

Soil Descriptions - Non Technical

GP--Pits, Gravel-Udipsamments Complex

Component Description

Pits

Extent: 100 percent of the unit

M-W--Water, Miscellaneous

Additional Components

Water, miscellaneous: ---

P3A--Biscay Silty Clay Loam, 0 To 2 Percent Slopes, Occasionally Flooded

Component Description

Biscay and similar soils

Extent: 80 to 90 percent of the unit

Geomorphic description:

Flat on outwash plain

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 outwash

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):

2.0 feet August

Ponding: None

Available water capacity to a depth of 60 inches: 6.9 inches

Content of organic matter in the upper 10 inches: 6.0 percent

Typical profile:

Ap,A1--0 to 16 inches; silty clay loam

A2--16 to 21 inches; clay loam

Bg--21 to 31 inches; clay loam

2Cg--31 to 60 inches; coarse sand

Additional Components

Cylinder and similar soils: 5 to 15 percent of the unit

Talcot and similar soils: 0 to 10 percent of the unit

P4A--Calco Silty Clay Loam, 0 To 2 Percent Slopes, Frequently Flooded

Component Description

Calco, frequent and similar soils

Extent: 75 to 85 percent of the unit

Geomorphic description:

Flat on floodplain

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:
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):
3.3 feet February August
Ponding: None
Available water capacity to a depth of 60 inches: 13.2 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
A1,A2--0 to 36 inches; silty clay loam
Cg--36 to 60 inches; silty clay loam

Additional Components

Calco, occasional and similar soils: 5 to 15 percent of the unit
Havelock, frequent and similar soils: 1 to 10 percent of the unit
Spillco, frequent and similar soils: 1 to 10 percent of the unit

P5A--Calco Silty Clay Loam, 0 To 2 Percent Slopes, Occasionally Flooded

Component Description

Calco, occasional and similar soils
Extent: 75 to 85 percent of the unit
Geomorphic description:
Flat on floodplain
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:
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):
3.3 feet February August
Ponding: None
Available water capacity to a depth of 60 inches: 13.2 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
Ap,A1-3--0 to 36 inches; silty clay loam
Bg--36 to 44 inches; silty clay loam
Cg--44 to 60 inches; silty clay loam

Additional Components

Calco, frequent and similar soils: 1 to 10 percent of the unit
Colo, occasional and similar soils: 1 to 10 percent of the unit
Havelock, occasional and similar soils: 1 to 10 percent of the unit
Spillco, occasional and similar soils: 1 to 10 percent of the unit

P6A--Colo Silty Clay Loam, 0 To 2 Percent Slopes, Occasionally Flooded

Component Description

Colo, occasional and similar soils
Extent: 75 to 85 percent of the unit
Geomorphic description:
Flat on floodplain
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:
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):
3.3 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,A1-3--0 to 34 inches; silty clay loam
BA,Bg--34 to 52 inches; silty clay loam
Cg--52 to 60 inches; silt loam

Additional Components

Calco, frequent and similar soils: 1 to 10 percent of the unit
Calco, occasional and similar soils: 1 to 10 percent of the unit
Comfrey, occasional and similar soils: 1 to 10 percent of the unit
unit
Spillco, occasional and similar soils: 1 to 10 percent of the unit
unit

P7A--Comfrey Clay Loam, 0 To 2 Percent Slopes, Occasionally Flooded

Component Description

Comfrey, occasional and similar soils
Extent: 75 to 85 percent of the unit
Geomorphic description:
Flat on floodplain
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:
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):
3.3 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:
A1,A2--0 to 26 inches; clay loam
Bg--26 to 35 inches; clay loam
BCg,Cg--35 to 60 inches; clay loam

Additional Components

Colo, occasional and similar soils: 1 to 10 percent of the unit
Havelock, frequent and similar soils: 1 to 10 percent of the unit
Havelock, occasional and similar soils: 1 to 10 percent of the unit
unit
Spillco, occasional and similar soils: 1 to 10 percent of the unit
unit

P8A--Cylinder Loam, 0 To 2 Percent Slopes, Occasionally Flooded

Component Description

Cylinder and similar soils

Extent: 75 to 85 percent of the unit
Geomorphic description:
Flat 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: Somewhat poorly drained
Parent material:
Alluvium over outwash
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):
1.3 feet April
Wet soil moisture status is lowest (depth, months):
3.0 feet August
Ponding: None
Available water capacity to a depth of 60 inches: 6.5 inches
Content of organic matter in the upper 10 inches: 5.0 percent
Typical profile:
Ap,A1,2--0 to 18 inches; loam
Bw1,2--18 to 28 inches; loam
2BC--28 to 39 inches; gravelly sand
2C1,2--39 to 60 inches; gravelly sand

Additional Components

Fairhaven and similar soils: 5 to 15 percent of the unit
Spillco, occasional and similar soils: 5 to 15 percent of the unit

P11A--Dempster Silt Loam, 0 To 2 Percent Slopes

Component Description

Dempster and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic description:
Flat on 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: Well drained
Parent material:
Loess over outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 7.9 inches
Content of organic matter in the upper 10 inches: 4.5 percent
Typical profile:
Ap,A--0 to 10 inches; silt loam
Bw1,Bw2--10 to 29 inches; silty clay loam
Bk--29 to 36 inches; loam
2C--36 to 60 inches; gravelly sand

Additional Components

Graceville and similar soils: 5 to 15 percent of the unit

P11B--Dempster Silt Loam, 2 To 6 Percent Slopes

Component Description

Dempster and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic description:
Hill on outwash plain
Position on landform:
Summits, shoulders, backslopes
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 over outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 7.0 inches
Content of organic matter in the upper 10 inches: 4.5 percent
Typical profile:
Ap,A--0 to 12 inches; silt loam
Bw1,Bw2--12 to 27 inches; silty clay loam
2C--27 to 60 inches; gravelly sand

