

Map Unit Description (MN)

Otter Tail 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]

7A--Hubbard loamy sand, 0 to 2 percent slopes

Hubbard

Extent: 95 percent of the unit

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

Slope gradient: 0 to 2 percent

Parent material: sandy outwash deposits

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): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .05

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,A,Bw1 -- 0 to 17 in	loamy sand	rapid	1.35 to 2.03 in	5.1 to 7.3
Bw2,BC -- 17 to 42 in	loamy sand	rapid	0.76 to 1.76 in	5.1 to 7.3
C -- 42 to 60 in	coarse sand	rapid	0.53 to 1.24 in	5.6 to 7.8

7B--Hubbard loamy sand, 2 to 6 percent slopes

Hubbard

Extent: 90 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 2 to 6 percent

Parent material: sandy outwash deposits

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): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .05

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,A -- 0 to 12 in	loamy sand	rapid	0.94 to 1.42 in	5.1 to 7.3
Bw,BC -- 12 to 42 in	loamy sand	rapid	0.91 to 2.12 in	5.1 to 7.3
C -- 42 to 60 in	coarse sand	rapid	0.53 to 1.24 in	5.6 to 7.8

Map Unit Description (MN)

Otter Tail County, Minnesota

7C--Hubbard loamy sand, 6 to 12 percent slopes

Hubbard

Extent: 90 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 6 to 12 percent

Parent material: sandy outwash deposits

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): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .10

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>
A -- 0 to 9 in	loamy sand	rapid	0.72 to 1.09 in	5.1 to 7.3
Bw,BC -- 9 to 34 in	loamy sand	rapid	0.74 to 1.74 in	5.1 to 7.3
C -- 34 to 60 in	coarse sand	rapid	0.78 to 1.82 in	5.6 to 7.8

26--Aazdahl clay loam

Aazdahl

Extent: 90 percent of the unit

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

Slope gradient: 0 to 3 percent

Parent material: loamy glacial 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) .17

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 13 in	clay loam	moderate	2.21 to 2.47 in	6.6 to 7.3
Bw1,Bw2 -- 13 to 23 in	clay loam	moderately slow	1.67 to 1.87 in	6.6 to 7.8
Bk -- 23 to 36 in	clay loam	moderately slow	1.82 to 2.21 in	7.4 to 8.4
C -- 36 to 60 in	clay loam	moderately slow	3.36 to 4.08 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

34--Parnell silty clay loam, depressional

Parnell, depressional

Extent: 90 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: silty and clayey alluvium over loamy glacial 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) .28

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 18 in	silty clay loam	moderately slow	3.26 to 3.98 in	6.1 to 7.8
Btg -- 18 to 50 in	silty clay	slow	4.15 to 6.06 in	6.1 to 7.8
Cg -- 50 to 60 in	silty clay loam	slow	1.08 to 1.87 in	6.6 to 8.4

38B--Waukon loam, 2 to 6 percent slopes

Waukon

Extent: 90 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 2 to 6 percent

Parent material: loamy glacial 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) .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 -- 0 to 8 in	loam	moderate	1.57 to 1.89 in	6.1 to 7.3
Bt -- 8 to 32 in	clay loam	moderate	3.60 to 4.56 in	6.1 to 8.4
Bk,C -- 32 to 60 in	loam	moderate	4.19 to 5.31 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

38C2--Waukon loam, 6 to 12 percent slopes, eroded

Waukon, eroded

Extent: 85 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 6 to 12 percent

Parent material: loamy glacial 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) .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 -- 0 to 8 in	loam	moderate	1.57 to 1.89 in	6.1 to 7.3
Bt -- 8 to 27 in	clay loam	moderate	2.89 to 3.67 in	6.1 to 8.4
Bk,C -- 27 to 60 in	loam	moderate	4.90 to 6.21 in	7.4 to 8.4

38D2--Waukon loam, 12 to 20 percent slopes, eroded

Waukon, eroded

Extent: 85 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 12 to 20 percent

Parent material: loamy glacial 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) .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 -- 0 to 7 in	loam	moderate	1.42 to 1.70 in	6.1 to 7.3
Bt -- 7 to 22 in	clay loam	moderate	2.24 to 2.84 in	6.1 to 8.4
Bk,C -- 22 to 60 in	loam	moderate	5.67 to 7.18 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

38E--Waukon loam, 20 to 30 percent slopes

Waukon

Extent: 85 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 20 to 30 percent

Parent material: loamy glacial 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) .28

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,E -- 0 to 9 in	loam	moderate	1.81 to 2.17 in	6.1 to 7.3
Bt -- 9 to 26 in	clay loam	moderate	2.54 to 3.22 in	6.1 to 8.4
Bk,C -- 26 to 60 in	loam	moderate	5.08 to 6.43 in	7.4 to 8.4

46--Borup loam

Borup

Extent: 90 percent of the unit

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

Slope gradient: 0 to 1 percent

Parent material: loamy over sandy 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) .28

Land capability, nonirrigated 2w

Hydric soil: yes

Hydrologic group: A/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 13 in	loam	moderately rapid	2.60 to 2.99 in	7.4 to 8.4
Bkg -- 13 to 32 in	very fine sandy loam	moderately rapid	3.21 to 3.78 in	7.4 to 8.4
Cg -- 32 to 60 in	very fine sandy loam	rapid	4.19 to 5.31 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

53B--Kandota sandy loam, 2 to 6 percent slopes

Kandota

Extent: 90 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 2 to 6 percent

Parent material: loamy glacial 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): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .15

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	sandy loam	moderately rapid	1.10 to 1.34 in	5.6 to 7.3
E -- 8 to 11 in	sandy loam	moderately rapid	0.35 to 0.54 in	5.1 to 6.5
Bt1,Bt2 -- 11 to 32 in	sandy clay loam	moderate	3.34 to 3.96 in	5.6 to 7.3
Bk -- 32 to 68 in	sandy loam	moderate	4.35 to 6.16 in	7.4 to 8.4
C -- 68 to 80 in	sandy loam	moderate	1.42 to 2.01 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

53C--Kandota sandy loam, 6 to 12 percent slopes

Kandota

Extent: 90 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 6 to 12 percent

Parent material: loamy glacial 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): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

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>
A -- 0 to 8 in	sandy loam	moderately rapid	1.10 to 1.34 in	5.6 to 7.3
Bt -- 8 to 24 in	sandy clay loam	moderate	2.58 to 3.07 in	5.6 to 7.3
Bk,C -- 24 to 60 in	sandy loam	moderate	4.30 to 6.09 in	7.4 to 8.4

53D--Kandota sandy loam, 12 to 20 percent slopes

Kandota

Extent: 85 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 12 to 20 percent

Parent material: loamy glacial 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): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .15

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>
A -- 0 to 7 in	sandy loam	moderately rapid	0.99 to 1.20 in	5.6 to 7.3
E -- 7 to 9 in	sandy loam	moderately rapid	0.22 to 0.33 in	5.1 to 6.5
Bt -- 9 to 28 in	sandy clay loam	moderate	3.02 to 3.59 in	5.6 to 7.3
Bk,C -- 28 to 60 in	sandy loam	moderate	3.83 to 5.42 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

58--Kittson loam

Kittson

Extent: 90 percent of the unit

Landform(s): flats on till-floored lake plains, rises on till-floored lake plains

Slope gradient: 0 to 3 percent

Parent material: glaciolacustrine deposits over loamy glacial 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) .28

Land capability, nonirrigated 1

Hydric soil: no

Hydrologic group: C

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 7 in	loam	moderate	1.42 to 1.56 in	6.6 to 7.8
Bw --	7 to 18 in	loam	moderate	1.87 to 2.09 in	6.6 to 7.8
2Bk --	18 to 32 in	clay loam	moderate	2.07 to 2.48 in	7.4 to 8.4
2C --	32 to 60 in	clay loam	moderate	4.19 to 5.03 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

59--Grimstad fine sandy loam

Grimstad

Extent: 90 percent of the unit

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

Slope gradient: 0 to 3 percent

Parent material: sandy lacustrine deposits over loamy glacial 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) .10

Land capability, nonirrigated 2s

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	fine sandy loam	moderately rapid	1.28 to 1.77 in	7.4 to 8.4
Bk1,Bk2,C1 -- 10 to 38 in	loamy fine sand	rapid	2.27 to 3.97 in	7.4 to 9.0
2C2 -- 38 to 60 in	clay loam	moderate	2.38 to 4.11 in	7.4 to 9.0

61--Arveson loam

Arveson

Extent: 90 percent of the unit

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

Slope gradient: 0 to 1 percent

Parent material: loamy mantle over sandy glaciolacustrine deposits

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 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	loam	moderate	1.57 to 1.77 in	7.4 to 8.4
Bkg -- 10 to 30 in	fine sandy loam	moderately rapid	3.01 to 3.41 in	7.4 to 8.4
2Cg -- 30 to 60 in	fine sand	rapid	1.50 to 4.49 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

63--Rockwell loam

Rockwell

Extent: 90 percent of the unit

Landform(s): flats on till-floored lake plains, swales on till-floored lake plains

Slope gradient: 0 to 1 percent

Parent material: glaciolacustrine deposits over loamy glacial 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: 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	1.77 to 2.17 in	7.4 to 8.4
Ak,Bkg -- 10 to 27 in	fine sandy loam	moderately rapid	2.60 to 2.94 in	7.9 to 8.4
2Cg1 -- 27 to 36 in	loamy fine sand	rapid	0.43 to 0.61 in	7.4 to 7.8
3Cg2 -- 36 to 60 in	loam	moderate	4.32 to 5.28 in	7.4 to 7.8

Map Unit Description (MN)

Otter Tail County, Minnesota

65--Foxhome sandy loam

Foxhome

<p><i>Extent:</i> 90 percent of the unit</p> <p><i>Landform(s):</i> rises on till-floored lake plains</p> <p><i>Slope gradient:</i> 0 to 3 percent</p> <p><i>Parent material:</i> stratified outwash deposits over loamy glacial 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> 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> 3s</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> B</p> <p><i>Potential for frost action:</i> high</p>
---	--

<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	sandy loam	moderately rapid	1.69 to 2.34 in	6.6 to 7.8
Bw -- 13 to 16 in	loamy sand	rapid	0.28 to 0.60 in	6.6 to 7.8
2Bk -- 16 to 35 in	very gravelly coarse sand	rapid	0.38 to 1.32 in	7.4 to 8.4
3Bk -- 35 to 60 in	clay loam	moderate	3.72 to 5.46 in	7.4 to 8.4

66--Flaming loamy fine sand

Flaming

<p><i>Extent:</i> 90 percent of the unit</p> <p><i>Landform(s):</i> flats on lake plains, rises on lake plains</p> <p><i>Slope gradient:</i> 0 to 3 percent</p> <p><i>Parent material:</i> sandy eolian and outwash deposits</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> 2</p> <p><i>Wind erodibility index (WEI):</i> 134</p> <p><i>Kw factor (surface layer):</i> .24</p> <p><i>Land capability, nonirrigated:</i> 4s</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> A</p> <p><i>Potential for frost action:</i> moderate</p>
--	---

<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	loamy fine sand	rapid	1.78 to 2.10 in	5.6 to 7.3
Bw,C -- 16 to 60 in	fine sand	rapid	2.62 to 4.37 in	5.6 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

68--Arveson loam, depressional

Arveson, depressional

Extent: 90 percent of the unit

Landform(s): depressions on lake plains

Slope gradient: 0 to 1 percent

Parent material: loamy mantle over sandy glaciolacustrine deposits

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) .20

Land capability, nonirrigated 6w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 16 in	loam	moderate	2.58 to 2.91 in	7.4 to 8.4
Bkg --	16 to 23 in	fine sandy loam	moderately rapid	1.00 to 1.14 in	7.4 to 8.4
2Cg --	23 to 60 in	fine sand	rapid	1.85 to 5.55 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

107--Winger silt loam

Winger

Extent: 90 percent of the unit

Landform(s): flats on till-floored lake plains, swales on till-floored lake plains

Slope gradient: 0 to 1 percent

Parent material: silty glaciolacustrine deposits over loamy glacial 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) .37

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,Ak -- 0 to 16 in	silt loam	moderate	3.55 to 3.87 in	7.4 to 8.4
Bkg -- 16 to 29 in	silty clay loam	moderate	2.86 to 3.12 in	7.4 to 8.4
2Cgy -- 29 to 60 in	clay loam	moderate	4.30 to 5.83 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

108--McIntosh silt loam

McIntosh

Extent: 90 percent of the unit

Landform(s): flats on till-floored lake plains, rises on till-floored lake plains

Slope gradient: 0 to 3 percent

Parent material: silty glaciolacustrine deposits over loamy glacial 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: 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 12 in	silt loam	moderate	2.36 to 2.83 in	7.4 to 8.4
Bk -- 12 to 25 in	silt loam	moderate	2.14 to 2.94 in	7.4 to 8.4
2Cg -- 25 to 60 in	clay loam	moderate	4.85 to 6.58 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

121--Wykeham fine sandy loam

Wykeham

Extent: 90 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 1 to 3 percent
Parent material: loamy glacial 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) .24
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 8 in	fine sandy loam	moderately rapid	1.02 to 1.42 in	5.1 to 6.5
B/E -- 8 to 14 in	sandy loam	moderate	0.63 to 1.07 in	5.1 to 6.5
Bt -- 14 to 28 in	sandy clay loam	moderate	1.65 to 2.48 in	5.6 to 7.3
BC,C -- 28 to 60 in	sandy loam	moderate	3.51 to 5.10 in	7.4 to 8.4

127A--Sverdrup sandy loam, 0 to 2 percent slopes

Sverdrup

Extent: 95 percent of the unit
Landform(s): flats on outwash plains, rises on outwash plains
Slope gradient: 0 to 2 percent
Parent material: loamy mantle over sandy outwash deposits
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well 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 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 -- 0 to 7 in	sandy loam	moderately rapid	0.92 to 1.06 in	6.1 to 7.3
Bw1 -- 7 to 17 in	sandy loam	moderately rapid	0.79 to 1.38 in	6.1 to 7.8
2Bw2,2C -- 17 to 60 in	sand	rapid	0.86 to 2.57 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

127B--Sverdrup sandy loam, 2 to 6 percent slopes

Sverdrup

Extent: 90 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 2 to 6 percent

Parent material: loamy mantle over sandy outwash deposits

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
Bw1 -- 12 to 24 in	sandy loam	moderately rapid	0.98 to 1.71 in	6.1 to 7.8
2Bw2,2C -- 24 to 60 in	sand	rapid	0.72 to 2.15 in	7.4 to 8.4

127C--Sverdrup sandy loam, 6 to 12 percent slopes

Sverdrup

Extent: 85 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 6 to 12 percent

Parent material: loamy mantle over sandy outwash deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well 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 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 8 in	sandy loam	moderately rapid	1.02 to 1.18 in	6.1 to 7.3
Bw1 -- 8 to 15 in	sandy loam	moderately rapid	0.57 to 0.99 in	6.1 to 7.8
2Bw2,2C -- 15 to 60 in	sand	rapid	0.90 to 2.69 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

141B--Egeland fine sandy loam, 1 to 6 percent slopes

Egeland

Extent: 90 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 1 to 6 percent

Parent material: loamy mantle over sandy outwash 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): 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: low

<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	fine sandy loam	moderately rapid	1.65 to 2.54 in	5.6 to 7.3
Bw,Bk -- 15 to 42 in	fine sandy loam	moderately rapid	2.44 to 4.07 in	6.1 to 7.8
C -- 42 to 60 in	loamy fine sand	moderately rapid	1.42 to 1.77 in	6.6 to 8.4

141C--Egeland fine sandy loam, 6 to 12 percent slopes

Egeland

Extent: 85 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 6 to 12 percent

Parent material: loamy mantle over sandy outwash 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): 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 -- 0 to 11 in	fine sandy loam	moderately rapid	1.21 to 1.87 in	5.6 to 7.3
Bw,Bk -- 11 to 35 in	fine sandy loam	moderately rapid	2.16 to 3.60 in	6.1 to 7.8
C -- 35 to 60 in	loamy fine sand	moderately rapid	1.98 to 2.48 in	6.6 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

141D--Egeland fine sandy loam, 12 to 20 percent slopes

Egeland

<i>Extent:</i> 85 percent of the unit	<i>Soil loss tolerance (T factor):</i> 5
<i>Landform(s):</i> hillslopes on outwash plains	<i>Wind erodibility group (WEG):</i> 3
<i>Slope gradient:</i> 12 to 20 percent	<i>Wind erodibility index (WEI):</i> 86
<i>Parent material:</i> loamy mantle over sandy outwash deposits	<i>Kw factor (surface layer)</i> .15
<i>Restrictive feature(s):</i> greater than 60 inches	<i>Land capability, nonirrigated</i> 4e
<i>Flooding:</i> none	<i>Hydric soil:</i> no
<i>Ponding:</i> none	<i>Hydrologic group:</i> A
<i>Drainage class:</i> well drained	<i>Potential for frost action:</i> 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	fine sandy loam	moderately rapid	1.00 to 1.54 in	5.6 to 7.3
Bw,Bk -- 9 to 30 in	fine sandy loam	moderately rapid	1.88 to 3.13 in	6.1 to 7.8
C -- 30 to 60 in	loamy fine sand	moderately rapid	2.39 to 2.99 in	6.6 to 8.4

168B--Forman clay loam, 2 to 6 percent slopes

Forman

<i>Extent:</i> 90 percent of the unit	<i>Soil loss tolerance (T factor):</i> 5
<i>Landform(s):</i> hillslopes on moraines	<i>Wind erodibility group (WEG):</i> 6
<i>Slope gradient:</i> 2 to 6 percent	<i>Wind erodibility index (WEI):</i> 48
<i>Parent material:</i> loamy glacial till	<i>Kw factor (surface layer)</i> .24
<i>Restrictive feature(s):</i> greater than 60 inches	<i>Land capability, nonirrigated</i> 2e
<i>Flooding:</i> none	<i>Hydric soil:</i> no
<i>Ponding:</i> none	<i>Hydrologic group:</i> C
<i>Drainage class:</i> well drained	<i>Potential for frost action:</i> 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	clay loam	moderate	1.54 to 1.72 in	6.6 to 7.8
Bt -- 9 to 24 in	clay loam	moderate	2.24 to 2.84 in	6.6 to 7.8
Bk,C -- 24 to 60 in	loam	moderately slow	5.02 to 6.81 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

180--Gonvick loam

Gonvick

Extent: 85 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 1 to 3 percent

Parent material: loamy glacial 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 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 15 in	loam	moderate	2.99 to 3.29 in	6.1 to 7.3
Bt -- 15 to 35 in	clay loam	moderate	3.01 to 3.81 in	6.6 to 7.3
Bk,C -- 35 to 60 in	loam	moderate	3.72 to 4.71 in	7.4 to 8.4

184--Hamerly loam

Hamerly

Extent: 85 percent of the unit

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

Slope gradient: 1 to 3 percent

Parent material: loamy glacial 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) .28

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 -- 0 to 10 in	loam	moderate	1.97 to 2.36 in	6.6 to 8.4
Bky -- 10 to 38 in	loam	moderate	4.25 to 5.39 in	7.4 to 8.4
C -- 38 to 60 in	loam	moderate	3.03 to 4.11 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

187--Haug muck

Haug

Extent: 95 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: highly decomposed herbaceous organic material over loamy glacial 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): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .02

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>
Oa -- 0 to 14 in	muck	moderately rapid	4.96 to 6.80 in	6.6 to 7.8
A -- 14 to 20 in	loam	moderately rapid	0.71 to 1.42 in	6.6 to 8.4
Cg -- 20 to 60 in	silt loam	moderate	4.37 to 7.56 in	7.4 to 8.4

191--Epoufette sandy loam

Epoufette

Extent: 90 percent of the unit

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

Slope gradient: 0 to 2 percent

Parent material: sandy outwash deposits

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): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated 4w

Hydric soil: yes

Hydrologic group: A/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	sandy loam	moderately rapid	0.64 to 0.99 in	6.1 to 7.3
Btg -- 7 to 33 in	loamy sand	moderately rapid	2.08 to 3.64 in	6.6 to 7.8
2Cg -- 33 to 60 in	sand	very rapid	0.27 to 0.80 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

202--Meehan loamy sand

Meehan

Extent: 90 percent of the unit

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

Slope gradient: 0 to 3 percent

Parent material: sandy outwash 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): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .17

Land capability, nonirrigated 4w

Hydric soil: no

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 -- 0 to 8 in	loamy sand	moderately rapid	0.79 to 0.94 in	3.5 to 7.3
Bw -- 8 to 24 in	sand	rapid	0.97 to 1.78 in	3.5 to 6.5
C,Cg -- 24 to 60 in	coarse sand	rapid	0.72 to 2.51 in	3.5 to 7.3

258A--Sandberg loamy sand, 0 to 2 percent slopes

Sandberg

Extent: 95 percent of the unit

Landform(s): flats on outwash plains

Slope gradient: 0 to 2 percent

Parent material: sandy and gravelly outwash deposits

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): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .20

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>
A -- 0 to 11 in	loamy sand	rapid	1.10 to 1.32 in	5.6 to 7.8
Bw -- 11 to 33 in	gravelly loamy coarse sand	rapid	0.66 to 2.20 in	6.1 to 7.8
Bk,C -- 33 to 60 in	gravelly coarse sand	very rapid	0.54 to 1.61 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

258B--Sandberg loamy sand, 1 to 6 percent slopes

Sandberg

Extent: 90 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 1 to 6 percent

Parent material: sandy and gravelly outwash deposits

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): 2

Wind erodibility index (WEI): 134

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,A -- 0 to 12 in	loamy sand	rapid	1.18 to 1.42 in	5.6 to 7.8
Bw -- 12 to 19 in	gravelly loamy coarse sand	rapid	0.21 to 0.71 in	6.1 to 7.8
Bk -- 19 to 29 in	gravelly coarse sand	very rapid	0.20 to 0.61 in	7.4 to 8.4
C -- 29 to 80 in	gravelly coarse sand	very rapid	1.02 to 3.05 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

258C--Sandberg loamy sand, 6 to 12 percent slopes

Sandberg

Extent: 85 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 6 to 12 percent

Parent material: sandy and gravelly outwash deposits

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): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .15

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>
A -- 0 to 10 in	loamy sand	rapid	0.98 to 1.18 in	5.6 to 7.8
Bw -- 10 to 17 in	gravelly loamy coarse sand	rapid	0.21 to 0.71 in	6.1 to 7.8
Bk -- 17 to 44 in	gravelly coarse sand	very rapid	0.54 to 1.63 in	7.4 to 8.4
C -- 44 to 60 in	gravelly coarse sand	very rapid	0.31 to 0.94 in	7.4 to 8.4

260--Duelm loamy sand

Duelm

Extent: 90 percent of the unit

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

Slope gradient: 0 to 2 percent

Parent material: sandy outwash 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): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .17

Land capability, nonirrigated 4s

Hydric soil: no

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,AB -- 0 to 16 in	loamy sand	rapid	1.29 to 1.94 in	5.6 to 7.3
Bw -- 16 to 35 in	sand	rapid	1.13 to 2.08 in	5.1 to 7.3
C,Cg -- 35 to 60 in	sand	rapid	0.50 to 1.74 in	5.6 to 7.8

Map Unit Description (MN)

Otter Tail County, Minnesota

267B--Snellman sandy loam, 2 to 8 percent slopes

Snellman

Extent: 90 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 2 to 8 percent

Parent material: loamy glacial 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): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

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 9 in	sandy loam	moderately rapid	1.18 to 1.63 in	5.1 to 6.5
E,Bt1 -- 9 to 15 in	sandy loam	moderate	0.53 to 0.83 in	5.1 to 6.5
Bt2,Bt3 -- 15 to 31 in	sandy clay loam	moderate	1.94 to 2.91 in	5.6 to 7.3
C -- 31 to 60 in	sandy loam	moderate	3.16 to 4.60 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

