

Map Unit Description (MN)

Swift County, Minnesota

[Data apply to the entire extent of the map unit within the survey area. Map unit and soil properties for a specific parcel of land may vary somewhat and should be determined by onsite investigation]

GP--Pits, gravel-Udipsamments complex

Pits, gravel

<p><i>Extent:</i> 50 to 100 percent of the unit</p> <p><i>Landform(s):</i> moraines, outwash plains, stream terraces</p> <p><i>Slope gradient:</i> 0 to 50 percent</p> <p><i>Parent material:</i> sandy and gravelly outwash</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i></p> <p><i>Ponding:</i></p> <p><i>Drainage class:</i></p>	<p><i>Soil loss tolerance (T factor):</i></p> <p><i>Wind erodibility group (WEG):</i></p> <p><i>Wind erodibility index (WEI):</i></p> <p><i>Kw factor (surface layer)</i></p> <p><i>Land capability, nonirrigated</i></p> <p><i>Hydric soil:</i></p> <p><i>Hydrologic group:</i></p> <p><i>Potential for frost action:</i></p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Udipsamments

<p><i>Extent:</i> 15 to 30 percent of the unit</p> <p><i>Landform(s):</i> moraines, outwash plains, stream terraces</p> <p><i>Slope gradient:</i> 0 to 6 percent</p> <p><i>Parent material:</i> outwash</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i></p> <p><i>Ponding:</i></p> <p><i>Drainage class:</i> excessively drained</p>	<p><i>Soil loss tolerance (T factor):</i></p> <p><i>Wind erodibility group (WEG):</i></p> <p><i>Wind erodibility index (WEI):</i></p> <p><i>Kw factor (surface layer)</i></p> <p><i>Land capability, nonirrigated</i></p> <p><i>Hydric soil:</i></p> <p><i>Hydrologic group:</i></p> <p><i>Potential for frost action:</i></p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Swift County, Minnesota

J1A--Parnell silty clay loam, depressional, 0 to 1 percent slopes

Parnell, depressional

Extent: 85 to 95 percent of the unit

Landform(s): depressions on lake plains, depressions on moraines, depressions on till plains

Slope gradient: 0 to 1 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated 3w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A1,A2 -- 0 to 22 in	silty clay loam	moderately slow	3.97 to 4.85 in	6.1 to 7.3
Btg -- 22 to 55 in	silty clay	slow	4.30 to 5.29 in	6.1 to 7.3
BCg -- 55 to 80 in	silty clay loam	slow	3.97 to 4.71 in	6.6 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J2A--La Prairie loam, 0 to 2 percent slopes, occasionally flooded

La Prairie, occasionally flooded

Extent: 80 to 95 percent of the unit

Landform(s): flats on flood plains

Slope gradient: 0 to 2 percent

Parent material: alluvium

Restrictive feature(s): greater than 60 inches

Flooding: occasional

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated 1

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	loam	moderate	1.81 to 1.99 in	6.6 to 8.4
A -- 9 to 38 in	loam	moderate	5.83 to 6.41 in	6.6 to 8.4
Bw -- 38 to 50 in	loam	moderate	2.01 to 2.24 in	6.6 to 8.4
C -- 50 to 60 in	loam	moderate	1.67 to 1.87 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J3A--Arveson sandy loam, 0 to 2 percent slopes

Arveson

<p><i>Extent:</i> 70 to 90 percent of the unit</p> <p><i>Landform(s):</i> rims on depressions on outwash plains, flats on outwash plains, drainageways on outwash plains</p> <p><i>Slope gradient:</i> 0 to 2 percent</p> <p><i>Parent material:</i> outwash</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> poorly drained</p>	<p><i>Soil loss tolerance (T factor):</i> 5</p> <p><i>Wind erodibility group (WEG):</i> 3</p> <p><i>Wind erodibility index (WEI):</i> 86</p> <p><i>Kw factor (surface layer):</i> .17</p> <p><i>Land capability, nonirrigated:</i> 2w</p> <p><i>Hydric soil:</i> yes</p> <p><i>Hydrologic group:</i> A/D</p> <p><i>Potential for frost action:</i> high</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	sandy loam	moderately rapid	1.28 to 1.48 in	7.4 to 8.4
Ak -- 10 to 22 in	sandy loam	moderately rapid	1.59 to 1.83 in	7.4 to 8.4
Bkg -- 22 to 35 in	sandy loam	moderately rapid	1.95 to 2.21 in	7.4 to 8.4
2Cg -- 35 to 80 in	sand	rapid	2.24 to 6.73 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J4A--Rockwell loam, 0 to 2 percent slopes

Rockwell

Extent: 80 to 95 percent of the unit

Landform(s): rims on depressions on outwash plains, flats on outwash plains, drainageways on outwash plains

Slope gradient: 0 to 2 percent

Parent material: outwash over lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated 2w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

Representative soil profile:

			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 9 in		loam	moderate	1.63 to 1.99 in	7.4 to 8.4
Ak --	9 to 16 in		loam	moderately rapid	1.06 to 1.20 in	7.9 to 8.4
Bg --	16 to 25 in		sandy loam	moderately rapid	1.36 to 1.54 in	7.9 to 8.4
2Cg --	25 to 45 in		stratified silt loam to silty clay loam	slow	3.15 to 4.33 in	7.4 to 8.4
3Cg --	45 to 80 in		clay loam	moderate	6.31 to 7.71 in	7.4 to 7.8

Map Unit Description (MN)

Swift County, Minnesota

J5A--Fossum sandy loam, 0 to 2 percent slopes

Fossum

Extent: 75 to 95 percent of the unit

Landform(s): rims on depressions on outwash plains, drainageways on outwash plains, flats on outwash plains

Slope gradient: 0 to 2 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated 3w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: moderate

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A1 --	0 to 13 in	sandy loam	moderately rapid	1.69 to 2.34 in	7.4 to 8.4
A2 --	13 to 21 in	sand	rapid	0.47 to 0.87 in	7.4 to 8.4
Cg --	21 to 80 in	fine sand	rapid	2.95 to 5.31 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J6A--McDonaldsville silty clay, 0 to 2 percent slopes

McDonaldsville

Extent: 80 to 95 percent of the unit

Landform(s): flats on outwash plains, drainageways on outwash plains

Slope gradient: 0 to 2 percent

Parent material: lacustrine deposits over outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated 2w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A1 -- 0 to 17 in	silty clay	slow	2.54 to 3.05 in	6.1 to 7.3
Bw,BC -- 17 to 36 in	silty clay	slow	2.65 to 3.59 in	6.1 to 8.4
2C -- 36 to 80 in	sand	rapid	3.09 to 5.29 in	7.9 to 8.4

J7A--Sverdrup sandy loam, 0 to 2 percent slopes

Sverdrup

Extent: 70 to 90 percent of the unit

Landform(s): flats on outwash plains

Slope gradient: 0 to 2 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated 3s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 12 in	sandy loam	moderately rapid	1.54 to 1.77 in	6.1 to 7.3
Bw -- 12 to 26 in	sandy loam	moderately rapid	1.70 to 1.98 in	6.1 to 7.3
2C -- 26 to 80 in	sand	rapid	2.70 to 3.78 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J7B--Sverdrup sandy loam, 2 to 6 percent slopes

Sverdrup

Extent: 80 to 90 percent of the unit
Landform(s): hills on outwash plains
Slope gradient: 2 to 6 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 12 in	sandy loam	moderately rapid	1.54 to 1.77 in	6.1 to 7.3
Bw -- 12 to 26 in	sandy loam	moderately rapid	1.70 to 1.98 in	6.1 to 7.3
2C -- 26 to 80 in	sand	rapid	2.70 to 3.78 in	7.4 to 8.4

J8A--Egeland sandy loam, 0 to 2 percent slopes

Egeland

Extent: 70 to 90 percent of the unit
Landform(s): flats on outwash plains
Slope gradient: 0 to 2 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .10
Land capability, nonirrigated 3s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A1 -- 0 to 15 in	sandy loam	moderately rapid	1.65 to 2.54 in	6.1 to 7.3
Bw -- 15 to 40 in	sandy loam	moderately rapid	2.27 to 3.78 in	6.1 to 7.8
Bk -- 40 to 60 in	sandy loam	moderately rapid	1.77 to 2.95 in	7.4 to 8.4
C -- 60 to 80 in	loamy sand	moderately rapid	1.61 to 2.01 in	6.6 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J8B--Egeland sandy loam, 2 to 6 percent slopes

Egeland

Extent: 70 to 90 percent of the unit

Landform(s): hills on outwash plains

Slope gradient: 2 to 6 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .10

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A1 -- 0 to 9 in	sandy loam	moderately rapid	1.00 to 1.54 in	6.1 to 7.3
Bw -- 9 to 26 in	sandy loam	moderately rapid	1.52 to 2.54 in	6.1 to 7.8
Bk -- 26 to 39 in	loamy sand	moderately rapid	1.04 to 1.30 in	6.6 to 8.4
C -- 39 to 80 in	loamy sand	moderately rapid	3.28 to 4.09 in	6.6 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J9A--Estelline silt loam, 0 to 2 percent slopes