Additional Components

Graceville and similar soils: 5 to 15 percent of the unit

P12B--Everly Silty Clay Loam, 2 To 6 Percent Slopes

Component Description

Everly and similar soils

Extent: 75 to 85 percent of the unit
Geomorphic description:
Hill on loess mantled till plain
Position on landform:
Summits, shoulders, backslopes
Slope range: 2 to 6 percent
Surface layer texture: Silty clay 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):
4.0 feet April
Wet soil moisture status is lowest (depth, months):
More than 6.7 feet January February March July
August September October
November December
Ponding: None
Available water capacity to a depth of 60 inches: 9.8 inches
Content of organic matter in the upper 10 inches: 4.5 percent
Typical profile:
Ap--0 to 10 inches; silty clay loam
Bw--10 to 18 inches; silty clay loam
2Bk,2BC--18 to 80 inches; clay loam

Additional Components

Sac and similar soils: 5 to 15 percent of the unit
Ransom and similar soils: 1 to 10 percent of the unit
Wilmington and similar soils: 1 to 10 percent of the unit

P12C2--Everly Silty Clay Loam, 6 To 12 Percent Slopes, Eroded

Component Description

Everly, eroded and similar soils

Extent: 75 to 85 percent of the unit
Geomorphic description:
Hill on loess mantled till plain

Position on landform:
Summits, shoulders, backslopes
Slope range: 6 to 12 percent
Surface layer texture: Silty clay 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):
4.0 feet April
Wet soil moisture status is lowest (depth, months):
More than 6.7 feet January February March May June
July August September October
November December
Ponding: None
Available water capacity to a depth of 60 inches: 9.7 inches
Content of organic matter in the upper 10 inches: 3.1 percent
Typical profile:
Ap--0 to 7 inches; silty clay loam
Bw--7 to 16 inches; silty clay loam
2Bk,2BC--16 to 80 inches; clay loam

Additional Components

Everly and similar soils: 5 to 15 percent of the unit
Moneta and similar soils: 0 to 10 percent of the unit
Wilmington and similar soils: 1 to 10 percent of the unit

P13A--Fairhaven Silt Loam, 0 To 2 Percent Slopes

Component Description

Fairhaven and similar soils
Extent: 80 to 90 percent of the unit
Geomorphic description:
Flat on 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: Well drained
Parent material:
Loess over outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 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: 4.5 percent
Typical profile:
Ap--0 to 8 inches; silt loam
Al--8 to 13 inches; loam
Bw1,Bw2--13 to 36 inches; loam
2C--36 to 60 inches; gravelly sand

Additional Components

Cylinder and similar soils: 1 to 10 percent of the unit
Dempster and similar soils: 1 to 10 percent of the unit
Flandreau and similar soils: 1 to 10 percent of the unit

P13B--Fairhaven Silt Loam, 2 To 6 Percent Slopes

Component Description

Fairhaven and similar soils
Extent: 75 to 85 percent of the unit
Geomorphic description:
Hill on outwash plain
Position on landform:
Summits, shoulders, basckslopes

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 over outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 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--0 to 7 inches; silt loam
 Al--7 to 12 inches; loam
 Bw1,Bw2--12 to 27 inches; loam
 2C--27 to 60 inches; gravelly sand

Additional Components

Cylinder and similar soils: 1 to 10 percent of the unit
Dempster and similar soils: 1 to 10 percent of the unit
Flandreau and similar soils: 1 to 10 percent of the unit
Kanaranzi and similar soils: 1 to 10 percent of the unit

P14A--Flandreau Silt Loam, 0 To 2 Percent Slopes

Component Description

Flandreau and similar soils
Extent: 85 to 95 percent of the unit
Geomorphic description:
 Flat on 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: Well drained
Parent material:
 Loess over outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 8.6 inches
Content of organic matter in the upper 10 inches: 3.8 percent
Typical profile:
 Ap--0 to 8 inches; silt loam
 AB,Bw1--8 to 30 inches; silt loam
 2BC,--30 to 47 inches; sandy loam
 2C--47 to 60 inches; loamy sand

Additional Components

Grovena and similar soils: 5 to 15 percent of the unit

P14B--Flandreau Silt Loam, 2 To 6 Percent Slopes

Component Description

Flandreau and similar soils
Extent: 75 to 85 percent of the unit
Geomorphic description:
 Hill on outwashplain
Position on landform:
 Summits, shoulders, basckslopes
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 over outwash

Flooding: None
Depth to wet soil moisture status: More than 6.7 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: 3.8 percent
Typical profile:
Ap--0 to 8 inches; silt loam
AB,Bw1,2--8 to 30 inches; silt loam
2BC,--30 to 36 inches; loamy sand
2C--36 to 60 inches; loamy sand

Additional Components

Grovena and similar soils: 5 to 15 percent of the unit
Thurman and similar soils: 5 to 15 percent of the unit

P15B--Galva Silty Clay Loam, 2 To 5 Percent Slopes

Component Description

Galva and similar soils

Extent: 75 to 85 percent of the unit
Geomorphic description:
Hill on loess mantled till plain
Position on landform:
Summits, shoulders, backslopes
Slope range: 2 to 5 percent
Surface layer texture: Silty clay 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 6.7 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: 4.5 percent
Typical profile:
Ap,A--0 to 11 inches; silty clay loam
BA,Bw1,2--11 to 31 inches; silty clay loam
BC--31 to 45 inches; silt loam
C--45 to 60 inches; silt loam

Additional Components

Primghar and similar soils: 5 to 15 percent of the unit
Annieville and similar soils: 1 to 10 percent of the unit
Sac and similar soils: 1 to 10 percent of the unit

P15C2--Galva Silty Clay Loam, 5 To 9 Percent Slopes, Eroded

Component Description

Galva, eroded and similar soils

Extent: 75 to 85 percent of the unit
Geomorphic description:
Hill on loess mantled till plain
Position on landform:
Summits, shoulders, backslopes
Slope range: 5 to 9 percent
Surface layer texture: Silty clay 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 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 11.5 inches
Content of organic matter in the upper 10 inches: 3.4 percent

Typical profile:

Ap--0 to 8 inches; silty clay loam
Bw1,Bw2--8 to 34 inches; silty clay loam
C--34 to 60 inches; silt loam

Additional Components

Galva and similar soils: 5 to 15 percent of the unit
Sac, eroded and similar soils: 1 to 10 percent of the unit
Judson and similar soils: 1 to 5 percent of the unit
Primghar and similar soils: 1 to 5 percent of the unit

