical profile:
A--0 to 5 inches; loamy sand
Bw--5 to 35 inches; coarse sand
C--35 to 60 inches; sand

454E--Mahtomedi Loamy Sand, 15 To 25 Percent Slopes

Component Description

Mahtomedi and similar soils

Extent: 100 percent of the unit
Geomorphic description: Outwash plain, Moraine
Slope range: 15 to 25 percent
Surface layer texture: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.1 inches
Content of organic matter in the upper 10 inches: 0.5 percent
Typical profile:
A--0 to 5 inches; loamy sand
Bw--5 to 35 inches; coarse sand
C--35 to 60 inches; sand

463--Minneiska Loam, Occasionally Flooded

Component Description

Minneiska, occasionally flooded and similar soils

Extent: 100 percent of the unit
Geomorphic description: Flood plain
Slope range: 0 to 2 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Alluvium
Flooding does not occur (months): January February September October November
December
Flooding is most likely (frequency, months): Occasional March April May June
July August
Wet soil moisture status is highest (depth, months): 2.5 feet, April
Wet soil moisture status is lowest (depth, months): 4.5 feet, February

Ponding: None
Available water capacity to a depth of 60 inches: 10.0 inches
Content of organic matter in the upper 10 inches: 3.1 percent
Typical profile:
A--0 to 8 inches; loam
C--8 to 60 inches; stratified sand to silt loam

465--Kalmarville Sandy Loam, Frequently Flooded

Component Description

Kalmarville, frequently flooded and similar soils

Extent: 100 percent of the unit
Geomorphic description: Flood plain
Slope range: 0 to 1 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Poorly drained
Parent material: Alluvium
Flooding does not occur (months): January February September October November
December
Flooding is most likely (frequency, months): Frequent March April May June
Wet soil moisture status is highest (depth, months): 0.5 foot, April
Wet soil moisture status is lowest (depth, months): 2.3 feet, September
Ponding: None
Available water capacity to a depth of 60 inches: 8.2 inches
Content of organic matter in the upper 10 inches: 2.5 percent
Typical profile:
A--0 to 42 inches; sandy loam
2C--42 to 60 inches; sand

495--Zumbro Fine Sandy Loam

Component Description

Zumbro and similar soils

Extent: 100 percent of the unit
Geomorphic description: Outwash plain, Flood plain
Slope range: 0 to 2 percent
Surface layer texture: Fine sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 7.4 inches
Content of organic matter in the upper 10 inches: 3.0 percent
Typical profile:
Ap,A1--0 to 18 inches; fine sandy loam
A2,A3--18 to 56 inches; loamy fine sand
Bw--56 to 60 inches; fine sand

522--Boots Muck

Component Description

Boots and similar soils

Extent: 100 percent of the unit
Geomorphic description: Flood plain, Moraine
Slope range: 0 to 1 percent

Surface layer texture: Muck
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Organic material
Flooding does not occur (months): January February August September October
November December
Flooding is most likely (frequency, months): Frequent March April May June
Wet soil moisture status is highest (depth, months): At the surface April May June
Wet soil moisture status is lowest (depth, months): 1.5 feet, February
Ponding is shallowest (depth, months): 0.5 foot, June
Ponding is deepest (depth, months): 1.0 foot, March April May
Available water capacity to a depth of 60 inches: 23.9 inches
Content of organic matter in the upper 10 inches: 75.0 percent
Typical profile:
Oa--0 to 5 inches; muck
Oe1,Oe2--5 to 60 inches; mucky peat

539--Palms Muck

Component Description

Palms and similar soils

Extent: 100 percent of the unit
Geomorphic description: Moraine, Flood plain
Slope range: 0 to 1 percent
Surface layer texture: Muck
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Organic material over loamy sediments
Flooding does not occur (months): January February August September October
November December
Flooding is most likely (frequency, months): Frequent March April May June
Wet soil moisture status is highest (depth, months): At the surface April May June
Wet soil moisture status is lowest (depth, months): 1.5 feet, February
Ponding is shallowest (depth, months): 0.5 foot, June
Ponding is deepest (depth, months): 1.0 foot, March April May
Available water capacity to a depth of 60 inches: 21.7 inches
Content of organic matter in the upper 10 inches: 42.5 percent
Typical profile:
Oa1,Oa2--0 to 45 inches; muck
2Ab--45 to 56 inches; clay loam
2Cg--56 to 60 inches; clay loam

540--Seelyeville Muck

Component Description

Seelyeville and similar soils

Extent: 100 percent of the unit
Geomorphic description: Flood plain, Moraine
Slope range: 0 to 1 percent
Surface layer texture: Muck
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Organic material
Flooding does not occur (months): January February August September October
November December
Flooding is most likely (frequency, months): Frequent March April May June
Wet soil moisture status is highest (depth, months): At the surface April May June
Wet soil moisture status is lowest (depth, months): 1.5 feet, February
Ponding is shallowest (depth, months): 0.5 foot, June
Ponding is deepest (depth, months): 1.0 foot, March April May