Estelline

Extent: 85 to 95 percent of the unit

Landform(s): flats on outwash plains

Slope gradient: 0 to 2 percent

Parent material: lacustrine deposits over outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 2s

Hydric soil: no

Hydrologic group: B

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 6 in	silt loam	moderate	1.12 to 1.30 in	6.1 to 7.3
Bw -- 6 to 27 in	silty clay loam	moderate	3.83 to 4.46 in	6.1 to 7.8
Bk -- 27 to 37 in	silt loam	moderate	1.57 to 1.97 in	7.4 to 8.4
2C -- 37 to 60 in	gravelly sand	very rapid	0.69 to 1.37 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J10A--Sinai silty clay, 0 to 2 percent slopes

Sinai

Extent: 85 to 95 percent of the unit

Landform(s): hills on moraines

Slope gradient: 0 to 2 percent

Parent material: lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated 2s

Hydric soil: no

Hydrologic group: D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 12 in	silty clay	slow	1.54 to 2.01 in	6.1 to 7.3
Bss -- 12 to 23 in	silty clay	slow	1.10 to 2.09 in	6.6 to 7.8
Bkss -- 23 to 42 in	silty clay	slow	1.93 to 3.67 in	7.4 to 8.4
C -- 42 to 60 in	silty clay	slow	1.77 to 3.37 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J10B--Sinai silty clay, 2 to 6 percent slopes

Sinai

Extent: 85 to 95 percent of the unit

Landform(s): hills on moraines

Slope gradient: 2 to 6 percent

Parent material: lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 12 in	silty clay	slow	1.54 to 2.01 in	6.1 to 7.3
Bss -- 12 to 23 in	silty clay	slow	1.10 to 2.09 in	6.6 to 7.8
Bkss -- 23 to 42 in	silty clay	slow	1.93 to 3.67 in	7.4 to 8.4
C -- 42 to 60 in	silty clay	slow	1.77 to 3.37 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J11A--Vallers clay loam, 0 to 2 percent slopes

Vallers

Extent: 75 to 95 percent of the unit

Landform(s): rims on depressions on till plains, flats on till plains, drainageways on till plains

Slope gradient: 0 to 2 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated 2w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A --	0 to 14 in	clay loam	moderate	2.41 to 2.69 in	7.4 to 8.4
Bkg --	14 to 38 in	loam	moderate	3.60 to 4.56 in	7.4 to 8.4
Cg --	38 to 80 in	loam	moderately slow	6.26 to 7.93 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J12A--Marysland loam, 0 to 2 percent slopes

Marysland

Extent: 75 to 95 percent of the unit
Landform(s): rims on depressions on outwash plains, flats on outwash plains, drainageways on outwash plains
Slope gradient: 0 to 2 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 2w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	loam	moderate	1.54 to 1.99 in	7.4 to 8.4
Ak -- 9 to 12 in	loam	moderate	0.47 to 0.61 in	7.4 to 8.4
Bkg -- 12 to 27 in	loam	moderate	2.30 to 2.92 in	7.4 to 8.4
2Cg -- 27 to 80 in	gravelly sand	rapid	1.06 to 3.69 in	7.4 to 8.4

J13A--Oldham silty clay loam, depressional, 0 to 1 percent slopes

Oldham, depressional

Extent: 85 to 95 percent of the unit
Landform(s): depressions on lake plains, depressions on moraines, depressions on till plains
Slope gradient: 0 to 1 percent
Parent material: lacustrine deposits
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated 3w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 28 in	silty clay loam	moderately slow	3.63 to 5.31 in	6.6 to 7.8
Cg -- 28 to 80 in	silty clay loam	moderately slow	7.28 to 10.39 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J14F--Esmond loam, 18 to 40 percent slopes

Esmond

Extent: 75 to 95 percent of the unit

Landform(s): hills on moraines

Slope gradient: 18 to 40 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated 7e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 8 in	loam	moderate	1.57 to 1.73 in	7.4 to 8.4
Bk -- 8 to 27 in	stratified sandy loam to loam to silt loam	moderate	2.51 to 3.47 in	7.4 to 8.4
C -- 27 to 80 in	stratified sandy loam to loam to silt loam	moderate	6.86 to 9.50 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J15B--Eckman silt loam, 2 to 6 percent slopes

Eckman

Extent: 70 to 90 percent of the unit

Landform(s): hills on lake plains

Slope gradient: 2 to 6 percent

Parent material: lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .43

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 13 in	silt loam	moderate	2.86 to 3.12 in	6.6 to 7.3
Bw -- 13 to 22 in	silt loam	moderate	1.54 to 1.99 in	6.6 to 7.8
Bk -- 22 to 30 in	silt loam	moderate	1.57 to 1.73 in	7.4 to 8.4
BC,C -- 30 to 80 in	silt loam	moderate	10.00 to 11.00 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J16A--Friberg silt loam, depressional, 0 to 2 percent slopes

Friberg, depressional

Extent: 85 to 95 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 2 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated 3w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 23 in	silt loam	moderate	4.57 to 5.48 in	6.1 to 7.8
Btg -- 23 to 47 in	silty clay loam	moderate	3.60 to 4.56 in	6.1 to 7.3
Bkg -- 47 to 60 in	loam	moderate	1.82 to 2.47 in	7.4 to 8.4
Cg -- 60 to 80 in	loam	moderate	2.61 to 3.61 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J17A--Quam silty clay loam, depressional, 0 to 1 percent slopes

Quam, depressional

Extent: 85 to 95 percent of the unit

Landform(s): depressions on lake plains, depressions on moraines, depressions on till plains

Slope gradient: 0 to 1 percent

Parent material: lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated 3w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	silty clay loam	moderately slow	1.77 to 2.17 in	6.6 to 7.3
A1,A2 -- 10 to 45 in	silty clay loam	moderately slow	5.61 to 6.66 in	6.6 to 7.3
Cg -- 45 to 80 in	silty clay loam	moderately slow	5.61 to 6.66 in	6.6 to 7.8

J18A--Malachy sandy loam, 1 to 3 percent slopes

Malachy

Extent: 75 to 95 percent of the unit

Landform(s): knolls on outwash plains

Slope gradient: 1 to 3 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated 2s

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 17 in	sandy loam	moderately rapid	2.20 to 3.05 in	7.4 to 8.4
Bk -- 17 to 28 in	sandy loam	moderately rapid	1.32 to 2.09 in	7.4 to 8.4
2C -- 28 to 80 in	loamy sand	rapid	1.04 to 5.20 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J19A--Hecla loamy fine sand, 1 to 3 percent slopes

Hecla

Extent: 70 to 90 percent of the unit

Landform(s): flats on outwash plains, swales on outwash plains

Slope gradient: 1 to 3 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .24

Land capability, nonirrigated 4s

Hydric soil: no

Hydrologic group: A

Potential for frost action: moderate

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 9 in	loamy fine sand	rapid	0.91 to 1.09 in	6.1 to 7.3
C --	9 to 80 in	fine sand	rapid	4.25 to 7.09 in	6.6 to 8.4

J20A--Clontarf sandy loam, 1 to 3 percent slopes

Clontarf

Extent: 70 to 90 percent of the unit

Landform(s): flats on outwash plains, swales on outwash plains

Slope gradient: 1 to 3 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .10

Land capability, nonirrigated 3s

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A --	0 to 15 in	sandy loam	moderately rapid	1.94 to 2.24 in	6.1 to 7.3
Bw --	15 to 25 in	sandy loam	moderately rapid	1.23 to 1.43 in	6.1 to 7.3
2C --	25 to 80 in	sand	rapid	2.74 to 3.83 in	6.6 to 7.8

Map Unit Description (MN)

Swift County, Minnesota

J21A--Hamar loamy fine sand, 0 to 2 percent slopes

Hamar

Extent: 75 to 95 percent of the unit

Landform(s): flats on outwash plains, drainageways on outwash plains

Slope gradient: 0 to 2 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .20

Land capability, nonirrigated 4w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 20 in	loamy fine sand	rapid	2.01 to 2.41 in	6.1 to 7.8
Cg -- 20 to 80 in	loamy fine sand	rapid	3.59 to 4.79 in	7.4 to 8.4

J22A--Renshaw loam, 0 to 3 percent slopes

Renshaw

Extent: 75 to 95 percent of the unit

Landform(s): flats on outwash plains

Slope gradient: 0 to 3 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .20

Land capability, nonirrigated 3s

Hydric soil: no

Hydrologic group: B

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	loam	moderate	1.42 to 1.56 in	6.1 to 7.3
Bw -- 7 to 15 in	loam	moderately rapid	1.34 to 1.50 in	6.6 to 7.3
2Bk -- 15 to 20 in	gravelly loamy sand	very rapid	0.26 to 0.36 in	7.4 to 8.4
2C -- 20 to 60 in	gravelly loamy sand	very rapid	1.59 to 2.39 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J23A--Lamoure silty clay loam, 0 to 2 percent slopes, occasionally flooded