267C--Snellman sandy loam, 8 to 15 percent slopes

Snellman

Extent: 85 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 8 to 15 percent

Parent material: loamy glacial 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): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

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	sandy loam	moderately rapid	0.92 to 1.28 in	5.1 to 6.5
E -- 7 to 15 in	sandy loam	moderate	0.71 to 1.10 in	5.1 to 6.5
Bt -- 15 to 31 in	sandy clay loam	moderate	1.94 to 2.91 in	5.6 to 7.3
Bk -- 31 to 45 in	sandy loam	moderate	1.52 to 2.20 in	7.4 to 8.4
C -- 45 to 60 in	sandy loam	moderate	1.65 to 2.39 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

267E--Snellman sandy loam, 15 to 30 percent slopes

Snellman

Extent: 85 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 15 to 30 percent

Parent material: loamy glacial 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): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

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 3 in	sandy loam	moderately rapid	0.41 to 0.57 in	5.1 to 6.5
E, BE -- 3 to 14 in	sandy loam	moderate	0.99 to 1.54 in	5.1 to 6.5
Bt -- 14 to 26 in	sandy clay loam	moderate	1.42 to 2.13 in	5.6 to 7.3
Bk -- 26 to 39 in	sandy loam	moderate	1.43 to 2.08 in	7.4 to 8.4
C -- 39 to 60 in	sandy loam	moderate	2.30 to 3.34 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

267F--Snellman sandy loam, 30 to 45 percent slopes

Snellman

Extent: 85 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 30 to 45 percent

Parent material: loamy glacial 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): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .17

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 3 in	sandy loam	moderately rapid	0.41 to 0.57 in	5.1 to 6.5
E, BE -- 3 to 16 in	sandy loam	moderate	1.17 to 1.82 in	5.1 to 6.5
Bt -- 16 to 32 in	sandy clay loam	moderate	1.89 to 2.83 in	5.6 to 7.3
Bk -- 32 to 40 in	sandy loam	moderate	0.91 to 1.32 in	7.4 to 8.4
C -- 40 to 60 in	sandy loam	moderate	2.17 to 3.15 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

290--Rothsay silt loam

Rothsay

Extent: 90 percent of the unit

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

Slope gradient: 1 to 3 percent

Parent material: silty eolian or 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

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A --	0 to 14 in	silt loam	moderate	3.12 to 3.40 in	6.6 to 7.3
Bw --	14 to 22 in	silt loam	moderate	1.34 to 1.73 in	6.6 to 7.8
Bk --	22 to 31 in	silt loam	moderately rapid	1.81 to 1.99 in	7.4 to 8.4
C --	31 to 60 in	very fine sandy loam	moderately rapid	5.75 to 6.32 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

293B--Swenoda fine sandy loam, 1 to 4 percent slopes

Swenoda

Extent: 90 percent of the unit
Landform(s): flats on lake plains, rises on lake plains
Slope gradient: 1 to 4 percent
Parent material: loamy glaciolacustrine deposits over loamy glacial 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) .17
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	fine sandy loam	moderately rapid	1.65 to 2.54 in	6.1 to 7.3
Bw -- 15 to 29 in	fine sandy loam	moderately rapid	1.56 to 2.41 in	6.6 to 7.8
2Bk,2C -- 29 to 60 in	clay loam	moderate	5.22 to 6.14 in	7.4 to 8.4

335--Urness mucky silt loam

Urness

Extent: 90 percent of the unit
Landform(s): depressions on moraines, glacial lakes on moraines
Slope gradient: 0 to 1 percent
Parent material: coprogenous earth organic material
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) .37
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 silt loam	moderate	1.63 to 2.17 in	7.4 to 8.4
C1,C2,C3 -- 9 to 60 in	mucky silt loam	moderate	8.13 to 11.17 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

339--Fordville loam

Fordville

Extent: 90 percent of the unit

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

Slope gradient: 0 to 3 percent

Parent material: loamy mantle over sandy and gravelly outwash deposits

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

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 10 in	loam	moderate	1.77 to 1.97 in	6.1 to 7.3
A,Bw1 --	10 to 29 in	loam	moderate	3.47 to 4.05 in	6.1 to 7.8
Bw2 --	29 to 37 in	loam	moderately rapid	0.94 to 1.42 in	6.1 to 8.4
2C1,2C2 --	37 to 60 in	gravelly coarse sand	very rapid	0.69 to 1.37 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

341A--Arvilla sandy loam, 0 to 2 percent slopes

Arvilla

Extent: 95 percent of the unit

Landform(s): flats on outwash plains

Slope gradient: 0 to 2 percent

Parent material: loamy mantle over sandy and gravelly outwash deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively 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 13 in	sandy loam	moderately rapid	1.69 to 1.95 in	6.1 to 8.4
Bw1,Bw2 -- 13 to 20 in	sandy loam	moderately rapid	0.78 to 0.99 in	6.6 to 8.4
2Bk,2C -- 20 to 60 in	gravelly sand	rapid	0.80 to 1.99 in	7.4 to 8.4

341B--Arvilla sandy loam, 2 to 6 percent slopes

Arvilla

Extent: 90 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 2 to 6 percent

Parent material: loamy mantle over sandy and gravelly outwash deposits

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) .20

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 9 in	sandy loam	moderately rapid	1.18 to 1.36 in	6.1 to 8.4
Bw1,Bw2 -- 9 to 19 in	sandy loam	moderately rapid	1.08 to 1.38 in	6.6 to 8.4
2Bk,2C -- 19 to 60 in	gravelly sand	rapid	0.82 to 2.05 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

371--Clontarf sandy loam

Clontarf

Extent: 90 percent of the unit

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

Slope gradient: 0 to 3 percent

Parent material: loamy mantle over sandy outwash deposits

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 3s

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 13 in	sandy loam	moderately rapid	1.69 to 2.34 in	6.1 to 7.3
Bw1,Bw2 --	13 to 24 in	sandy loam	moderately rapid	1.32 to 2.09 in	6.1 to 7.8
2C --	24 to 60 in	sand	rapid	1.79 to 3.22 in	6.6 to 7.8

Map Unit Description (MN)

Otter Tail County, Minnesota

375--Forada loam

Forada

<p><i>Extent:</i> 90 percent of the unit</p> <p><i>Landform(s):</i> flats on outwash plains, swales on outwash plains</p> <p><i>Slope gradient:</i> 0 to 1 percent</p> <p><i>Parent material:</i> loamy mantle over sandy and gravelly outwash deposits</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> 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> 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>
--	--

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 18 in	loam	moderate	3.62 to 3.98 in	6.1 to 7.8
Bg1,Bg2,Bg3 -- 18 to 36 in	sandy loam	moderately rapid	2.13 to 3.37 in	6.1 to 7.8
2Cg -- 36 to 60 in	gravelly coarse sand	rapid	0.48 to 2.40 in	6.6 to 8.4

402C--Sioux loamy sand, 2 to 12 percent slopes

Sioux

<p><i>Extent:</i> 90 percent of the unit</p> <p><i>Landform(s):</i> hillslopes on outwash plains</p> <p><i>Slope gradient:</i> 2 to 12 percent</p> <p><i>Parent material:</i> sandy and gravelly outwash deposits</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> excessively drained</p>	<p><i>Soil loss tolerance (T factor):</i> 5</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> .10</p> <p><i>Land capability, nonirrigated:</i> 6s</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> A</p> <p><i>Potential for frost action:</i> low</p>
---	--

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	loamy sand	moderately rapid	0.79 to 1.18 in	6.6 to 8.4
A,C -- 10 to 60 in	very gravelly coarse sand	rapid	1.50 to 3.00 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

402E--Sioux loamy sand, 12 to 40 percent slopes

Sioux

Extent: 85 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 12 to 40 percent

Parent material: sandy and gravelly outwash deposits

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): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .17

Land capability, nonirrigated 7s

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>
A -- 0 to 10 in	loamy sand	moderately rapid	0.79 to 1.18 in	6.6 to 8.4
AC,C -- 10 to 60 in	very gravelly coarse sand	rapid	1.50 to 3.00 in	7.4 to 8.4

406A--Dorset sandy loam, 0 to 2 percent slopes

Dorset

Extent: 95 percent of the unit

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

Slope gradient: 0 to 2 percent

Parent material: loamy mantle over sandy and gravelly outwash deposits

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 11 in	sandy loam	moderately rapid	1.43 to 1.65 in	5.6 to 7.3
Bt -- 11 to 20 in	sandy loam	moderately rapid	1.09 to 1.72 in	5.6 to 7.3
2Bk,2C -- 20 to 60 in	gravelly coarse sand	rapid	0.80 to 1.59 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

406B--Dorset sandy loam, 2 to 6 percent slopes

Dorset

Extent: 90 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 2 to 6 percent

Parent material: loamy mantle over sandy and gravelly outwash deposits

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) .17

Land capability, nonirrigated 3s

Hydric soil: no

Hydrologic group: A

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 11 in	sandy loam	moderately rapid	1.43 to 1.65 in	5.6 to 7.3
Bt --	11 to 20 in	sandy loam	moderately rapid	1.09 to 1.72 in	5.6 to 7.3
2Bk --	20 to 38 in	gravelly coarse sand	rapid	1.09 to 1.81 in	7.4 to 8.4
2C --	38 to 60 in	gravelly coarse sand	rapid	0.43 to 0.87 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

418--Lamoure silty clay loam, occasionally flooded

Lamoure, occasionally flooded

Extent: 85 percent of the unit

Landform(s): flood plains on moraines

Slope gradient: 0 to 2 percent

Parent material: silty 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 32 in	silty clay loam	moderate	6.06 to 7.02 in	7.4 to 8.4
Cg1 -- 32 to 40 in	silty clay loam	moderate	1.41 to 1.65 in	7.4 to 8.4
Cg2 -- 40 to 48 in	silt loam	moderate	1.34 to 1.57 in	7.4 to 8.4
Cg3 -- 48 to 60 in	stratified sandy loam to silty clay loam	moderate	1.06 to 2.13 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

422B--Bygland silty clay loam, 1 to 6 percent slopes

Bygland

<p><i>Extent:</i> 90 percent of the unit</p> <p><i>Landform(s):</i> hillslopes on moraines</p> <p><i>Slope gradient:</i> 1 to 6 percent</p> <p><i>Parent material:</i> silty and clayey glaciolacustrine sediments</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> 2e</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> C</p> <p><i>Potential for frost action:</i> high</p>
--	--

<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	6.1 to 7.3
Bt -- 10 to 41 in	silty clay	moderately slow	3.11 to 5.91 in	6.1 to 7.8
BC -- 41 to 46 in	silty clay loam	moderately slow	0.82 to 1.13 in	7.4 to 8.4
C -- 46 to 60 in	silty clay loam	moderately slow	2.20 to 3.03 in	7.4 to 8.4

Soils underlain by loamy till

<p><i>Extent:</i> 2 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> no</p> <p><i>Hydrologic group:</i></p> <p><i>Potential for frost action:</i></p>
---	---

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
-------------------------------------	----------------	---------------------	---------------------------------	-----------

Map Unit Description (MN)

Otter Tail County, Minnesota

422B--Bygland silty clay loam, 1 to 6 percent slopes

Parnell

Extent: 2 percent of the unit

Landform(s): swales

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: yes

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>
-------------------------------------	----------------	---------------------	---------------------------------	-----------

Lindaas

Extent: 2 percent of the unit

Landform(s): flats, swales

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: yes

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>
-------------------------------------	----------------	---------------------	---------------------------------	-----------

Map Unit Description (MN)

Otter Tail County, Minnesota

422B--Bygland silty clay loam, 1 to 6 percent slopes

Dent

Extent: 2 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: no

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>
-------------------------------------	----------------	---------------------	---------------------------------	-----------

Lizzie

Extent: 1 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: no

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>
-------------------------------------	----------------	---------------------	---------------------------------	-----------

Map Unit Description (MN)

Otter Tail County, Minnesota

422B--Bygland silty clay loam, 1 to 6 percent slopes

Cathro

Extent: 1 percent of the unit

Landform(s): depressions

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: yes

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>
-------------------------------------	----------------	---------------------	---------------------------------	-----------

422C--Bygland silty clay loam, 6 to 15 percent slopes

Bygland

Extent: 85 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 6 to 15 percent

Parent material: silty and clayey glaciolacustrine sediments

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 3e

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	silty clay loam	moderately slow	1.42 to 1.73 in	6.1 to 7.3
Bt -- 8 to 16 in	silty clay	moderately slow	0.83 to 1.57 in	6.1 to 7.8
BC -- 16 to 22 in	silty clay loam	moderately slow	0.94 to 1.30 in	7.4 to 8.4
C -- 22 to 60 in	silty clay loam	moderately slow	6.05 to 8.31 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

426--Foldahl loamy fine sand

Foldahl

Extent: 90 percent of the unit

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

Slope gradient: 0 to 3 percent

Parent material: loamy and sandy glaciolacustrine deposits over loamy glacial 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): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .24

Land capability, nonirrigated 3s

Hydric soil: no

Hydrologic group: A

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	loamy fine sand	rapid	1.42 to 1.98 in	6.1 to 7.8
Bw --	14 to 26 in	fine sand	rapid	0.83 to 1.42 in	6.6 to 7.8
2Bk --	26 to 40 in	clay loam	moderate	1.98 to 2.69 in	7.4 to 8.4
2Cg --	40 to 60 in	clay loam	moderate	2.76 to 3.74 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

441A--Almora loam, 0 to 2 percent slopes

Almora

Extent: 95 percent of the unit

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

Slope gradient: 0 to 2 percent

Parent material: loamy mantle over sandy and gravelly outwash deposits

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): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .32

Land capability, nonirrigated 2s

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 11 in	loam	moderate	2.20 to 2.43 in	5.6 to 7.3
BE -- 11 to 15 in	sandy loam	moderate	0.47 to 0.75 in	5.6 to 7.3
Bt -- 15 to 38 in	sandy clay loam	moderate	3.25 to 4.41 in	5.6 to 7.3
2Bt3 -- 38 to 46 in	gravelly loamy coarse sand	rapid	0.16 to 0.87 in	5.6 to 7.8
2C -- 46 to 60 in	gravelly coarse sand	rapid	0.28 to 0.96 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

441B--Almora loam, 2 to 6 percent slopes

Almora

Extent: 90 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 2 to 6 percent

Parent material: loamy mantle over sandy and gravelly outwash deposits

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): 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

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 9 in	loam	moderate	1.81 to 1.99 in	5.6 to 7.3
BE --	9 to 13 in	sandy loam	moderate	0.47 to 0.75 in	5.6 to 7.3
Bt1 --	13 to 27 in	sandy clay loam	moderate	1.98 to 2.69 in	5.6 to 7.3
2Bt2,2C --	27 to 60 in	gravelly coarse sand	rapid	0.65 to 2.29 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

441C--Almora loam, 6 to 12 percent slopes

Almora

Extent: 85 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 6 to 12 percent

Parent material: loamy mantle over sandy and gravelly outwash deposits

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): 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 10 in	loam	moderate	1.97 to 2.17 in	5.6 to 7.3
BE -- 10 to 13 in	sandy loam	moderate	0.38 to 0.60 in	5.6 to 7.3
Bt1 -- 13 to 33 in	sandy clay loam	moderate	2.81 to 3.81 in	5.6 to 7.3
2Bt2,2C -- 33 to 60 in	gravelly coarse sand	rapid	0.54 to 1.87 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

481--Kratka fine sandy loam

Kratka

Extent: 85 percent of the unit
Landform(s): flats on lake plains, swales on lake plains
Slope gradient: 0 to 2 percent
Parent material: sandy glaciolacustrine deposits or outwash over loamy glacial 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): 3
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: 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	fine sandy loam	moderately rapid	1.18 to 1.63 in	5.6 to 7.8
Bg -- 9 to 25 in	loamy fine sand	rapid	0.97 to 1.78 in	5.6 to 7.8
2Bgk,2Cg -- 25 to 60 in	clay loam	moderate	3.81 to 6.58 in	6.1 to 8.4

494--Darnen loam, moderately wet

Darnen, moderately wet

Extent: 85 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 0 to 3 percent
Parent material: loamy colluvium over loamy glacial 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 1
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,AB -- 0 to 36 in	loam	moderate	7.17 to 8.60 in	6.6 to 7.8
Bw -- 36 to 43 in	loam	moderate	1.06 to 1.35 in	6.1 to 7.8
Cg -- 43 to 60 in	loam	moderate	2.37 to 3.22 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

497--Hantho silt loam

Hantho

Extent: 85 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 1 to 3 percent

Parent material: silty glaciolacustrine 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 -- 0 to 9 in	silt loam	moderate	1.99 to 2.17 in	6.6 to 7.8
A -- 9 to 22 in	silt loam	moderate	2.21 to 2.86 in	6.6 to 7.8
Bw1,Bw2 -- 22 to 31 in	silt loam	moderate	1.54 to 1.99 in	7.4 to 8.4
C -- 31 to 60 in	silt loam	moderate	4.89 to 6.32 in	7.4 to 8.4

508--Wyndmere fine sandy loam

Wyndmere

Extent: 90 percent of the unit

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

Slope gradient: 0 to 3 percent

Parent material: loamy over sandy glaciolacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated 2s

Hydric soil: no

Hydrologic group: A/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 12 in	fine sandy loam	moderately rapid	1.54 to 2.13 in	6.6 to 8.4
Abk,Bk1,Bk2 -- 12 to 38 in	fine sandy loam	moderately rapid	3.17 to 4.48 in	7.4 to 8.4
C1,Cg -- 38 to 60 in	fine sand	rapid	1.08 to 3.46 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

540--Seelyeville muck

Seelyeville

Extent: 95 percent of the unit

Landform(s): depressions on moraines, depressions on outwash plains

Slope gradient: 0 to 1 percent

Parent material: highly decomposed herbaceous organic material

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .02

Land capability, nonirrigated 6w

Hydric soil: yes

Hydrologic group: A/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 8 in	muck	moderately rapid	2.76 to 3.54 in	
Oa2,Oa3 -- 8 to 80 in	muck	moderately rapid	25.22 to 32.42 in	

541--Rifle mucky peat

Rifle

Extent: 95 percent of the unit

Landform(s): depressions on moraines, depressions on outwash plains

Slope gradient: 0 to 1 percent

Parent material: moderately decomposed herbaceous organic material

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer) .02

Land capability, nonirrigated 6w

Hydric soil: yes

Hydrologic group: A/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>
Oe1 -- 0 to 21 in	mucky peat	rapid	10.02 to 12.10 in	
Oe2 -- 21 to 80 in	mucky peat	rapid	28.35 to 34.25 in	

Map Unit Description (MN)

Otter Tail County, Minnesota

544--Cathro muck

Cathro

Extent: 90 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: highly decomposed herbaceous organic material over loamy glacial deposits

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): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .02

Land capability, nonirrigated 6w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oa1 --	0 to 16 in	muck	moderately rapid	7.26 to 8.88 in	
Oa2 --	16 to 38 in	muck	moderately rapid	7.72 to 9.92 in	
A1,A2,Cg --	38 to 60 in	loam	moderate	2.38 to 4.76 in	

Map Unit Description (MN)

Otter Tail County, Minnesota

567A--Verndale sandy loam, 0 to 2 percent slopes

Verndale

<p><i>Extent:</i> 95 percent of the unit</p> <p><i>Landform(s):</i> flats on outwash plains, rises</p> <p><i>Slope gradient:</i> 0 to 2 percent</p> <p><i>Parent material:</i> loamy mantle over sandy outwash deposits</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> somewhat excessively drained</p>	<p><i>Soil loss tolerance (T factor):</i> 3</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> .24</p> <p><i>Land capability, nonirrigated</i> 3s</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> B</p> <p><i>Potential for frost action:</i> low</p>
--	---

<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 1.54 in	5.6 to 7.3
Bt,2Bt -- 9 to 21 in	sandy loam	moderate	1.65 to 2.13 in	5.6 to 7.3
2Bw -- 21 to 38 in	sand	rapid	1.04 to 1.39 in	5.6 to 7.3
2C -- 38 to 60 in	sand	rapid	0.43 to 1.30 in	6.1 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

567B--Verndale sandy loam, 2 to 6 percent slopes

Verndale

Extent: 90 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 2 to 6 percent

Parent material: loamy mantle over sandy outwash deposits

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) .24

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 10 in	sandy loam	moderately rapid	1.28 to 1.67 in	5.6 to 7.3
Bt,2Bt -- 10 to 18 in	sandy loam	moderate	1.16 to 1.49 in	5.6 to 7.3
2Bw -- 18 to 29 in	sand	rapid	0.66 to 0.88 in	5.6 to 7.3
2C -- 29 to 60 in	sand	rapid	0.61 to 1.84 in	6.1 to 8.4

609B--Dickey loamy fine sand, 1 to 5 percent slopes

Dickey

Extent: 90 percent of the unit

Landform(s): hillslopes on till plains

Slope gradient: 1 to 5 percent

Parent material: sandy glacial outwash over loamy glacial 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): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .15

Land capability, nonirrigated 3e

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,A -- 0 to 13 in	loamy fine sand	rapid	1.04 to 1.56 in	6.1 to 7.8
Bw1,Bw2 -- 13 to 28 in	fine sand	rapid	0.90 to 1.80 in	6.1 to 7.8
2Bk,2C -- 28 to 60 in	clay loam	moderate	4.46 to 6.06 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

624--Rosy sandy loam

Rosy

Extent: 90 percent of the unit

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

Slope gradient: 0 to 3 percent

Parent material: loamy and sandy glaciolacustrine 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): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

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,E -- 0 to 9 in	sandy loam	moderate	1.27 to 1.72 in	5.1 to 7.3
Bt -- 9 to 26 in	sandy loam	moderate	2.37 to 3.22 in	5.1 to 7.3
2C -- 26 to 60 in	stratified sand to silt loam	moderate	3.72 to 5.76 in	5.6 to 8.4

646C--Peever clay loam, 6 to 12 percent slopes

Peever

Extent: 90 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 6 to 12 percent

Parent material: loamy and clayey glacial 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) .17

Land capability, nonirrigated 3e

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	clay loam	moderately slow	1.72 to 1.99 in	6.1 to 7.3
Bt1,Bt2 -- 9 to 18 in	silty clay	moderately slow	1.00 to 1.72 in	6.6 to 7.8
Bk1,Bk2 -- 18 to 37 in	clay loam	moderately slow	1.51 to 3.21 in	7.4 to 8.4
C -- 37 to 60 in	clay loam	moderately slow	1.83 to 3.88 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

646D--Peever clay loam, 12 to 18 percent slopes

Peever

Extent: 85 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 12 to 18 percent

Parent material: loamy and clayey glacial 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) .24

Land capability, nonirrigated 4e

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 8 in	clay loam	moderately slow	1.50 to 1.73 in	6.1 to 7.3
Bt -- 8 to 21 in	clay loam	moderately slow	1.43 to 2.47 in	6.6 to 7.8
Bk,C -- 21 to 60 in	clay loam	moderately slow	3.12 to 6.63 in	7.4 to 8.4

670--Knutte fine sandy loam

Knutte

Extent: 90 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 0 to 3 percent

Parent material: loamy glacial 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) .24

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	fine sandy loam	moderate	1.18 to 1.63 in	6.1 to 7.3
Bt -- 9 to 22 in	sandy clay loam	moderate	1.95 to 2.47 in	6.1 to 7.8
Bk -- 22 to 29 in	loam	moderate	0.78 to 1.35 in	7.4 to 8.4
C -- 29 to 60 in	loam	moderate	3.38 to 5.83 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