Available water capacity to a depth of 60 inches: 23.9 inches
Content of organic matter in the upper 10 inches: 62.0 percent
Typical profile:
Oa1--0 to 6 inches; muck
Oa2,Oa3,Oa4--6 to 60 inches; muck

545--Rondeau Muck

Component Description

Rondeau and similar soils

Extent: 100 percent of the unit
Geomorphic description: Flood plain, Moraine
Slope range: 0 to 1 percent
Surface layer texture: Muck
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Organic material over limnic sediments
Flooding does not occur (months): January February August September October
November December
Flooding is most likely (frequency, months): Frequent March April May June
Wet soil moisture status is highest (depth, months): At the surface April May June
Wet soil moisture status is lowest (depth, months): 1.5 feet, February
Ponding is shallowest (depth, months): 0.5 foot, June
Ponding is deepest (depth, months): 1.0 foot, March April May
Available water capacity to a depth of 60 inches: 22.0 inches
Content of organic matter in the upper 10 inches: 62.0 percent
Typical profile:
Oa--0 to 45 inches; muck
Ck--45 to 60 inches; marl

611C--Hawick Coarse Sandy Loam, 6 To 12 Percent Slopes

Component Description

Hawick and similar soils

Extent: 100 percent of the unit
Geomorphic description: Outwash plain, Stream terrace
Slope range: 6 to 12 percent
Surface layer texture: Coarse sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.8 inches
Content of organic matter in the upper 10 inches: 2.5 percent
Typical profile:
Ap,AB--0 to 11 inches; coarse sandy loam
Bw,BC--11 to 21 inches; gravelly loamy coarse sand
C--21 to 60 inches; gravelly coarse sand

611D--Hawick Coarse Sandy Loam, 12 To 18 Percent Slopes

Component Description

Hawick and similar soils

Extent: 100 percent of the unit
Geomorphic description: Stream terrace, Outwash plain
Slope range: 12 to 18 percent

Surface layer texture: Coarse sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.8 inches
Content of organic matter in the upper 10 inches: 2.5 percent
Typical profile:
Ap,AB--0 to 11 inches; coarse sandy loam
Bw,BC--11 to 21 inches; gravelly loamy coarse sand
C--21 to 60 inches; gravelly coarse sand

611E--Hawick Loamy Sand, 18 To 25 Percent Slopes

Component Description

Hawick and similar soils

Extent: 100 percent of the unit
Geomorphic description: Outwash plain, Stream terrace
Slope range: 18 to 25 percent
Surface layer texture: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.4 inches
Content of organic matter in the upper 10 inches: 1.9 percent
Typical profile:
A--0 to 9 inches; loamy sand
Bw,BC--9 to 21 inches; gravelly loamy coarse sand
C--21 to 60 inches; gravelly coarse sand

611F--Hawick Loamy Sand, 25 To 50 Percent Slopes

Component Description

Hawick and similar soils

Extent: 100 percent of the unit
Geomorphic description: Stream terrace, Outwash plain
Slope range: 25 to 50 percent
Surface layer texture: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.4 inches
Content of organic matter in the upper 10 inches: 1.9 percent
Typical profile:
A--0 to 9 inches; loamy sand
Bw,BC--9 to 21 inches; gravelly loamy coarse sand
C--21 to 60 inches; gravelly coarse sand

857A--Urban Land-Waukegan Complex, 0 To 1 Percent Slopes

Component Description

Urban land

Extent: 90 percent of the unit
Geomorphic description: Outwash plain

857B--Urban Land-Waukegan Complex, 1 To 8 Percent Slopes

Component Description

Urban land

Extent: 90 percent of the unit
Geomorphic description: Outwash plain

858C--Urban Land-Chetek Complex, 1 To 15 Percent Slopes

Component Description

Urban land

Extent: 65 percent of the unit
Geomorphic description: Moraine, Outwash plain

Chetek and similar soils

Extent: 35 percent of the unit
Geomorphic description: Outwash plain, Moraine
Slope range: 1 to 15 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.9 inches
Content of organic matter in the upper 10 inches: 1.5 percent
Typical profile:
A,AB--0 to 7 inches; sandy loam
Bt--7 to 14 inches; loam
2Bt--14 to 24 inches; gravelly loamy sand
2C--24 to 60 inches; stratified very gravelly coarse sand to sand

860C--Urban Land-Lester Complex, 3 To 15 Percent Slopes

Component Description

Urban land

Extent: 65 percent of the unit
Geomorphic description: Moraine

Lester and similar soils

Extent: 35 percent of the unit
Geomorphic description: Moraine
Slope range: 3 to 15 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 10.4 inches
Content of organic matter in the upper 10 inches: 1.8 percent