P16A--Graceville Silty Clay Loam, 0 To 2 Percent Slopes

Component Description

Graceville and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic description:
Flat on outwash plain
Slope range: 0 to 2 percent
Surface layer texture: Silty clay loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Well drained
Parent material:
Loess over outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 10.6 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
Ap,A--0 to 20 inches; silty clay loam
Bw1-3--20 to 53 inches; silty clay loam
2C--53 to 60 inches; gravelly sand

Additional Components

Dempster and similar soils: 5 to 15 percent of the unit

P16B--Graceville Silty Clay Loam, 2 To 6 Percent Slopes

Component Description

Graceville and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic description:
Hill on outwash plain
Position on landform:
Summits, shoulders, backslopes
Slope range: 2 to 6 percent
Surface layer texture: Silty clay loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Well drained
Parent material:
Loess over outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 10.6 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
Ap,A--0 to 20 inches; silty clay loam
Bw1-3--20 to 53 inches; silty clay loam
2C--53 to 60 inches; gravelly sand

Additional Components

Dempster and similar soils: 5 to 15 percent of the unit

P17A--Ihlen Silty Clay Loam, 0 To 2 Percent Slopes

Component Description

Ihlen and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic description:
 Flat on loess mantled bedrock
Slope range: 0 to 2 percent
Surface layer texture: Silty clay loam
Depth to restrictive feature:
 Bedrock (lithic): 20 to 40 inches
Drainage class: Well drained
Parent material:
 Loess over bedrock
Flooding: None
Depth to wet soil moisture status: More than 3.2 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: 4.5 percent
Typical profile:
 A--0 to 12 inches; silty clay loam
 Bw1,Bw2--12 to 38 inches; silty clay loam
 R--38 to 80 inches; unweathered bedrock

Additional Components

Bluemound and similar soils: 1 to 5 percent of the unit
Deeper to rock and similar soils: 1 to 5 percent of the unit
Rock outcrop: 0 to 2 percent of the unit

P17B--Ihlen Silty Clay Loam, 2 To 6 Percent Slopes

Component Description

Ihlen and similar soils

Extent: 75 to 85 percent of the unit
Geomorphic description:
 Hill on loess mantled bedrock
Position on landform:
 Summits, shoulders, backslopes
Slope range: 2 to 6 percent
Surface layer texture: Silty clay loam
Depth to restrictive feature:
 Bedrock (lithic): 20 to 40 inches
Drainage class: Well drained
Parent material:
 Loess over bedrock
Flooding: None
Depth to wet soil moisture status: More than 2.6 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: 3.8 percent
Typical profile:
 A--0 to 8 inches; silty clay loam
 Bw1,Bw2--8 to 23 inches; silty clay loam
 BC,C--23 to 31 inches; silt loam
 R--31 to 80 inches; unweathered bedrock

Additional Components

Bluemound and similar soils: 5 to 15 percent of the unit
Deeper to rock and similar soils: 1 to 10 percent of the unit
Rock outcrop: 1 to 10 percent of the unit

P18B--Ihlen-Rock Outcrop Complex, 0 To 4 Percent Slopes

Component Description

Ihlen and similar soils

Extent: 50 to 60 percent of the unit

Geomorphic description:

Flat on loess mantled bedrock and bedrock
Slope range: 0 to 4 percent
Surface layer texture: Silty clay loam
Depth to restrictive feature:
Bedrock (lithic): 20 to 40 inches
Drainage class: Well drained
Parent material:
Loess over bedrock
Flooding: None
Depth to wet soil moisture status: More than 2.7 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: 4.5 percent
Typical profile:
A--0 to 11 inches; silty clay loam
Bw1,Bw2--11 to 32 inches; silty clay loam
R--32 to 80 inches; unweathered bedrock

Rock outcrop

Extent: 20 to 30 percent of the unit

Additional Components

Bluemound and similar soils: 5 to 15 percent of the unit
Deeper to rock and similar soils: 5 to 15 percent of the unit

P18C--Ihlen-Rock Outcrop Complex, 4 To 35 Percent Slopes

Component Description

Ihlen and similar soils

Extent: 40 to 50 percent of the unit
Geomorphic description:
Hill on loess mantled bedrock and bedrock
Position on landform:
Summits, shoulders, backslopes
Slope range: 4 to 35 percent
Surface layer texture: Silty clay loam
Depth to restrictive feature:
Bedrock (lithic): 20 to 40 inches
Drainage class: Well drained
Parent material:
Loess over bedrock
Flooding: None
Depth to wet soil moisture status: More than 2.3 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 5.2 inches
Content of organic matter in the upper 10 inches: 4.5 percent
Typical profile:
A1,A2--0 to 14 inches; silty clay loam
Bw1,Bw2--14 to 27 inches; silty clay loam
R--27 to 80 inches; unweathered bedrock

Rock outcrop

Extent: 35 to 45 percent of the unit

Additional Components

Bluemound and similar soils: 5 to 15 percent of the unit
Deeper to rock and similar soils: 1 to 5 percent of the unit
Spillco, occasional and similar soils: 0 to 5 percent of the unit

P19A--Judson Silty Clay Loam, 1 To 3 Percent Slopes

Component Description

Judson and similar soils

Extent: 75 to 85 percent of the unit
Geomorphic description:
Hill on loess mantled till plain
Position on landform:

Footslopes
Slope range: 1 to 3 percent
Surface layer texture: Silty clay 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):
2.5 feet April
Wet soil moisture status is lowest (depth, months):
More than 6.7 feet February August
Ponding: None
Available water capacity to a depth of 60 inches: 12.3 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
Ap,A1,A2--0 to 22 inches; silty clay loam
AB,Bw--22 to 35 inches; silty clay loam
BC,C--35 to 60 inches; silty clay loam

Additional Components

Whitewood, overwash and similar soils: 10 to 20 percent of the unit
Primghar and similar soils: 1 to 10 percent of the unit