680--Parnell silt loam

Parnell

<p><i>Extent:</i> 85 percent of the unit</p> <p><i>Landform(s):</i> swales on moraines</p> <p><i>Slope gradient:</i> 0 to 3 percent</p> <p><i>Parent material:</i> loamy glacial 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> 4</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> 2w</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>
--	---

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 27 in	silt loam	moderate	5.43 to 6.52 in	6.1 to 7.8
Btg -- 27 to 49 in	silty clay	slow	2.81 to 4.11 in	6.1 to 7.8
Cg -- 49 to 60 in	clay loam	moderately slow	1.54 to 2.09 in	6.6 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

698--Doran clay loam

Doran

Extent: 85 percent of the unit

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

Slope gradient: 0 to 2 percent

Parent material: silty and clayey glaciolacustrine deposits over loamy glacial 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 1

Hydric soil: no

Hydrologic group: 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	clay loam		moderately slow	1.63 to 2.08 in	6.6 to 7.3
Bt --	9 to 19 in	clay		moderately slow	1.48 to 1.87 in	6.6 to 7.8
2Bky --	19 to 32 in	clay loam		slow	1.82 to 2.08 in	7.4 to 8.4
2Cg --	32 to 60 in	clay loam		moderate	3.91 to 4.47 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

701--Runeberg mucky loam, depressional

Runeberg, depressional

Extent: 90 percent of the unit

Landform(s): depressions on interdrumlins

Slope gradient: 0 to 1 percent

Parent material: loamy glacial 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): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .32

Land capability, nonirrigated 6w

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 10 in	mucky loam	moderate	1.77 to 2.46 in	6.1 to 7.3
Bg -- 10 to 36 in	sandy loam	moderately slow	3.12 to 4.68 in	6.1 to 7.3
Cg -- 36 to 60 in	sandy loam	moderately slow	1.44 to 3.12 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

705B--Nitche-Kandota-Lida complex, 1 to 6 percent slopes

Nitche

Extent: 40 percent of the unit
Landform(s): hillslopes on outwash plains
Slope gradient: 1 to 6 percent
Parent material: loamy over sandy and gravelly outwash over loamy glacial 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): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .17
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,E -- 0 to 16 in	sandy loam	moderately rapid	2.10 to 3.07 in	5.6 to 7.3
Bt1 -- 16 to 24 in	gravelly sandy loam	moderately rapid	0.94 to 1.50 in	5.6 to 7.3
2Bt2 -- 24 to 33 in	loamy sand	rapid	0.54 to 0.91 in	5.6 to 7.3
2Bk -- 33 to 55 in	gravelly sand	rapid	0.44 to 0.88 in	7.4 to 8.4
3Bk,3C -- 55 to 80 in	sandy loam	moderate	2.98 to 4.22 in	7.4 to 8.4

Kandota

Extent: 30 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 1 to 6 percent
Parent material: loamy glacial 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): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
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 7 in	sandy loam	moderately rapid	0.99 to 1.20 in	5.6 to 7.3
E -- 7 to 11 in	sandy loam	moderately rapid	0.43 to 0.67 in	5.1 to 6.5
Bt1,Bt2 -- 11 to 28 in	sandy clay loam	moderate	2.71 to 3.22 in	5.6 to 7.3
Btk1,Btk2 -- 28 to 48 in	sandy loam	moderate	2.41 to 3.41 in	7.4 to 8.4
C -- 48 to 80 in	sandy loam	moderate	3.83 to 5.42 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

705B--Nitche-Kandota-Lida complex, 1 to 6 percent slopes

Lida

Extent: 20 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 1 to 6 percent

Parent material: loamy mantle over sandy and gravelly outwash 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): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .15

Land capability, nonirrigated 3s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

Representative soil profile:

		<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 1.63 in	5.6 to 7.3
E --	9 to 19 in	loamy sand	rapid	0.79 to 1.28 in	5.6 to 7.3
2Bt --	19 to 28 in	gravelly sandy loam	moderately rapid	0.72 to 1.54 in	5.6 to 7.3
2C --	28 to 60 in	gravelly sand	rapid	0.32 to 2.23 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

705C--Nitche-Kandota-Lida complex, 6 to 12 percent slopes

Nitche

Extent: 35 percent of the unit
Landform(s): hillslopes on outwash plains
Slope gradient: 6 to 12 percent
Parent material: loamy over sandy and gravelly outwash over loamy glacial 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): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .10
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,E -- 0 to 15 in	sandy loam	moderately rapid	1.94 to 2.84 in	5.6 to 7.3
Bt1 -- 15 to 23 in	loamy sand	moderately rapid	0.94 to 1.50 in	5.6 to 7.3
2Bt2,2Bt3 -- 23 to 41 in	gravelly loamy sand	rapid	1.09 to 1.81 in	5.6 to 7.3
3Bt3,3C -- 41 to 60 in	sandy loam	moderate	2.27 to 3.21 in	7.4 to 8.4

Kandota

Extent: 30 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 6 to 12 percent
Parent material: loamy glacial 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): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
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	sandy loam	moderately rapid	0.99 to 1.20 in	5.6 to 7.3
E -- 7 to 13 in	sandy loam	moderately rapid	0.65 to 1.00 in	5.1 to 6.5
Bt -- 13 to 33 in	sandy clay loam	moderate	3.21 to 3.81 in	5.6 to 7.3
Bk -- 33 to 47 in	sandy loam	moderate	1.65 to 2.34 in	7.4 to 8.4
C -- 47 to 60 in	sandy loam	moderate	1.56 to 2.21 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

705C--Nitche-Kandota-Lida complex, 6 to 12 percent slopes

Lida

<i>Extent:</i> 20 percent of the unit	<i>Soil loss tolerance (T factor):</i> 5
<i>Landform(s):</i> hillslopes on outwash plains	<i>Wind erodibility group (WEG):</i> 3
<i>Slope gradient:</i> 6 to 12 percent	<i>Wind erodibility index (WEI):</i> 86
<i>Parent material:</i> loamy mantle over sandy and gravelly outwash deposits	<i>Kw factor (surface layer)</i> .20
<i>Restrictive feature(s):</i> greater than 60 inches	<i>Land capability, nonirrigated</i> 4e
<i>Flooding:</i> none	<i>Hydric soil:</i> no
<i>Ponding:</i> none	<i>Hydrologic group:</i> A
<i>Drainage class:</i> well drained	<i>Potential for frost action:</i> 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	sandy loam	moderately rapid	0.77 to 1.06 in	5.6 to 7.3
E -- 6 to 17 in	loamy sand	rapid	0.88 to 1.43 in	5.6 to 7.3
Bt -- 17 to 28 in	gravelly sandy loam	moderately rapid	0.88 to 1.87 in	5.6 to 7.3
2Bw,2C -- 28 to 60 in	gravelly sand	rapid	0.32 to 2.23 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

707B--Lizzie silt loam, 2 to 6 percent slopes

Lizzie

Extent: 90 percent of the unit

Landform(s): hillslopes on lake terraces, hillslopes on moraines

Slope gradient: 2 to 6 percent

Parent material: silty loess or glaciolacustrine 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: B

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	silt loam	moderate	1.81 to 2.17 in	6.1 to 7.3
Bt --	9 to 26 in	silty clay loam	moderate	2.54 to 3.72 in	6.1 to 7.3
Bk --	26 to 32 in	silt loam	moderate	0.89 to 1.30 in	7.4 to 8.4
C --	32 to 60 in	very fine sandy loam	moderately rapid	2.24 to 6.15 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

707C2--Lizzie silt loam, 6 to 12 percent slopes, eroded

Lizzie, eroded

Extent: 85 percent of the unit

Landform(s): hillslopes on lake terraces, hillslopes on moraines

Slope gradient: 6 to 12 percent

Parent material: silty loess or glaciolacustrine 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: B

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 10 in	silt loam	moderate	1.97 to 2.36 in	6.1 to 7.3
Bt --	10 to 35 in	silty clay loam	moderate	3.78 to 5.54 in	6.1 to 7.3
Bk --	35 to 40 in	silt loam	moderate	0.77 to 1.13 in	7.4 to 8.4
C --	40 to 80 in	very fine sandy loam	moderately rapid	3.18 to 8.75 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

707D2--Lizzie silt loam, 12 to 20 percent slopes, eroded

Lizzie, eroded

Extent: 85 percent of the unit

Landform(s): lake terraces, hillslopes on moraines, hillslopes on moraines

Slope gradient: 12 to 20 percent

Parent material: silty loess or glaciolacustrine 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated 4e

Hydric soil: no

Hydrologic group: B

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 8 in	silt loam	moderate	1.57 to 1.89 in	6.1 to 7.3
Bt --	8 to 21 in	silty clay loam	moderate	1.95 to 2.86 in	6.1 to 7.3
Bk --	21 to 35 in	silt loam	moderate	2.13 to 3.12 in	7.4 to 8.4
C --	35 to 60 in	very fine sandy loam	moderately rapid	1.98 to 5.46 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

710--Friberg-Weetown complex

Friberg

Extent: 50 percent of the unit
Landform(s): swales on moraines
Slope gradient: 0 to 2 percent
Parent material: loamy colluvium over loamy glacial 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): 5
Wind erodibility index (WEI): 56
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,A -- 0 to 19 in	loam	moderate	3.78 to 4.54 in	5.6 to 7.8
Btg1,2Btg -- 19 to 47 in	sandy clay loam	moderate	4.19 to 5.31 in	5.6 to 7.3
2Cg -- 47 to 60 in	fine sandy loam	moderate	1.43 to 2.47 in	7.4 to 8.4

Weetown

Extent: 40 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 1 to 3 percent
Parent material: loamy colluvium over loamy glacial 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) .20
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 9 in	fine sandy loam	moderate	1.18 to 1.63 in	6.1 to 7.3
A,BE -- 9 to 31 in	fine sandy loam	moderate	2.87 to 3.97 in	6.1 to 7.3
Bt1,Bt2 -- 31 to 50 in	loam	moderate	2.83 to 3.59 in	5.6 to 7.3
Bk -- 50 to 60 in	fine sandy loam	moderate	1.08 to 1.87 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

711B--Arvilla-Sandberg complex, 2 to 6 percent slopes

Arvilla

Extent: 65 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 2 to 6 percent

Parent material: loamy mantle over sandy and gravelly outwash deposits

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) .20

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,A -- 0 to 13 in	sandy loam	moderately rapid	1.69 to 1.95 in	6.1 to 8.4
Bw1,Bw2 -- 13 to 19 in	sandy loam	moderately rapid	0.65 to 0.83 in	6.6 to 8.4
2Bk,2C -- 19 to 60 in	gravelly sand	rapid	0.82 to 2.05 in	7.4 to 8.4

Sandberg

Extent: 25 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 2 to 6 percent

Parent material: sandy and gravelly outwash deposits

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 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,A -- 0 to 12 in	coarse sandy loam	moderately rapid	1.54 to 1.77 in	5.6 to 7.8
Bw -- 12 to 20 in	loamy sand	rapid	0.25 to 0.83 in	6.1 to 7.8
Bk -- 20 to 32 in	gravelly coarse sand	very rapid	0.24 to 0.71 in	7.4 to 8.4
C -- 32 to 60 in	gravelly coarse sand	very rapid	0.56 to 1.68 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

711C--Arvilla-Sandberg complex, 6 to 12 percent slopes

Arvilla

Extent: 50 percent of the unit
Landform(s): hillslopes on outwash plains
Slope gradient: 6 to 12 percent
Parent material: loamy mantle over sandy and gravelly outwash deposits
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) .20
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>
A -- 0 to 8 in	sandy loam	moderately rapid	1.02 to 1.18 in	6.1 to 8.4
Bw -- 8 to 15 in	sandy loam	moderately rapid	0.78 to 0.99 in	6.6 to 8.4
2Bk,2c -- 15 to 60 in	gravelly coarse sand	rapid	0.90 to 2.24 in	7.4 to 8.4

Sandberg

Extent: 40 percent of the unit
Landform(s): hillslopes on outwash plains
Slope gradient: 6 to 12 percent
Parent material: sandy and gravelly outwash deposits
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) .15
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 7 in	coarse sandy loam	moderately rapid	0.92 to 1.06 in	5.6 to 7.8
Bw -- 7 to 14 in	loamy sand	rapid	0.21 to 0.71 in	6.1 to 7.8
Bk,C -- 14 to 60 in	gravelly coarse sand	very rapid	0.91 to 2.74 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

715--Bluffcreek-Clearriver complex

Bluffcreek

Extent: 60 percent of the unit
Landform(s): flats on outwash plains, rises on outwash plains
Slope gradient: 0 to 3 percent
Parent material: loamy and sandy and gravelly outwash 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): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .15
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 -- 0 to 8 in	sandy loam	moderately rapid	1.02 to 1.42 in	5.6 to 7.3
E1,E2 -- 8 to 26 in	sand	rapid	1.45 to 1.81 in	5.6 to 7.3
E&Bt,Bt -- 26 to 42 in	coarse sandy loam	moderately rapid	1.61 to 2.26 in	5.6 to 7.3
BC,C -- 42 to 80 in	sand	rapid	0.76 to 2.65 in	6.1 to 8.4

Clearriver

Extent: 30 percent of the unit
Landform(s): flats on outwash plains, rises on outwash plains
Slope gradient: 0 to 3 percent
Parent material: sandy outwash 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): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .05
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 9 in	loamy coarse sand	rapid	0.91 to 1.09 in	5.1 to 6.5
E,E&Bt -- 9 to 48 in	loamy sand	rapid	2.34 to 4.29 in	5.1 to 7.3
Cg -- 48 to 60 in	gravelly sand	rapid	0.24 to 0.71 in	6.6 to 7.8

Map Unit Description (MN)

Otter Tail County, Minnesota

716B--Leaflake-Eagleview complex, 1 to 6 percent slopes

Leaflake

Extent: 55 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 1 to 6 percent

Parent material: sandy eolian deposits over loamy glacial 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): 2

Wind erodibility index (WEI): 134

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 8 in	loamy sand	rapid	0.79 to 0.94 in	5.6 to 7.3
E -- 8 to 26 in	sand	rapid	1.09 to 1.63 in	5.6 to 7.3
2Bt -- 26 to 51 in	sandy clay loam	moderate	3.02 to 4.54 in	5.1 to 7.3
2C -- 51 to 60 in	sandy loam	moderate	0.95 to 1.47 in	6.6 to 8.4

Eagleview

Extent: 35 percent of the unit

Landform(s): hillslopes on moraines, hillslopes on outwash plains

Slope gradient: 1 to 6 percent

Parent material: sandy outwash deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively 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 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 9 in	loamy sand	rapid	0.91 to 1.09 in	5.6 to 7.3
E -- 9 to 36 in	sand	rapid	2.41 to 2.94 in	5.6 to 7.3
E&Bt -- 36 to 54 in	loamy sand	rapid	1.09 to 1.45 in	6.1 to 7.3
Bw -- 54 to 60 in	sand	rapid	0.30 to 0.41 in	6.1 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

716C--Leaflake-Eagleview complex, 6 to 12 percent slopes

Leaflake

Extent: 55 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 6 to 12 percent
Parent material: sandy eolian deposits over loamy glacial 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): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .15
Land capability, nonirrigated 4e
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>
A -- 0 to 3 in	loamy sand	rapid	0.31 to 0.38 in	5.6 to 7.3
E,E&Bt -- 3 to 34 in	sand	rapid	1.84 to 2.76 in	5.6 to 7.3
2Bt -- 34 to 71 in	sandy clay loam	moderate	4.44 to 6.66 in	5.1 to 7.3
2C -- 71 to 80 in	sandy loam	moderate	1.00 to 1.54 in	6.6 to 8.4

Eagleview

Extent: 35 percent of the unit
Landform(s): hillslopes on moraines, hillslopes on outwash plains
Slope gradient: 6 to 12 percent
Parent material: sandy outwash deposits
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively 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 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>
A -- 0 to 3 in	loamy sand	rapid	0.31 to 0.38 in	5.6 to 7.3
E -- 3 to 46 in	sand	rapid	3.86 to 4.72 in	5.6 to 7.3
E&Bt -- 46 to 78 in	loamy sand	rapid	1.91 to 2.55 in	6.1 to 7.3
C -- 78 to 80 in	sand	rapid	0.10 to 0.14 in	6.1 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

716D--Leaflake-Eagleview complex, 12 to 20 percent slopes

Leaflake

Extent: 55 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 12 to 20 percent
Parent material: sandy eolian deposits over loamy glacial 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): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .15
Land capability, nonirrigated 4e
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>
A1,A2 -- 0 to 6 in	loamy sand	rapid	0.59 to 0.71 in	5.6 to 7.3
E -- 6 to 23 in	sand	rapid	1.02 to 1.52 in	5.6 to 7.3
Bt,2BtC -- 23 to 39 in	sandy clay loam	moderate	1.94 to 2.91 in	5.1 to 7.3
2C -- 39 to 60 in	sandy loam	moderate	2.30 to 3.55 in	6.6 to 8.4

Eagleview

Extent: 30 percent of the unit
Landform(s): hillslopes on moraines, hillslopes on outwash plains
Slope gradient: 12 to 20 percent
Parent material: sandy outwash deposits
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively 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 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>
A -- 0 to 3 in	loamy sand	rapid	0.31 to 0.38 in	5.6 to 7.3
E1 -- 3 to 42 in	sand	rapid	3.51 to 4.29 in	5.6 to 7.3
E2,E&Bt -- 42 to 60 in	loamy sand	rapid	1.06 to 1.42 in	6.1 to 7.3

Map Unit Description (MN)

Otter Tail County, Minnesota

718E--Naytahwaush loam, 15 to 30 percent slopes

Naytahwaush

Extent: 85 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 15 to 30 percent

Parent material: loamy and clayey glacial 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 6e

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>
A -- 0 to 5 in	loam	moderate	1.02 to 1.23 in	5.6 to 7.3
E -- 5 to 10 in	fine sandy loam	moderate	0.76 to 1.13 in	5.6 to 7.3
Bt -- 10 to 31 in	clay	slow	2.13 to 4.04 in	5.6 to 7.3
Bk,C -- 31 to 60 in	clay loam	moderately slow	4.02 to 5.46 in	7.4 to 8.4

721B--Corliss loamy sand, 2 to 6 percent slopes

Corliss

Extent: 95 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 2 to 6 percent

Parent material: sandy and gravelly outwash deposits

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): 2

Wind erodibility index (WEI): 134

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,AB -- 0 to 8 in	loamy sand	rapid	0.79 to 0.94 in	6.1 to 7.8
Bw -- 8 to 19 in	sand	rapid	0.33 to 1.10 in	6.1 to 7.8
C -- 19 to 60 in	gravelly coarse sand	rapid	0.82 to 2.46 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

721C--Corliss loamy sand, 6 to 12 percent slopes

Corliss

Extent: 90 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 6 to 12 percent

Parent material: sandy and gravelly outwash deposits

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): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .20

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 7 in	loamy sand	rapid	0.71 to 0.85 in	6.1 to 7.8
Bw -- 7 to 28 in	coarse sand	rapid	0.63 to 2.09 in	6.1 to 7.8
C -- 28 to 80 in	gravelly coarse sand	rapid	1.04 to 3.12 in	7.4 to 8.4

721D--Corliss loamy sand, 12 to 20 percent slopes

Corliss

Extent: 90 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 12 to 20 percent

Parent material: sandy and gravelly outwash deposits

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): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .15

Land capability, nonirrigated 6e

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>
A -- 0 to 6 in	loamy sand	rapid	0.59 to 0.71 in	6.1 to 7.8
Bw1,Bw2 -- 6 to 20 in	loamy sand	rapid	0.43 to 1.42 in	6.1 to 7.8
C -- 20 to 60 in	gravelly coarse sand	rapid	0.80 to 2.39 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

721E--Corliss loamy sand, 20 to 35 percent slopes

Corliss

Extent: 85 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 20 to 35 percent

Parent material: sandy and gravelly outwash deposits

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): 2

Wind erodibility index (WEI): 134

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>
A -- 0 to 2 in	loamy sand	rapid	0.20 to 0.24 in	6.1 to 7.8
Bw -- 2 to 22 in	loamy sand	rapid	0.60 to 2.01 in	6.1 to 7.8
C -- 22 to 60 in	gravelly coarse sand	rapid	0.76 to 2.27 in	7.4 to 8.4

726--Kratka sandy loam, thick solum, depressional

Kratka, depressional, thick solum

Extent: 90 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: sandy glaciolacustrine deposits or outwash over loamy glacial 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): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .17

Land capability, nonirrigated 6w

Hydric soil: yes

Hydrologic group: B/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>
A -- 0 to 8 in	fine sandy loam	moderately rapid	1.02 to 1.42 in	6.1 to 7.3
Bg1,Bg2 -- 8 to 33 in	fine sand	rapid	1.51 to 2.77 in	6.1 to 7.3
2Bg3,2Bg4 -- 33 to 60 in	loam	moderate	2.94 to 5.09 in	6.1 to 7.3

Map Unit Description (MN)

Otter Tail County, Minnesota

746--Haslie muck

Haslie

Extent: 95 percent of the unit

Landform(s): depressions on glacial lakes, depressions on lake plains, depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: herbaceous organic material over coprogenous earth

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): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .02

Land capability, nonirrigated 6w

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>
Oa1 -- 0 to 21 in	muck	moderately rapid	7.30 to 10.02 in	
Oa2 -- 21 to 24 in	muck	moderately rapid	1.10 to 1.51 in	
Cg1,Cg2 -- 24 to 60 in	mucky silt loam	moderately slow	6.45 to 8.60 in	

Map Unit Description (MN)

Otter Tail County, Minnesota

760C2--Chapett-Sisseton complex, 6 to 12 percent slopes, eroded

Chapett, eroded

Extent: 55 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 6 to 12 percent

Parent material: loamy glacial 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
Bt -- 7 to 16 in	sandy clay loam	moderate	1.36 to 1.72 in	6.1 to 7.3
Btk,Bk -- 16 to 27 in	sandy loam	moderate	1.21 to 2.09 in	7.4 to 8.4
C -- 27 to 60 in	sandy loam	moderate	3.27 to 5.23 in	7.4 to 8.4

Sisseton, eroded

Extent: 30 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 6 to 12 percent

Parent material: loamy glacial 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) .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>
Ap -- 0 to 7 in	loam	moderate	1.13 to 1.28 in	7.4 to 8.4
Bk -- 7 to 22 in	loam	moderate	2.39 to 2.99 in	7.4 to 8.4
C -- 22 to 60 in	sandy loam	moderate	5.29 to 7.18 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

760D2--Chapett-Sisseton complex, 12 to 20 percent slopes, eroded

Chapett, eroded

Extent: 50 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 12 to 20 percent

Parent material: loamy glacial 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 7 in	loam	moderate	1.42 to 1.56 in	6.1 to 7.3
Bt -- 7 to 15 in	sandy clay loam	moderate	1.18 to 1.50 in	6.1 to 7.3
Bk -- 15 to 23 in	sandy loam	moderate	0.87 to 1.50 in	7.4 to 8.4
C -- 23 to 60 in	sandy loam	moderate	3.70 to 5.92 in	7.4 to 8.4

Sisseton, eroded

Extent: 35 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 12 to 20 percent

Parent material: loamy glacial 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) .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>
Ap -- 0 to 8 in	loam	moderate	1.26 to 1.42 in	7.4 to 8.4
Bk -- 8 to 16 in	loam	moderate	1.32 to 1.65 in	7.4 to 8.4
C -- 16 to 60 in	sandy loam	moderate	6.12 to 8.30 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

769B--Mehurin clay loam, 1 to 4 percent slopes

Mehurin

Extent: 90 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 1 to 4 percent

Parent material: loamy and clayey glacial 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 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 13 in	clay loam	moderately slow	2.21 to 2.47 in	6.1 to 7.3
Bt -- 13 to 26 in	clay loam	moderately slow	1.30 to 2.47 in	6.1 to 7.8
Bk -- 26 to 34 in	clay loam	moderate	1.18 to 1.50 in	7.4 to 8.4
C -- 34 to 60 in	clay loam	moderate	3.90 to 4.94 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