Lamoure, occasionally flooded

Extent: 75 to 95 percent of the unit

Landform(s): flats on flood plains

Slope gradient: 0 to 2 percent

Parent material: alluvium

Restrictive feature(s): greater than 60 inches

Flooding: occasional

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A1,A2 -- 0 to 27 in	silty clay loam	moderate	4.89 to 5.98 in	7.4 to 8.4
Cg1 -- 27 to 34 in	silty clay loam	moderate	1.07 to 1.27 in	7.4 to 8.4
Cg2 -- 34 to 60 in	silt loam	moderate	5.20 to 5.72 in	7.4 to 8.4

J24F--Buse loam, 18 to 40 percent slopes

Buse

Extent: 75 to 95 percent of the unit

Landform(s): hills on till plains

Slope gradient: 18 to 40 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated 7e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 8 in	loam	moderate	1.34 to 1.73 in	7.4 to 8.4
Bk -- 8 to 37 in	loam	moderate	4.37 to 5.54 in	7.4 to 8.4
C -- 37 to 80 in	loam	moderate	6.44 to 8.15 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J25A--Rauville silty clay loam, 0 to 1 percent slopes, frequently flooded

Rauville, frequently flooded

Extent: 80 to 95 percent of the unit

Landform(s): flats on flood plains

Slope gradient: 0 to 1 percent

Parent material: alluvium

Restrictive feature(s): greater than 60 inches

Flooding: frequent

Ponding: none

Drainage class: very poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated 6w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A1,A2 -- 0 to 27 in	silty clay loam	moderate	4.89 to 5.98 in	7.4 to 8.4
Cg -- 27 to 45 in	silty clay loam	moderate	2.83 to 3.37 in	7.4 to 8.4
2Cg -- 45 to 60 in	stratified gravelly sand to clay loam	moderately rapid	1.20 to 2.24 in	7.4 to 8.4

J26B--Darnen loam, 2 to 6 percent slopes

Darnen

Extent: 85 to 95 percent of the unit

Landform(s): hills on moraines

Slope gradient: 2 to 6 percent

Parent material: colluvium

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 24 in	loam	moderate	4.80 to 5.28 in	6.6 to 7.3
AB,Bw1 -- 24 to 34 in	loam	moderate	1.67 to 1.87 in	6.1 to 7.3
Bw2 -- 34 to 80 in	loam	moderate	7.83 to 8.75 in	6.6 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J27A--Hantho silt loam, 1 to 3 percent slopes

Hantho

Extent: 75 to 95 percent of the unit

Landform(s): flats on lake plains, swales on lake plains

Slope gradient: 1 to 3 percent

Parent material: lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .37

Land capability, nonirrigated 1

Hydric soil: no

Hydrologic group: C

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 12 in	silt loam	moderate	2.60 to 2.83 in	6.6 to 7.8
Bw -- 12 to 24 in	silt loam	moderate	2.07 to 2.69 in	6.6 to 7.8
Bk,Bkg -- 24 to 65 in	silt loam	moderate	6.96 to 9.01 in	7.4 to 8.4
Cg -- 65 to 80 in	silt loam	moderate	2.54 to 3.29 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J28A--Vallers clay loam, 0 to 2 percent slopes, bouldery

Vallers, very bouldery

Extent: 80 to 95 percent of the unit

Landform(s): rims on depressions on terraces, flats on terraces, drainageways on terraces

Slope gradient: 0 to 2 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .15

Land capability, nonirrigated 5w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A1,A2	--	0 to 12 in	clay loam	moderately slow	2.13 to 2.60 in	7.4 to 8.4
Bkg	--	12 to 60 in	loam	moderate	7.20 to 9.13 in	7.4 to 8.4
Cg	--	60 to 80 in	loam	moderate	3.01 to 3.81 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J29A--Cathro muck, depressional, 0 to 1 percent slopes

Cathro, depressional

<p><i>Extent:</i> 85 to 95 percent of the unit</p> <p><i>Landform(s):</i> depressions on lake plains, depressions on moraines, depressions on till plains</p> <p><i>Slope gradient:</i> 0 to 1 percent</p> <p><i>Parent material:</i> organic material over till</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> frequent</p> <p><i>Drainage class:</i> very poorly drained</p>	<p><i>Soil loss tolerance (T factor):</i> 1</p> <p><i>Wind erodibility group (WEG):</i> 2</p> <p><i>Wind erodibility index (WEI):</i> 134</p> <p><i>Kw factor (surface layer):</i> .02</p> <p><i>Land capability, nonirrigated:</i> 3w</p> <p><i>Hydric soil:</i> yes</p> <p><i>Hydrologic group:</i> B/D</p> <p><i>Potential for frost action:</i> high</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Op -- 0 to 9 in	muck	moderately rapid	4.07 to 4.98 in	
Oa1 -- 9 to 18 in	muck	moderately rapid	3.17 to 4.07 in	
A -- 18 to 50 in	silt loam	moderate	3.51 to 6.06 in	
Cg -- 50 to 80 in	clay loam	moderate	3.29 to 5.69 in	

Map Unit Description (MN)

Swift County, Minnesota

J30A--Tara silt loam, 1 to 3 percent slopes

Tara

Extent: 85 to 95 percent of the unit

Landform(s): flats on till plains, swales on till plains

Slope gradient: 1 to 3 percent

Parent material: lacustrine deposits over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated 1

Hydric soil: no

Hydrologic group: C

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 19 in	silt loam	moderate	3.78 to 4.54 in	6.1 to 7.3
Bw -- 19 to 27 in	silt loam	moderate	1.41 to 1.82 in	6.6 to 7.8
2Bk -- 27 to 33 in	loam	moderate	0.89 to 1.12 in	7.4 to 8.4
2C -- 33 to 80 in	loam	moderate	7.03 to 8.90 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J31B--Arvilla-Sandberg complex, 2 to 6 percent slopes

Arvilla

Extent: 35 to 55 percent of the unit
Landform(s): hills on outwash plains
Slope gradient: 2 to 6 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .15
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	sandy loam	moderately rapid	1.18 to 1.36 in	6.1 to 7.3
Bw -- 9 to 14 in	sandy loam	moderately rapid	0.61 to 0.72 in	6.6 to 7.3
2Bk -- 14 to 48 in	gravelly sand	very rapid	0.68 to 1.69 in	7.4 to 8.4
2C -- 48 to 80 in	gravelly sand	very rapid	0.64 to 1.59 in	7.4 to 8.4

Sandberg

Extent: 30 to 50 percent of the unit
Landform(s): hills on outwash plains
Slope gradient: 2 to 6 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: excessively drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .15
Land capability, nonirrigated 4s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	gravelly sandy loam	very rapid	0.39 to 1.02 in	6.1 to 7.8
Bk -- 8 to 32 in	very gravelly sand	very rapid	0.48 to 1.44 in	7.4 to 8.4
C -- 32 to 80 in	gravelly sand	very rapid	0.96 to 2.88 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J32A--Bigstone silty clay loam, depressional, 0 to 1 percent slopes

Bigstone, depressional

Extent: 70 to 90 percent of the unit

Landform(s): depressions on lake plains, depressions on moraines, depressions on till plains

Slope gradient: 0 to 1 percent

Parent material: lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated 3w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	silty clay loam	moderate	1.77 to 2.17 in	7.4 to 8.4
A -- 10 to 30 in	silty clay loam	moderate	3.61 to 4.42 in	7.4 to 8.4
Cg -- 30 to 80 in	loam	moderate	7.50 to 9.50 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J33D2--Sisseton-Heimdal complex, 12 to 20 percent slopes, eroded

Sisseton, moderately eroded

Extent: 60 to 70 percent of the unit

Landform(s): hills on moraines

Slope gradient: 12 to 20 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .37

Land capability, nonirrigated 4e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	loam	moderate	1.26 to 1.42 in	7.4 to 8.4
Bk -- 8 to 36 in	stratified sandy loam to loam to silt loam	moderate	3.63 to 5.03 in	7.4 to 8.4
C -- 36 to 80 in	stratified sandy loam to loam to silt loam	moderate	5.73 to 7.94 in	7.4 to 8.4

Heimdal, moderately eroded

Extent: 10 to 20 percent of the unit

Landform(s): hills on moraines

Slope gradient: 12 to 20 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .32

Land capability, nonirrigated 4e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	loam	moderate	1.97 to 2.17 in	6.1 to 7.3
Bw -- 10 to 21 in	loam	moderate	1.32 to 2.09 in	6.1 to 7.3
Bk -- 21 to 38 in	stratified sandy loam to loam to silt loam	moderate	2.25 to 3.12 in	7.4 to 8.4
C -- 38 to 80 in	stratified sandy loam to loam to silt loam	moderate	5.43 to 7.51 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J34B--Byrne-Buse complex, 2 to 6 percent slopes

Byrne

Extent: 35 to 55 percent of the unit

Landform(s): hills on till plains

Slope gradient: 2 to 6 percent

Parent material: lacustrine deposits over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	silt loam	moderate	2.36 to 2.76 in	6.1 to 7.3
Bw -- 10 to 23 in	silt loam	moderate	2.21 to 2.86 in	6.1 to 7.3
Bk -- 23 to 28 in	silt loam	moderate	0.87 to 1.13 in	7.4 to 8.4
2Bk -- 28 to 40 in	loam	moderate	1.83 to 2.32 in	7.4 to 8.4
2C -- 40 to 80 in	loam	moderate	5.96 to 7.56 in	7.4 to 8.4