P20B--Judson Silt Loam, 3 To 8 Percent Slopes

Component Description

Judson and similar soils
Extent: 75 to 85 percent of the unit
Geomorphic description:
Hill on loess mantled till plain
Position on landform:
Footslopes
Slope range: 3 to 8 percent
Surface layer texture: Silt 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 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 12.5 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
Ap,A--0 to 36 inches; silt loam
Bw1,Bw2--36 to 56 inches; silty clay loam
C--56 to 60 inches; silty clay loam

Additional Components

Primghar and similar soils: 5 to 15 percent of the unit
Galva and similar soils: 1 to 10 percent of the unit
Whitewood, overwash and similar soils: 1 to 10 percent of the unit

P21A--Marcus Silty Clay Loam, 0 To 2 Percent Slopes

Component Description

Marcus and similar soils
Extent: 75 to 85 percent of the unit
Geomorphic description:
Hill on loess mantled till plain
Position on landform:
Toeslopes
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
Wet soil moisture status is lowest (depth, months):
 3.3 feet February August
Ponding: None
Available water capacity to a depth of 60 inches: 12.1 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
 Ap, A1,2--0 to 17 inches; silty clay loam
 BA,Bg1-3--17 to 44 inches; silty clay loam
 Cg1--44 to 57 inches; silt loam
 2Cg2--57 to 60 inches; loam

Additional Components

Whitewood, frequent and similar soils: 5 to 15 percent of the unit
Primghar and similar soils: 1 to 10 percent of the unit
Spicer and similar soils: 1 to 10 percent of the unit

P22A--Havelock Clay Loam, 0 To 2 Percent Slopes, Frequently Flooded

Component Description

Havelock, frequent and similar soils
Extent: 75 to 85 percent of the unit
Geomorphic description:
 Flat on floodplain
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:
 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):
 3.3 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: 6.0 percent
Typical profile:
 A1,A2--0 to 32 inches; clay loam
 Cg--32 to 60 inches; clay loam

Additional Components

Havelock, occasional and similar soils: 5 to 15 percent of the unit
Calco, frequent and similar soils: 1 to 10 percent of the unit
Spillco, frequent and similar soils: 1 to 10 percent of the unit

P23A--Havelock Clay Loam, 0 To 2 Percent Slopes, Occasionally Flooded

Component Description

Havelock, occasional and similar soils
Extent: 75 to 85 percent of the unit
Geomorphic description:
 Flat of floodplain

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:
 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):
 3.3 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: 6.0 percent
Typical profile:
 Ap,A1,A2--0 to 32 inches; clay loam
 Bg--32 to 60 inches; clay loam

Additional Components

Havelock, frequent and similar soils: 5 to 15 percent of the unit
Spillco, occasional and similar soils: 1 to 10 percent of the unit
Comfrey, occasional and similar soils: 1 to 5 percent of the unit
Calco, occasional and similar soils: 1 to 5 percent of the unit

P24B--Moody Silty Clay Loam, 2 To 5 Percent Slopes

Component Description

Moody and similar soils
Extent: 80 to 90 percent of the unit
Geomorphic description:
 Hill on loess mantled till plain
Position on landform:
 Summits, shoulders, backslopes
Slope range: 2 to 5 percent
Surface layer texture: Silty clay 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 6.7 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: 4.5 percent
Typical profile:
 Ap--0 to 10 inches; silty clay loam
 Bw1,2,3--10 to 35 inches; silty clay loam
 Bk--35 to 48 inches; silt loam
 C--48 to 60 inches; silt loam

Additional Components

Primghar and similar soils: 5 to 15 percent of the unit
Nora, eroded and similar soils: 1 to 5 percent of the unit
Splitrock and similar soils: 0 to 5 percent of the unit

P24C2--Moody Silty Clay Loam, 5 To 9 Percent Slopes, Eroded

Component Description

Moody, eroded and similar soils
Extent: 75 to 85 percent of the unit
Geomorphic description:
 Hill on loess mantled till plain

Position on landform:
Summits, shoulders, backslopes
Slope range: 5 to 9 percent
Surface layer texture: Silty clay 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 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 11.5 inches
Content of organic matter in the upper 10 inches: 2.9 percent
Typical profile:
Ap--0 to 8 inches; silty clay loam
Bw1,Bw2--8 to 34 inches; silty clay loam
Bk--34 to 50 inches; silt loam
C--50 to 60 inches; silt loam

Additional Components

Moody and similar soils: 1 to 10 percent of the unit
Nora, eroded and similar soils: 1 to 10 percent of the unit
Splitrock, eroded and similar soils: 1 to 10 percent of the unit
Primghar and similar soils: 1 to 5 percent of the unit
Crofton, eroded and similar soils: 1 to 5 percent of the unit

P25C2--Nora Silt Loam, 4 To 10 Percent Slopes, Eroded

Component Description

Nora, eroded and similar soils
Extent: 80 to 90 percent of the unit
Geomorphic description:
Hill on loess mantled till plain
Position on landform:
Summits, shoulders, backslopes
Slope range: 4 to 10 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 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 11.5 inches
Content of organic matter in the upper 10 inches: 2.9 percent
Typical profile:
Ap--0 to 8 inches; silt loam
Bw1,Bw2--8 to 24 inches; silt loam
Bk--24 to 33 inches; silt loam
C1,C2--33 to 60 inches; silt loam

Additional Components

Crofton, eroded and similar soils: 1 to 10 percent of the unit
Judson and similar soils: 1 to 10 percent of the unit
Moody, eroded and similar soils: 1 to 10 percent of the unit

P25D2--Nora Silt Loam, 10 To 18 Percent Slopes, Eroded

Component Description

Nora, eroded and similar soils
Extent: 75 to 85 percent of the unit
Geomorphic description:
Hill on loess mantled till plain
Position on landform:
Summits, shoulders, backslopes

Slope range: 10 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 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 11.5 inches
Content of organic matter in the upper 10 inches: 2.9 percent
Typical profile:
 Ap--0 to 8 inches; silt loam
 Bw1,Bw2--8 to 32 inches; silt loam
 Bk--32 to 40 inches; silt loam
 C--40 to 60 inches; silt loam

Additional Components

Crofton, eroded and similar soils: 5 to 15 percent of the unit
Judson and similar soils: 1 to 10 percent of the unit
Moody, eroded and similar soils: 1 to 10 percent of the unit