776B--Snellman-Sugarbush complex, 2 to 8 percent slopes

Snellman

Extent: 60 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 2 to 8 percent

Parent material: loamy glacial 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): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

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>
A -- 0 to 3 in	sandy loam	moderately rapid	0.41 to 0.57 in	5.1 to 6.5
E -- 3 to 12 in	sandy loam	moderate	0.78 to 1.21 in	5.1 to 6.5
Bt -- 12 to 32 in	sandy clay loam	moderate	2.41 to 3.61 in	5.6 to 7.3
Bk,C -- 32 to 60 in	sandy loam	moderate	3.07 to 4.47 in	7.4 to 8.4

Sugarbush

Extent: 30 percent of the unit

Landform(s): hillslopes on moraines, hillslopes on outwash plains

Slope gradient: 2 to 8 percent

Parent material: loamy mantle over sandy and gravelly outwash 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): 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>
A -- 0 to 3 in	sandy loam	moderately rapid	0.41 to 0.47 in	5.6 to 7.3
E -- 3 to 17 in	loamy sand	rapid	1.24 to 1.52 in	5.6 to 7.3
Bt -- 17 to 28 in	sandy loam	moderately rapid	1.32 to 1.65 in	5.6 to 7.3
2C -- 28 to 60 in	gravelly coarse sand	very rapid	0.64 to 1.91 in	5.6 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

776C--Snellman-Sugarbush complex, 8 to 15 percent slopes

Snellman

<p><i>Extent:</i> 60 percent of the unit</p> <p><i>Landform(s):</i> hillslopes on moraines</p> <p><i>Slope gradient:</i> 8 to 15 percent</p> <p><i>Parent material:</i> loamy glacial 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> well 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> .20</p> <p><i>Land capability, nonirrigated</i> 3e</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> B</p> <p><i>Potential for frost action:</i> moderate</p>
---	--

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	sandy loam	moderately rapid	0.26 to 0.35 in	5.1 to 6.5
E -- 2 to 16 in	sandy loam	moderate	1.28 to 1.98 in	5.1 to 6.5
Bt -- 16 to 32 in	sandy clay loam	moderate	1.89 to 2.83 in	5.6 to 7.3
C -- 32 to 60 in	sandy loam	moderate	3.07 to 4.47 in	7.4 to 8.4

Sugarbush

<p><i>Extent:</i> 30 percent of the unit</p> <p><i>Landform(s):</i> hillslopes on moraines, hillslopes on outwash plains</p> <p><i>Slope gradient:</i> 8 to 15 percent</p> <p><i>Parent material:</i> loamy mantle over sandy and gravelly outwash deposits</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> well 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> .20</p> <p><i>Land capability, nonirrigated</i> 4e</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> A</p> <p><i>Potential for frost action:</i> low</p>
--	---

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	sandy loam	moderately rapid	0.26 to 0.30 in	5.6 to 7.3
E -- 2 to 14 in	loamy sand	rapid	1.10 to 1.34 in	5.6 to 7.3
Bt -- 14 to 21 in	sandy loam	moderately rapid	0.80 to 1.00 in	5.6 to 7.3
2C -- 21 to 60 in	gravelly coarse sand	very rapid	0.78 to 2.34 in	5.6 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

776E--Snellman-Sugarbush complex, 15 to 30 percent slopes

Snellman

Extent: 55 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 15 to 30 percent

Parent material: loamy glacial 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): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

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 3 in	sandy loam	moderately rapid	0.41 to 0.57 in	5.1 to 6.5
E -- 3 to 14 in	sandy loam	moderate	0.99 to 1.54 in	5.1 to 6.5
Bt -- 14 to 26 in	sandy clay loam	moderate	1.42 to 2.13 in	5.6 to 7.3
C -- 26 to 60 in	sandy loam	moderate	3.72 to 5.42 in	7.4 to 8.4

Sugarbush

Extent: 35 percent of the unit

Landform(s): hillslopes on moraines, hillslopes on outwash plains

Slope gradient: 15 to 30 percent

Parent material: loamy mantle over sandy and gravelly outwash deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well 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 6e

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>
A -- 0 to 2 in	sandy loam	moderately rapid	0.26 to 0.30 in	5.6 to 7.3
E -- 2 to 10 in	sandy loam	rapid	0.71 to 0.87 in	5.6 to 7.3
Bt -- 10 to 19 in	sandy loam	moderately rapid	1.09 to 1.36 in	5.6 to 7.3
C -- 19 to 60 in	gravelly coarse sand	very rapid	0.82 to 2.46 in	5.6 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

777C2--Sisseton-Heimdal complex, 6 to 12 percent slopes, eroded

Sisseton, eroded

Extent: 55 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 6 to 12 percent

Parent material: loamy glacial 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) .24

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	1.45 to 1.63 in	7.4 to 8.4
Bk -- 9 to 19 in	loam	moderate	1.57 to 1.97 in	7.4 to 8.4
C -- 19 to 60 in	stratified sandy loam to silt loam	moderate	5.73 to 7.78 in	7.4 to 8.4

Heimdal, eroded

Extent: 35 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 6 to 12 percent

Parent material: loamy glacial 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 17 in	loam	moderate	1.18 to 1.87 in	6.1 to 7.8
Bk -- 17 to 34 in	sandy loam	moderate	1.86 to 3.22 in	7.4 to 8.4
C -- 34 to 60 in	sandy loam	moderate	2.86 to 4.16 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

777D2--Sisseton-Heimdal complex, 12 to 20 percent slopes, eroded

Sisseton, eroded

Extent: 60 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 12 to 20 percent

Parent material: loamy glacial 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 8 in	loam	moderate	1.26 to 1.42 in	7.4 to 8.4
Bk -- 8 to 16 in	loam	moderate	1.32 to 1.65 in	7.4 to 8.4
C -- 16 to 60 in	stratified sandy loam to silt loam	moderate	6.12 to 8.30 in	7.4 to 8.4

Heimdal, eroded

Extent: 30 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 12 to 20 percent

Parent material: loamy glacial 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 8 in	loam	moderate	1.57 to 1.73 in	6.1 to 7.3
Bw -- 8 to 12 in	loam	moderate	0.47 to 0.75 in	6.1 to 7.8
Bk -- 12 to 25 in	sandy loam	moderate	1.47 to 2.54 in	7.4 to 8.4
C -- 25 to 60 in	sandy loam	moderate	3.81 to 5.54 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

777E--Sisseton-Heimdal complex, 20 to 30 percent slopes

Sisseton

Extent: 70 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 20 to 30 percent

Parent material: loamy glacial 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) .28

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 3 in	loam	moderate	0.50 to 0.57 in	7.4 to 8.4
Bk -- 3 to 12 in	loam	moderate	1.39 to 1.73 in	7.4 to 8.4
C -- 12 to 60 in	stratified sandy loam to silt loam	moderate	6.72 to 9.13 in	7.4 to 8.4

Heimdal

Extent: 20 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 20 to 30 percent

Parent material: loamy glacial 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) .28

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	6.1 to 7.3
Bw -- 8 to 12 in	loam	moderate	0.47 to 0.75 in	6.1 to 7.8
Bk -- 12 to 19 in	sandy loam	moderate	0.78 to 1.35 in	7.4 to 8.4
C -- 19 to 60 in	sandy loam	moderate	4.50 to 6.55 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

778B--Dorset-Corliss complex, 1 to 6 percent slopes

Dorset

Extent: 70 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 1 to 6 percent

Parent material: loamy mantle over sandy and gravelly outwash deposits

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 -- 0 to 10 in	sandy loam	moderately rapid	1.28 to 1.48 in	5.6 to 7.3
Bt1,Bt2 -- 10 to 20 in	sandy loam	moderately rapid	1.23 to 1.94 in	5.6 to 7.3
2Bt,2Bk -- 20 to 38 in	gravelly coarse sand	rapid	1.09 to 1.81 in	7.4 to 8.4
2C -- 38 to 60 in	gravelly coarse sand	rapid	0.43 to 0.87 in	7.4 to 8.4

Corliss

Extent: 25 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 1 to 6 percent

Parent material: sandy and gravelly outwash deposits

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): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .10

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 7 in	loamy coarse sand	rapid	0.71 to 0.85 in	6.1 to 7.8
Bw -- 7 to 16 in	gravelly sand	rapid	0.27 to 0.91 in	6.1 to 7.8
Bk,C -- 16 to 60 in	gravelly coarse sand	rapid	0.87 to 2.62 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

778C--Dorset-Corliss complex, 6 to 12 percent slopes

Dorset

Extent: 50 percent of the unit
Landform(s): hillslopes on outwash plains
Slope gradient: 6 to 12 percent
Parent material: loamy mantle over sandy and gravelly outwash deposits
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well 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 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	5.6 to 7.3
Bt -- 9 to 16 in	sandy loam	moderately rapid	0.85 to 1.35 in	5.6 to 7.3
2Bk -- 16 to 43 in	gravelly coarse sand	rapid	1.61 to 2.68 in	7.4 to 8.4
2C -- 43 to 60 in	gravelly coarse sand	rapid	0.34 to 0.68 in	7.4 to 8.4

Corliss

Extent: 35 percent of the unit
Landform(s): hillslopes on outwash plains
Slope gradient: 6 to 12 percent
Parent material: sandy and gravelly outwash deposits
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): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .10
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 7 in	loamy coarse sand	rapid	0.71 to 0.85 in	6.1 to 7.8
Bw -- 7 to 11 in	gravelly sand	rapid	0.12 to 0.39 in	6.1 to 7.8
Bk,C -- 11 to 60 in	gravelly coarse sand	rapid	0.98 to 2.93 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

779B--Peever-Mehurin complex, 2 to 6 percent slopes

Peever

Extent: 45 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 3 to 6 percent

Parent material: loamy and clayey glacial 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) .24

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 11 in	clay loam	moderately slow	2.09 to 2.43 in	6.1 to 7.3
Bt -- 11 to 29 in	silty clay	moderately slow	1.99 to 3.44 in	6.6 to 7.8
Btk,Bk -- 29 to 60 in	clay loam	moderately slow	2.46 to 5.22 in	7.4 to 8.4

Mehurin

Extent: 40 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 2 to 4 percent

Parent material: loamy and clayey glacial 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 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 13 in	clay loam	moderately slow	2.21 to 2.47 in	6.1 to 7.3
Bt -- 13 to 35 in	clay	moderately slow	2.20 to 4.19 in	6.1 to 7.8
Bk -- 35 to 48 in	clay loam	moderate	1.95 to 2.47 in	7.4 to 8.4
C -- 48 to 60 in	clay loam	moderate	1.77 to 2.24 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

902B--Barnes-Buse complex, 2 to 6 percent slopes

Barnes

Extent: 60 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 2 to 6 percent

Parent material: loamy glacial 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 -- 0 to 9 in	loam	moderate	1.63 to 2.17 in	6.1 to 7.8
Bw -- 9 to 17 in	loam	moderate	1.18 to 1.50 in	6.1 to 7.8
Bk,C -- 17 to 60 in	loam	moderate	6.01 to 8.15 in	7.4 to 8.4

Buse

Extent: 25 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 3 to 6 percent

Parent material: loamy glacial 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
Bk1,Bk2 -- 8 to 40 in	loam	moderate	4.52 to 6.13 in	7.4 to 8.4
C -- 40 to 60 in	loam	moderate	2.76 to 3.74 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

903C2--Barnes-Langhei complex, 6 to 12 percent slopes, eroded

Barnes, eroded

Extent: 55 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 6 to 12 percent

Parent material: loamy glacial 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 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>
A -- 0 to 10 in	loam	moderate	1.77 to 2.36 in	6.1 to 7.8
Bw -- 10 to 16 in	loam	moderate	0.94 to 1.20 in	6.1 to 7.8
Bk,C -- 16 to 60 in	loam	moderate	6.12 to 8.30 in	7.4 to 8.4

Langhei, eroded

Extent: 35 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 6 to 12 percent

Parent material: loamy glacial 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 7 in	loam	moderate	1.20 to 1.56 in	6.6 to 8.4
Bk1,Bk2 -- 7 to 30 in	loam	moderate	3.43 to 4.34 in	7.9 to 8.4
C -- 30 to 60 in	loam	moderate	4.49 to 5.69 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

915C2--Forman-Buse complex, 6 to 12 percent slopes, eroded

Forman, eroded

Extent: 60 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 6 to 12 percent

Parent material: loamy glacial 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) .24

Land capability, nonirrigated 3e

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 8 in	clay loam	moderate	1.34 to 1.50 in	6.6 to 7.8
Bt -- 8 to 23 in	clay loam	moderate	2.24 to 2.84 in	6.6 to 7.8
Bk,C -- 23 to 60 in	loam	moderately slow	5.18 to 7.03 in	7.4 to 8.4

Buse, eroded

Extent: 25 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 6 to 12 percent

Parent material: loamy glacial 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 7 in	loam	moderate	1.20 to 1.56 in	7.4 to 8.4
Bk1,Bk2 -- 7 to 30 in	loam	moderate	3.20 to 4.34 in	7.4 to 8.4
C -- 30 to 60 in	loam	moderate	4.19 to 5.69 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

915D2--Forman-Buse complex, 12 to 20 percent slopes, eroded

Forman, eroded

Extent: 50 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 12 to 20 percent

Parent material: loamy glacial 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) .24

Land capability, nonirrigated 4e

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	clay loam	moderate	1.54 to 1.72 in	6.6 to 7.8
Bt1,Bt2 -- 9 to 23 in	clay loam	moderate	2.07 to 2.62 in	6.6 to 7.8
Bk,C -- 23 to 60 in	loam	moderately slow	5.18 to 7.03 in	7.4 to 8.4

Buse, eroded

Extent: 35 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 12 to 20 percent

Parent material: loamy glacial 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 9 in	loam	moderate	1.54 to 1.99 in	7.4 to 8.4
Bk -- 9 to 16 in	loam	moderate	0.99 to 1.35 in	7.4 to 8.4
C -- 16 to 60 in	loam	moderate	6.12 to 8.30 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

931C2--Formdale-Langhei complex, 6 to 12 percent slopes, eroded

Formdale, eroded

Extent: 55 percent of the unit

Landform(s): hillslopes on till plains

Slope gradient: 6 to 12 percent

Parent material: loamy glacial 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) .24

Land capability, nonirrigated 3e

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 8 in	clay loam	moderate	1.34 to 1.50 in	6.1 to 7.3
Bw -- 8 to 18 in	clay loam	moderately slow	1.74 to 1.94 in	6.6 to 7.8
Bk -- 18 to 39 in	clay loam	moderately slow	2.92 to 3.96 in	7.4 to 8.4
C -- 39 to 60 in	clay loam	moderately slow	2.92 to 3.96 in	7.4 to 8.4

Langhei, eroded

Extent: 35 percent of the unit

Landform(s): hillslopes on till plains

Slope gradient: 6 to 12 percent

Parent material: loamy glacial 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) .28

Land capability, nonirrigated 4e

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 7 in	clay loam	moderately slow	1.20 to 1.56 in	6.6 to 8.4
Bk -- 7 to 16 in	clay loam	moderately slow	1.27 to 1.72 in	7.4 to 8.4
C -- 16 to 60 in	clay loam	moderately slow	6.12 to 8.30 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

931D2--Formdale-Langhei complex, 12 to 20 percent slopes, eroded

Formdale, eroded

Extent: 50 percent of the unit

Landform(s): hillslopes on till plains

Slope gradient: 12 to 20 percent

Parent material: loamy glacial 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) .24

Land capability, nonirrigated 4e

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 8 in	clay loam	moderate	1.34 to 1.50 in	6.1 to 7.3
Bw -- 8 to 12 in	clay loam	moderately slow	0.67 to 0.75 in	6.6 to 7.8
Bk -- 12 to 26 in	clay loam	moderately slow	1.98 to 2.69 in	7.4 to 8.4
C -- 26 to 60 in	clay loam	moderately slow	4.74 to 6.43 in	7.4 to 8.4

Langhei, eroded

Extent: 40 percent of the unit

Landform(s): hillslopes on till plains

Slope gradient: 12 to 20 percent

Parent material: loamy glacial 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) .28

Land capability, nonirrigated 6e

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 5 in	clay loam	moderately slow	0.87 to 1.13 in	6.6 to 8.4
Bk -- 5 to 21 in	clay loam	moderately slow	2.20 to 2.99 in	7.4 to 8.4
C -- 21 to 60 in	clay loam	moderately slow	5.46 to 7.41 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

942D2--Langhei-Barnes complex, 12 to 20 percent slopes, eroded

Langhei, eroded

Extent: 55 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 12 to 20 percent

Parent material: loamy glacial 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 7 in	loam	moderate	1.20 to 1.56 in	6.6 to 8.4
Bk -- 7 to 13 in	loam	moderate	0.89 to 1.12 in	7.9 to 8.4
C -- 13 to 60 in	loam	moderate	7.03 to 8.90 in	7.4 to 8.4

Barnes, eroded

Extent: 35 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 12 to 20 percent

Parent material: loamy glacial 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 -- 0 to 7 in	loam	moderate	1.28 to 1.70 in	6.1 to 7.8
Bw -- 7 to 14 in	loam	moderate	1.06 to 1.35 in	6.1 to 7.8
Bk,C -- 14 to 60 in	loam	moderate	6.39 to 8.68 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

957B2--Rothsay-Zell complex, 2 to 6 percent slopes, eroded

Rothsay, eroded

Extent: 55 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 2 to 6 percent

Parent material: silty eolian or 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) .32

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 27 in	silt loam	moderate	2.07 to 2.69 in	6.6 to 7.8
Bk -- 27 to 33 in	silt loam	moderately rapid	1.18 to 1.30 in	7.4 to 8.4
C -- 33 to 60 in	very fine sandy loam	moderately rapid	5.35 to 5.89 in	7.4 to 8.4

Zell, eroded

Extent: 35 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 2 to 6 percent

Parent material: silty eolian or 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) .32

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 9 in	silt loam	moderate	1.72 to 1.99 in	6.6 to 8.4
Bk -- 9 to 18 in	silt loam	moderate	1.36 to 1.81 in	7.4 to 8.4
C -- 18 to 60 in	silt loam	moderate	6.26 to 8.35 in	7.4 to 9.0

Map Unit Description (MN)

Otter Tail County, Minnesota

969C2--Zell-Rothsay complex, 6 to 12 percent slopes, eroded

Zell, eroded

Extent: 50 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 6 to 12 percent

Parent material: silty eolian or 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	1.50 to 1.73 in	6.6 to 8.4
Bk -- 8 to 31 in	silt loam	moderate	3.48 to 4.65 in	7.4 to 8.4
C -- 31 to 60 in	silt loam	moderate	4.31 to 5.75 in	7.4 to 9.0

Rothsay, eroded

Extent: 35 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 6 to 12 percent

Parent material: silty eolian or 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 9 in	silt loam	moderate	1.99 to 2.17 in	6.6 to 7.3
Bw1,Bw2 -- 9 to 17 in	silt loam	moderate	1.34 to 1.73 in	6.6 to 7.8
Bk -- 17 to 28 in	silt loam	moderately rapid	2.20 to 2.43 in	7.4 to 8.4
C -- 28 to 60 in	silt loam	moderately rapid	6.38 to 7.02 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

969D2--Zell-Rothsay complex, 12 to 20 percent slopes, eroded

Zell, eroded

Extent: 60 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 12 to 20 percent

Parent material: silty eolian or 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) .32

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 8 in	silt loam	moderate	1.50 to 1.73 in	6.6 to 8.4
Bk -- 8 to 13 in	silt loam	moderate	0.77 to 1.02 in	7.4 to 8.4
C -- 13 to 60 in	silt loam	moderate	7.03 to 9.37 in	7.4 to 9.0

Rothsay, eroded

Extent: 25 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 12 to 18 percent

Parent material: silty eolian or 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 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>
A -- 0 to 6 in	silt loam	moderate	1.30 to 1.42 in	6.6 to 7.3
Bw -- 6 to 12 in	silt loam	moderate	1.00 to 1.30 in	6.6 to 7.8
Bk -- 12 to 32 in	silt loam	moderately rapid	4.02 to 4.42 in	7.4 to 8.4
C -- 32 to 60 in	silt loam	moderately rapid	5.59 to 6.15 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1015--Udipsamments (cut and fill land)

Udipsamments, cut and fill land

Extent: 95 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 0 to 10 percent

Parent material: sandy and gravelly 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): 1

Wind erodibility index (WEI): 220

Kw factor (surface layer) .02

Land capability, nonirrigated 8s

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>
AC -- 0 to 14 in	sand	rapid	0.71 to 1.42 in	6.6 to 7.3
C1 -- 14 to 60 in	sand	rapid	2.28 to 3.65 in	6.6 to 7.3
C2 -- 60 to 80 in	coarse sand	very rapid	0.60 to 1.00 in	7.4 to 8.4

1016--Udorthents, loamy (cut and fill land)

Udorthents, loamy, cut and fill land

Extent: 95 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 0 to 50 percent

Parent material: loamy soil material

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) .37

Land capability, nonirrigated 6s

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>
AC -- 0 to 60 in	loam	moderate	8.98 to 11.37 in	6.1 to 8.4
C -- 60 to 80 in	loam	moderate	3.01 to 3.81 in	6.1 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1027--Udorthents, wet substratum (fill land)

Udorthents, wet substratum, fill land

Extent: 95 percent of the unit

Landform(s): hillslopes on moraines, hillslopes on outwash plains

Slope gradient: 0 to 5 percent

Parent material: mineral 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: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
----------------	---------------------	---------------------------------	-----------

Map Unit Description (MN)

Otter Tail County, Minnesota

1030--Pits, gravel-Udipsamments complex

Pits, gravel

Extent: 50 percent of the unit

Landform(s): hillslopes on beach ridges, hillslopes on moraines, hillslopes on outwash plains

Slope gradient: 1 to 50 percent

Parent material: gravelly outwash deposits

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: no

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>
-------------------------------------	----------------	---------------------	---------------------------------	-----------

Udipsamments

Extent: 45 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 1 to 50 percent

Parent material: gravelly outwash deposits

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 1

Wind erodibility index (WEI): 220

Kw factor (surface layer) .02

Land capability, nonirrigated 8s

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>
-------------------------------------	----------------	---------------------	---------------------------------	-----------

AC -- 0 to 14 in	sand	rapid	0.71 to 1.42 in	6.6 to 7.3
C1 -- 14 to 60 in	sand	rapid	2.28 to 3.65 in	6.6 to 7.3
C2 -- 60 to 80 in	gravelly coarse sand	very rapid	0.60 to 1.00 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1077--Forada and Leafriver soils, depressional

Forada, depressional

Extent: 45 percent of the unit

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

Slope gradient: 0 to 1 percent

Parent material: loamy mantle over sandy and gravelly outwash deposits

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) .32

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 16 in	loam	moderate	3.23 to 3.55 in	6.6 to 7.8
Bg1,Bg2 -- 16 to 27 in	sandy loam	moderately rapid	1.32 to 2.09 in	6.6 to 7.8
2Cg1,2Cg2 -- 27 to 60 in	gravelly coarse sand	rapid	0.65 to 1.31 in	7.4 to 8.4

Leafriver, depressional

Extent: 45 percent of the unit

Landform(s): depressions on outwash plains

Slope gradient: 0 to 1 percent

Parent material: highly decomposed herbaceous organic material over sandy and gravelly outwash or lacustrine deposits

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): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .02

Land capability, nonirrigated 6w

Hydric soil: yes

Hydrologic group: A/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>
Oa -- 0 to 12 in	muck	moderately rapid	4.13 to 5.91 in	4.5 to 7.3
A -- 12 to 20 in	loamy sand	rapid	0.66 to 1.16 in	4.5 to 7.3
Cg -- 20 to 60 in	sand	rapid	1.19 to 3.18 in	4.5 to 7.3