Typical profile:
Ap--0 to 6 inches; loam
BA,Bt,Bw--6 to 38 inches; clay loam
C--38 to 60 inches; loam

861C--Urban Land-Kingsley Complex, 3 To 15 Percent Slopes

Component Description

Urban land

Extent: 65 percent of the unit
Geomorphic description: Moraine

Kingsley and similar soils

Extent: 35 percent of the unit
Geomorphic description: Moraine
Slope range: 3 to 15 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 8.4 inches
Content of organic matter in the upper 10 inches: 2.4 percent
Typical profile:
A--0 to 8 inches; sandy loam
E--8 to 12 inches; loamy sand
Bt,Bw--12 to 38 inches; sandy loam
C--38 to 60 inches; sandy loam

861E--Urban Land-Kingsley Complex, 15 To 25 Percent Slopes

Component Description

Urban land

Extent: 65 percent of the unit
Geomorphic description: Moraine

Kingsley and similar soils

Extent: 35 percent of the unit
Geomorphic description: Moraine
Slope range: 15 to 25 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 8.4 inches
Content of organic matter in the upper 10 inches: 2.4 percent
Typical profile:
A--0 to 8 inches; sandy loam
E--8 to 12 inches; loamy sand
Bt,Bw--12 to 38 inches; sandy loam
C--38 to 60 inches; sandy loam

865B--Urban Land-Hubbard Complex, 0 To 6 Percent Slopes

Component Description

Urban land

Extent: 65 percent of the unit
Geomorphic description: Outwash plain

Hubbard and similar soils

Extent: 35 percent of the unit
Geomorphic description: Outwash plain
Slope range: 0 to 6 percent
Surface layer texture: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.8 inches
Content of organic matter in the upper 10 inches: 3.5 percent
Typical profile:
A1,A2--0 to 16 inches; loamy sand
BA,Bw--16 to 38 inches; loamy sand
C--38 to 60 inches; sand

880F--Brodale-Rock Outcrop Complex, 18 To 45 Percent Slopes

Component Description

Brodale and similar soils

Extent: 70 percent of the unit
Geomorphic description: Hill
Slope range: 18 to 45 percent
Surface layer texture: Flaggy loam
Depth to restrictive feature: Bedrock (lithic): 40 to 80 inches
Drainage class: Excessively drained
Parent material: Colluvium over bedrock
Flooding: None
Depth to wet soil moisture status: More than 3.9 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.4 inches
Content of organic matter in the upper 10 inches: 2.3 percent
Typical profile:
A1--0 to 6 inches; flaggy loam
Bw,C--6 to 47 inches; very flaggy very fine sandy loam
R--47 to 51 inches; unweathered bedrock

Rock outcrop

Extent: 30 percent of the unit
Geomorphic description: Hill

888B--Kingsley-Lester Complex, 2 To 6 Percent Slopes

Component Description

Kingsley and similar soils

Extent: 60 percent of the unit
Geomorphic description: Moraine
Slope range: 2 to 6 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till

Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 8.4 inches
Content of organic matter in the upper 10 inches: 2.0 percent
Typical profile:
A--0 to 8 inches; sandy loam
E--8 to 12 inches; loamy sand
Bt,Bw--12 to 38 inches; sandy loam
C--38 to 60 inches; sandy loam

Lester and similar soils

Extent: 40 percent of the unit
Geomorphic description: Moraine
Slope range: 2 to 6 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Wet soil moisture status is highest (depth, months): 3.6 feet, April
Wet soil moisture status is lowest (depth, months): More than 5.0 feet, January
February July August September October December
Ponding: None
Available water capacity to a depth of 60 inches: 10.4 inches
Content of organic matter in the upper 10 inches: 2.1 percent
Typical profile:
Ap--0 to 6 inches; loam
BA,Bt,Bw--6 to 38 inches; clay loam
C--38 to 60 inches; loam

888C--Kingsley-Lester Complex, 6 To 12 Percent Slopes

Component Description

Kingsley and similar soils

Extent: 60 percent of the unit
Geomorphic description: Moraine
Slope range: 6 to 12 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 8.4 inches
Content of organic matter in the upper 10 inches: 2.0 percent
Typical profile:
A--0 to 8 inches; sandy loam
E--8 to 12 inches; loamy sand
Bt,Bw--12 to 38 inches; sandy loam
C--38 to 60 inches; sandy loam

Lester and similar soils

Extent: 40 percent of the unit
Geomorphic description: Moraine
Slope range: 6 to 12 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None

Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 10.4 inches
Content of organic matter in the upper 10 inches: 2.1 percent
Typical profile:
Ap--0 to 6 inches; loam
BA,Bt,Bw--6 to 38 inches; clay loam
C--38 to 60 inches; loam