P26C2--Nora-Crofton Complex, 6 To 12 Percent Slopes, Eroded

Component Description

Nora, eroded and similar soils
Extent: 40 to 60 percent of the unit
Geomorphic description:
 Hill on loess mantled till plain
Position on landform:
 Summits, backslopes
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 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 11.5 inches
Content of organic matter in the upper 10 inches: 2.9 percent
Typical profile:
 Ap--0 to 8 inches; silt loam
 Bw1,Bw2--8 to 22 inches; silt loam
 Bk--22 to 30 inches; silt loam
 C--30 to 60 inches; silt loam

Crofton, eroded and similar soils
Extent: 20 to 40 percent of the unit
Geomorphic description:
 Hill on loess mantled till plain
Position on landform:
 Shoulders
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 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 12.2 inches
Content of organic matter in the upper 10 inches: 1.4 percent
Typical profile:
 Ap--0 to 8 inches; silt loam

Bk--8 to 14 inches; silt loam
C1,C2--14 to 60 inches; silt loam

Additional Components

Judson and similar soils: 5 to 15 percent of the unit
Moody, eroded and similar soils: 5 to 15 percent of the unit

P26D2--Nora-Crofton Complex, 12 To 18 Percent Slopes, Eroded

Component Description

Nora, eroded and similar soils

Extent: 40 to 50 percent of the unit

Geomorphic description:

Hill on loess mantled till plain

Position on landform:

Summits, backslopes

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 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 11.5 inches

Content of organic matter in the upper 10 inches: 2.9 percent

Typical profile:

Ap--0 to 8 inches; silt loam

Bw1,Bw2--8 to 30 inches; silt loam

Bk--30 to 38 inches; silt loam

C--38 to 60 inches; silt loam

Crofton, eroded and similar soils

Extent: 30 to 40 percent of the unit

Geomorphic description:

Hill on loess mantled till plain

Position on landform:

Summits, shoulders

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 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 12.1 inches

Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

Ap--0 to 6 inches; silt loam

Bk1,2--6 to 20 inches; silt loam

C--20 to 60 inches; silt loam

Additional Components

Judson and similar soils: 10 to 20 percent of the unit
Moody, eroded and similar soils: 1 to 10 percent of the unit

P27A--Primghar Silty Clay Loam, 1 To 3 Percent Slopes

Component Description

Primghar and similar soils

Extent: 75 to 85 percent of the unit

Geomorphic description:

Hill on loess mantled till plain

Position on landform:
 Footslopes
Slope range: 1 to 3 percent
Surface layer texture: Silty clay 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
Wet soil moisture status is lowest (depth, months):
 5.9 feet February August
Ponding: None
Available water capacity to a depth of 60 inches: 11.8 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
 Ap,A1,A2--0 to 21 inches; silty clay loam
 Bw1,2,3--21 to 42 inches; silty clay loam
 C--42 to 60 inches; silty clay loam

Additional Components

Galva and similar soils: 5 to 10 percent of the unit
Marcus and similar soils: 5 to 10 percent of the unit
Judson and similar soils: 1 to 10 percent of the unit

P28A--Ransom Silty Clay Loam, 1 To 3 Percent Slopes

Component Description

Ransom and similar soils
Extent: 75 to 85 percent of the unit
Geomorphic description:
 Hill on loess mantled till plain
Position on landform:
 Footslopes
Slope range: 1 to 3 percent
Surface layer texture: Silty clay 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
Wet soil moisture status is lowest (depth, months):
 5.9 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: 6.0 percent
Typical profile:
 Ap,A,AB--0 to 16 inches; silty clay loam
 Bw1-3--16 to 33 inches; silty clay loam
 2Bck,2BC--33 to 80 inches; clay loam

Additional Components

Rushmore and similar soils: 5 to 10 percent of the unit
Sac and similar soils: 5 to 10 percent of the unit
Primghar and similar soils: 1 to 10 percent of the unit

P29A--Rushmore Silty Clay Loam, 0 To 2 Percent Slopes

Component Description

Rushmore and similar soils
Extent: 75 to 85 percent of the unit
Geomorphic description:
 Hill on loess mantled till plain

Position on landform:
Toeslopes
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
Wet soil moisture status is lowest (depth, months):
3.3 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: 6.0 percent
Typical profile:
Ap,A,AB--0 to 18 inches; silty clay loam
Bg1,2--18 to 24 inches; silty clay loam
BCg--24 to 32 inches; silty clay loam
2BCkg,2BCg--32 to 80 inches; clay loam

Additional Components

Ransom and similar soils: 5 to 15 percent of the unit
Whitewood, frequent and similar soils: 5 to 15 percent of the Unit

P30B--Sac Silty Clay Loam, 2 To 5 Percent Slopes

Component Description

Sac and similar soils
Extent: 75 to 85 percent of the unit
Geomorphic description:
Hill on loess mantled till plain
Position on landform:
Summits, shoulders, backslopes
Slope range: 2 to 5 percent
Surface layer texture: Silty clay 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 6.7 feet January February March July
August September October
November December
Ponding: None
Available water capacity to a depth of 60 inches: 10.7 inches
Content of organic matter in the upper 10 inches: 4.5 percent
Typical profile:
Ap,A--0 to 11 inches; silty clay loam
BA,Bw1--11 to 28 inches; silty clay loam
2Bw2--28 to 33 inches; clay loam
2BCk,2BC--33 to 60 inches; clay loam

Additional Components

Annieville and similar soils: 5 to 15 percent of the unit
Primghar and similar soils: 1 to 10 percent of the unit
Ransom and similar soils: 1 to 10 percent of the unit

P30C2--Sac Silty Clay Loam, 5 To 10 Percent Slopes, Eroded

Component Description

Sac, eroded and similar soils

Extent: 75 to 85 percent of the unit

Geomorphic description:

Hill on loess mantled till plain

Position on landform:

Summits, shoulders, backslopes

Slope range: 5 to 10 percent

Surface layer texture: Silty clay 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 6.7 feet January February March May June

July August September October

November December

Ponding: None

Available water capacity to a depth of 60 inches: 10.6 inches

Content of organic matter in the upper 10 inches: 2.9 percent

Typical profile:

Ap--0 to 8 inches; silty clay loam

Bw--8 to 26 inches; silty clay loam

2Bck--26 to 60 inches; clay loam

Additional Components

Annieville and similar soils: 5 to 15 percent of the unit

Sac and similar soils: 1 to 10 percent of the unit

Primghar and similar soils: 1 to 5 percent of the unit

Ransom and similar soils: 1 to 5 percent of the unit

P31A--Spicer Silty Clay Loam, 0 To 2 Percent Slopes

Component Description

Spicer and similar soils

Extent: 80 to 90 percent of the unit

Geomorphic description:

Hill on loess mantled till plain

Position on landform:

Toeslopes

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

Wet soil moisture status is lowest (depth, months):

3.3 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: 6.0 percent

Typical profile:

Ap,A,AB--0 to 17 inches; silty clay loam

Bg1,Bg2--17 to 35 inches; silty clay loam

Cg--35 to 60 inches; silty clay loam

Additional Components

Marcus and similar soils: 5 to 15 percent of the unit

Whitewood and similar soils: 1 to 10 percent of the unit

P32A--Spillco Silt Loam, 0 To 2 Percent Slopes, Frequently Flooded

Component Description

Spillco, frequent and similar soils
Extent: 80 to 90 percent of the unit
Geomorphic description:
Flat on floodplain
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:
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):
2.5 feet April
Wet soil moisture status is lowest (depth, months):
More than 6.7 feet February August
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--0 to 15 inches; silt loam
A2,C1,2--15 to 60 inches; loam

Additional Components

Spillco, occasional and similar soils: 5 to 15 percent of the unit
Havelock, frequent and similar soils: 1 to 10 percent of the unit

P33A--Spillco Silt Loam, 0 To 2 Percent Slopes, Occasionally Flooded

Component Description

Spillco, occasional and similar soils
Extent: 80 to 90 percent of the unit
Geomorphic description:
Flat on floodplain
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:
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):
More than 6.7 feet February August
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--0 to 10 inches; silt loam
A2--10 to 22 inches; silt loam
A3,A4,C--22 to 60 inches; loam

Additional Components

Spillco, frequent and similar soils: 5 to 15 percent of the unit
Comfrey, occasional and similar soils: 1 to 10 percent of the unit

P34B--Splitrock Silty Clay Loam, 2 To 5 Percent Slopes

Component Description

Splitrock and similar soils

Extent: 75 to 90 percent of the unit

Geomorphic description:

Hill on loess mantled till plain

Position on landform:

Summits, shoulders, backslopes

Slope range: 2 to 5 percent

Surface layer texture: Silty clay 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 6.7 feet January February March July
August September October
November December

Ponding: None

Available water capacity to a depth of 60 inches: 10.5 inches

Content of organic matter in the upper 10 inches: 4.5 percent

Typical profile:

Ap--0 to 10 inches; silty clay loam

Bw1,2--10 to 30 inches; silty clay loam

2Bk,2BC--30 to 80 inches; clay loam

Additional Components

Primghar and similar soils: 5 to 15 percent of the unit

Deeper to till and similar soils: 5 to 10 percent of the unit

P34C2--Splitrock Silty Clay Loam, 5 To 9 Percent Slopes, Eroded

Component Description

Splitrock, eroded and similar soils

Extent: 75 to 85 percent of the unit

Geomorphic description:

Hill on loess mantled till plain

Position on landform:

Summits, shoulders, backslopes

Slope range: 5 to 9 percent

Surface layer texture: Silty clay 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 6.7 feet January February March May June
July August September October
November December

Ponding: None

Available water capacity to a depth of 60 inches: 10.3 inches

Content of organic matter in the upper 10 inches: 3.4 percent

Typical profile:

Ap--0 to 8 inches; silty clay loam

Bw--8 to 26 inches; silty clay loam

2Bk,2Bck--26 to 60 inches; clay loam

Additional Components

Splitrock and similar soils: 5 to 15 percent of the unit

Deeper to till and similar soils: 1 to 10 percent of the unit

Primghar and similar soils: 1 to 10 percent of the unit

P36A--Talcot Silty Clay Loam, 0 To 2 Percent Slopes, Occasionally Flooded

Component Description

Talcot and similar soils

Extent: 80 to 90 percent of the unit

Geomorphic description:

Flat on outwash plain

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:

Alluvium over outwash

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):

2.0 feet August

Ponding: None

Available water capacity to a depth of 60 inches: 7.3 inches

Content of organic matter in the upper 10 inches: 6.0 percent

Typical profile:

Ap,A1,A2--0 to 22 inches; silty clay loam

Bg--22 to 33 inches; silty clay loam

2Cg--33 to 60 inches; coarse sand

Additional Components

Biscay and similar soils: 5 to 15 percent of the unit

Cylinder and similar soils: 1 to 10 percent of the unit

P37B--Talmo Gravelly Sandy Loam, 2 To 6 Percent Slopes

Component Description

Talmo and similar soils

Extent: 85 to 95 percent of the unit

Geomorphic description:

Hill on outwash plain

Position on landform:

Summits, shoulders, backslopes

Slope range: 2 to 6 percent

Surface layer texture: 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 6.7 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: 1.6 percent

Typical profile:

A--0 to 7 inches; gravelly sandy loam

AC--7 to 10 inches; gravelly loamy sand

C1,C2--10 to 60 inches; gravelly coarse sand

Additional Components

Kanaranzi and similar soils: 1 to 10 percent of the unit

Thurman and similar soils: 1 to 10 percent of the unit

P37D--Talmo Gravelly Sandy Loam, 6 To 35 Percent Slopes

Component Description

Talmo and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic description:
Hill on outwash plain
Position on landform:
Summits, shoulders, backslopes
Slope range: 6 to 35 percent
Surface layer texture: 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 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 2.5 inches
Content of organic matter in the upper 10 inches: 1.9 percent
Typical profile:
A--0 to 9 inches; gravelly sandy loam
AC--9 to 12 inches; gravelly loamy sand
C1,C2--12 to 60 inches; very gravelly sand