Map Unit Description (MN)

Otter Tail County, Minnesota

1102B--Chapett-Dorset complex, 1 to 6 percent slopes

Chapett

Extent: 50 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 1 to 6 percent
Parent material: loamy glacial 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
Bt1,Bt2 -- 10 to 25 in	sandy clay loam	moderate	2.30 to 2.92 in	6.1 to 7.3
Bk -- 25 to 37 in	sandy loam	moderate	1.30 to 2.24 in	7.4 to 8.4
C -- 37 to 60 in	sandy loam	moderate	2.28 to 3.65 in	7.4 to 8.4

Dorset

Extent: 35 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 1 to 6 percent
Parent material: loamy mantle over sandy and gravelly outwash deposits
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well 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 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	5.6 to 7.3
Bt -- 12 to 15 in	sandy loam	moderately rapid	0.38 to 0.60 in	5.6 to 7.3
2Bt,2Bw -- 15 to 32 in	gravelly coarse sand	rapid	1.02 to 1.69 in	7.4 to 8.4
2Bk,2C -- 32 to 60 in	gravelly coarse sand	rapid	0.56 to 1.12 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1102C--Chapett-Dorset complex, 6 to 12 percent slopes, eroded

Chapett, eroded

<p><i>Extent:</i> 50 percent of the unit</p> <p><i>Landform(s):</i> hillslopes on moraines</p> <p><i>Slope gradient:</i> 6 to 12 percent</p> <p><i>Parent material:</i> loamy glacial 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> well drained</p>	<p><i>Soil loss tolerance (T factor):</i> 5</p> <p><i>Wind erodibility group (WEG):</i> 5</p> <p><i>Wind erodibility index (WEI):</i> 56</p> <p><i>Kw factor (surface layer)</i> .32</p> <p><i>Land capability, nonirrigated</i> 3e</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> B</p> <p><i>Potential for frost action:</i> moderate</p>
---	--

<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	6.1 to 7.3
Bt -- 9 to 20 in	sandy clay loam	moderate	1.65 to 2.09 in	6.1 to 7.3
Bk -- 20 to 34 in	sandy loam	moderate	1.52 to 2.62 in	7.4 to 8.4
C -- 34 to 60 in	sandy loam	moderate	2.60 to 4.16 in	7.4 to 8.4

Dorset

<p><i>Extent:</i> 35 percent of the unit</p> <p><i>Landform(s):</i> hillslopes on moraines</p> <p><i>Slope gradient:</i> 6 to 12 percent</p> <p><i>Parent material:</i> loamy mantle over sandy and gravelly outwash deposits</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> well drained</p>	<p><i>Soil loss tolerance (T factor):</i> 2</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> .20</p> <p><i>Land capability, nonirrigated</i> 4e</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> A</p> <p><i>Potential for frost action:</i> low</p>
--	---

<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	5.6 to 7.3
Bt -- 10 to 18 in	sandy loam	moderately rapid	0.99 to 1.57 in	5.6 to 7.3
2Bk -- 18 to 29 in	gravelly coarse sand	rapid	0.66 to 1.10 in	7.4 to 8.4
2C -- 29 to 60 in	gravelly coarse sand	rapid	0.61 to 1.23 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1103--Clitherall sandy loam

Clitherall

Extent: 90 percent of the unit

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

Slope gradient: 0 to 3 percent

Parent material: loamy mantle over sandy and gravelly outwash over loamy glacial 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) .20

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>
A --	0 to 10 in	sandy loam	moderately rapid	1.28 to 1.77 in	5.6 to 7.3
Bt --	10 to 16 in	coarse sandy loam	moderately rapid	0.76 to 1.20 in	5.6 to 7.3
2Bt,2Bk --	16 to 38 in	gravelly loamy sand	rapid	0.44 to 1.54 in	6.1 to 7.8
3Bk,3C --	38 to 80 in	sandy loam	moderate	4.59 to 6.68 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1104B--Waukon-Dorset complex, 1 to 6 percent slopes

Waukon

<p><i>Extent:</i> 55 percent of the unit</p> <p><i>Landform(s):</i> hillslopes on moraines</p> <p><i>Slope gradient:</i> 1 to 6 percent</p> <p><i>Parent material:</i> loamy glacial 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> well drained</p>	<p><i>Soil loss tolerance (T factor):</i> 5</p> <p><i>Wind erodibility group (WEG):</i> 5</p> <p><i>Wind erodibility index (WEI):</i> 56</p> <p><i>Kw factor (surface layer)</i> .28</p> <p><i>Land capability, nonirrigated</i> 2e</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> B</p> <p><i>Potential for frost action:</i> moderate</p>
--	--

<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 2.17 in	6.1 to 7.3
Bt1,Bt2 -- 9 to 34 in	clay loam	moderate	3.72 to 4.71 in	6.1 to 8.4
Bk,C -- 34 to 60 in	loam	moderate	3.90 to 4.94 in	7.4 to 8.4

Dorset

<p><i>Extent:</i> 35 percent of the unit</p> <p><i>Landform(s):</i> hillslopes on moraines</p> <p><i>Slope gradient:</i> 1 to 6 percent</p> <p><i>Parent material:</i> loamy mantle over sandy and gravelly outwash deposits</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> well drained</p>	<p><i>Soil loss tolerance (T factor):</i> 3</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> .20</p> <p><i>Land capability, nonirrigated</i> 3s</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> A</p> <p><i>Potential for frost action:</i> low</p>
---	---

<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	5.6 to 7.3
Bt -- 9 to 23 in	sandy loam	moderately rapid	1.65 to 2.62 in	5.6 to 7.3
2Bk -- 23 to 33 in	gravelly coarse sand	rapid	0.61 to 1.02 in	7.4 to 8.4
2C -- 33 to 60 in	gravelly coarse sand	rapid	0.54 to 1.07 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1104C--Waukon-Dorset complex, 6 to 12 percent slopes, eroded

Waukon, eroded

<p><i>Extent:</i> 55 percent of the unit</p> <p><i>Landform(s):</i> hillslopes on moraines</p> <p><i>Slope gradient:</i> 6 to 12 percent</p> <p><i>Parent material:</i> loamy glacial 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> well drained</p>	<p><i>Soil loss tolerance (T factor):</i> 5</p> <p><i>Wind erodibility group (WEG):</i> 5</p> <p><i>Wind erodibility index (WEI):</i> 56</p> <p><i>Kw factor (surface layer)</i> .28</p> <p><i>Land capability, nonirrigated</i> 3e</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> B</p> <p><i>Potential for frost action:</i> moderate</p>
---	--

<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 2.17 in	6.1 to 7.3
Bt -- 9 to 28 in	clay loam	moderate	2.83 to 3.59 in	6.1 to 8.4
Bk,C -- 28 to 60 in	loam	moderate	4.78 to 6.06 in	7.4 to 8.4

Dorset

<p><i>Extent:</i> 35 percent of the unit</p> <p><i>Landform(s):</i> hillslopes on moraines</p> <p><i>Slope gradient:</i> 6 to 12 percent</p> <p><i>Parent material:</i> loamy mantle over sandy and gravelly outwash deposits</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> well drained</p>	<p><i>Soil loss tolerance (T factor):</i> 2</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> .20</p> <p><i>Land capability, nonirrigated</i> 4e</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> A</p> <p><i>Potential for frost action:</i> low</p>
--	---

<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	5.6 to 7.3
Bt1 -- 10 to 14 in	sandy loam	moderately rapid	0.52 to 0.82 in	5.6 to 7.3
2Bt2 -- 14 to 20 in	gravelly loamy sand	rapid	0.35 to 0.59 in	7.4 to 8.4
2C -- 20 to 60 in	gravelly coarse sand	rapid	0.80 to 1.59 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1104D--Waukon-Dorset complex, 12 to 20 percent slopes, eroded

Waukon, eroded

Extent: 50 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 12 to 20 percent

Parent material: loamy glacial 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) .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>
A,E -- 0 to 9 in	loam	moderate	1.81 to 2.17 in	6.1 to 7.3
Bt -- 9 to 21 in	clay loam	moderate	1.77 to 2.24 in	6.1 to 8.4
BtC,C -- 21 to 60 in	loam	moderate	5.85 to 7.41 in	7.4 to 8.4

Dorset

Extent: 35 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 12 to 20 percent

Parent material: loamy mantle over sandy and gravelly outwash deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well 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 6e

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	5.6 to 7.3
Bt -- 8 to 18 in	sandy loam	moderately rapid	1.23 to 1.94 in	5.6 to 7.3
2C -- 18 to 60 in	gravelly coarse sand	rapid	0.83 to 1.67 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1105B--Dent silt loam, 1 to 6 percent slopes

Dent

Extent: 90 percent of the unit

Landform(s): hillslopes on lake terraces, hillslopes on moraines

Slope gradient: 1 to 6 percent

Parent material: silty glaciolacustrine 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 2e

Hydric soil: no

Hydrologic group: C

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 12 in	silt loam	moderate	2.36 to 2.83 in	6.1 to 7.3
Bt1,Bt2	-- 12 to 26 in	silty clay loam	moderate	2.41 to 3.12 in	5.1 to 7.3
Btk	-- 26 to 54 in	silt loam	moderate	4.19 to 6.15 in	7.4 to 7.8
C	-- 54 to 80 in	silt loam	moderate	3.12 to 5.72 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1110--Isan sandy loam

Isan

Extent: 90 percent of the unit

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

Slope gradient: 0 to 1 percent

Parent material: sandy outwash deposits

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 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 16 in	sandy loam	moderately rapid	1.61 to 2.42 in	5.6 to 7.3
Bg -- 16 to 26 in	loamy sand	rapid	0.59 to 0.98 in	5.1 to 6.5
Cg -- 26 to 60 in	sand	rapid	1.35 to 2.03 in	5.6 to 7.3

1111--Nidaros muck, frequently flooded

Nidaros, frequently flooded

Extent: 90 percent of the unit

Landform(s): flats on flood plains on outwash plains

Slope gradient: 0 to 1 percent

Parent material: highly decomposed herbaceous organic material over outwash deposits

Restrictive feature(s): greater than 60 inches

Flooding: frequent

Ponding: none

Drainage class: very poorly drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .02

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>
Oa1,Oa2 -- 0 to 32 in	muck	moderately rapid	11.16 to 14.35 in	
2AB -- 32 to 38 in	sandy clay loam	moderate	0.82 to 1.39 in	
3Cg -- 38 to 60 in	coarse sand	rapid	0.65 to 1.73 in	

Map Unit Description (MN)

Otter Tail County, Minnesota

1112D--Chapett-Corliss complex, 12 to 20 percent slopes, eroded

Chapett, eroded

Extent: 50 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 12 to 20 percent

Parent material: loamy glacial 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) .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 -- 0 to 8 in	loam	moderate	1.57 to 1.73 in	6.1 to 7.3
Bt -- 8 to 18 in	sandy clay loam	moderate	1.54 to 1.94 in	6.1 to 7.3
Bk -- 18 to 30 in	sandy loam	moderate	1.30 to 2.24 in	7.4 to 8.4
C -- 30 to 60 in	sandy loam	moderate	2.99 to 4.79 in	7.4 to 8.4

Corliss

Extent: 35 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 12 to 20 percent

Parent material: sandy and gravelly outwash deposits

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): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .15

Land capability, nonirrigated 6e

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 6 in	loamy sand	rapid	0.59 to 0.71 in	6.1 to 7.8
Bw -- 6 to 18 in	loamy sand	rapid	0.37 to 1.22 in	6.1 to 7.8
C -- 18 to 60 in	gravelly coarse sand	rapid	0.83 to 2.50 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1112E--Chapett-Corliss complex, 20 to 30 percent slopes

Chapett

Extent: 50 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 20 to 30 percent

Parent material: loamy glacial 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 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	1.42 to 1.56 in	6.1 to 7.3
Bt1,Bt2 -- 7 to 20 in	sandy clay loam	moderate	1.95 to 2.47 in	6.1 to 7.3
Bk -- 20 to 37 in	sandy loam	moderate	1.86 to 3.22 in	7.4 to 8.4
C -- 37 to 60 in	sandy loam	moderate	2.28 to 3.65 in	7.4 to 8.4

Corliss

Extent: 35 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 20 to 30 percent

Parent material: sandy and gravelly outwash deposits

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): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .17

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>
A -- 0 to 7 in	loamy sand	rapid	0.71 to 0.85 in	6.1 to 7.8
Bw -- 7 to 10 in	loamy sand	rapid	0.08 to 0.28 in	6.1 to 7.8
C -- 10 to 60 in	gravelly coarse sand	rapid	1.00 to 3.00 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1113--Haslie, Seelyeville, and Cathro soils, ponded

Haslie, ponded

Extent: 30 percent of the unit

Landform(s): depressions on moraines, glacial lakes on moraines

Slope gradient: 0 to 1 percent

Parent material: herbaceous organic material over coprogenous earth

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: A/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>
Oa,Oa2 -- 0 to 44 in	muck	moderately rapid	15.43 to 21.17 in	
Cg -- 44 to 60 in	coprogenous earth	slow	3.15 to 5.51 in	

Seelyeville, ponded

Extent: 30 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: highly decomposed herbaceous organic material

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer) .02

Land capability, nonirrigated 8w

Hydric soil: yes

Hydrologic group: A/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 30 in	muck	moderately rapid	10.47 to 13.46 in	
Oa2 -- 30 to 60 in	muck	moderately rapid	10.47 to 13.46 in	

Map Unit Description (MN)

Otter Tail County, Minnesota

1113--Haslie, Seelyeville, and Cathro soils, ponded

Cathro, ponded

Extent: 30 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: highly decomposed herbaceous organic material over loamy glacial deposits

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,Oa2 -- 0 to 30 in	muck	moderately rapid	13.46 to 16.46 in	
Cg -- 30 to 60 in	sandy loam	moderate	3.29 to 6.58 in	

1114--Hangaard loamy sand, lake beaches

Hangaard, lake beaches

Extent: 85 percent of the unit

Landform(s): flats on lakeshores

Slope gradient: 0 to 2 percent

Parent material: loamy mantle over sandy and gravelly 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) .10

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>
A1,A2 -- 0 to 8 in	loamy sand	rapid	0.79 to 0.94 in	6.6 to 7.8
Cg -- 8 to 60 in	gravelly coarse sand	very rapid	1.04 to 2.08 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1120--Rushlake-Hangaard complex

Rushlake

Extent: 55 percent of the unit

Landform(s): hillslopes on beaches on lakeshores

Slope gradient: 0 to 3 percent

Parent material: sandy and gravelly lakebeach 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): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .15

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>
A --	0 to 5 in loamy sand	rapid	0.51 to 0.61 in	6.1 to 7.8
C2,Cg --	5 to 60 in gravelly coarse sand	rapid	1.09 to 5.47 in	7.4 to 8.4

Hangaard

Extent: 35 percent of the unit

Landform(s): hillslopes on beaches on lakeshores

Slope gradient: 0 to 2 percent

Parent material: sandy and gravelly lakebeach 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): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .05

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>
A --	0 to 4 in loamy sand	rapid	0.39 to 0.47 in	6.6 to 7.8
Cg --	4 to 60 in gravelly coarse sand	very rapid	1.12 to 2.24 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1129--Lindaas silty clay loam, morainic

Lindaas, morainic

Extent: 90 percent of the unit

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

Slope gradient: 0 to 2 percent

Parent material: silty and clayey glaciolacustrine 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) .37

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 loam	moderate	2.09 to 2.54 in	6.6 to 7.3
Btg -- 15 to 25 in	silty clay	slow	1.02 to 1.43 in	6.6 to 7.3
Bkg,Cg -- 25 to 60 in	silty clay loam	moderately slow	3.81 to 5.20 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1131B--Verndale-Abbeylake complex, 1 to 6 percent slopes

Verndale

Extent: 60 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 1 to 6 percent

Parent material: loamy mantle over sandy outwash deposits

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) .24

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 9 in	sandy loam	moderately rapid	1.18 to 1.54 in	5.6 to 7.3
Bt1,Bt2 -- 9 to 19 in	sandy loam	moderate	1.38 to 1.77 in	5.6 to 7.3
2Bw -- 19 to 49 in	sand	rapid	1.80 to 2.39 in	5.6 to 7.3
2C -- 49 to 60 in	sand	rapid	0.22 to 0.66 in	6.1 to 8.4

Abbeylake

Extent: 30 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 1 to 6 percent

Parent material: sandy outwash deposits

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): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .20

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	loamy sand	rapid	0.79 to 0.94 in	6.1 to 7.3
Bw -- 8 to 19 in	loamy sand	rapid	0.33 to 1.21 in	6.1 to 7.3
C -- 19 to 60 in	sand	rapid	1.23 to 3.28 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1136--Nidaros muck

Nidaros

Extent: 90 percent of the unit

Landform(s): depressions on outwash plains

Slope gradient: 0 to 1 percent

Parent material: highly decomposed herbaceous organic material over outwash deposits

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): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .02

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>
Oa1,Oa2 -- 0 to 27 in	muck	moderately rapid	9.51 to 12.22 in	
2AB -- 27 to 38 in	sandy clay loam	moderate	1.43 to 2.43 in	
3Cg -- 38 to 60 in	coarse sand	rapid	0.65 to 1.73 in	

1149--Hamerly clay loam

Hamerly

Extent: 90 percent of the unit

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

Slope gradient: 0 to 2 percent

Parent material: loamy glacial 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): 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,Ak -- 0 to 16 in	clay loam	moderate	2.74 to 3.07 in	6.6 to 8.4
Bkgy -- 16 to 25 in	clay loam	moderate	1.36 to 1.72 in	7.4 to 8.4
Bkg,Cg -- 25 to 60 in	clay loam	moderate	4.85 to 6.58 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1195A--Sybil-Eagleview complex, 0 to 2 percent slopes

Sybil

Extent: 70 percent of the unit
Landform(s): flats on outwash plains
Slope gradient: 0 to 2 percent
Parent material: loamy mantle over sandy outwash 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): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .15
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>
A -- 0 to 6 in	loamy sand	rapid	0.41 to 0.71 in	5.6 to 7.3
E -- 6 to 14 in	loamy sand	rapid	0.83 to 1.49 in	5.6 to 7.3
Bt1 -- 14 to 19 in	sandy loam	moderately rapid	0.57 to 0.80 in	5.6 to 7.3
Bt2 -- 19 to 34 in	loamy sand	rapid	0.90 to 1.65 in	5.6 to 7.3
C -- 34 to 80 in	sand	rapid	2.30 to 3.22 in	6.1 to 8.4

Eagleview

Extent: 25 percent of the unit
Landform(s): flats on outwash plains
Slope gradient: 0 to 2 percent
Parent material: sandy outwash deposits
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively 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 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	loamy sand	rapid	0.79 to 0.94 in	5.6 to 7.3
E,Bw -- 8 to 32 in	sand	rapid	2.16 to 2.64 in	5.6 to 7.3
E/Bt -- 32 to 60 in	stratified sand to loamy sand	rapid	1.68 to 2.24 in	6.1 to 7.3
C -- 60 to 80 in	sand	rapid	1.00 to 1.41 in	6.1 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1195B--Sybil-Eagleview complex, 2 to 8 percent slopes

Sybil

<p><i>Extent:</i> 60 percent of the unit</p> <p><i>Landform(s):</i> hillslopes on outwash plains</p> <p><i>Slope gradient:</i> 2 to 8 percent</p> <p><i>Parent material:</i> loamy mantle over sandy outwash deposits</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> well drained</p>	<p><i>Soil loss tolerance (T factor):</i> 5</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> .15</p> <p><i>Land capability, nonirrigated</i> 3s</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> A</p> <p><i>Potential for frost action:</i> low</p>
--	--

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 5 in	loamy sand	rapid	0.36 to 0.61 in	5.6 to 7.3
E -- 5 to 10 in	loamy sand	rapid	0.47 to 0.85 in	5.6 to 7.3
Bt1 -- 10 to 15 in	sandy loam	moderately rapid	0.61 to 0.87 in	5.6 to 7.3
Bt2,Bt3 -- 15 to 32 in	loamy sand	rapid	1.02 to 1.86 in	5.6 to 7.3
C -- 32 to 80 in	sand	rapid	2.40 to 3.36 in	6.1 to 8.4

Eagleview

<p><i>Extent:</i> 30 percent of the unit</p> <p><i>Landform(s):</i> hillslopes on outwash plains</p> <p><i>Slope gradient:</i> 2 to 8 percent</p> <p><i>Parent material:</i> sandy outwash deposits</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> somewhat excessively drained</p>	<p><i>Soil loss tolerance (T factor):</i> 5</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> .20</p> <p><i>Land capability, nonirrigated</i> 4s</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> A</p> <p><i>Potential for frost action:</i> low</p>
--	--

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	loamy sand	rapid	0.39 to 0.47 in	5.6 to 7.3
Bw1,Bw2,E -- 4 to 36 in	sand	rapid	2.87 to 3.51 in	5.6 to 7.3
E&Bt -- 36 to 60 in	stratified sand to loamy sand	rapid	1.44 to 1.92 in	6.1 to 7.3

Map Unit Description (MN)

Otter Tail County, Minnesota

1195C--Sybil-Eagleview complex, 8 to 15 percent slopes

Sybil

<p><i>Extent:</i> 60 percent of the unit</p> <p><i>Landform(s):</i> hillslopes on outwash plains</p> <p><i>Slope gradient:</i> 8 to 15 percent</p> <p><i>Parent material:</i> loamy mantle over sandy outwash deposits</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> well drained</p>	<p><i>Soil loss tolerance (T factor):</i> 5</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> .15</p> <p><i>Land capability, nonirrigated</i> 4e</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> A</p> <p><i>Potential for frost action:</i> low</p>
---	--

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	loamy sand	rapid	0.55 to 0.94 in	5.6 to 7.3
E -- 8 to 17 in	loamy sand	rapid	0.91 to 1.63 in	5.6 to 7.3
Bt1 -- 17 to 26 in	sandy loam	moderately rapid	1.09 to 1.54 in	5.6 to 7.3
Bt2 -- 26 to 37 in	loamy sand	rapid	0.66 to 1.21 in	5.6 to 7.3
C -- 37 to 80 in	sand	rapid	2.15 to 3.00 in	6.1 to 8.4

Eagleview

<p><i>Extent:</i> 30 percent of the unit</p> <p><i>Landform(s):</i> hillslopes on outwash plains</p> <p><i>Slope gradient:</i> 8 to 15 percent</p> <p><i>Parent material:</i> sandy outwash deposits</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> somewhat excessively drained</p>	<p><i>Soil loss tolerance (T factor):</i> 5</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> .15</p> <p><i>Land capability, nonirrigated</i> 4s</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> A</p> <p><i>Potential for frost action:</i> low</p>
---	--

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	loamy sand	rapid	0.31 to 0.38 in	5.6 to 7.3
E -- 3 to 37 in	sand	rapid	3.05 to 3.72 in	5.6 to 7.3
E&Bt -- 37 to 60 in	stratified sand to loamy sand	rapid	1.37 to 1.83 in	6.1 to 7.3
C -- 60 to 80 in	sand	rapid	1.00 to 1.41 in	6.1 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1195E--Sybil-Eagleview complex, 15 to 30 percent slopes

Sybil

Extent: 60 percent of the unit
Landform(s): hillslopes on outwash plains
Slope gradient: 15 to 30 percent
Parent material: loamy mantle over sandy outwash 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): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .17
Land capability, nonirrigated 6e
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>
A -- 0 to 4 in	sandy loam	moderately rapid	0.51 to 0.71 in	5.6 to 7.3
E -- 4 to 15 in	loamy sand	rapid	1.10 to 1.98 in	5.6 to 7.3
Bt1,Bt2 -- 15 to 25 in	sandy loam	moderately rapid	1.23 to 1.74 in	5.6 to 7.3
E&Bt -- 25 to 78 in	loamy sand	rapid	3.17 to 5.80 in	5.6 to 7.3
C -- 78 to 80 in	sand	rapid	0.10 to 0.14 in	6.1 to 8.4