888D--Kingsley-Lester Complex, 12 To 18 Percent Slopes

Component Description

Kingsley and similar soils

Extent: 60 percent of the unit
Geomorphic description: Moraine
Slope range: 12 to 18 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 8.4 inches
Content of organic matter in the upper 10 inches: 2.0 percent
Typical profile:
A--0 to 8 inches; sandy loam
E--8 to 12 inches; loamy sand
Bt,Bw--12 to 38 inches; sandy loam
C--38 to 60 inches; sandy loam

Lester and similar soils

Extent: 40 percent of the unit
Geomorphic description: Moraine
Slope range: 12 to 18 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 10.4 inches
Content of organic matter in the upper 10 inches: 2.1 percent
Typical profile:
Ap--0 to 6 inches; loam
BA,Bt,Bw--6 to 38 inches; clay loam
C--38 to 60 inches; loam

889B--Wadena-Hawick Complex, 2 To 6 Percent Slopes

Component Description

Wadena and similar soils

Extent: 60 percent of the unit
Geomorphic description: Outwash plain, Valley train
Slope range: 2 to 6 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Outwash

Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 6.8 inches
Content of organic matter in the upper 10 inches: 4.5 percent
Typical profile:
Ap,A,AB--0 to 16 inches; loam
Bw--16 to 31 inches; loam
2BC,2C--31 to 60 inches; stratified gravelly coarse sand to sand

Hawick and similar soils

Extent: 40 percent of the unit
Geomorphic description: Outwash plain, Valley train
Slope range: 2 to 6 percent
Surface layer texture: Coarse sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.8 inches
Content of organic matter in the upper 10 inches: 2.5 percent
Typical profile:
Ap,AB--0 to 11 inches; coarse sandy loam
Bw,BC--11 to 21 inches; gravelly loamy coarse sand
C--21 to 60 inches; gravelly coarse sand

889C--Wadena-Hawick Complex, 6 To 12 Percent Slopes

Component Description

Wadena and similar soils

Extent: 60 percent of the unit
Geomorphic description: Outwash plain, Valley train
Slope range: 6 to 12 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 6.8 inches
Content of organic matter in the upper 10 inches: 4.5 percent
Typical profile:
Ap,A,AB--0 to 16 inches; loam
Bw--16 to 31 inches; loam
2BC,2C--31 to 60 inches; stratified gravelly coarse sand to sand

Hawick and similar soils

Extent: 40 percent of the unit
Geomorphic description: Outwash plain, Valley train
Slope range: 6 to 12 percent
Surface layer texture: Coarse sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.8 inches
Content of organic matter in the upper 10 inches: 2.5 percent

Typical profile:

Ap,AB--0 to 11 inches; coarse sandy loam
Bw,BC--11 to 21 inches; gravelly loamy coarse sand
C--21 to 60 inches; gravelly coarse sand

889D--Wadena-Hawick Complex, 12 To 18 Percent Slopes

Component Description

Wadena and similar soils

Extent: 60 percent of the unit
Geomorphic description: Valley train, Outwash plain
Slope range: 12 to 18 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 6.8 inches
Content of organic matter in the upper 10 inches: 4.5 percent
Typical profile:
Ap,A,AB--0 to 16 inches; loam
Bw--16 to 31 inches; loam
2BC,2C--31 to 60 inches; stratified gravelly coarse sand to sand

Hawick and similar soils

Extent: 40 percent of the unit
Geomorphic description: Valley train, Outwash plain
Slope range: 12 to 18 percent
Surface layer texture: Coarse sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.8 inches
Content of organic matter in the upper 10 inches: 2.5 percent
Typical profile:
Ap,AB--0 to 11 inches; coarse sandy loam
Bw,BC--11 to 21 inches; gravelly loamy coarse sand
C--21 to 60 inches; gravelly coarse sand

895B--Kingsley-Mahtomedi-Spencer Complex, 3 To 8 Percent Slopes

Component Description

Kingsley and similar soils

Extent: 50 percent of the unit
Geomorphic description: Moraine
Slope range: 3 to 8 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 8.4 inches
Content of organic matter in the upper 10 inches: 2.4 percent

Typical profile:

A--0 to 8 inches; sandy loam
E--8 to 12 inches; loamy sand
Bt,Bw--12 to 38 inches; sandy loam
C--38 to 60 inches; sandy loam

Mahtomedi and similar soils

Extent: 25 percent of the unit
Geomorphic description: Moraine
Slope range: 3 to 8 percent
Surface layer texture: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.1 inches
Content of organic matter in the upper 10 inches: 0.5 percent
Typical profile:
A--0 to 5 inches; loamy sand
Bw--5 to 35 inches; coarse sand
C--35 to 60 inches; sand