Additional Components

Kanaranzi and similar soils: 1 to 10 percent of the unit
Thurman and similar soils: 1 to 10 percent of the unit

P38B--Thurman Sandy Loam, 2 To 6 Percent Slopes

Component Description

Thurman and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic description:
Hill on outwash plain
Position on landform:
Summits, shoulders, backslopes
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 6.7 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: 3.0 percent
Typical profile:
Ap,A--0 to 13 inches; sandy loam
AC--13 to 18 inches; sandy loam
C1,C2--18 to 60 inches; sand

Additional Components

Henkin and similar soils: 5 to 15 percent of the unit

P38C--Thurman Sandy Loam, 6 To 12 Percent Slopes

Component Description

Thurman and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic description:
Hill on outwash plain
Position on landform:
Summits, shoulders, backslopes
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 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.7 inches
Content of organic matter in the upper 10 inches: 3.0 percent
Typical profile:
Ap,A--0 to 10 inches; sandy loam
AC--10 to 20 inches; sandy loam
Cl,C2--20 to 60 inches; sand

Additional Components

Henkin and similar soils: 5 to 15 percent of the unit

P40A--Bluemound Silt Loam, 0 To 3 Percent Slopes

Component Description

Bluemound and similar soils
Extent: 80 to 90 percent of the unit
Geomorphic description:
Flat on loess mantled bedrock
Slope range: 0 to 3 percent
Surface layer texture: Silt loam
Depth to restrictive feature:
Bedrock (lithic): 10 to 20 inches
Drainage class: Well drained
Parent material:
Loess 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: 2.8 inches
Content of organic matter in the upper 10 inches: 5.0 percent
Typical profile:
A--0 to 14 inches; silt loam
2R--14 to 80 inches; unweathered bedrock

Additional Components

Ihlen and similar soils: 5 to 15 percent of the unit
Rock outcrop: 1 to 10 percent of the unit

P41A--Rosedell Silty Clay Loam, 0 To 2 Percent Slopes

Component Description

Rosedell and similar soils
Extent: 90 to 98 percent of the unit
Geomorphic description:
Flat on lakeplain
Slope range: 0 to 2 percent
Surface layer texture: Silty clay loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material:
Lacustrine deposits and/or 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 does not occur (months):
January February May June July August September October
November December

Ponding is deepest (depth, months):
1.0 foot April
Available water capacity to a depth of 60 inches: 11.7 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
Ap--0 to 10 inches; silty clay loam
Bg--10 to 30 inches; clay loam
2Bkg--30 to 44 inches; silty clay
2Cg--44 to 80 inches; clay

Additional Components

Spicer and similar soils: 1 to 5 percent of the unit
Albolls and similar soils: 1 to 5 percent of the unit

P42A--Whitewood Silty Clay Loam, 0 To 2 Percent Slopes

Component Description

Whitewood and similar soils
Extent: 65 to 80 percent of the unit
Geomorphic description:
Hill on loess mantled till plain
Position on landform:
Toeslopes
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:
Alluvium
Flooding: None
Wet soil moisture status is highest (depth, months):
0.5 foot April
Wet soil moisture status is lowest (depth, months):
3.3 feet February August
Ponding: None
Available water capacity to a depth of 60 inches: 11.9 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
Ap,A,Bw--0 to 25 inches; silty clay loam
Bg1,2--25 to 43 inches; silty clay loam
Bkg--43 to 60 inches; silty clay loam

Additional Components

Whitewood, frequent and similar soils: 5 to 15 percent of the unit
Whitewood, overwash and similar soils: 5 to 15 percent of the unit
Primghar and similar soils: 5 to 15 percent of the unit
Wakonda and similar soils: 0 to 3 percent of the unit

P43A--Wilmington Silty Clay Loam, 1 To 3 Percent Slopes

Component Description

Wilmington and similar soils
Extent: 80 to 90 percent of the unit
Geomorphic description:
Hill on loess mantled till plain
Position on landform:
Footslopes
Slope range: 1 to 3 percent
Surface layer texture: Silty clay 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
Wet soil moisture status is lowest (depth, months):
5.9 feet February August
Ponding: None
Available water capacity to a depth of 60 inches: 10.9 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
Ap,A--0 to 15 inches; silty clay loam
Bw--15 to 20 inches; loam
2Bw--20 to 25 inches; clay loam
2Bk--25 to 55 inches; clay loam
2BC1,2--55 to 80 inches; clay loam

Additional Components

Everly and similar soils: 1 to 10 percent of the unit
Ransom and similar soils: 1 to 10 percent of the unit
Rushmore and similar soils: 1 to 10 percent of the unit

P44E--Shindler Clay Loam, 15 To 45 Percent Slopes

Component Description

Shindler and similar soils
Extent: 80 to 90 percent of the unit
Geomorphic description:
Hill on loess mantled till plain
Position on landform:
Summits, shoulders
Slope range: 15 to 45 percent
Surface layer texture: Clay 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 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 9.1 inches
Content of organic matter in the upper 10 inches: 1.6 percent
Typical profile:
A--0 to 7 inches; clay loam
Bw--7 to 11 inches; clay loam
Bk1,Bk2--11 to 35 inches; clay loam
BC--35 to 60 inches; clay loam

Additional Components

Judson and similar soils: 5 to 15 percent of the unit
Deeper to carbonates and similar soils: 1 to 10 percent of the unit

P45E--Moneta Clay Loam, 15 To 45 Percent Slopes

Component Description

Moneta and similar soils
Extent: 80 to 90 percent of the unit
Geomorphic description:
Hill on loess mantled till plain
Position on landform:
Summits, shoulders
Slope range: 15 to 45 percent
Surface layer texture: Clay 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 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 9.6 inches
Content of organic matter in the upper 10 inches: 1.9 percent
Typical profile:
A--0 to 9 inches; clay loam
BA--9 to 13 inches; clay loam
Bk1-3,BC1--13 to 53 inches; clay loam
BC2--53 to 80 inches; clay loam

Additional Components

Judson and similar soils: 5 to 15 percent of the unit
Deeper to carbonates and similar soils: 1 to 10 percent of the Unit