Buse

Extent: 25 to 45 percent of the unit

Landform(s): hills on till plains

Slope gradient: 3 to 6 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	loam	moderate	1.34 to 1.73 in	7.4 to 8.4
Bk -- 8 to 40 in	loam	moderate	4.84 to 6.13 in	7.4 to 8.4
C -- 40 to 60 in	loam	moderate	2.95 to 3.74 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J35B--Hokans-Buse complex, 2 to 6 percent slopes

Hokans

Extent: 45 to 65 percent of the unit

Landform(s): hills on moraines, hills on till plains

Slope gradient: 2 to 6 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 15 in	loam	moderate	2.99 to 3.29 in	6.1 to 7.3
Bw -- 15 to 22 in	loam	moderate	1.20 to 1.35 in	6.1 to 7.3
Bk -- 22 to 40 in	loam	moderate	2.72 to 3.44 in	7.4 to 8.4
C -- 40 to 80 in	loam	moderately slow	5.96 to 7.56 in	7.4 to 8.4

Buse

Extent: 10 to 20 percent of the unit

Landform(s): hills on moraines, hills on till plains

Slope gradient: 2 to 6 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	loam	moderate	1.34 to 1.73 in	7.4 to 8.4
Bk -- 8 to 40 in	loam	moderate	4.84 to 6.13 in	7.4 to 8.4
C -- 40 to 60 in	loam	moderate	2.95 to 3.74 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J36C2--Buse-Barnes complex, 6 to 12 percent slopes, eroded

Buse, moderately eroded

Extent: 35 to 55 percent of the unit

Landform(s): hills on till plains

Slope gradient: 6 to 12 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	loam	moderate	1.54 to 1.99 in	7.4 to 8.4
Bk -- 9 to 34 in	loam	moderate	3.72 to 4.71 in	7.4 to 8.4
C -- 34 to 80 in	loam	moderate	6.91 to 8.75 in	7.4 to 8.4

Barnes, moderately eroded

Extent: 10 to 30 percent of the unit

Landform(s): hills on till plains

Slope gradient: 6 to 12 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 10 in	loam	moderate	1.77 to 2.36 in	6.1 to 7.3
Bw -- 10 to 22 in	loam	moderate	1.83 to 2.32 in	6.1 to 7.3
Bk -- 22 to 42 in	loam	moderate	3.01 to 3.81 in	7.4 to 8.4
C -- 42 to 80 in	loam	moderate	5.67 to 7.18 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J37D2--Langhei-Barnes complex, 12 to 20 percent slopes, eroded

Langhei, moderately eroded

Extent: 50 to 70 percent of the unit

Landform(s): hills on moraines

Slope gradient: 12 to 20 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated 4e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 6 in	loam	moderate	1.00 to 1.30 in	6.6 to 8.4
Bk -- 6 to 15 in	loam	moderate	1.36 to 1.72 in	7.4 to 8.4
C -- 15 to 60 in	loam	moderate	6.73 to 8.53 in	7.4 to 8.4

Barnes, moderately eroded

Extent: 10 to 20 percent of the unit

Landform(s): hills on moraines

Slope gradient: 12 to 20 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 4e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 10 in	loam	moderate	1.77 to 2.36 in	6.1 to 7.3
Bw -- 10 to 22 in	loam	moderate	1.83 to 2.32 in	6.1 to 7.3
Bk -- 22 to 42 in	loam	moderate	3.01 to 3.81 in	7.4 to 8.4
C -- 42 to 80 in	loam	moderate	5.67 to 7.18 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J38B--Zell-Eckman complex, 2 to 6 percent slopes

Zell

Extent: 30 to 55 percent of the unit

Landform(s): hills on moraines

Slope gradient: 2 to 6 percent

Parent material: lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .49

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	silt loam	moderate	1.87 to 2.17 in	6.6 to 8.4
Bk -- 10 to 43 in	silt loam	moderate	4.96 to 6.61 in	7.4 to 8.4
C -- 43 to 80 in	silt loam	moderate	5.55 to 7.40 in	7.4 to 8.4

Eckman

Extent: 30 to 50 percent of the unit

Landform(s): hills on moraines

Slope gradient: 2 to 6 percent

Parent material: lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .43

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 15 in	silt loam	moderate	3.29 to 3.59 in	6.6 to 7.3
Bw -- 15 to 32 in	silt loam	moderate	2.88 to 3.72 in	6.6 to 7.8
Bk -- 32 to 42 in	silt loam	moderate	2.05 to 2.25 in	7.4 to 8.4
C -- 42 to 80 in	silt loam	moderate	7.56 to 8.31 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J38C2--Zell-Eckman complex, 6 to 12 percent slopes, eroded

Zell, moderately eroded

Extent: 35 to 55 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 12 percent

Parent material: lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .49

Land capability, nonirrigated 4e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	silt loam	moderate	1.72 to 1.99 in	6.6 to 8.4
Bk -- 9 to 28 in	silt loam	moderate	2.83 to 3.78 in	7.4 to 8.4
C -- 28 to 80 in	silt loam	moderate	7.80 to 10.39 in	7.4 to 9.0

Eckman, moderately eroded

Extent: 10 to 30 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 12 percent

Parent material: lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .43

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	silt loam	moderate	1.73 to 1.89 in	6.6 to 7.3
Bw -- 8 to 31 in	silt loam	moderate	3.95 to 5.11 in	6.6 to 7.8
Bk -- 31 to 50 in	silt loam	moderate	3.78 to 4.16 in	7.4 to 8.4
C -- 50 to 80 in	silt loam	moderate	5.98 to 6.58 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J39A--Udorthents, shallow (sanitary landfill)

Udorthents, shallow

Extent: 100 percent of the unit

Landform(s): moraines

Slope gradient: 0 to 12 percent

Parent material: variable soil material

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class: well drained

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil:

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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J40A--Foxlake silty clay, 0 to 2 percent slopes

Foxlake

Extent: 75 to 95 percent of the unit

Landform(s): flats on till plains, drainageways on till plains

Slope gradient: 0 to 2 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated 2w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 23 in	silty clay	slow	4.11 to 5.02 in	6.6 to 7.8
Bkg -- 23 to 39 in	silty clay	slow	2.58 to 3.07 in	7.4 to 8.4
Cg -- 39 to 80 in	silty clay	slow	6.55 to 7.78 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J41A--Urness mucky silty clay loam, depressional, 0 to 1 percent slopes

Urness, depressional

Extent: 70 to 90 percent of the unit

Landform(s): depressions on moraines, depressions on lake plains, depressions on till plains

Slope gradient: 0 to 1 percent

Parent material: lacustrine deposits over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated 3w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	mucky silty clay loam	moderate	1.63 to 2.17 in	7.4 to 8.4
Cg -- 9 to 32 in	mucky silt loam	moderate	3.65 to 5.02 in	7.4 to 8.4
2Cg -- 32 to 80 in	silty clay loam	moderate	7.20 to 9.13 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J42C--Sandberg-Arvilla complex, 6 to 12 percent slopes

Sandberg

Extent: 50 to 70 percent of the unit

Landform(s): hills on outwash plains

Slope gradient: 6 to 12 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .17

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	gravelly sandy loam	very rapid	0.49 to 1.28 in	6.1 to 7.8
Bk -- 10 to 22 in	gravelly sand	very rapid	0.24 to 0.73 in	7.4 to 8.4
C -- 22 to 80 in	gravelly sand	very rapid	1.16 to 3.47 in	7.4 to 8.4

Arvilla

Extent: 25 to 35 percent of the unit

Landform(s): hills on outwash plains

Slope gradient: 6 to 12 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .15

Land capability, nonirrigated 4e

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	sandy loam	moderately rapid	1.18 to 1.36 in	6.1 to 7.3
Bw -- 9 to 14 in	sandy loam	moderately rapid	0.61 to 0.72 in	6.6 to 7.3
2Bk -- 14 to 48 in	gravelly sand	very rapid	0.68 to 1.69 in	7.4 to 8.4
2C -- 48 to 80 in	gravelly sand	very rapid	0.64 to 1.59 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J43A--Quam, Cathro, and Urness soils, ponded, 0 to 1 percent slopes

Quam, ponded

Extent: 0 to 85 percent of the unit
Landform(s): depressions on moraines, depressions on lake plains, depressions on till plains
Slope gradient: 0 to 1 percent
Parent material: lacustrine deposits
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 8
Wind erodibility index (WEI): 0
Kw factor (surface layer) .37
Land capability, nonirrigated 8w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 33 in	silt loam	moderate	7.28 to 7.94 in	6.6 to 7.8
Cg -- 33 to 50 in	silty clay loam	moderately slow	2.71 to 3.72 in	6.6 to 7.8
2Cg -- 50 to 60 in	clay loam	moderately slow	1.38 to 1.87 in	7.4 to 8.4