Spencer and similar soils

Extent: 25 percent of the unit
Geomorphic description: Moraine
Slope range: 3 to 8 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Loess over till
Flooding: None
Wet soil moisture status is highest (depth, months): 2.5 feet, April
Wet soil moisture status is lowest (depth, months): More than 5.0 feet, January
February July August September October
Ponding: None
Available water capacity to a depth of 60 inches: 9.9 inches
Content of organic matter in the upper 10 inches: 2.5 percent
Typical profile:
A--0 to 7 inches; silt loam
E--7 to 13 inches; silt loam
Bt--13 to 35 inches; silt loam
Bw--35 to 45 inches; silt loam
2C--45 to 60 inches; sandy loam

895C--Kingsley-Mahtomedi-Spencer Complex, 8 To 15 Percent Slopes

Component Description

Kingsley and similar soils

Extent: 50 percent of the unit
Geomorphic description: Moraine
Slope range: 8 to 15 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 8.4 inches
Content of organic matter in the upper 10 inches: 2.0 percent

Typical profile:

A--0 to 8 inches; sandy loam
E--8 to 12 inches; loamy sand
Bt,Bw--12 to 38 inches; sandy loam
C--38 to 60 inches; sandy loam

Mahtomedi and similar soils

Extent: 25 percent of the unit
Geomorphic description: Moraine
Slope range: 8 to 15 percent
Surface layer texture: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.1 inches
Content of organic matter in the upper 10 inches: 0.5 percent
Typical profile:
A--0 to 5 inches; loamy sand
Bw--5 to 35 inches; coarse sand
C--35 to 60 inches; sand

Spencer and similar soils

Extent: 25 percent of the unit
Geomorphic description: Moraine
Slope range: 8 to 12 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Loess over till
Flooding: None
Wet soil moisture status is highest (depth, months): 2.5 feet, April
Wet soil moisture status is lowest (depth, months): More than 5.0 feet, January
February July August September October
Ponding: None
Available water capacity to a depth of 60 inches: 9.9 inches
Content of organic matter in the upper 10 inches: 2.5 percent
Typical profile:
A--0 to 7 inches; silt loam
E--7 to 13 inches; silt loam
Bt--13 to 35 inches; silt loam
Bw--35 to 45 inches; silt loam
2C--45 to 60 inches; sandy loam

896E--Kingsley-Mahtomedi Complex, 15 To 25 Percent Slopes

Component Description

Kingsley and similar soils

Extent: 65 percent of the unit
Geomorphic description: Moraine
Slope range: 15 to 25 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 8.4 inches
Content of organic matter in the upper 10 inches: 2.8 percent

Typical profile:

A--0 to 8 inches; sandy loam
E--8 to 12 inches; loamy sand
Bt,Bw--12 to 38 inches; sandy loam
C--38 to 60 inches; sandy loam

Mahtomedi and similar soils

Extent: 35 percent of the unit
Geomorphic description: Moraine
Slope range: 15 to 25 percent
Surface layer texture: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.1 inches
Content of organic matter in the upper 10 inches: 0.5 percent
Typical profile:
A--0 to 5 inches; loamy sand
Bw--5 to 35 inches; coarse sand
C--35 to 60 inches; sand

896F--Kingsley-Mahtomedi Complex, 25 To 40 Percent Slopes

Component Description

Kingsley and similar soils

Extent: 65 percent of the unit
Geomorphic description: Moraine
Slope range: 25 to 35 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Till
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 8.4 inches
Content of organic matter in the upper 10 inches: 2.4 percent
Typical profile:
A--0 to 8 inches; sandy loam
E--8 to 12 inches; loamy sand
Bt,Bw--12 to 38 inches; sandy loam
C--38 to 60 inches; sandy loam

Mahtomedi and similar soils

Extent: 35 percent of the unit
Geomorphic description: Moraine
Slope range: 25 to 40 percent
Surface layer texture: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.1 inches
Content of organic matter in the upper 10 inches: 0.5 percent
Typical profile:
A--0 to 5 inches; loamy sand
Bw--5 to 35 inches; coarse sand

C--35 to 60 inches; sand

963C2--Timula-Bold Silt Loams, 6 To 12 Percent Slopes, Eroded

Component Description

Timula, eroded and similar soils

Extent: 60 percent of the unit
Geomorphic description: Hill
Slope range: 6 to 12 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Loess
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 11.6 inches
Content of organic matter in the upper 10 inches: 1.3 percent
Typical profile:
Ap--0 to 8 inches; silt loam
Bw,C--8 to 60 inches; silt loam

Bold, eroded and similar soils

Extent: 40 percent of the unit
Geomorphic description: Hill
Slope range: 6 to 12 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Loess
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 13.2 inches
Content of organic matter in the upper 10 inches: 1.1 percent
Typical profile:
Ap--0 to 8 inches; silt loam
C--8 to 60 inches; silt loam