P47A--Whitewood Silty Clay Loam, Overwash, 0 To 2 Percent Slopes

Component Description

Whitewood, overwash and similar soils
Extent: 75 to 90 percent of the unit
Geomorphic description:
Hill on loess mantled till plain
Position on landform:
Toeslopes
Slope range: 0 to 2 percent
Surface layer texture: Silty clay loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Somewhat poorly drained
Parent material:
Alluvium
Flooding: None
Wet soil moisture status is highest (depth, months):
1.5 feet April
Wet soil moisture status is lowest (depth, months):
5.9 feet February August
Ponding: None
Available water capacity to a depth of 60 inches: 12.3 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
Ap,A1,A2--0 to 48 inches; silty clay loam
Bkg--48 to 70 inches; silty clay loam
Cg--70 to 80 inches; silty clay loam

Additional Components

Judson and similar soils: 5 to 15 percent of the unit
Whitewood, frequent and similar soils: 5 to 15 percent of the unit

P48A--Allendorf Silty Clay Loam, 0 To 2 Percent Slopes

Component Description

Allendorf and similar soils
Extent: 80 to 90 percent of the unit
Geomorphic description:
Flat on outwash plain
Slope range: 0 to 2 percent
Surface layer texture: Silty clay loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Well drained
Parent material:
Loess over outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 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: 4.5 percent

Typical profile:

Ap,A--0 to 14 inches; silty clay loam
Bw1,2,3--14 to 34 inches; silty clay loam
2BC,2C1--34 to 60 inches; very gravelly loamy coarse sand

Additional Components

Kanaranzi and similar soils: 1 to 10 percent of the unit
Component Description

Moderately well drained soil and similar soils

Extent: 1 to 10 percent of the unit
Geomorphic description:
Hill on outwash plain
Position on landform:
Summits, shoulders, basckslopes
Slope range: 1 to 3 percent
Surface layer texture: Silty clay loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material:
Loess over outwash
Flooding: None
Wet soil moisture status is highest (depth, months):
1.3 feet April
Wet soil moisture status is lowest (depth, months):
3.0 feet August
Ponding: None
Available water capacity to a depth of 60 inches: 7.5 inches
Content of organic matter in the upper 10 inches: 4.5 percent
Typical profile:
Ap,A--0 to 13 inches; silty clay loam
Bw1,2,3--13 to 34 inches; silty clay loam
2BC,2C1--34 to 60 inches; very gravelly loamy coarse sand

Sac and similar soils

Extent: 1 to 10 percent of the unit
Geomorphic description:
Hill on loess mantled till plain
Position on landform:
Summits, shoulders, backslopes
Slope range: 2 to 5 percent
Surface layer texture: Silty clay 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 6.7 feet January February March July
August September October
November December
Ponding: None
Available water capacity to a depth of 60 inches: 10.7 inches
Content of organic matter in the upper 10 inches: 4.5 percent
Typical profile:
Ap,A--0 to 11 inches; silty clay loam
BA,Bw1--11 to 28 inches; silty clay loam
2Bw2--28 to 33 inches; clay loam
2BCk,2BC--33 to 60 inches; clay loam

P48B--Allendorf Silty Clay Loam, 2 To 6 Percent Slopes

Component Description

Allendorf and similar soils

Extent: 80 to 90 percent of the unit
Geomorphic description:
Hill on outwash plain

Position on landform:
Summits, shoulders, basckslopes
Slope range: 2 to 6 percent
Surface layer texture: Silty clay loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Well drained
Parent material:
Loess over outwash
Flooding: None
Depth to wet soil moisture status: More than 6.7 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: 4.5 percent
Typical profile:
Ap,A--0 to 13 inches; silty clay loam
Bw1,2,3--13 to 34 inches; silty clay loam
2BC,2C1--34 to 60 inches; very gravelly loamy coarse sand

Additional Components

Kanaranzi and similar soils: 1 to 10 percent of the unit
Component Description

Moderately well drained soil and similar soils
Extent: 1 to 10 percent of the unit
Geomorphic description:
Hill on outwash plain
Position on landform:
Summits, shoulders, basckslopes
Slope range: 1 to 3 percent
Surface layer texture: Silty clay loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material:
Loess over outwash
Flooding: None
Wet soil moisture status is highest (depth, months):
1.3 feet April
Wet soil moisture status is lowest (depth, months):
3.0 feet August
Ponding: None
Available water capacity to a depth of 60 inches: 7.5 inches
Content of organic matter in the upper 10 inches: 4.5 percent
Typical profile:
Ap,A--0 to 13 inches; silty clay loam
Bw1,2,3--13 to 34 inches; silty clay loam
2BC,2C1--34 to 60 inches; very gravelly loamy coarse sand

Sac and similar soils

Extent: 1 to 10 percent of the unit
Geomorphic description:
Hill on loess mantled till plain
Position on landform:
Summits, shoulders, backslopes
Slope range: 2 to 5 percent
Surface layer texture: Silty clay 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 6.7 feet January February March July
August September October
November December
Ponding: None
Available water capacity to a depth of 60 inches: 10.7 inches
Content of organic matter in the upper 10 inches: 4.5 percent
Typical profile:

Ap,A--0 to 11 inches; silty clay loam
BA,Bw1--11 to 28 inches; silty clay loam
2Bw2--28 to 33 inches; clay loam
2Bck,2BC--33 to 60 inches; clay loam

P55A--Kato Silty Clay Loam, 0 To 2 Percent Slopes

Component Description

Kato and similar soils

Extent: 85 to 95 percent of the unit

Geomorphic description:

Flat on outwash plain

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 outwash

Flooding: None

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

0.5 foot April

Wet soil moisture status is lowest (depth, months):

2.0 feet August

Ponding: None

Available water capacity to a depth of 60 inches: 7.8 inches

Content of organic matter in the upper 10 inches: 6.0 percent

Typical profile:

Ap,A,AB--0 to 21 inches; silty clay loam

Bg1,Bg2--21 to 31 inches; silty clay loam

2BCg--31 to 35 inches; sandy loam

2Cg1,2Cg2--35 to 60 inches; coarse sand

Additional Components

Better drained soil and similar soils: 5 to 15 percent of the unit

W--Water

Additional Components

Water: ---