Eagleview

Extent: 30 percent of the unit
Landform(s): hillslopes on outwash plains
Slope gradient: 15 to 30 percent
Parent material: sandy outwash deposits
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively 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 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>
A -- 0 to 7 in	loamy sand	rapid	0.71 to 0.85 in	5.6 to 7.3
E -- 7 to 17 in	sand	rapid	0.89 to 1.08 in	5.6 to 7.3
E&Bt -- 17 to 55 in	stratified sand to loamy sand	rapid	2.29 to 3.06 in	6.1 to 7.3
C -- 55 to 80 in	sand	rapid	1.24 to 1.74 in	6.1 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1196B--Lida-Two Inlets complex, 1 to 8 percent slopes

Lida

Extent: 65 percent of the unit
Landform(s): hillslopes on outwash plains
Slope gradient: 1 to 8 percent
Parent material: loamy mantle over sandy and gravelly outwash 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): 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 -- 0 to 9 in	sandy loam	moderately rapid	1.18 to 1.63 in	5.6 to 7.3
E -- 9 to 13 in	loamy sand	rapid	0.31 to 0.51 in	5.6 to 7.3
Bt1,Bt2 -- 13 to 25 in	sandy loam	moderately rapid	0.98 to 2.07 in	5.6 to 7.3
Bt3,Bt4 -- 25 to 45 in	gravelly loamy coarse sand	rapid	0.39 to 1.97 in	5.6 to 7.3
C -- 45 to 60 in	gravelly sand	rapid	0.15 to 1.05 in	7.4 to 8.4

Two Inlets

Extent: 20 percent of the unit
Landform(s): hillslopes on outwash plains
Slope gradient: 1 to 8 percent
Parent material: sandy and gravelly outwash deposits
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
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>
A -- 0 to 7 in	sandy loam	moderately rapid	0.71 to 1.06 in	5.6 to 7.3
EBt -- 7 to 14 in	loamy coarse sand	rapid	0.64 to 0.78 in	5.6 to 7.3
Bt1,Bt2 -- 14 to 29 in	gravelly loamy coarse sand	rapid	1.35 to 1.65 in	6.1 to 7.3
Bk,C -- 29 to 60 in	gravelly coarse sand	very rapid	0.61 to 1.23 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1196C--Lida-Two Inlets complex, 8 to 15 percent slopes

Lida

Extent: 60 percent of the unit
Landform(s): hillslopes on outwash plains
Slope gradient: 8 to 15 percent
Parent material: loamy mantle over sandy and gravelly outwash 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): 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>
A1,A2 -- 0 to 8 in	sandy loam	moderately rapid	1.02 to 1.42 in	5.6 to 7.3
E -- 8 to 17 in	loamy sand	rapid	0.72 to 1.18 in	5.6 to 7.3
Bt1 -- 17 to 25 in	gravelly sandy loam	moderately rapid	0.66 to 1.41 in	5.6 to 7.3
Bt2,Bt3 -- 25 to 41 in	gravelly loamy sand	rapid	0.31 to 1.57 in	5.6 to 7.3
C -- 41 to 80 in	gravelly sand	rapid	0.39 to 2.73 in	7.4 to 8.4

Two Inlets

Extent: 25 percent of the unit
Landform(s): hillslopes on outwash plains
Slope gradient: 8 to 15 percent
Parent material: sandy and gravelly outwash deposits
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat 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 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>
A -- 0 to 4 in	sandy loam	moderately rapid	0.39 to 0.59 in	5.6 to 7.3
E -- 4 to 9 in	loamy coarse sand	rapid	0.46 to 0.56 in	5.6 to 7.3
Bt,E&Bt,BC -- 9 to 38 in	gravelly loamy coarse sand	rapid	2.62 to 3.20 in	6.1 to 7.3
C -- 38 to 60 in	gravelly coarse sand	very rapid	0.43 to 0.87 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1196E--Lida-Two Inlets complex, 15 to 30 percent slopes

Lida

Extent: 60 percent of the unit
Landform(s): hillslopes on outwash plains
Slope gradient: 15 to 30 percent
Parent material: loamy mantle over sandy and gravelly outwash 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): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .15
Land capability, nonirrigated 6e
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>
A -- 0 to 3 in	sandy loam	moderately rapid	0.41 to 0.57 in	5.6 to 7.3
E -- 3 to 14 in	loamy sand	rapid	0.88 to 1.43 in	5.6 to 7.3
Bt -- 14 to 20 in	gravelly sandy loam	moderately rapid	0.47 to 1.00 in	5.6 to 7.3
BC -- 20 to 27 in	gravelly loamy sand	rapid	0.14 to 0.71 in	5.6 to 7.3
C -- 27 to 60 in	gravelly sand	rapid	0.33 to 2.29 in	7.4 to 8.4

Two Inlets

Extent: 25 percent of the unit
Landform(s): hillslopes on outwash plains
Slope gradient: 15 to 30 percent
Parent material: sandy and gravelly outwash deposits
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
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>
A -- 0 to 3 in	sandy loam	moderately rapid	0.31 to 0.47 in	5.6 to 7.3
E -- 3 to 7 in	loamy coarse sand	rapid	0.35 to 0.43 in	5.6 to 7.3
Bt1,Bt2 -- 7 to 21 in	gravelly loamy coarse sand	rapid	1.24 to 1.52 in	6.1 to 7.3
Bk,C -- 21 to 60 in	gravelly coarse sand	very rapid	0.78 to 1.56 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1196F--Lida-Two Inlets complex, 30 to 50 percent slopes

Lida

Extent: 45 percent of the unit
Landform(s): hillslopes on outwash plains
Slope gradient: 30 to 50 percent
Parent material: loamy mantle over sandy and gravelly outwash 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): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .15
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>
A -- 0 to 4 in	sandy loam	moderately rapid	0.51 to 0.71 in	5.6 to 7.3
E1,E2 -- 4 to 17 in	loamy sand	rapid	1.04 to 1.69 in	5.6 to 7.3
Bt -- 17 to 25 in	gravelly sandy loam	moderately rapid	0.66 to 1.41 in	5.6 to 7.3
Bw -- 25 to 28 in	gravelly loamy sand	rapid	0.06 to 0.28 in	5.6 to 7.3
C -- 28 to 60 in	gravelly sand	rapid	0.32 to 2.23 in	7.4 to 8.4

Two Inlets

Extent: 40 percent of the unit
Landform(s): hillslopes on outwash plains
Slope gradient: 30 to 50 percent
Parent material: sandy and gravelly outwash deposits
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 7s
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>
A -- 0 to 3 in	sandy loam	moderately rapid	0.31 to 0.47 in	5.6 to 7.3
E -- 3 to 7 in	loamy coarse sand	rapid	0.35 to 0.43 in	5.6 to 7.3
Bt -- 7 to 14 in	gravelly loamy coarse sand	rapid	0.64 to 0.78 in	6.1 to 7.3
C -- 14 to 60 in	gravelly coarse sand	very rapid	0.91 to 1.83 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1200--Egglake loam

Egglake

Extent: 85 percent of the unit

Landform(s): swales on moraines

Slope gradient: 0 to 2 percent

Parent material: loamy glacial 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): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .32

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>
A -- 0 to 4 in	loam	moderately rapid	0.39 to 0.83 in	5.6 to 7.3
Eg -- 4 to 9 in	fine sandy loam	moderately rapid	0.61 to 0.72 in	5.6 to 7.3
Btg -- 9 to 25 in	sandy clay loam	moderate	2.58 to 2.91 in	5.6 to 7.3
Bkg,Cg -- 25 to 60 in	sandy loam	moderate	3.81 to 4.50 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1208B--Naytahwaush-Mahkonce complex, 1 to 8 percent slopes

Naytahwaush

Extent: 45 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 4 to 8 percent

Parent material: loamy and clayey glacial 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: 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 7 in	clay loam	moderately slow	1.20 to 1.42 in	5.6 to 7.3
Bt1,Bt2 -- 7 to 25 in	clay	slow	1.81 to 3.44 in	5.6 to 7.3
Bk,C -- 25 to 60 in	clay loam	moderately slow	4.85 to 6.58 in	7.4 to 8.4

Mahkonce

Extent: 40 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 4 to 6 percent

Parent material: loamy and clayey glacial 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) .28

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 -- 0 to 7 in	clay loam	moderately slow	1.20 to 1.56 in	5.6 to 7.3
Bt1,Bt2 -- 7 to 33 in	silty clay	slow	3.38 to 4.94 in	6.1 to 7.3
Bt3,Bk -- 33 to 55 in	clay loam	moderately slow	2.87 to 4.19 in	6.1 to 7.8
C -- 55 to 60 in	clay loam	moderately slow	0.61 to 0.90 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1209C--Naytahwaush clay loam, 8 to 15 percent slopes, eroded

Naytahwaush, eroded

Extent: 90 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 8 to 15 percent

Parent material: loamy and clayey glacial 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: 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 7 in	clay loam	moderately slow	1.20 to 1.42 in	5.6 to 7.3
Bt1,Bt2 -- 7 to 24 in	clay	slow	1.69 to 3.22 in	5.6 to 7.3
Bk,C -- 24 to 60 in	clay loam	moderately slow	5.02 to 6.81 in	7.4 to 8.4

1212B--Mahkonce clay loam, 1 to 4 percent slopes

Mahkonce

Extent: 90 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 1 to 4 percent

Parent material: loamy and clayey glacial 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) .28

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 -- 0 to 7 in	clay loam	moderately slow	1.20 to 1.56 in	5.6 to 7.3
Bt1,Bt2 -- 7 to 23 in	silty clay	slow	2.05 to 2.99 in	6.1 to 7.3
Bk -- 23 to 46 in	clay loam	moderately slow	3.02 to 4.41 in	6.1 to 7.8
C -- 46 to 60 in	clay loam	moderately slow	1.79 to 2.62 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1214--Mustinka silty clay loam

Mustinka

Extent: 90 percent of the unit

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

Slope gradient: 0 to 1 percent

Parent material: silty and clayey glaciolacustrine deposits over loamy glacial till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

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,A --	0 to 14 in	silty clay loam	moderately slow	2.41 to 3.40 in	6.6 to 7.3
Btg1,Btg2 --	14 to 24 in	silty clay	slow	1.28 to 1.87 in	6.6 to 7.3
Bkg --	24 to 36 in	silty clay loam	moderately slow	1.65 to 2.24 in	7.4 to 8.4
2Bkgy,2Cgy --	36 to 80 in	clay loam	moderately slow	6.17 to 8.38 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1215--Pinelake sandy loam

Pinelake

Extent: 90 percent of the unit

Landform(s): swales on outwash plains

Slope gradient: 0 to 2 percent

Parent material: loamy mantle over sandy and gravelly outwash deposits

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): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated 2w

Hydric soil: yes

Hydrologic group: A/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 12 in	sandy loam	moderately rapid	1.54 to 2.13 in	6.1 to 7.3
Btg1,Btg2 --	12 to 30 in	coarse sandy loam	moderately rapid	2.54 to 3.44 in	6.1 to 7.3
2Btg3 --	30 to 35 in	loamy coarse sand	rapid	0.15 to 0.46 in	6.1 to 8.4
2Cg --	35 to 80 in	coarse sand	rapid	0.90 to 1.80 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1216B--Egglake-Wykeham complex, 0 to 5 percent slopes

Egglake

Extent: 60 percent of the unit

Landform(s): swales on moraines

Slope gradient: 0 to 4 percent

Parent material: loamy glacial 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): 3

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>
A -- 0 to 4 in	fine sandy loam	moderately rapid	0.51 to 0.59 in	5.6 to 7.3
Eg -- 4 to 8 in	sandy loam	moderately rapid	0.47 to 0.55 in	5.6 to 7.3
Btg1,Btg2 -- 8 to 22 in	sandy clay loam	moderate	2.27 to 2.55 in	5.6 to 7.3
Bg,Cg -- 22 to 60 in	sandy loam	moderate	4.16 to 4.91 in	7.4 to 8.4

Wykeham

Extent: 30 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 1 to 5 percent

Parent material: loamy glacial 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) .24

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 -- 0 to 9 in	fine sandy loam	moderately rapid	1.18 to 1.63 in	5.1 to 6.5
E -- 9 to 13 in	sandy loam	moderate	0.39 to 0.67 in	5.1 to 6.5
Bt -- 13 to 40 in	sandy clay loam	moderate	3.26 to 4.89 in	5.6 to 7.3
Bk -- 40 to 60 in	sandy loam	moderate	2.17 to 3.15 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1217E--Waukon-Lida complex, 20 to 35 percent slopes

Waukon

<p><i>Extent:</i> 50 percent of the unit</p> <p><i>Landform(s):</i> hillslopes on moraines</p> <p><i>Slope gradient:</i> 20 to 35 percent</p> <p><i>Parent material:</i> loamy glacial 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> well drained</p>	<p><i>Soil loss tolerance (T factor):</i> 5</p> <p><i>Wind erodibility group (WEG):</i> 5</p> <p><i>Wind erodibility index (WEI):</i> 56</p> <p><i>Kw factor (surface layer)</i> .20</p> <p><i>Land capability, nonirrigated</i> 7e</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> B</p> <p><i>Potential for frost action:</i> moderate</p>
--	--

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A,E -- 0 to 8 in	loam	moderate	1.57 to 1.89 in	6.1 to 7.3
Bt1,Bt2 -- 8 to 36 in	clay loam	moderate	4.19 to 5.31 in	6.1 to 8.4
Bk,C -- 36 to 60 in	loam	moderate	3.60 to 4.56 in	7.4 to 8.4

Lida

<p><i>Extent:</i> 35 percent of the unit</p> <p><i>Landform(s):</i> hillslopes on moraines</p> <p><i>Slope gradient:</i> 20 to 35 percent</p> <p><i>Parent material:</i> loamy mantle over sandy and gravelly outwash deposits</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> well 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> 6e</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> A</p> <p><i>Potential for frost action:</i> low</p>
---	---

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 6 in	sandy loam	moderately rapid	0.77 to 1.06 in	5.6 to 7.3
E -- 6 to 16 in	loamy sand	rapid	0.82 to 1.33 in	5.6 to 7.3
E&Bt -- 16 to 36 in	gravelly sandy loam	moderately rapid	1.57 to 3.35 in	5.6 to 7.3
2Bk,2C -- 36 to 60 in	gravelly coarse sand	rapid	0.24 to 1.68 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1218B--Snellman-Lida complex, 1 to 8 percent slopes

Snellman

Extent: 55 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 1 to 8 percent

Parent material: loamy glacial 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): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

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>
A -- 0 to 3 in	fine sandy loam	moderately rapid	0.41 to 0.57 in	5.1 to 6.5
E -- 3 to 10 in	sandy loam	moderate	0.60 to 0.94 in	5.1 to 6.5
Bt1,Bt2 -- 10 to 42 in	sandy clay loam	moderate	3.87 to 5.81 in	5.6 to 7.3
Bk -- 42 to 55 in	sandy loam	moderate	1.43 to 2.08 in	7.4 to 8.4
C -- 55 to 80 in	sandy loam	moderate	2.73 to 3.97 in	7.4 to 8.4

Lida

Extent: 30 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 1 to 8 percent

Parent material: loamy mantle over sandy and gravelly outwash 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): 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>
A -- 0 to 5 in	sandy loam	moderately rapid	0.67 to 0.92 in	5.6 to 7.3
E1,E2 -- 5 to 19 in	loamy sand	rapid	1.10 to 1.79 in	5.6 to 7.3
Bt1,Bt2 -- 19 to 31 in	gravelly sandy loam	moderately rapid	0.98 to 2.07 in	5.6 to 7.3
Bt3 -- 31 to 35 in	gravelly loamy coarse sand	rapid	0.08 to 0.39 in	5.6 to 7.3
C -- 35 to 80 in	gravelly coarse sand	rapid	0.45 to 3.14 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1218C--Snellman-Lida complex, 8 to 15 percent slopes

Snellman

Extent: 45 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 8 to 15 percent

Parent material: loamy glacial 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): 3

Wind erodibility index (WEI): 86

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>
A -- 0 to 3 in	fine sandy loam	moderately rapid	0.41 to 0.57 in	5.1 to 6.5
E -- 3 to 10 in	sandy loam	moderate	0.60 to 0.94 in	5.1 to 6.5
BtE,Bt -- 10 to 39 in	sandy clay loam	moderate	3.50 to 5.24 in	5.6 to 7.3
Bk,C -- 39 to 80 in	sandy loam	moderate	4.50 to 6.55 in	7.4 to 8.4

Lida

Extent: 40 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 8 to 15 percent

Parent material: loamy mantle over sandy and gravelly outwash 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): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

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>
A -- 0 to 6 in	sandy loam	moderately rapid	0.77 to 1.06 in	5.6 to 7.3
E -- 6 to 13 in	loamy sand	rapid	0.57 to 0.92 in	5.6 to 7.3
Bt -- 13 to 20 in	gravelly sandy loam	moderately rapid	0.57 to 1.20 in	5.6 to 7.3
Bk,C -- 20 to 80 in	gravelly coarse sand	rapid	0.60 to 4.19 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1218E--Snellman-Lida complex, 15 to 30 percent slopes

Snellman

Extent: 55 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 15 to 30 percent
Parent material: loamy glacial 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): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
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 3 in	sandy loam	moderately rapid	0.41 to 0.57 in	5.1 to 6.5
E -- 3 to 8 in	sandy loam	moderate	0.43 to 0.66 in	5.1 to 6.5
Bt -- 8 to 30 in	sandy clay loam	moderate	2.65 to 3.97 in	5.6 to 7.3
Bk,C -- 30 to 60 in	sandy loam	moderate	3.29 to 4.79 in	7.4 to 8.4

Lida

Extent: 30 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 15 to 30 percent
Parent material: loamy mantle over sandy and gravelly outwash 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): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .15
Land capability, nonirrigated 6e
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>
A,E1 -- 0 to 6 in	sandy loam	moderately rapid	0.77 to 1.06 in	5.6 to 7.3
E2 -- 6 to 13 in	loamy sand	rapid	0.57 to 0.92 in	5.6 to 7.3
Bt1,Bt2 -- 13 to 28 in	gravelly sandy loam	moderately rapid	1.20 to 2.54 in	5.6 to 7.3
Bt3 -- 28 to 42 in	gravelly loamy coarse sand	rapid	0.28 to 1.42 in	5.6 to 7.3
C -- 42 to 60 in	gravelly coarse sand	rapid	0.18 to 1.24 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1218F--Snellman-Lida complex, 30 to 45 percent slopes

Snellman

Extent: 55 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 30 to 45 percent

Parent material: loamy glacial 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): 3

Wind erodibility index (WEI): 86

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 3 in	sandy loam	moderately rapid	0.41 to 0.57 in	5.1 to 6.5
E -- 3 to 13 in	sandy loam	moderate	0.89 to 1.38 in	5.1 to 6.5
Bt -- 13 to 23 in	sandy clay loam	moderate	1.18 to 1.77 in	5.6 to 7.3
Bk -- 23 to 40 in	sandy loam	moderate	1.91 to 2.77 in	7.4 to 8.4
C -- 40 to 60 in	sandy loam	moderate	2.17 to 3.15 in	7.4 to 8.4

Lida

Extent: 30 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 30 to 45 percent

Parent material: loamy mantle over sandy and gravelly outwash 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): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .15

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>
A -- 0 to 4 in	sandy loam	moderately rapid	0.51 to 0.71 in	5.6 to 7.3
E -- 4 to 14 in	loamy sand	rapid	0.82 to 1.33 in	5.6 to 7.3
Bt1,Bt2 -- 14 to 24 in	gravelly sandy loam	moderately rapid	0.79 to 1.67 in	5.6 to 7.3
Bk -- 24 to 35 in	gravelly loamy coarse sand	rapid	0.22 to 1.10 in	5.6 to 7.3
C -- 35 to 60 in	gravelly coarse sand	rapid	0.25 to 1.74 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1219C--Sandberg-Sverdrup complex, 6 to 12 percent slopes

Sandberg

Extent: 55 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 6 to 12 percent

Parent material: sandy and gravelly outwash deposits

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) .24

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 8 in	sandy loam	moderately rapid	1.02 to 1.18 in	5.6 to 7.8
Bw1,Bw2 -- 8 to 25 in	loamy sand	rapid	0.52 to 1.73 in	6.1 to 7.8
Bk -- 25 to 36 in	gravelly coarse sand	very rapid	0.21 to 0.64 in	7.4 to 8.4
C -- 36 to 60 in	gravelly coarse sand	very rapid	0.48 to 1.44 in	7.4 to 8.4

Sverdrup

Extent: 35 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 6 to 12 percent

Parent material: loamy mantle over sandy outwash deposits

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 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,A -- 0 to 12 in	sandy loam	moderately rapid	1.54 to 1.77 in	6.1 to 7.3
Bw -- 12 to 24 in	sandy loam	moderately rapid	0.98 to 1.71 in	6.1 to 7.8
2C -- 24 to 60 in	sand	rapid	0.72 to 2.15 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1221B--Sverdrup-Sandberg complex, 2 to 6 percent slopes

Sverdrup

Extent: 50 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 2 to 6 percent

Parent material: loamy mantle over sandy outwash deposits

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 15 in	sandy loam	moderately rapid	1.94 to 2.24 in	6.1 to 7.3
Bw1,2Bw2 -- 15 to 28 in	loamy sand	moderately rapid	1.04 to 1.82 in	6.1 to 7.8
2C -- 28 to 60 in	sand	rapid	0.64 to 1.91 in	7.4 to 8.4

Sandberg

Extent: 35 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 2 to 6 percent

Parent material: sandy and gravelly outwash deposits

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) .24

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	sandy loam	moderately rapid	1.02 to 1.18 in	5.6 to 7.8
Bw -- 8 to 14 in	loamy sand	rapid	0.19 to 0.63 in	6.1 to 7.8
Bk -- 14 to 24 in	sand	very rapid	0.20 to 0.59 in	7.4 to 8.4
C -- 24 to 60 in	gravelly coarse sand	very rapid	0.72 to 2.15 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1223D--Sandberg-Arvilla complex, 12 to 20 percent slopes

Sandberg

Extent: 65 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 12 to 20 percent

Parent material: sandy and gravelly outwash deposits

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) .15

Land capability, nonirrigated 6e

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 7 in	coarse sandy loam	moderately rapid	0.92 to 1.06 in	5.6 to 7.8
BC -- 7 to 13 in	gravelly loamy coarse sand	rapid	0.18 to 0.59 in	6.1 to 7.8
C -- 13 to 60 in	gravelly coarse sand	very rapid	0.94 to 2.81 in	7.4 to 8.4

Arvilla

Extent: 25 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 12 to 20 percent

Parent material: loamy mantle over sandy and gravelly outwash deposits

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 6e

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	sandy loam	moderately rapid	1.28 to 1.48 in	6.1 to 8.4
Bw -- 10 to 19 in	sandy loam	moderately rapid	1.00 to 1.27 in	6.6 to 8.4
2Bk,2C -- 19 to 60 in	gravelly coarse sand	rapid	0.82 to 2.05 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1227--Quam, Cathro, and Urness soils, ponded

Quam, ponded

Extent: 30 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: local alluvium and loamy glacial 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) .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>
A1,A2,A3 -- 0 to 33 in	silt loam	moderate	7.28 to 7.94 in	6.6 to 7.8
Bg -- 33 to 50 in	silty clay loam	moderately slow	2.71 to 3.72 in	6.6 to 7.8
Cg -- 50 to 60 in	clay loam	moderately slow	1.38 to 1.87 in	7.4 to 8.4