963D2--Timula-Bold Silt Loams, 12 To 18 Percent Slopes, Eroded

Component Description

Timula, eroded and similar soils

Extent: 60 percent of the unit
Geomorphic description: Hill
Slope range: 12 to 18 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Loess
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 11.6 inches
Content of organic matter in the upper 10 inches: 1.3 percent
Typical profile:
Ap--0 to 8 inches; silt loam
Bw,C--8 to 60 inches; silt loam

Bold, eroded and similar soils

Extent: 40 percent of the unit
Geomorphic description: Hill
Slope range: 12 to 18 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Loess
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 13.2 inches
Content of organic matter in the upper 10 inches: 1.1 percent
Typical profile:
Ap--0 to 8 inches; silt loam
C--8 to 60 inches; silt loam

963E2--Timula-Bold Silt Loams, 18 To 25 Percent Slopes, Eroded

Component Description

Timula, eroded and similar soils

Extent: 60 percent of the unit
Geomorphic description: Hill
Slope range: 18 to 25 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 11.6 inches
Content of organic matter in the upper 10 inches: 1.3 percent
Typical profile:
A--0 to 8 inches; silt loam
Bw,C--8 to 60 inches; silt loam

Bold, eroded and similar soils

Extent: 40 percent of the unit
Geomorphic description: Hill
Slope range: 18 to 25 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 13.2 inches
Content of organic matter in the upper 10 inches: 1.1 percent
Typical profile:
A--0 to 8 inches; silt loam
C--8 to 60 inches; silt loam

1013--Pits, Quarry

Component Description

Pits

Extent: 100 percent of the unit
Geomorphic description: Stream terrace, Outwash plain, Moraine
Parent material: Limestone and sandstone bedrock

1027--Udorthents, Wet

Component Description

Udorthents, wet substratum

Extent: 100 percent of the unit
Geomorphic description: Outwash plain, Stream terrace, Moraine
Position on landform: Fill placed in depressions
Parent material: Variable soil material
Flooding: None

The Udorthents, wet substratum component comprises of fill material placed in these wet depressional areas to match the adjoining upland landscape. Because of the variability of the Components in this map unit, interpretations for specific uses are not available. Onsite investigation is needed.

1029--Pits, Gravel

Component Description

Pits

Extent: 100 percent of the unit
Geomorphic description: Stream terrace
Moraine, Outwash plain,
Parent material: Gravelly and sandy outwash

Gravel pits are areas that have been mined for gravel or sand. This map unit is actively being mined or is an abandoned pit. Because of the variability of this component in this map unit, interpretation for specific uses are not available. Onsite investigation is needed.

1039--Urban Land

Component Description

Urban land

Extent: 100 percent of the unit
Geomorphic description: Stream terrace
Moraine, Outwash plain
Flooding: None

The Urban land component is mainly commercial, industrial or residential areas with 65 to 100 percent of the mapunit covered by impervious surfaces.

1055--Aquolls And Histosols, Ponded

Component Description

Aquolls, ponded and similar soils

Extent: 50 percent of the unit
Geomorphic description: Depression
Slope range: 0 to 1 percent
Surface layer texture: Variable
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Mineral sediments
Flooding: None
Wet soil moisture status: At the surface all year
Ponding is shallowest (depth, months): 0.5 foot, August
Ponding is deepest (depth, months): 3.0 feet, March April May
Typical profile:

AC--0 to 60 inches; variable

Histosols, ponded and similar soils

Extent: 50 percent of the unit
Geomorphic description: Depression
Slope range: 0 to 1 percent
Surface layer texture: Muck
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Organic material
Flooding: None
Wet soil moisture status: At the surface all year
Ponding is shallowest (depth, months): 0.5 foot, August
Ponding is deepest (depth, months): 3.0 feet, March April May
Available water capacity to a depth of 60 inches: 23.9 inches
Content of organic matter in the upper 10 inches: 59.5 percent
Typical profile:
Oa--0 to 60 inches; muck

1072--Udorthents, Moderately Shallow

Component Description

Udorthents, moderately shallow

Extent: 100 percent of the unit
Geomorphic description: Stream terrace, Outwash plain, Moraine
Slope range: 0 to 6 percent
Parent material: Variable soil material
Flooding: None

The Udorthents component comprises of areas that are active or inactive sanitary landfills. Because of the variability of the Components in this map unit, interpretations for specific uses are not available. Onsite investigation is needed.