Cathro, ponded

Extent: 0 to 85 percent of the unit
Landform(s): depressions on moraines, depressions on lake plains, depressions on till plains
Slope gradient: 0 to 1 percent
Parent material: organic material over till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 1
Wind erodibility group (WEG): 8
Wind erodibility index (WEI): 0
Kw factor (surface layer) .02
Land capability, nonirrigated 8w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oa1 -- 0 to 20 in	muck	moderately rapid	9.04 to 11.04 in	
Oa2 -- 20 to 34 in	muck	moderately rapid	4.82 to 6.20 in	
A -- 34 to 40 in	loam	moderate	0.69 to 1.39 in	
Cg -- 40 to 80 in	loam	moderate	4.37 to 8.75 in	

Map Unit Description (MN)

Swift County, Minnesota

J43A--Quam, Cathro, and Urness soils, ponded, 0 to 1 percent slopes

Urness, ponded

<p><i>Extent:</i> 0 to 85 percent of the unit</p> <p><i>Landform(s):</i> depressions on moraines, depressions on lake plains, depressions on till plains</p> <p><i>Slope gradient:</i> 0 to 1 percent</p> <p><i>Parent material:</i> lacustrine deposits over till</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> frequent</p> <p><i>Drainage class:</i> very poorly drained</p>	<p><i>Soil loss tolerance (T factor):</i> 5</p> <p><i>Wind erodibility group (WEG):</i> 8</p> <p><i>Wind erodibility index (WEI):</i> 0</p> <p><i>Kw factor (surface layer)</i> .28</p> <p><i>Land capability, nonirrigated</i> 8w</p> <p><i>Hydric soil:</i> yes</p> <p><i>Hydrologic group:</i> B/D</p> <p><i>Potential for frost action:</i> high</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 20 in	mucky silt loam	moderate	3.61 to 4.82 in	7.4 to 8.4
Cg -- 20 to 45 in	mucky silt loam	moderate	3.97 to 5.46 in	7.4 to 8.4
2Cg -- 45 to 60 in	loam	moderate	2.24 to 2.84 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J44B--Esmond-Heimdal complex, 2 to 6 percent slopes

Esmond

Extent: 35 to 55 percent of the unit

Landform(s): hills on moraines

Slope gradient: 2 to 6 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .37

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	loam	moderate	1.97 to 2.17 in	7.4 to 8.4
Bk -- 10 to 30 in	stratified sandy loam to loam to silt loam	moderate	2.61 to 3.61 in	7.4 to 8.4
C -- 30 to 80 in	stratified sandy loam to loam to silt loam	moderate	6.50 to 9.00 in	7.4 to 8.4

Heimdal

Extent: 30 to 50 percent of the unit

Landform(s): hills on moraines

Slope gradient: 2 to 6 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .32

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	loam	moderate	1.97 to 2.17 in	6.1 to 7.3
Bw -- 10 to 22 in	loam	moderate	1.46 to 2.32 in	6.1 to 7.3
Bk -- 22 to 42 in	stratified sandy loam to loam to silt loam	moderate	2.61 to 3.61 in	7.4 to 8.4
C -- 42 to 80 in	stratified sandy loam to loam to silt loam	moderate	4.91 to 6.80 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J44C2--Esmond-Heimdal complex, 6 to 12 percent slopes, eroded

Esmond, moderately eroded

Extent: 30 to 50 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 12 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .37

Land capability, nonirrigated 4e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	loam	moderate	1.57 to 1.73 in	7.4 to 8.4
Bk -- 8 to 30 in	stratified sandy loam to loam to silt loam	moderate	2.87 to 3.97 in	7.4 to 8.4
C -- 30 to 80 in	stratified sandy loam to loam to silt loam	moderate	6.50 to 9.00 in	7.4 to 8.4

Heimdal, moderately eroded

Extent: 10 to 30 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 12 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .32

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	loam	moderate	1.42 to 1.56 in	6.1 to 7.3
Bw -- 7 to 16 in	loam	moderate	1.09 to 1.72 in	6.1 to 7.3
Bk -- 16 to 36 in	stratified sandy loam to loam to silt loam	moderate	2.56 to 3.54 in	7.4 to 8.4
C -- 36 to 80 in	stratified sandy loam to loam to silt loam	moderate	5.73 to 7.94 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J45F--Sandberg sandy loam, 12 to 40 percent slopes

Sandberg

Extent: 70 to 90 percent of the unit

Landform(s): hills on outwash plains

Slope gradient: 12 to 40 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated 7e

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A1,A2 -- 0 to 12 in	sandy loam	very rapid	1.54 to 1.77 in	6.1 to 7.8
Bk -- 12 to 28 in	gravelly sand	very rapid	0.32 to 0.97 in	7.4 to 8.4
C -- 28 to 80 in	gravelly sand	very rapid	1.04 to 3.12 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J46B--Byrne silt loam, 2 to 4 percent slopes

Byrne

Extent: 75 to 95 percent of the unit

Landform(s): hills on till plains

Slope gradient: 2 to 4 percent

Parent material: lacustrine deposits over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	silt loam	moderate	1.57 to 1.89 in	6.1 to 7.3
Bw -- 8 to 23 in	silt loam	moderate	2.54 to 3.59 in	6.1 to 7.3
Bk -- 23 to 28 in	silt loam	moderate	0.87 to 1.23 in	7.4 to 8.4
2Bk -- 28 to 72 in	loam	moderate	6.61 to 8.38 in	7.4 to 8.4
2C -- 72 to 80 in	loam	moderate	1.18 to 1.50 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J47A--Swenoda sandy loam, moderately wet, 1 to 3 percent slopes

Swenoda, moderately wet

Extent: 75 to 95 percent of the unit

Landform(s): swales on outwash plains, flats on outwash plains

Slope gradient: 1 to 3 percent

Parent material: outwash over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .15

Land capability, nonirrigated 2s

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A --	0 to 17 in	sandy loam	moderately rapid	2.20 to 2.54 in	6.1 to 7.3
Bw --	17 to 29 in	sandy loam	moderately rapid	1.46 to 1.71 in	6.6 to 7.3
2C --	29 to 80 in	silt loam	moderate	10.16 to 11.17 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J48A--Bigstone and Parnell soils, ponded, 0 to 1 percent slopes

Bigstone, ponded

Extent: 0 to 85 percent of the unit
Landform(s): depressions on moraines, depressions on lake plains, depressions on till plains
Slope gradient: 0 to 1 percent
Parent material: lacustrine deposits
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 8
Wind erodibility index (WEI): 0
Kw factor (surface layer) .24
Land capability, nonirrigated 8w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A1 -- 0 to 18 in	silty clay loam	moderate	3.26 to 3.98 in	7.4 to 8.4
A2 -- 18 to 48 in	silty clay loam	moderate	5.39 to 6.58 in	7.4 to 8.4
2Cg -- 48 to 80 in	loam	moderate	4.78 to 6.06 in	7.4 to 8.4

Parnell, ponded

Extent: 0 to 85 percent of the unit
Landform(s): depressions on moraines, depressions on lake plains, depressions on till plains
Slope gradient: 0 to 1 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 8
Wind erodibility index (WEI): 0
Kw factor (surface layer) .32
Land capability, nonirrigated 8w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A1,A2 -- 0 to 22 in	silty clay loam	moderately slow	3.97 to 4.85 in	6.1 to 7.3
Btg -- 22 to 55 in	silty clay	slow	4.30 to 5.29 in	6.1 to 7.3
BCg -- 55 to 80 in	silty clay loam	slow	3.97 to 4.71 in	6.6 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J49A--Lakepark-Parnell, depressional, complex, 0 to 2 percent slopes

Lakepark

<p><i>Extent:</i> 40 to 60 percent of the unit</p> <p><i>Landform(s):</i> flats on moraines, drainageways on moraines</p> <p><i>Slope gradient:</i> 1 to 2 percent</p> <p><i>Parent material:</i> till</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> poorly drained</p>	<p><i>Soil loss tolerance (T factor):</i> 5</p> <p><i>Wind erodibility group (WEG):</i> 6</p> <p><i>Wind erodibility index (WEI):</i> 48</p> <p><i>Kw factor (surface layer):</i> .28</p> <p><i>Land capability, nonirrigated:</i> 2w</p> <p><i>Hydric soil:</i> yes</p> <p><i>Hydrologic group:</i> B/D</p> <p><i>Potential for frost action:</i> high</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	loam	moderate	1.57 to 1.73 in	6.1 to 7.3
A -- 8 to 27 in	loam	moderate	3.86 to 4.24 in	6.1 to 7.3
Bg -- 27 to 41 in	loam	moderate	2.34 to 2.62 in	6.6 to 7.3
Cg -- 41 to 80 in	loam	moderately slow	5.85 to 7.41 in	7.4 to 8.4