Cathro, ponded

Extent: 30 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: highly decomposed herbaceous organic material over loamy glacial deposits

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 12 in	muck	moderately rapid	5.31 to 6.50 in	
Oa2 -- 12 to 24 in	muck	moderately rapid	4.27 to 5.49 in	
Cg -- 24 to 60 in	clay loam	moderate	3.94 to 7.88 in	

Map Unit Description (MN)

Otter Tail County, Minnesota

1227--Quam, Cathro, and Urness soils, ponded

Urness, ponded

Extent: 30 percent of the unit

Landform(s): depressions on moraines, glacial lakes on moraines

Slope gradient: 0 to 1 percent

Parent material: coprogenous earth organic material

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) .02

Land capability, nonirrigated 8w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

Representative soil profile:

		<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
C1 --	20 to 45 in	mucky silt loam	moderate	3.97 to 5.46 in	7.4 to 8.4
C2 --	45 to 60 in	mucky silt loam	moderate	2.09 to 2.99 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1230--Haslie and Nidaros soils, ponded

Haslie, ponded

Extent: 45 percent of the unit
Landform(s): depressions on outwash plains, glacial lakes on outwash plains, depressions on moraines, glacial lakes on moraines
Slope gradient: 0 to 1 percent
Parent material: herbaceous organic material over coprogenous earth
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: A/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,Oa2 -- 0 to 44 in	muck	moderately rapid	15.43 to 21.17 in	
Oa3 -- 44 to 60 in	coprogenous earth	slow	3.15 to in	

Nidaros, ponded

Extent: 45 percent of the unit
Landform(s): depressions on outwash plains
Slope gradient: 0 to 1 percent
Parent material: highly decomposed herbaceous organic material over outwash deposits
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,Oa2 -- 0 to 38 in	muck	moderately rapid	13.37 to 17.19 in	
A1,A2 -- 38 to 54 in	sandy loam	moderate	2.05 to 3.46 in	
2Cg -- 54 to 60 in	gravelly coarse sand	rapid	0.18 to 0.47 in	

Map Unit Description (MN)

Otter Tail County, Minnesota

1232B--Chapett loam, 2 to 6 percent slopes

Chapett

Extent: 90 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 2 to 6 percent

Parent material: loamy glacial 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 8 in	loam	moderate	1.57 to 1.73 in	6.1 to 7.3
Bt -- 8 to 21 in	sandy clay loam	moderate	1.95 to 2.47 in	6.1 to 7.3
Bk -- 21 to 36 in	sandy loam	moderate	1.65 to 2.84 in	7.4 to 8.4
C -- 36 to 60 in	sandy loam	moderate	2.40 to 3.84 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1232E--Chapett loam, 20 to 30 percent slopes

Chapett

Extent: 85 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 20 to 30 percent

Parent material: loamy glacial 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 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 9 in	loam	moderate	1.81 to 1.99 in	6.1 to 7.3
Bt1,Bt2 -- 9 to 26 in	sandy clay loam	moderate	2.54 to 3.22 in	6.1 to 7.3
Bk -- 26 to 33 in	sandy loam	moderate	0.78 to 1.35 in	7.4 to 8.4
C -- 33 to 60 in	sandy loam	moderate	2.68 to 4.28 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1234B--Formdale-Buse complex, 2 to 6 percent slopes

Formdale

Extent: 60 percent of the unit

Landform(s): hillslopes on till plains

Slope gradient: 2 to 6 percent

Parent material: loamy glacial 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) .24

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 11 in	clay loam	moderate	1.87 to 2.09 in	6.1 to 7.3
Bw -- 11 to 18 in	clay loam	moderately slow	1.20 to 1.35 in	6.6 to 7.8
Bk -- 18 to 30 in	clay loam	moderately slow	1.65 to 2.24 in	7.4 to 8.4
C -- 30 to 60 in	clay loam	moderately slow	4.19 to 5.69 in	7.4 to 8.4

Buse

Extent: 30 percent of the unit

Landform(s): hillslopes on till plains

Slope gradient: 3 to 6 percent

Parent material: loamy glacial 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) .28

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 -- 0 to 8 in	clay loam	moderately slow	1.34 to 1.73 in	6.6 to 8.4
Bk1,Bk2 -- 8 to 27 in	clay loam	moderately slow	2.70 to 3.67 in	7.4 to 8.4
C -- 27 to 60 in	clay loam	moderately slow	4.57 to 6.21 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1237--Lakepark loam

Lakepark

Extent: 85 percent of the unit

Landform(s): swales on moraines

Slope gradient: 1 to 3 percent

Parent material: colluvium over loamy glacial 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: 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	loam	moderately slow	1.72 to 1.90 in	6.1 to 7.8
A1,A2 -- 9 to 35 in	clay loam	moderately slow	4.94 to 5.46 in	6.1 to 7.8
Bg -- 35 to 44 in	clay loam	moderately slow	1.36 to 1.72 in	6.6 to 7.8
Bkg,Cg -- 44 to 60 in	loam	moderately slow	2.20 to 2.99 in	7.4 to 8.4

1239--Quam silt loam

Quam

Extent: 90 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: local alluvium and loamy glacial 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) .37

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 9 in	silt loam	moderate	1.99 to 2.17 in	6.6 to 7.8
A1,A2,A3 -- 9 to 56 in	silty clay loam	moderately slow	7.50 to 10.31 in	6.6 to 7.8
2Cg -- 56 to 80 in	loam	moderately slow	3.36 to 4.56 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1240--Roliss clay loam

Roliss

Extent: 85 percent of the unit

Landform(s): rims on depressions on moraines, swales on moraines, flats on till-floored lake plains

Slope gradient: 0 to 1 percent

Parent material: loamy glacial 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) .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,A1 --	0 to 14 in	clay loam		moderately slow	2.55 to 3.12 in	6.6 to 8.4
Bg --	14 to 17 in	silty clay loam		moderate	0.41 to 0.52 in	7.4 to 8.4
Bkg --	17 to 27 in	loam		moderate	1.54 to 1.94 in	7.4 to 8.4
Cg --	27 to 60 in	loam		moderate	4.90 to 6.21 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1247D--Corliss-Dorset complex, 12 to 20 percent slopes

Corliss

Extent: 65 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 12 to 20 percent

Parent material: sandy and gravelly outwash deposits

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): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .02

Land capability, nonirrigated 6e

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 7 in	loamy coarse sand	rapid	0.71 to 0.85 in	6.1 to 7.8
Bw -- 7 to 10 in	gravelly coarse sand	rapid	0.08 to 0.28 in	6.1 to 7.8
C -- 10 to 60 in	gravelly coarse sand	rapid	1.00 to 3.00 in	7.4 to 8.4

Dorset

Extent: 25 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 12 to 20 percent

Parent material: loamy mantle over sandy and gravelly outwash deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well 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 6e

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	5.6 to 7.3
Bt1,Bt2 -- 8 to 17 in	sandy loam	moderately rapid	1.09 to 1.72 in	5.6 to 7.3
2Bt3 -- 17 to 22 in	gravelly loamy coarse sand	rapid	0.31 to 0.51 in	7.4 to 8.4
2C -- 22 to 60 in	gravelly coarse sand	rapid	0.76 to 1.51 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1250C--Abbeylake-Verndale complex, 6 to 12 percent slopes

Abbeylake

Extent: 60 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 6 to 12 percent

Parent material: sandy outwash deposits

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): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .05

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	loamy coarse sand	rapid	0.79 to 0.94 in	6.1 to 7.3
Bw1,Bw2 -- 8 to 18 in	sand	rapid	0.31 to 1.13 in	6.1 to 7.3
C -- 18 to 60 in	sand	rapid	1.25 to 3.34 in	7.4 to 8.4

Verndale

Extent: 30 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 6 to 12 percent

Parent material: loamy mantle over sandy outwash deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively 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 4e

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 9 in	coarse sandy loam	moderately rapid	1.18 to 1.54 in	5.6 to 7.3
Bt1,Bt2 -- 9 to 17 in	sandy loam	moderate	1.10 to 1.42 in	5.6 to 7.3
2Bt3 -- 17 to 24 in	loamy coarse sand	rapid	0.43 to 0.57 in	5.6 to 7.3
2C -- 24 to 60 in	coarse sand	rapid	0.72 to 2.15 in	6.1 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1259--Hamerly-Mustinka complex

Hamerly

<p><i>Extent:</i> 60 percent of the unit</p> <p><i>Landform(s):</i> flats on lake plains, rises on lake plains</p> <p><i>Slope gradient:</i> 0 to 2 percent</p> <p><i>Parent material:</i> loamy glacial 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> somewhat 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> .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>
---	---

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	clay loam	moderate	1.34 to 1.50 in	6.6 to 8.4
Bky -- 8 to 40 in	clay loam	moderate	4.84 to 6.13 in	7.4 to 8.4
C -- 40 to 60 in	clay loam	moderate	2.76 to 3.74 in	7.4 to 8.4

Mustinka

<p><i>Extent:</i> 25 percent of the unit</p> <p><i>Landform(s):</i> flats on lake plains, swales on lake plains</p> <p><i>Slope gradient:</i> 0 to 1 percent</p> <p><i>Parent material:</i> silty and clayey glaciolacustrine deposits over loamy glacial 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> 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> .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> high</p>
---	---

<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 loam	moderately slow	1.34 to 1.89 in	6.6 to 7.3
Btg1,Btg2 -- 8 to 25 in	silty clay	slow	2.25 to 3.29 in	6.6 to 7.3
Bkg -- 25 to 36 in	silty clay loam	moderately slow	1.49 to 2.02 in	7.4 to 8.4
2cg -- 36 to 60 in	clay loam	moderately slow	3.36 to 4.56 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1275B--Kandota-Egglake, depressional, complex, 0 to 8 percent slopes

Kandota

Extent: 60 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 1 to 8 percent

Parent material: loamy glacial 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): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

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>
A -- 0 to 9 in	sandy loam	moderately rapid	1.27 to 1.54 in	5.6 to 7.3
E -- 9 to 11 in	sandy loam	moderately rapid	0.22 to 0.33 in	5.1 to 6.5
Bt -- 11 to 45 in	sandy clay loam	moderate	5.42 to 6.43 in	5.6 to 7.3
Btk -- 45 to 57 in	sandy loam	moderate	1.46 to 2.07 in	7.4 to 8.4
C -- 57 to 80 in	sandy loam	moderate	2.74 to 3.88 in	7.4 to 8.4

Egglake, depressional

Extent: 25 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 3 percent

Parent material: loamy colluvium and loamy glacial 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): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .32

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>
A -- 0 to 6 in	silt loam	moderate	1.18 to 1.30 in	6.1 to 7.3
Ab -- 6 to 12 in	sandy loam	moderately rapid	0.71 to 1.12 in	5.6 to 7.3
E -- 12 to 17 in	sandy clay loam	moderate	0.61 to 0.97 in	5.6 to 6.5
Btg -- 17 to 52 in	sandy loam	moderate	5.26 to 6.66 in	5.6 to 6.5
Bkg,Cg -- 52 to 80 in	sandy loam	moderate	3.07 to 5.31 in	6.6 to 7.8

Map Unit Description (MN)

Otter Tail County, Minnesota

1275C--Kandota-Egglake, depressional, complex, 0 to 15 percent slopes

Kandota

Extent: 55 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 8 to 15 percent

Parent material: loamy glacial 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): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

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	sandy loam	moderately rapid	1.27 to 1.54 in	5.6 to 7.3
E -- 9 to 13 in	sandy loam	moderately rapid	0.43 to 0.67 in	5.1 to 6.5
Bt -- 13 to 38 in	sandy clay loam	moderate	4.03 to 4.79 in	5.6 to 7.3
Bk -- 38 to 55 in	sandy loam	moderate	2.03 to 2.88 in	7.4 to 8.4
C -- 55 to 80 in	sandy loam	moderate	2.98 to 4.22 in	7.4 to 8.4

Egglake, depressional

Extent: 30 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 3 percent

Parent material: loamy colluvium and loamy glacial 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): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .28

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>
A -- 0 to 9 in	loam	moderate	1.81 to 1.99 in	6.1 to 7.3
Ab -- 9 to 14 in	sandy loam	moderately rapid	0.61 to 0.97 in	5.6 to 7.3
E -- 14 to 22 in	sandy clay loam	moderate	0.94 to 1.50 in	5.6 to 6.5
Bt -- 22 to 41 in	sandy loam	moderate	2.83 to 3.59 in	5.6 to 6.5
BC -- 41 to 80 in	sandy loam	moderate	4.29 to 7.41 in	6.6 to 7.8

Map Unit Description (MN)

Otter Tail County, Minnesota

1276--Knut-Brandsvold complex, thick solum

Knut, thick solum

Extent: 60 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 0 to 3 percent

Parent material: loamy glacial 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) .24

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 10 in	fine sandy loam	moderate	1.28 to 1.77 in	6.1 to 7.3
E -- 10 to 12 in	sandy loam	moderate	0.30 to 0.37 in	6.1 to 7.8
Bt -- 12 to 34 in	sandy clay loam	moderate	2.43 to 4.19 in	7.4 to 8.4
Bk1 -- 34 to 48 in	sandy loam	moderate	1.56 to 2.69 in	7.4 to 8.4
Bk2,C -- 48 to 60 in	loam	moderately slow	0.59 to 1.30 in	7.4 to 8.4

Brandsvold, thick solum

Extent: 30 percent of the unit

Landform(s): swales on moraines

Slope gradient: 0 to 2 percent

Parent material: loamy glacial 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): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

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 11 in	fine sandy loam	moderately rapid	1.43 to 1.98 in	6.1 to 7.3
Eg -- 11 to 15 in	fine sandy loam	moderately rapid	0.47 to 0.55 in	5.6 to 7.3
Btg -- 15 to 29 in	sandy clay loam	moderate	2.13 to 2.69 in	5.6 to 6.5
Cg -- 29 to 60 in	sandy loam	moderate	3.38 to 5.83 in	6.1 to 7.3

Map Unit Description (MN)

Otter Tail County, Minnesota

1277D--Corliss-Sverdrup complex, 12 to 20 percent slopes

Corliss

Extent: 55 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 12 to 18 percent

Parent material: sandy and gravelly outwash deposits

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): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .20

Land capability, nonirrigated 6e

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>
A -- 0 to 8 in	loamy sand	rapid	0.79 to 0.94 in	6.1 to 7.8
Bw1,Bw2 -- 8 to 20 in	loamy sand	rapid	0.37 to 1.22 in	6.1 to 7.8
Bk,C -- 20 to 60 in	gravelly coarse sand	rapid	0.80 to 2.39 in	7.4 to 8.4

Sverdrup

Extent: 30 percent of the unit

Landform(s): hillslopes on outwash plains

Slope gradient: 12 to 18 percent

Parent material: loamy mantle over sandy outwash deposits

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 6e

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 25 in	loamy sand	moderately rapid	1.29 to 2.26 in	6.1 to 7.8
C -- 25 to 60 in	sand	rapid	0.69 to 2.08 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1289--Knut fine sandy loam, thick solum

Knut, thick solum

Extent: 85 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 0 to 3 percent

Parent material: loamy glacial 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) .24

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 10 in	fine sandy loam	moderate	1.28 to 1.77 in	6.1 to 7.3
E -- 10 to 13 in	sandy loam	moderate	0.47 to 0.60 in	5.1 to 6.5
Bt -- 13 to 41 in	sandy clay loam	moderate	3.07 to 5.31 in	5.6 to 6.5
Btk -- 41 to 53 in	sandy loam	moderate	1.34 to 2.32 in	7.4 to 8.4
C -- 53 to 60 in	sandy loam	moderately slow	0.33 to 0.74 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1290--Brandsvold fine sandy loam, thick solum

Brandsvold, thick solum

Extent: 90 percent of the unit

Landform(s): swales on moraines

Slope gradient: 0 to 2 percent

Parent material: loamy glacial 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): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

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 12 in	fine sandy loam	moderately rapid	1.54 to 2.13 in	6.1 to 7.3
Eg -- 12 to 17 in	sandy loam	moderately rapid	0.61 to 0.72 in	5.6 to 7.3
Btg -- 17 to 37 in	sandy clay loam	moderate	3.01 to 3.81 in	5.6 to 6.5
Btg2 -- 37 to 45 in	sandy loam	moderate	0.87 to 1.50 in	6.1 to 7.3
Cg -- 45 to 80 in	sandy loam	moderately slow	3.85 to 6.66 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1291--Sedgeville loam, frequently flooded

Sedgeville, frequently flooded

Extent: 85 percent of the unit

Landform(s): flats on flood plains on outwash plains

Slope gradient: 0 to 2 percent

Parent material: loamy over sandy alluvium

Restrictive feature(s): greater than 60 inches

Flooding: frequent

Ponding: none

Drainage class: very poorly drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer) .32

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>
A -- 0 to 8 in	loam	moderate	1.34 to 1.89 in	6.1 to 8.4
Bg,Cg1 -- 8 to 34 in	sandy loam	moderate	2.60 to 5.72 in	6.1 to 8.4
2Cg2 -- 34 to 60 in	gravelly loamy coarse sand	rapid	1.04 to 4.16 in	6.6 to 8.4

1293--Sedgeville fine sandy loam, rarely flooded

Sedgeville, rarely flooded

Extent: 85 percent of the unit

Landform(s): flats on flood plains on outwash plains

Slope gradient: 0 to 2 percent

Parent material: loamy over sandy alluvium

Restrictive feature(s): greater than 60 inches

Flooding: rare

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 3

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 21 in	fine sandy loam	moderately rapid	2.30 to 3.76 in	5.6 to 7.8
Bg -- 21 to 40 in	sandy loam	moderate	1.93 to 4.24 in	5.6 to 7.8
2Cg -- 40 to 60 in	gravelly loamy coarse sand	rapid	0.79 to 3.15 in	7.9 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1304A--Glyndon very fine sandy loam

Glyndon

Extent: 90 percent of the unit

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

Slope gradient: 0 to 2 percent

Parent material: silty glaciolacustrine 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): 3

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,Ak -- 0 to 16 in	very fine sandy loam	moderate	3.23 to 3.71 in	7.4 to 9.0
Bk1,Bk2g -- 16 to 29 in	loam	moderately rapid	2.21 to 2.60 in	7.4 to 9.0
Cg -- 29 to 60 in	loamy very fine sand	moderately rapid	4.61 to 5.83 in	7.4 to 9.0

1307--Rushlake sand

Rushlake

Extent: 85 percent of the unit

Landform(s): hillslopes on beaches on lakeshores

Slope gradient: 0 to 3 percent

Parent material: sandy and gravelly lakebeach 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): 1

Wind erodibility index (WEI): 220

Kw factor (surface layer) .02

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>
A -- 0 to 5 in	sand	rapid	0.20 to 0.36 in	6.1 to 7.8
C1,Cg -- 5 to 60 in	gravelly coarse sand	rapid	1.09 to 5.47 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1317--Vallars silty clay loam

Vallars

Extent: 90 percent of the unit

Landform(s): rims on depressions on moraines, flats on moraines

Slope gradient: 0 to 2 percent

Parent material: loamy glacial 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

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A --	0 to 14 in	silty clay loam	moderately slow	2.55 to 3.12 in	7.4 to 8.4
Bkg1,Bkg2 --	14 to 24 in	clay loam	moderately slow	1.48 to 1.87 in	7.4 to 8.4
Cg --	24 to 60 in	clay loam	moderately slow	6.09 to 6.81 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1319B--Rockwood sandy loam, 2 to 6 percent slopes, stony

Rockwood, stony

Extent: 90 percent of the unit

Landform(s): hillslopes on drumlins

Slope gradient: 2 to 6 percent

Parent material: loamy dense basal till

Restrictive feature(s): densic material at 40 to 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

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 -- 0 to 8 in	sandy loam	moderate	1.02 to 1.42 in	5.1 to 6.5
E -- 8 to 18 in	loamy sand	moderate	1.23 to 1.54 in	5.1 to 6.5
E/B,B/E -- 18 to 26 in	sandy loam	moderate	0.94 to 1.18 in	5.6 to 7.3
Bt -- 26 to 42 in	sandy loam	moderately slow	1.94 to 2.42 in	5.6 to 7.3
Cd -- 42 to 60 in	sandy loam	very slow	0.00 to 0.71 in	6.1 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1319C--Rockwood sandy loam, 6 to 12 percent slopes, stony

Rockwood, stony

Extent: 85 percent of the unit

Landform(s): hillslopes on drumlins

Slope gradient: 6 to 12 percent

Parent material: loamy dense basal till

Restrictive feature(s): densic material at 40 to 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated 3e

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	sandy loam	moderate	1.18 to 1.63 in	5.1 to 6.5
E -- 9 to 16 in	loamy sand	moderate	0.85 to 1.06 in	5.1 to 6.5
EB -- 16 to 27 in	sandy loam	moderate	1.32 to 1.65 in	5.6 to 7.3
BC -- 27 to 41 in	sandy loam	moderately slow	1.65 to 2.07 in	5.6 to 7.3
Cd -- 41 to 60 in	sandy loam	very slow	0.00 to 0.76 in	6.1 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1319D--Rockwood sandy loam, 12 to 20 percent slopes, stony

Rockwood, stony

Extent: 85 percent of the unit

Landform(s): hillslopes on drumlins

Slope gradient: 12 to 20 percent

Parent material: loamy dense basal till

Restrictive feature(s): densic material at 40 to 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated 4e

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 5 in	sandy loam	moderate	0.67 to 0.92 in	5.1 to 6.5
E -- 5 to 9 in	sandy loam	moderate	0.47 to 0.59 in	5.1 to 6.5
B/E,Bt -- 9 to 38 in	sandy loam	moderate	3.50 to 4.37 in	5.6 to 7.3
BC -- 38 to 45 in	sandy loam	moderately slow	0.80 to 1.00 in	5.6 to 7.3
Cd -- 45 to 60 in	sandy loam	very slow	0.00 to 0.60 in	6.1 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1320B--Blowers sandy loam, 1 to 5 percent slopes, stony

Blowers, stony

Extent: 90 percent of the unit

Landform(s): hillslopes on drumlins

Slope gradient: 1 to 5 percent

Parent material: loamy dense basal till

Restrictive feature(s): densic material at 40 to 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

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 7 in	sandy loam	moderate	0.92 to 1.28 in	5.1 to 7.3
E,E/B -- 7 to 19 in	sandy loam	moderate	1.42 to 1.77 in	5.1 to 6.5
B/E,Bt -- 19 to 36 in	sandy loam	moderate	2.03 to 2.54 in	5.6 to 7.3
BC -- 36 to 43 in	sandy loam	moderately slow	0.85 to 1.06 in	5.6 to 7.3
Cd -- 43 to 60 in	sandy loam	very slow	0.00 to 0.68 in	6.6 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1321--Paddock-Becida complex, stony

Paddock, stony

Extent: 55 percent of the unit

Landform(s): hillslopes on drumlins

Slope gradient: 0 to 2 percent

Parent material: loamy dense basal till

Restrictive feature(s): densic material at 40 to 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 3

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 8 in	fine sandy loam	moderate	1.02 to 1.42 in	5.6 to 7.3
EB -- 8 to 15 in	sandy loam	moderate	0.85 to 1.13 in	5.6 to 6.5
Bt -- 15 to 40 in	sandy loam	moderately slow	3.02 to 4.03 in	6.6 to 7.3
BC,Cd -- 40 to 60 in	sandy loam	very slow	0.00 to 0.79 in	6.6 to 8.4

Becida, stony

Extent: 30 percent of the unit

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

Slope gradient: 0 to 2 percent

Parent material: loamy dense basal till

Restrictive feature(s): densic material at 40 to 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