1815--Zumbro Loamy Fine Sand

Component Description

Zumbro and similar soils

Extent: 100 percent of the unit
Geomorphic description: Flood plain, Outwash plain
Slope range: 0 to 2 percent
Surface layer texture: Loamy fine sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Outwash
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 6.5 inches
Content of organic matter in the upper 10 inches: 1.5 percent
Typical profile:
Ap,A1--0 to 18 inches; loamy fine sand
A2,A3--18 to 56 inches; loamy fine sand
Bw--56 to 60 inches; fine sand

1816--Kennebec Variant Silt Loam

Component Description

Kennebec variant and similar soils

Extent: 100 percent of the unit
Geomorphic description: Moraine
Slope range: 0 to 4 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Colluvium
Flooding: None
Wet soil moisture status is highest (depth, months): 3.0 feet, April
Wet soil moisture status is lowest (depth, months): More than 5.0 feet, January
February July August September October
Ponding: None
Available water capacity to a depth of 60 inches: 12.0 inches
Content of organic matter in the upper 10 inches: 5.0 percent
Typical profile:
A1,A2,A3--0 to 37 inches; silt loam
Ab,Bb--37 to 60 inches; silty clay loam

1821--Alganssee Sandy Loam, Occasionally Flooded

Component Description

Alganssee, occasionally flooded and similar soils

Extent: 100 percent of the unit
Geomorphic description: Flood plain
Slope range: 0 to 2 percent
Surface layer texture: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat poorly drained
Parent material: Alluvium
Flooding does not occur (months): January February September October November
December
Flooding is most likely (frequency, months): Occasional March April May June
July August
Wet soil moisture status is highest (depth, months): 1.5 feet, April
Wet soil moisture status is lowest (depth, months): 4.5 feet, September
Ponding: None
Available water capacity to a depth of 60 inches: 5.4 inches
Content of organic matter in the upper 10 inches: 3.0 percent
Typical profile:
A--0 to 12 inches; sandy loam
C--12 to 60 inches; stratified sand to loam

1824--Quam Silt Loam, Ponded

Component Description

Quam, ponded and similar soils

Extent: 100 percent of the unit
Geomorphic description: Depression on moraine
Slope range: 0 to 1 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Glaciolacustrine sediments
Flooding: None
Wet soil moisture status: At the surface all year
Ponding is shallowest (depth, months): 0.5 foot, August
Ponding is deepest (depth, months): 3.0 feet, March April May
Available water capacity to a depth of 60 inches: 11.5 inches
Content of organic matter in the upper 10 inches: 10.5 percent

Typical profile:
A1--0 to 12 inches; silt loam
A2,Ab1,Ab2--12 to 45 inches; silt loam
Cg--45 to 60 inches; silt loam

1825C--Seelyeville Muck, Sloping

Component Description

Seelyeville, sloping and similar soils

Extent: 100 percent of the unit
Geomorphic description: Escarpment
Slope range: 0 to 15 percent
Surface layer texture: Muck
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Organic material
Flooding: None
Wet soil moisture status is highest (depth, months): At the surface April May June
Wet soil moisture status is lowest (depth, months): 1.5 feet, February
Ponding: None
Available water capacity to a depth of 60 inches: 23.9 inches
Content of organic matter in the upper 10 inches: 62.0 percent
Typical profile:
Oa--0 to 60 inches; muck

1827A--Waukegan Silt Loam, Bedrock Substratum, 0 To 2 Percent Slopes

Component Description

Waukegan, bedrock substratum and similar soils

Extent: 100 percent of the unit
Geomorphic description: Outwash plain
Slope range: 0 to 2 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Bedrock (lithic): 30 to 45 inches
Drainage class: Well drained
Parent material: Glaciofluvial sediments over bedrock
Flooding: None
Depth to wet soil moisture status: More than 3.3 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 8.2 inches
Content of organic matter in the upper 10 inches: 3.5 percent
Typical profile:
Ap,AB--0 to 17 inches; silt loam
Bt--17 to 36 inches; silt loam
2C--36 to 40 inches; sand
R--40 to 60 inches; unweathered bedrock

1827B--Waukegan Silt Loam, Bedrock Substratum, 2 To 6 Percent Slopes

Component Description

Waukegan, bedrock substratum and similar soils

Extent: 100 percent of the unit
Geomorphic description: Outwash plain
Slope range: 2 to 6 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Bedrock (lithic): 30 to 45 inches
Drainage class: Well drained
Parent material: Glaciofluvial sediments over bedrock

Flooding: None
Depth to wet soil moisture status: More than 3.3 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 8.2 inches
Content of organic matter in the upper 10 inches: 3.5 percent
Typical profile:
Ap,AB--0 to 17 inches; silt loam
Bt--17 to 36 inches; silt loam
2C--36 to 40 inches; sand
R--40 to 60 inches; unweathered bedrock