Parnell, depressional

<p><i>Extent:</i> 25 to 45 percent of the unit</p> <p><i>Landform(s):</i> depressions on moraines</p> <p><i>Slope gradient:</i> 0 to 2 percent</p> <p><i>Parent material:</i> till</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> frequent</p> <p><i>Drainage class:</i> very poorly drained</p>	<p><i>Soil loss tolerance (T factor):</i> 5</p> <p><i>Wind erodibility group (WEG):</i> 6</p> <p><i>Wind erodibility index (WEI):</i> 48</p> <p><i>Kw factor (surface layer):</i> .32</p> <p><i>Land capability, nonirrigated:</i> 3w</p> <p><i>Hydric soil:</i> yes</p> <p><i>Hydrologic group:</i> C/D</p> <p><i>Potential for frost action:</i> high</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A1,A2 -- 0 to 22 in	silty clay loam	moderately slow	3.97 to 4.85 in	6.1 to 7.3
Btg -- 22 to 55 in	silty clay	slow	4.30 to 5.29 in	6.1 to 7.3
BCg -- 55 to 80 in	silty clay loam	slow	3.97 to 4.71 in	6.6 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J50A--Balaton-Tara complex, 1 to 3 percent slopes

Balaton

<p><i>Extent:</i> 35 to 55 percent of the unit</p> <p><i>Landform(s):</i> knolls on lake plains</p> <p><i>Slope gradient:</i> 1 to 3 percent</p> <p><i>Parent material:</i> till</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> moderately well drained</p>	<p><i>Soil loss tolerance (T factor):</i> 5</p> <p><i>Wind erodibility group (WEG):</i> 4L</p> <p><i>Wind erodibility index (WEI):</i> 86</p> <p><i>Kw factor (surface layer)</i> .24</p> <p><i>Land capability, nonirrigated</i> 2s</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> B/D</p> <p><i>Potential for frost action:</i> high</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 13 in	loam	moderate	2.60 to 2.86 in	7.4 to 8.4
ABk,Bk -- 13 to 31 in	loam	moderate	2.72 to 3.44 in	7.4 to 8.4
C -- 31 to 80 in	loam	moderate	7.32 to 9.28 in	7.4 to 8.4

Tara

<p><i>Extent:</i> 25 to 45 percent of the unit</p> <p><i>Landform(s):</i> flats on lake plains, swales on lake plains</p> <p><i>Slope gradient:</i> 1 to 3 percent</p> <p><i>Parent material:</i> lacustrine deposits over till</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> moderately well drained</p>	<p><i>Soil loss tolerance (T factor):</i> 5</p> <p><i>Wind erodibility group (WEG):</i> 6</p> <p><i>Wind erodibility index (WEI):</i> 48</p> <p><i>Kw factor (surface layer)</i> .32</p> <p><i>Land capability, nonirrigated</i> 1</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> C</p> <p><i>Potential for frost action:</i> high</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 22 in	silty clay loam	moderate	4.41 to 5.29 in	6.1 to 7.3
Bw -- 22 to 38 in	silt loam	moderate	2.74 to 3.55 in	6.6 to 7.8
2C -- 38 to 80 in	loam	moderate	6.26 to 7.93 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J51A--Bearden-Quam, depressional, complex, 0 to 2 percent slopes

Bearden

Extent: 50 to 70 percent of the unit
Landform(s): rims on depressions on lake plains, flats on lake plains, drainageways on lake plains
Slope gradient: 0 to 2 percent
Parent material: lacustrine deposits
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .32
Land capability, nonirrigated 2s
Hydric soil: no
Hydrologic group: B/D
Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 16 in	silty clay loam	moderate	2.74 to 3.71 in	7.4 to 8.4
Bk -- 16 to 37 in	silt loam	moderate	3.34 to 4.59 in	7.4 to 8.4
Cg -- 37 to 80 in	stratified silt loam to silty clay loam	moderate	6.87 to 9.44 in	7.4 to 8.4

Quam, depressional

Extent: 20 to 40 percent of the unit
Landform(s): depressions on lake plains
Slope gradient: 0 to 1 percent
Parent material: lacustrine deposits
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .32
Land capability, nonirrigated 3w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 28 in	silty clay loam	moderately slow	5.03 to 6.15 in	6.6 to 7.8
Bg -- 28 to 48 in	silty clay loam	moderately slow	3.21 to 4.42 in	6.6 to 7.8
2Cg -- 48 to 80 in	silty clay loam	moderately slow	4.46 to 6.06 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J52A--Rondell silty clay loam, 1 to 3 percent slopes

Rondell

Extent: 75 to 95 percent of the unit

Landform(s): knolls on lake plains

Slope gradient: 1 to 3 percent

Parent material: lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated 2s

Hydric soil: no

Hydrologic group: C

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	silty clay loam	moderate	1.72 to 1.99 in	6.6 to 8.4
Bk -- 9 to 30 in	silty clay loam	moderate	2.92 to 3.55 in	7.4 to 9.0
C -- 30 to 80 in	silty clay loam	moderate	7.00 to 8.50 in	7.4 to 8.4

J53A--Ortonville loam, 1 to 3 percent slopes

Ortonville

Extent: 75 to 95 percent of the unit

Landform(s): knolls on moraines

Slope gradient: 1 to 3 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated 2s

Hydric soil: no

Hydrologic group: C

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	loam	moderate	1.34 to 1.73 in	7.4 to 8.4
Bk -- 8 to 24 in	stratified sandy loam to loam to silt loam	moderate	2.10 to 2.91 in	7.4 to 8.4
C -- 24 to 80 in	stratified sandy loam to loam to silt loam	moderate	7.27 to 10.06 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J54A--Marysland loam, depressional, 0 to 1 percent slopes

Marysland, depressional

Extent: 85 to 95 percent of the unit

Landform(s): depressions on outwash plains

Slope gradient: 0 to 1 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated 3w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,Ak -- 0 to 19 in	loam	moderate	3.21 to 4.16 in	7.4 to 8.4
Bkg -- 19 to 23 in	sandy loam	moderate	0.59 to 0.75 in	7.4 to 8.4
2Cg -- 23 to 80 in	gravelly sand	rapid	1.14 to 4.00 in	7.4 to 8.4

J55A--Sedgeville loam, channeled, 0 to 2 percent slopes, occasionally flooded

Sedgeville, channeled, occasionally flooded

Extent: 85 to 95 percent of the unit

Landform(s): flats on flood plains

Slope gradient: 0 to 2 percent

Parent material: alluvium

Restrictive feature(s): greater than 60 inches

Flooding: occasional

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated 3w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 8 in	loam	moderate	1.34 to 1.89 in	6.1 to 7.8
Bg -- 8 to 34 in	coarse sandy loam	moderate	2.60 to 5.72 in	6.1 to 7.8
2Cg -- 34 to 80 in	gravelly loamy coarse sand	very rapid	1.84 to 7.37 in	7.9 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J56A--Winger-Balaton-Parnell, depressional, complex, 0 to 3 percent slopes

Winger

Extent: 30 to 50 percent of the unit
Landform(s): rims on depressions on lake plains, flats on lake plains, drainageways on lake plains
Slope gradient: 0 to 2 percent
Parent material: lacustrine deposits over till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .32
Land capability, nonirrigated 2w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	silty clay loam	moderate	1.28 to 1.56 in	7.4 to 8.4
Ak -- 7 to 22 in	silt loam	moderate	3.29 to 3.59 in	7.4 to 8.4
Bkg -- 22 to 27 in	silt loam	moderate	1.02 to 1.13 in	7.4 to 8.4
Cg1 -- 27 to 31 in	silt loam	moderate	0.79 to 0.87 in	7.4 to 8.4
2Cg2 -- 31 to 80 in	loam	moderately slow	7.32 to 9.28 in	7.4 to 8.4

Balaton

Extent: 20 to 40 percent of the unit
Landform(s): knolls on lake plains
Slope gradient: 1 to 3 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .24
Land capability, nonirrigated 2s
Hydric soil: no
Hydrologic group: B/D
Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 13 in	loam	moderate	2.60 to 2.86 in	7.4 to 8.4
ABk,Bk -- 13 to 31 in	loam	moderate	2.72 to 3.44 in	7.4 to 8.4
C -- 31 to 80 in	loam	moderate	7.32 to 9.28 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J56A--Winger-Balaton-Parnell, depressional, complex, 0 to 3 percent slopes

Parnell, depressional

Extent: 10 to 30 percent of the unit

Landform(s): depressions on lake plains

Slope gradient: 0 to 1 percent

Parent material: lacustrine deposits over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated 3w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A1,A2 -- 0 to 22 in	silty clay loam	moderately slow	3.97 to 4.85 in	6.1 to 7.3
Btg -- 22 to 55 in	silty clay	slow	4.30 to 5.29 in	6.1 to 7.3
BCg -- 55 to 80 in	silty clay loam	slow	3.97 to 4.71 in	6.6 to 8.4

J57A--Balaton loam, 1 to 3 percent slopes

Balaton

Extent: 75 to 95 percent of the unit

Landform(s): knolls on till plains

Slope gradient: 1 to 3 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated 2s

Hydric soil: no

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 13 in	loam	moderate	2.60 to 2.86 in	7.4 to 8.4
ABk,Bk -- 13 to 31 in	loam	moderate	2.72 to 3.44 in	7.4 to 8.4
C -- 31 to 80 in	loam	moderate	7.32 to 9.28 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J58B--Torning-Egeland complex, 2 to 6 percent slopes