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 8 in	loam	moderate	1.57 to 1.73 in	5.6 to 7.3
E -- 8 to 13 in	fine sandy loam	moderate	0.61 to 0.82 in	5.6 to 6.5
E/B -- 13 to 27 in	sandy loam	moderate	1.70 to 2.27 in	5.1 to 6.5
Btg,Bt -- 27 to 58 in	sandy loam	slow	0.61 to 1.84 in	5.1 to 6.5
Cd -- 58 to 80 in	sandy loam	very slow	0.44 to 1.32 in	6.6 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1322--Wolverton very fine sandy loam

Wolverton

Extent: 90 percent of the unit
Landform(s): flats on till-floored lake plains, rises on till-floored lake plains
Slope gradient: 0 to 2 percent
Parent material: loamy glaciolacustrine deposits over loamy glacial 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) .37
Land capability, nonirrigated 2s
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,Ak -- 0 to 16 in	very fine sandy loam	moderately rapid	2.58 to 3.23 in	7.4 to 8.4
Bk1,Bk2 -- 16 to 35 in	loamy very fine sand	rapid	1.13 to 1.70 in	7.4 to 8.4
2BkCy -- 35 to 45 in	clay loam	rapid	0.49 to 0.69 in	7.4 to 8.4
2C -- 45 to 80 in	clay loam	moderately slow	4.91 to 6.66 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1324B--Heimdal-Sisseton complex, 2 to 6 percent slopes

Heimdal

<i>Extent:</i> 60 percent of the unit	<i>Soil loss tolerance (T factor):</i> 5
<i>Landform(s):</i> hillslopes on moraines	<i>Wind erodibility group (WEG):</i> 5
<i>Slope gradient:</i> 2 to 6 percent	<i>Wind erodibility index (WEI):</i> 56
<i>Parent material:</i> loamy glacial till	<i>Kw factor (surface layer)</i> .32
<i>Restrictive feature(s):</i> greater than 60 inches	<i>Land capability, nonirrigated</i> 2e
<i>Flooding:</i> none	<i>Hydric soil:</i> no
<i>Ponding:</i> none	<i>Hydrologic group:</i> B
<i>Drainage class:</i> well drained	<i>Potential for frost action:</i> 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	6.1 to 7.3
Bw -- 8 to 18 in	sandy loam	moderate	1.23 to 1.94 in	6.1 to 7.8
Bk -- 18 to 25 in	sandy loam	moderate	0.78 to 1.35 in	7.4 to 8.4
C -- 25 to 60 in	fine sandy loam	moderate	3.81 to 5.54 in	7.4 to 8.4

Sisseton

<i>Extent:</i> 30 percent of the unit	<i>Soil loss tolerance (T factor):</i> 5
<i>Landform(s):</i> hillslopes on moraines	<i>Wind erodibility group (WEG):</i> 5
<i>Slope gradient:</i> 2 to 6 percent	<i>Wind erodibility index (WEI):</i> 56
<i>Parent material:</i> loamy glacial till	<i>Kw factor (surface layer)</i> .37
<i>Restrictive feature(s):</i> greater than 60 inches	<i>Land capability, nonirrigated</i> 3e
<i>Flooding:</i> none	<i>Hydric soil:</i> no
<i>Ponding:</i> none	<i>Hydrologic group:</i> B
<i>Drainage class:</i> well drained	<i>Potential for frost action:</i> 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 22 in	loam	moderate	2.27 to 2.83 in	7.4 to 8.4
C -- 22 to 60 in	stratified sandy loam to silt loam	moderate	5.29 to 7.18 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1338--Oakcreek loam

Oakcreek

Extent: 85 percent of the unit

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

Slope gradient: 0 to 3 percent

Parent material: loamy mantle over sandy and gravelly outwash deposits

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): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .32

Land capability, nonirrigated 2s

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,A1 -- 0 to 14 in	loam	moderate	2.83 to 3.12 in	6.1 to 7.3
Bt1,Bt2,2Bt3 -- 14 to 33 in	loam	moderately rapid	2.27 to 3.21 in	5.6 to 7.3
2Bt4,2Btk -- 33 to 47 in	loamy coarse sand	rapid	0.83 to 1.52 in	5.6 to 7.8
2C -- 47 to 80 in	gravelly coarse sand	rapid	0.66 to 2.31 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1339--Borup mucky silt loam, depressional

Borup, depressional

Extent: 85 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: loamy over sandy 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) .32

Land capability, nonirrigated 6w

Hydric soil: yes

Hydrologic group: A/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 10 in	mucky silt loam	moderately rapid	1.97 to 2.26 in	7.4 to 8.4
Bkg -- 10 to 16 in	very fine sandy loam	moderately rapid	1.07 to 1.26 in	7.4 to 8.4
Cg -- 16 to 60 in	very fine sandy loam	rapid	6.56 to 8.30 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1340--Bluffcreek-Epoufette complex

Bluffcreek

Extent: 65 percent of the unit

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

Slope gradient: 0 to 3 percent

Parent material: loamy and sandy and gravelly outwash deposits

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 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 -- 0 to 8 in	sandy loam	moderately rapid	1.02 to 1.42 in	5.6 to 7.3
Bt -- 8 to 31 in	sandy loam	moderately rapid	2.32 to 3.25 in	5.6 to 7.3
C -- 31 to 60 in	coarse sand	rapid	0.57 to 2.01 in	6.1 to 8.4

Epoufette

Extent: 25 percent of the unit

Landform(s): swales on outwash plains

Slope gradient: 0 to 2 percent

Parent material: sandy outwash 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): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated 4w

Hydric soil: yes

Hydrologic group: A/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 7 in	sandy loam	moderately rapid	0.64 to 0.99 in	6.1 to 7.3
Eg -- 7 to 10 in	loamy sand	rapid	0.14 to 0.19 in	6.1 to 7.3
Btg -- 10 to 22 in	sandy loam	moderately rapid	0.98 to 1.71 in	6.6 to 7.8
2Cg -- 22 to 60 in	coarse sand	very rapid	0.38 to 1.13 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1341--Clitherall-Wykeham complex

Clitherall

Extent: 60 percent of the unit

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

Slope gradient: 1 to 3 percent

Parent material: loamy mantle over sandy and gravelly outwash over loamy glacial 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) .17

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 -- 0 to 11 in	coarse sandy loam	moderately rapid	1.43 to 1.98 in	5.6 to 7.3
Bt1 -- 11 to 16 in	coarse sandy loam	moderately rapid	0.61 to 0.97 in	5.6 to 7.3
Bt2,Bt3 -- 16 to 30 in	gravelly loamy coarse sand	rapid	0.83 to 1.38 in	5.6 to 7.3
Bw -- 30 to 45 in	gravelly sand	rapid	0.30 to 1.05 in	6.1 to 7.8
2Btk,2Bk,2C -- 45 to 80 in	sandy loam	moderate	3.85 to 5.61 in	7.4 to 8.4

Wykeham

Extent: 30 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 1 to 3 percent

Parent material: loamy glacial 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) .24

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 8 in	sandy loam	moderately rapid	1.02 to 1.42 in	5.1 to 6.5
E -- 8 to 17 in	sandy loam	moderate	0.91 to 1.54 in	5.1 to 6.5
Bt -- 17 to 32 in	sandy clay loam	moderate	1.80 to 2.69 in	5.6 to 7.3
Bk,C -- 32 to 60 in	sandy loam	moderate	3.07 to 4.47 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1342--Pinelake, loamy substratum-Brandsvold complex

Pinelake, loamy substratum

Extent: 60 percent of the unit

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

Slope gradient: 0 to 2 percent

Parent material: loamy mantle over sandy and gravelly outwash deposits

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): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

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	fine sandy loam	moderately rapid	1.28 to 1.77 in	6.1 to 7.3
Btg1,Btg2 -- 10 to 29 in	sandy loam	moderate	2.70 to 3.67 in	6.1 to 7.3
2Cg1,2Cg2 -- 29 to 70 in	loamy sand	rapid	0.82 to 3.28 in	7.4 to 8.4
3Cg3 -- 70 to 80 in	sandy loam	moderate	1.08 to 1.77 in	7.4 to 8.4

Brandsvold

Extent: 30 percent of the unit

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

Slope gradient: 0 to 2 percent

Parent material: loamy glacial 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): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

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	fine sandy loam	moderately rapid	1.28 to 1.77 in	6.1 to 7.3
E -- 10 to 12 in	fine sandy loam	moderately rapid	0.24 to 0.28 in	5.6 to 7.3
Btg -- 12 to 41 in	sandy clay loam	moderate	4.37 to 5.54 in	5.6 to 6.5
Bkg,Cg -- 41 to 80 in	sandy loam	moderately slow	4.29 to 7.41 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1343C--Lida-Almora-Lizzie complex, 8 to 15 percent slopes

Lida

Extent: 35 percent of the unit
Landform(s): hillslopes on outwash plains
Slope gradient: 8 to 15 percent
Parent material: loamy mantle over sandy and gravelly outwash deposits
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) .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 8 in	sandy loam	moderately rapid	1.02 to 1.42 in	5.6 to 7.3
Bt1 -- 8 to 13 in	sandy loam	rapid	0.41 to 0.67 in	5.6 to 7.3
Bt2 -- 13 to 22 in	sandy loam	moderately rapid	0.72 to 1.54 in	5.6 to 7.3
Bk -- 22 to 38 in	gravelly coarse sand	rapid	0.32 to 1.61 in	5.6 to 7.3
C -- 38 to 80 in	gravelly coarse sand	rapid	0.42 to 2.92 in	7.4 to 8.4

Almora

Extent: 30 percent of the unit
Landform(s): hillslopes on outwash plains
Slope gradient: 8 to 15 percent
Parent material: loamy mantle over sandy and gravelly outwash deposits
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) .10
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	sandy loam	moderately rapid	1.18 to 1.63 in	5.6 to 7.3
E -- 9 to 12 in	sandy loam	moderate	0.33 to 0.52 in	5.6 to 7.3
Bt -- 12 to 25 in	sandy clay loam	moderate	1.87 to 2.54 in	5.6 to 7.3
BC -- 25 to 28 in	loamy sand	rapid	0.06 to 0.30 in	5.6 to 7.8
C -- 28 to 80 in	gravelly coarse sand	rapid	1.04 to 3.64 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1343C--Lida-Almora-Lizzie complex, 8 to 15 percent slopes

Lizzie

Extent: 20 percent of the unit

Landform(s): hillslopes on lake plains, hillslopes on lake terraces, hillslopes on moraines

Slope gradient: 8 to 15 percent

Parent material: silty loess or glaciolacustrine 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): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .37

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	very fine sandy loam	moderately rapid	1.26 to 1.73 in	6.1 to 7.3
Bt --	8 to 18 in	silt loam	moderate	1.54 to 2.25 in	6.1 to 7.3
Bk --	18 to 42 in	silt loam	moderate	3.60 to 5.28 in	7.4 to 8.4
C --	42 to 80 in	very fine sandy loam	moderately rapid	3.02 to 8.31 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1344B--Lida-Almora-Dent complex, 1 to 8 percent slopes

Lida

Extent: 35 percent of the unit
Landform(s): hillslopes on outwash plains
Slope gradient: 1 to 8 percent
Parent material: loamy mantle over sandy and gravelly outwash deposits
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) .15
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 --	0 to 7 in	sandy loam	moderately rapid	0.92 to 1.28 in	5.6 to 7.3
Bt --	7 to 23 in	gravelly coarse sandy loam	moderately rapid	1.26 to 2.68 in	5.6 to 7.3
Bk --	23 to 30 in	gravelly loamy sand	rapid	0.14 to 0.71 in	5.6 to 7.3
C --	30 to 80 in	gravelly sand	rapid	0.50 to 3.50 in	7.4 to 8.4

Almora

Extent: 30 percent of the unit
Landform(s): hillslopes on outwash plains
Slope gradient: 1 to 8 percent
Parent material: loamy mantle over sandy and gravelly outwash deposits
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 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	fine sandy loam	moderately rapid	1.28 to 1.77 in	5.6 to 7.3
E --	10 to 15 in	sandy loam	moderate	0.61 to 0.97 in	5.6 to 7.3
Bt,Btk --	15 to 39 in	loam	moderate	3.36 to 4.56 in	5.6 to 7.3
2C --	39 to 80 in	sand	rapid	0.82 to 2.87 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1344B--Lida-Almora-Dent complex, 1 to 8 percent slopes

Dent

Extent: 20 percent of the unit
Landform(s): hillslopes on lake terraces, hillslopes on outwash plains
Slope gradient: 1 to 6 percent
Parent material: silty glaciolacustrine 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): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated 2e
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 15 in	fine sandy loam	moderately rapid	2.39 to 3.29 in	6.1 to 7.3
E,Bt --	15 to 38 in	silt loam	moderate	3.95 to 5.11 in	5.1 to 7.3
Btk --	38 to 62 in	silt loam	moderate	3.54 to 5.20 in	7.4 to 7.8
C --	62 to 80 in	silt loam	moderate	2.17 to 3.98 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1345--Bluffcreek-Rosy complex

Bluffcreek

Extent: 60 percent of the unit
Landform(s): flats on outwash plains, rises on outwash plains
Slope gradient: 0 to 3 percent
Parent material: loamy and sandy and gravelly outwash 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): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
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 -- 0 to 8 in	sandy loam	moderately rapid	1.02 to 1.42 in	5.6 to 7.3
E1,E2 -- 8 to 19 in	loamy sand	rapid	0.88 to 1.10 in	5.6 to 7.3
Bt -- 19 to 47 in	gravelly sandy loam	moderately rapid	2.80 to 3.91 in	5.6 to 7.3
C -- 47 to 60 in	sand	rapid	0.26 to 0.91 in	6.1 to 8.4

Rosy

Extent: 30 percent of the unit
Landform(s): flats on outwash plains, rises on outwash plains
Slope gradient: 0 to 3 percent
Parent material: loamy and sandy glaciolacustrine 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): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .32
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	fine sandy loam	moderate	1.27 to 1.72 in	5.1 to 7.3
E,E/Bt,Bt -- 9 to 48 in	stratified sand to fine sandy loam	moderate	5.46 to 7.41 in	5.1 to 7.3
C -- 48 to 60 in	stratified sand to silty clay loam	moderate	1.30 to 2.01 in	5.6 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1346--Nidaros muck, calcareous

Nidaros, calcareous

Extent: 90 percent of the unit

Landform(s): depressions on outwash plains

Slope gradient: 0 to 1 percent

Parent material: highly decomposed herbaceous organic material over outwash deposits

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): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .02

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>
Oa1,Oa2 -- 0 to 25 in	muck	moderately rapid	8.82 to 11.34 in	
A1,A2 -- 25 to 42 in	sandy loam	moderate	2.20 to 3.72 in	
Cg,2Cg2 -- 42 to 60 in	gravelly coarse sand	rapid	0.53 to 1.42 in	

Map Unit Description (MN)

Otter Tail County, Minnesota

1347B--Kandota loam, 1 to 6 percent slopes

Kandota

Extent: 90 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 1 to 6 percent

Parent material: loamy glacial 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 8 in	loam	moderate	1.57 to 1.73 in	5.6 to 7.3
E -- 8 to 11 in	loam	moderately rapid	0.35 to 0.54 in	5.1 to 6.5
Bt -- 11 to 26 in	sandy clay loam	moderate	2.39 to 2.84 in	5.6 to 7.3
Btk,Bk -- 26 to 46 in	loam	moderate	2.41 to 3.41 in	7.4 to 8.4
C -- 46 to 80 in	sandy loam	moderate	4.06 to 5.76 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1348--Knutte loam, thick solum

Knutte, thick solum

Extent: 90 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 0 to 3 percent

Parent material: loamy glacial 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 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 11 in	loam	moderate	2.20 to 2.43 in	6.1 to 7.3
E -- 11 to 16 in	loam	moderate	0.77 to 0.97 in	6.1 to 7.8
Bt -- 16 to 45 in	loam	moderate	3.16 to 5.46 in	7.4 to 8.4
Bk -- 45 to 65 in	loam	moderate	2.21 to 3.81 in	7.4 to 8.4
C -- 65 to 80 in	loam	moderately slow	0.75 to 1.65 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1349--Clotho loam, moderately permeable

Clotho, moderately permeable

Extent: 85 percent of the unit

Landform(s): flats on interdrumlins

Slope gradient: 0 to 2 percent

Parent material: loamy glacial 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,Ag -- 0 to 14 in	loam	moderate	2.83 to 3.12 in	7.4 to 8.4
Bw,C1 -- 14 to 28 in	sandy loam	moderately slow	1.65 to 2.34 in	7.4 to 8.4
C2 -- 28 to 60 in	sandy loam	moderate	3.51 to 4.46 in	7.4 to 8.4

1350--Brandsvold loam, thick solum

Brandsvold, thick solum

Extent: 90 percent of the unit

Landform(s): swales on moraines

Slope gradient: 0 to 2 percent

Parent material: loamy glacial 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): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .32

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,A1 -- 0 to 13 in	loam	moderate	2.60 to 2.86 in	6.1 to 7.3
Btg,Bk,C1 -- 13 to 61 in	sandy clay loam	moderate	7.20 to 9.13 in	5.6 to 6.5
C2 -- 61 to 80 in	sandy loam	moderately slow	2.08 to 3.59 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1351--Bluffton loam, moderately permeable

Bluffton, moderately permeable

Extent: 85 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: loamy alluvium over loamy glacial 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): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .28

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 10 in	loam	moderate	1.97 to 2.36 in	5.6 to 7.3
Bg -- 10 to 53 in	loam	moderate	6.50 to 7.36 in	5.6 to 7.3
Cg -- 53 to 80 in	loam	moderate	4.02 to 5.09 in	6.6 to 8.4

1356--Water, miscellaneous

Water, miscellaneous

Extent: 95 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:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
-------------------------------------	----------------	---------------------	---------------------------------	-----------

Map Unit Description (MN)

Otter Tail County, Minnesota

1365--Hillview fine sandy loam

Hillview

Extent: 90 percent of the unit

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

Slope gradient: 0 to 2 percent

Parent material: loamy mantle over sandy and gravelly outwash 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): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated 2w

Hydric soil: yes

Hydrologic group: A/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 7 in	fine sandy loam	moderately rapid	0.92 to 1.28 in	5.1 to 7.3
Eg --	7 to 15 in	sandy loam	moderately rapid	0.79 to 1.10 in	5.1 to 6.5
Btg --	15 to 29 in	loam	moderately rapid	1.70 to 2.69 in	5.1 to 7.3
Cg --	29 to 60 in	stratified fine sand to very fine sandy loam	moderately rapid	2.46 to 5.22 in	5.1 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1396--Sedgeville, Nidaros, and Aquolls soils, channeled

Sedgeville, channeled

Extent: 30 percent of the unit

Landform(s): flood plains on outwash plains

Slope gradient: 0 to 2 percent

Parent material: highly decomposed herbaceous organic material over outwash deposits

Restrictive feature(s): greater than 60 inches

Flooding: frequent

Ponding: none

Drainage class: very poorly drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer) .28

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>
A,Ag -- 0 to 7 in	loam	moderate	1.20 to 1.70 in	6.1 to 8.4
Bg -- 7 to 24 in	coarse sandy loam	moderate	1.69 to 3.72 in	6.1 to 8.4
2Cg -- 24 to 60 in	coarse sand	rapid	1.43 to 5.73 in	6.6 to 8.4

Nidaros, channeled

Extent: 30 percent of the unit

Landform(s): flood plains on outwash plains

Slope gradient: 0 to 1 percent

Parent material: highly decomposed herbaceous organic material over outwash deposits

Restrictive feature(s): greater than 60 inches

Flooding: frequent

Ponding: none

Drainage class: very poorly drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .02

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>
Oa1,Oa2 -- 0 to 21 in	muck	moderately rapid	7.30 to 9.39 in	
A -- 21 to 27 in	sandy loam	moderate	0.82 to 1.39 in	
Cg -- 27 to 80 in	gravelly sand	rapid	1.58 to 4.22 in	

Map Unit Description (MN)

Otter Tail County, Minnesota

1396--Sedgeville, Nidaros, and Aquolls soils, channeled

Aquolls, channeled

Extent: 30 percent of the unit

Landform(s): flood plains on outwash plains

Slope gradient: 0 to 2 percent

Parent material: outwash deposits

Restrictive feature(s): greater than 60 inches

Flooding: rare

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 5w

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 10 in	loam	moderate	1.97 to 2.17 in	6.1 to 8.4
Cg -- 10 to 60 in	sandy loam	moderate	7.50 to 9.50 in	6.1 to 8.4

1397--Bemidji loamy sand, moderately permeable

Bemidji, moderately permeable

Extent: 90 percent of the unit

Landform(s): hillslopes on moraines

Slope gradient: 1 to 3 percent

Parent material: sandy outwash deposits over loamy glacial 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): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .20

Land capability, nonirrigated 3s

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	loamy sand	rapid	0.79 to 0.94 in	5.6 to 6.5
E,Bt1,Bt2 -- 8 to 36 in	sand	rapid	1.68 to 3.07 in	5.6 to 6.5
2Bt3 -- 36 to 45 in	sandy loam	moderate	1.09 to 1.63 in	6.1 to 7.3
2Bt4 -- 45 to 60 in	sandy loam	moderate	1.65 to 2.39 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1825B--Seelyeville muck, seep land, 1 to 10 percent slopes

Seelyeville, seep land

Extent: 85 percent of the unit
Landform(s): swales on hillslopes on moraines
Slope gradient: 1 to 10 percent
Parent material: highly decomposed herbaceous organic material
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: very poorly drained

Soil loss tolerance (T factor): 2
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .02
Land capability, nonirrigated 6w
Hydric soil: yes
Hydrologic group: A/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,Oa2,Oa3 -	0 to 60 in muck	moderately rapid	20.94 to 26.93 in	

1874--Radium loamy sand

Radium

Extent: 90 percent of the unit
Landform(s): rises on lakeshores, flats on outwash plains, rises on outwash plains
Slope gradient: 0 to 3 percent
Parent material: sandy and gravelly outwash 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): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .20
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 11 in loamy sand	rapid	0.66 to 1.32 in	6.1 to 7.8
Bw --	11 to 18 in loamy sand	rapid	0.21 to 0.57 in	6.6 to 8.4
Bk1 --	18 to 24 in gravelly coarse sand	very rapid	0.12 to 0.30 in	7.4 to 8.4
Bk2,Cg --	24 to 60 in coarse sand	rapid	1.07 to 3.22 in	7.4 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1943--Roscommon loamy sand

Roscommon

Extent: 90 percent of the unit

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

Slope gradient: 0 to 2 percent

Parent material: sandy outwash 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): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .05

Land capability, nonirrigated 4w

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 --	0 to 6 in	loamy sand	rapid	0.41 to 1.18 in	5.6 to 7.8
Cg --	6 to 60 in	sand	rapid	2.70 to 3.78 in	5.6 to 8.4

Map Unit Description (MN)

Otter Tail County, Minnesota

1975--Oylen sandy loam

Oylen

Extent: 90 percent of the unit

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

Slope gradient: 0 to 3 percent

Parent material: loamy mantle over sandy and gravelly outwash deposits

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) .24

Land capability, nonirrigated 3s

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,AB -- 0 to 13 in	sandy loam	moderately rapid	1.56 to 2.08 in	6.1 to 7.3
Bt -- 13 to 22 in	sandy loam	moderate	1.09 to 1.63 in	6.1 to 7.3
2Bw -- 22 to 26 in	coarse sand	rapid	0.12 to 0.31 in	6.1 to 7.3
2Bk,2C -- 26 to 60 in	gravelly sand	rapid	1.02 to 2.37 in	6.6 to 8.4

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:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
-------------------------------------	----------------	---------------------	---------------------------------	-----------

Map Unit Description (MN)

Otter Tail County, Minnesota

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.