1827C--Waukegan Silt Loam, Bedrock Substratum, 6 To 12 Percent Slopes

Component Description

Waukegan, bedrock substratum and similar soils

Extent: 100 percent of the unit
Geomorphic description: Outwash plain
Slope range: 6 to 12 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Bedrock (lithic): 30 to 45 inches
Drainage class: Well drained
Parent material: Glaciofluvial sediments over bedrock
Flooding: None
Depth to wet soil moisture status: More than 3.3 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 8.2 inches
Content of organic matter in the upper 10 inches: 3.5 percent
Typical profile:
Ap,AB--0 to 17 inches; silt loam
Bt--17 to 36 inches; silt loam
2C--36 to 40 inches; sand
R--40 to 60 inches; unweathered bedrock

1848B--Sparta Loamy Sand, Bedrock Substratum, 2 To 8 Percent Slopes

Component Description

Sparta, bedrock substratum and similar soils

Extent: 100 percent of the unit
Geomorphic description: Hill
Slope range: 2 to 8 percent
Surface layer texture: Loamy sand
Depth to restrictive feature: Bedrock (lithic): 40 to 60 inches
Drainage class: Excessively drained
Parent material: Outwash over bedrock
Flooding: None
Depth to wet soil moisture status: More than 3.5 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.7 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Ap--0 to 10 inches; loamy sand
Bw--10 to 38 inches; fine sand
2Bw--38 to 42 inches; clay loam
R--42 to 60 inches; unweathered bedrock

1894B--Winnebago Loam, 2 To 6 Percent Slopes

Component Description

Winnebago and similar soils

Extent: 100 percent of the unit
Geomorphic description: Moraine
Slope range: 2 to 6 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Loess over till
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 10.2 inches
Content of organic matter in the upper 10 inches: 3.0 percent
Typical profile:
Ap,A--0 to 15 inches; loam
2Bt,2BC--15 to 44 inches; sandy clay loam
2C--44 to 60 inches; sandy loam

1895B--Carmi Loam, 2 To 8 Percent Slopes

Component Description

Carmi and similar soils

Extent: 100 percent of the unit
Geomorphic description: Moraine
Slope range: 2 to 8 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Glaciofluvial sediments
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 5.3 inches
Content of organic matter in the upper 10 inches: 2.5 percent
Typical profile:
Ap,A--0 to 13 inches; loam
Bw,Bt--13 to 25 inches; sandy loam
2Bw,2C--25 to 60 inches; stratified gravelly coarse sand to loamy sand

1896B--Ostrander-Carmi Loams, 2 To 6 Percent Slopes

Component Description

Ostrander and similar soils

Extent: 60 percent of the unit
Geomorphic description: Moraine
Slope range: 2 to 6 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Loess over till
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 11.4 inches
Content of organic matter in the upper 10 inches: 4.0 percent
Typical profile:
Ap,A,AB--0 to 17 inches; loam
2Bw--17 to 53 inches; loam
2C--53 to 60 inches; loam

Carmi and similar soils

Extent: 40 percent of the unit
Geomorphic description: Moraine
Slope range: 2 to 6 percent
Surface layer texture: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Glaciofluvial sediments
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 5.3 inches
Content of organic matter in the upper 10 inches: 2.5 percent
Typical profile:
Ap,A--0 to 13 inches; loam
Bw,Bt--13 to 25 inches; sandy loam
2Bw,2C--25 to 60 inches; stratified gravelly coarse sand to loamy sand

1898F--Etter-Brodale Complex, 25 To 60 Percent Slopes

Component Description

Etter and similar soils

Extent: 50 percent of the unit
Geomorphic description: Hill
Slope range: 25 to 40 percent
Surface layer texture: Fine sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Glacial drift over sandy residuum
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 6.6 inches
Content of organic matter in the upper 10 inches: 1.5 percent
Typical profile:
Ap,A--0 to 15 inches; fine sandy loam
Bw--15 to 21 inches; fine sandy loam
2C--21 to 60 inches; fine sand

Brodale and similar soils

Extent: 50 percent of the unit
Geomorphic description: Hill
Slope range: 25 to 60 percent
Surface layer texture: Very flaggy loam
Depth to restrictive feature: Bedrock (lithic): 40 to 80 inches
Drainage class: Excessively drained
Parent material: Colluvium over bedrock
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.4 inches
Content of organic matter in the upper 10 inches: 2.3 percent
Typical profile:
A--0 to 6 inches; very flaggy loam
Bw--6 to 47 inches; very flaggy very fine sandy loam
R--47 to 60 inches; unweathered bedrock

1902B--Jewett Silt Loam, 1 To 6 Percent Slopes

Component Description

Jewett and similar soils

Extent: 100 percent of the unit
Geomorphic description: Moraine
Slope range: 1 to 6 percent
Surface layer texture: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Loess over till
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 8.2 inches
Content of organic matter in the upper 10 inches: 2.0 percent
Typical profile:
Ap,E--0 to 13 inches; silt loam
Bt--13 to 24 inches; silt loam
2Bt--24 to 33 inches; loam
2C--33 to 60 inches; sandy loam

CW--Census Water

Additional Components

Census water: 100 percent of the unit