Torning

Extent: 35 to 55 percent of the unit

Landform(s): hills on outwash plains

Slope gradient: 2 to 6 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: A

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	fine sandy loam	moderately rapid	1.42 to 1.73 in	7.4 to 7.8
Bk -- 8 to 30 in	fine sandy loam	moderately rapid	3.97 to 4.85 in	7.4 to 8.4
C -- 30 to 80 in	fine sand	moderately rapid	4.50 to 9.50 in	7.4 to 8.4

Egeland

Extent: 30 to 50 percent of the unit

Landform(s): hills on outwash plains

Slope gradient: 2 to 6 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .17

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	sandy loam	moderately rapid	1.02 to 1.18 in	6.1 to 7.3
Bw1,Bw2 -- 8 to 30 in	sandy loam	moderately rapid	2.65 to 3.09 in	6.1 to 7.3
Bw3 -- 30 to 35 in	loamy sand	moderately rapid	0.46 to 0.56 in	6.1 to 7.3
Bk -- 35 to 48 in	loamy fine sand	moderately rapid	1.17 to 1.43 in	7.4 to 8.4
C -- 48 to 80 in	loamy fine sand	moderately rapid	2.55 to 3.19 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J59A--Urness mucky silty clay loam, sandy substratum, ponded, 0 to 1 percent slopes

Urness, sandy substratum, ponded

Extent: 80 to 95 percent of the unit

Landform(s): depressions on outwash plains

Slope gradient: 0 to 1 percent

Parent material: lacustrine deposits over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer) .32

Land capability, nonirrigated 8w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A1,A2 -- 0 to 34 in	mucky silty clay loam	moderate	6.09 to 8.13 in	7.4 to 8.4
Cg -- 34 to 66 in	mucky silty clay loam	moderate	5.17 to 7.10 in	7.4 to 8.4
2Cg -- 66 to 80 in	sand	rapid	0.28 to 0.96 in	7.9 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J60B--Hattie-Audubon complex, 1 to 4 percent slopes

Hattie

Extent: 35 to 55 percent of the unit

Landform(s): hills on till plains

Slope gradient: 1 to 4 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .17

Land capability, nonirrigated 2s

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	silty clay	slow	1.26 to 1.73 in	7.4 to 8.4
Bwss -- 8 to 15 in	silty clay	slow	0.85 to 1.13 in	7.4 to 8.4
Bkss -- 15 to 22 in	silty clay	slow	0.85 to 1.13 in	7.4 to 8.4
C -- 22 to 80 in	silty clay	slow	6.94 to 9.26 in	7.4 to 8.4

Audubon

Extent: 35 to 55 percent of the unit

Landform(s): hills on till plains

Slope gradient: 1 to 4 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 14 in	silty clay	slow	2.27 to 3.12 in	6.6 to 7.8
Bkss -- 14 to 36 in	silty clay	slow	2.81 to 4.11 in	7.4 to 8.4
C -- 36 to 80 in	silty clay	slow	4.85 to 7.06 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J60C--Hattie-Audubon complex, 4 to 10 percent slopes

Hattie

Extent: 50 to 70 percent of the unit

Landform(s): hills on till plains

Slope gradient: 4 to 10 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .17

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	silty clay	slow	1.45 to 1.99 in	7.4 to 8.4
Bkss -- 9 to 19 in	silty clay	slow	1.18 to 1.57 in	7.4 to 8.4
C -- 19 to 80 in	silty clay	slow	7.32 to 9.76 in	7.4 to 8.4

Audubon

Extent: 20 to 40 percent of the unit

Landform(s): hills on till plains

Slope gradient: 4 to 10 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	silty clay	slow	1.26 to 1.73 in	6.6 to 7.8
Bkss -- 8 to 34 in	silty clay	slow	3.38 to 4.94 in	7.4 to 8.4
C -- 34 to 80 in	silty clay	slow	5.07 to 7.37 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J61A--Svea loam, 1 to 3 percent slopes, bouldery

Svea, very bouldery

Extent: 80 to 95 percent of the unit

Landform(s): swales on terraces, flats on terraces

Slope gradient: 1 to 3 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A1,A2 -- 0 to 10 in	loam	moderate	1.97 to 2.36 in	6.1 to 7.3
Bw -- 10 to 23 in	clay loam	moderate	2.21 to 2.86 in	6.6 to 7.3
Bk -- 23 to 60 in	loam	moderate	5.55 to 7.03 in	7.4 to 8.4
C -- 60 to 80 in	loam	moderate	3.01 to 3.81 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J62C--Buse-Barnes complex, 2 to 12 percent slopes, very bouldery

Buse, very bouldery

Extent: 35 to 55 percent of the unit

Landform(s): hills on terraces

Slope gradient: 2 to 12 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated 6e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 8 in	loam	moderate	1.34 to 1.73 in	6.6 to 8.4
Bk -- 8 to 24 in	loam	moderate	2.42 to 3.07 in	7.4 to 8.4
BC,C -- 24 to 80 in	loam	moderate	8.39 to 10.62 in	7.4 to 8.4

Barnes, very bouldery

Extent: 20 to 30 percent of the unit

Landform(s): hills on terraces

Slope gradient: 2 to 12 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 6e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A1,A2 -- 0 to 15 in	loam	moderate	2.69 to 3.59 in	6.1 to 7.3
Bw -- 15 to 22 in	loam	moderate	1.06 to 1.35 in	6.1 to 7.3
Bk -- 22 to 50 in	loam	moderate	4.19 to 5.31 in	7.4 to 8.4
C -- 50 to 80 in	loam	moderate	4.49 to 5.69 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J62F--Buse-Barnes complex, 12 to 40 percent slopes, very bouldery

Buse, very bouldery

Extent: 40 to 60 percent of the unit

Landform(s): hills on terraces

Slope gradient: 12 to 40 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated 7e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 7 in	loam	moderate	1.20 to 1.56 in	6.6 to 8.4
Bk -- 7 to 44 in	loam	moderate	5.55 to 7.03 in	7.4 to 8.4
C -- 44 to 80 in	loam	moderate	5.37 to 6.81 in	7.4 to 8.4

Barnes, very bouldery

Extent: 30 to 50 percent of the unit

Landform(s): hills on terraces

Slope gradient: 12 to 40 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .20

Land capability, nonirrigated 7e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 12 in	loam	moderate	2.13 to 2.83 in	6.1 to 7.3
Bw -- 12 to 19 in	loam	moderate	1.06 to 1.35 in	6.1 to 7.3
Bk -- 19 to 33 in	loam	moderate	2.13 to 2.69 in	7.4 to 8.4
C -- 33 to 80 in	loam	moderate	7.03 to 8.90 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J63A--Ortonville-Vallers-Parnell, depressional, complex, 0 to 3 percent slopes

Ortonville

<p><i>Extent:</i> 35 to 55 percent of the unit</p> <p><i>Landform(s):</i> knolls on moraines</p> <p><i>Slope gradient:</i> 1 to 3 percent</p> <p><i>Parent material:</i> till</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> moderately well drained</p>	<p><i>Soil loss tolerance (T factor):</i> 5</p> <p><i>Wind erodibility group (WEG):</i> 4L</p> <p><i>Wind erodibility index (WEI):</i> 86</p> <p><i>Kw factor (surface layer):</i> .32</p> <p><i>Land capability, nonirrigated:</i> 2s</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> C</p> <p><i>Potential for frost action:</i> high</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	loam	moderate	1.34 to 1.73 in	7.4 to 8.4
Bk -- 8 to 24 in	stratified sandy loam to loam to silt loam	moderate	2.10 to 2.91 in	7.4 to 8.4
C -- 24 to 80 in	stratified sandy loam to loam to silt loam	moderate	7.27 to 10.06 in	7.4 to 8.4

Vallers

<p><i>Extent:</i> 25 to 45 percent of the unit</p> <p><i>Landform(s):</i> rims on depressions on moraines, flats on moraines, drainageways on moraines</p> <p><i>Slope gradient:</i> 0 to 2 percent</p> <p><i>Parent material:</i> till</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> poorly drained</p>	<p><i>Soil loss tolerance (T factor):</i> 5</p> <p><i>Wind erodibility group (WEG):</i> 4L</p> <p><i>Wind erodibility index (WEI):</i> 86</p> <p><i>Kw factor (surface layer):</i> .28</p> <p><i>Land capability, nonirrigated:</i> 2w</p> <p><i>Hydric soil:</i> yes</p> <p><i>Hydrologic group:</i> B/D</p> <p><i>Potential for frost action:</i> high</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	loam	moderate	2.17 to 2.36 in	7.4 to 8.4
Bkg -- 10 to 29 in	loam	moderate	2.89 to 3.67 in	7.4 to 8.4
Cg -- 29 to 80 in	loam	moderate	7.62 to 9.65 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J63A--Ortonville-Vallers-Parnell, depressional, complex, 0 to 3 percent slopes

Parnell, depressional

Extent: 15 to 25 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated 3w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A1,A2 -- 0 to 22 in	silty clay loam	moderately slow	3.97 to 4.85 in	6.1 to 7.3
Btg -- 22 to 55 in	silty clay	slow	4.30 to 5.29 in	6.1 to 7.3
BCg -- 55 to 80 in	silty clay loam	slow	3.97 to 4.71 in	6.6 to 8.4

J64A--Quam silty clay loam, 0 to 2 percent slopes

Quam

Extent: 80 to 95 percent of the unit

Landform(s): flats on till plains, drainageways on till plains

Slope gradient: 0 to 2 percent

Parent material: lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated 2w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	silty clay loam	moderately slow	1.63 to 1.99 in	6.6 to 7.8
A -- 9 to 60 in	silty clay loam	moderately slow	8.13 to 11.17 in	6.6 to 7.8
Bg -- 60 to 68 in	silty clay loam	moderately slow	1.32 to 1.82 in	6.6 to 7.8
2Cg -- 68 to 80 in	loam	moderately slow	1.65 to 2.24 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J65A--Shakopee silty clay, 0 to 2 percent slopes

Shakopee

<p><i>Extent:</i> 80 to 95 percent of the unit</p> <p><i>Landform(s):</i> rims on depressions on outwash plains, flats on outwash plains, drainageways on outwash plains</p> <p><i>Slope gradient:</i> 0 to 2 percent</p> <p><i>Parent material:</i> lacustrine deposits over outwash</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> poorly drained</p>	<p><i>Soil loss tolerance (T factor):</i> 3</p> <p><i>Wind erodibility group (WEG):</i> 4</p> <p><i>Wind erodibility index (WEI):</i> 86</p> <p><i>Kw factor (surface layer):</i> .24</p> <p><i>Land capability, nonirrigated:</i> 2w</p> <p><i>Hydric soil:</i> yes</p> <p><i>Hydrologic group:</i> C/D</p> <p><i>Potential for frost action:</i> moderate</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	silty clay	slow	1.00 to 1.18 in	7.4 to 7.8
A -- 9 to 15 in	silty clay	slow	0.53 to 0.65 in	7.9 to 8.4
Bkg -- 15 to 38 in	silty clay	slow	2.32 to 2.79 in	7.9 to 8.4
2Cg -- 38 to 80 in	sand	rapid	2.09 to 2.92 in	7.4 to 7.8

Map Unit Description (MN)

Swift County, Minnesota

J66A--Emrick loam, 1 to 3 percent slopes

Emrick

Extent: 75 to 95 percent of the unit

Landform(s): flats on moraines, swales on moraines

Slope gradient: 1 to 3 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .32

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 15 in	loam	moderate	2.99 to 3.59 in	6.6 to 7.3
Bw -- 15 to 25 in	loam	moderate	1.74 to 1.94 in	6.6 to 7.3
Bk -- 25 to 36 in	stratified sandy loam to loam to silt loam	moderate	1.38 to 1.91 in	7.4 to 8.4
C -- 36 to 80 in	stratified sandy loam to loam to silt loam	moderate	5.73 to 7.94 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J67A--Fordtown loam, 1 to 3 percent slopes

Fordtown

Extent: 75 to 95 percent of the unit

Landform(s): flats on outwash plains, swales on outwash plains

Slope gradient: 1 to 3 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .20

Land capability, nonirrigated 2s

Hydric soil: no

Hydrologic group: B

Potential for frost action: low

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A --	0 to 30 in	loam	moderate	5.98 to 6.58 in	6.1 to 7.3
Bw --	30 to 36 in	loam	moderate	1.00 to 1.12 in	6.1 to 7.3
2C --	36 to 80 in	gravelly loamy sand	very rapid	1.76 to 2.65 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

J68A--Kerkhoven-Friberg, depressional, complex, 0 to 2 percent slopes

Kerkhoven

Extent: 45 to 65 percent of the unit

Landform(s): flats on moraines, drainageways on moraines

Slope gradient: 0 to 2 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	loam	moderate	1.87 to 2.07 in	6.1 to 7.8
A -- 10 to 35 in	loam	moderate	4.79 to 5.29 in	6.1 to 7.8
Bg -- 35 to 53 in	loam	moderate	2.72 to 3.44 in	6.6 to 7.8
Bkg -- 53 to 63 in	loam	moderate	1.38 to 1.87 in	7.4 to 8.4
Cg -- 63 to 80 in	loam	moderate	2.20 to 3.05 in	7.4 to 8.4

Friberg, depressional

Extent: 25 to 45 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated 3w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 23 in	silt loam	moderate	4.57 to 5.48 in	6.1 to 7.8
Btg -- 23 to 47 in	silty clay loam	moderate	3.60 to 4.56 in	6.1 to 7.3
Bkg -- 47 to 60 in	loam	moderate	1.82 to 2.47 in	7.4 to 8.4
Cg -- 60 to 80 in	loam	moderate	2.61 to 3.61 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

L33A--Kandiyohi clay, 0 to 2 percent slopes

Kandiyohi

Extent: 70 to 90 percent of the unit

Landform(s): flats on moraines, rises on moraines

Slope gradient: 0 to 2 percent

Parent material: fine textured mantle over firm till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated 2w

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	clay	moderately slow	1.57 to 2.17 in	6.1 to 7.3
Bw -- 10 to 23 in	clay	moderately slow	1.82 to 2.47 in	6.1 to 7.3
Bkg -- 23 to 29 in	clay	moderately slow	0.82 to 1.20 in	7.4 to 8.4
2Bkg -- 29 to 80 in	clay loam	moderately slow	5.08 to 7.62 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

L33B--Kandiyohi clay, 2 to 5 percent slopes

Kandiyohi

Extent: 80 to 90 percent of the unit

Landform(s): hills on till plains

Slope gradient: 2 to 5 percent

Parent material: lacustrine deposits over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	clay	moderately slow	1.57 to 2.17 in	6.1 to 7.3
Bw -- 10 to 23 in	clay	moderately slow	1.82 to 2.47 in	6.1 to 7.3
Bkg -- 23 to 64 in	clay loam	slow	5.37 to 7.85 in	7.4 to 8.4
BCg -- 64 to 80 in	clay loam	slow	1.73 to 2.36 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

L34A--Cosmos silty clay, 0 to 2 percent slopes

Cosmos

Extent: 75 to 95 percent of the unit

Landform(s): flats on till plains, drainageways on till plains

Slope gradient: 0 to 2 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated 2w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 15 in	silty clay	slow	2.39 to 3.29 in	6.1 to 7.3
Btg -- 15 to 30 in	silty clay	slow	2.09 to 2.84 in	6.1 to 7.3
Btkg -- 30 to 36 in	silty clay	slow	0.83 to 1.12 in	7.4 to 8.4
2Bkg -- 36 to 80 in	clay loam	slow	4.85 to 6.61 in	7.4 to 8.4

Map Unit Description (MN)

Swift County, Minnesota

L164A--Lura silty clay, depressional, firm substratum, 0 to 1 percent slopes

Lura, firm substratum, depressional

<p><i>Extent:</i> 85 to 95 percent of the unit</p> <p><i>Landform(s):</i> depressions on moraines</p> <p><i>Slope gradient:</i> 0 to 1 percent</p> <p><i>Parent material:</i> clayey lacustrine sediments over firm till</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> frequent</p> <p><i>Drainage class:</i> very poorly drained</p>	<p><i>Soil loss tolerance (T factor):</i> 5</p> <p><i>Wind erodibility group (WEG):</i> 4</p> <p><i>Wind erodibility index (WEI):</i> 86</p> <p><i>Kw factor (surface layer)</i> .24</p> <p><i>Land capability, nonirrigated</i> 3w</p> <p><i>Hydric soil:</i> yes</p> <p><i>Hydrologic group:</i> C/D</p> <p><i>Potential for frost action:</i> high</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 24 in	silty clay	slow	3.36 to 4.08 in	6.1 to 7.3
Bg -- 24 to 31 in	silty clay	slow	0.99 to 1.20 in	6.1 to 7.3
Bkg -- 31 to 60 in	silty clay	moderately slow	3.16 to 5.46 in	7.4 to 8.4
2BCg -- 60 to 80 in	clay loam	moderately slow	2.61 to 3.81 in	7.4 to 8.4

M-W--Water, miscellaneous

Water, miscellaneous

<p><i>Extent:</i> 100 percent of the unit</p> <p><i>Landform(s):</i></p> <p><i>Slope gradient:</i></p> <p><i>Parent material:</i></p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i></p> <p><i>Ponding:</i></p> <p><i>Drainage class:</i></p>	<p><i>Soil loss tolerance (T factor):</i></p> <p><i>Wind erodibility group (WEG):</i></p> <p><i>Wind erodibility index (WEI):</i></p> <p><i>Kw factor (surface layer)</i></p> <p><i>Land capability, nonirrigated</i></p> <p><i>Hydric soil:</i></p> <p><i>Hydrologic group:</i></p> <p><i>Potential for frost action:</i></p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Swift County, Minnesota

W--Water

Water

Extent: 100 percent of the unit

Landform(s):

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil:

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

This report provides a semitabular listing of some soil and site properties and interpretations that are valuable in communicating the concept of a map unit. The report also provides easy access to the commonly used conservation planning information in one place. The major soil components in each map unit are displayed. Minor components may be displayed if they are included in the database and are selected at the time the report is generated.