Roberts County, South Dakota
Nontechnical Soil Descriptions

AaA − Aastad Loam, 0 To 2 Percent Slopes

AaA AASTAD LOAM, 0 TO 2 PERCENT SLOPES − The Aastad series consists of very deep, moderately well drained soils that formed in calcareous loamy glacial till on till plains and ground moraines. These soils have moderately slow permeability. This soil has high available water capacity and high organic matter content. Flooding is NONE.

Ac − Antler−Colvin Silt Loams

Ac ANTLER−COLVIN SILT LOAMS − The Antler series consists of very deep, somewhat poorly drained soils that formed in silty lacustrine sediments over loam or clay loam glacial till. Permeability is moderate or moderately slow in the upper lacustrine sediments and moderately slow or slow in the underlying till. These soils are on glacial lake plains and interbeach areas. This soil has high available water capacity and organic matter content. Flooding is NONE.
Ac ANTLER−COLVIN SILT LOAMS − The Colvin series consists of very deep, poorly and very poorly drained, moderately slow or moderately permeable soils formed in silt loam and silty clay loam sediments. These soils are in concave shallow swales and depressions on glacial lake plains, in outwash channels, on stream terraces and in drainageways on till plains. This soil has high available water capacity and high organic matter content. Flooding is NONE.

At − Antler−Tonka Silt Loams

At ANTLER−TONKA SILT LOAMS − The Antler series consists of very deep, somewhat poorly drained soils that formed in silty lacustrine sediments over loam or clay loam glacial till. Permeability is moderate or moderately slow in the upper lacustrine sediments and moderately slow or slow in the underlying till. These soils are on glacial lake plains and interbeach areas. This soil has high available water capacity and organic matter content. Flooding is NONE.
At ANTLER−TONKA SILT LOAMS − The Tonka series consists of very deep, poorly drained, slowly permeable soils that formed in local alluvium over glacial till or glaciolacustrine deposits. These soils are in closed basins and depressions on glacial till and glacial lake plains. This soil has high available water capacity and high organic matter content. Flooding is NONE. Ponding duration is LONG.

AvA − Antler And Hamerly Soils, 0 To 2 Percent Slopes

AvA ANTLER AND HAMERLY SOILS, 0 TO 2 PERCENT SLOPES − The Antler series consists of very deep, somewhat poorly drained soils that formed in silty lacustrine sediments over loam or clay loam glacial till. Permeability is moderate or moderately slow in the upper lacustrine sediments and moderately slow or slow in the underlying till. These soils are on glacial lake plains and interbeach areas. This soil has high available water capacity and organic matter content. Flooding is NONE.
AvA ANTLER AND HAMERLY SOILS, 0 TO 2 PERCENT SLOPES − The Hamerly series consists of very deep, somewhat poorly or moderately well drained soils that formed in calcareous loamy glacial till. Permeability is moderate in the upper horizons and moderate or moderately slow in the lower horizons. These soils are on flats on till−floored lake plains and on convex slopes surrounding shallow depressions and on slight rises on till plains. This soil has high available water capacity and high organic matter content. Flooding is NONE.

BbE − Barnes−Buse Stony Complex, 9 To 40 Percent Slopes

BbE BARNES−BUSE STONY COMPLEX, 9 TO 40 PERCENT SLOPES − The Barnes series consists of very deep, well drained, moderate or moderately slowly permeable soils that formed in loamy till. These soils are on till plains and moraines. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

Be − Bearden Silty Clay Loam

Be BEARDEN SILTY CLAY LOAM − The Bearden series consists of very deep, somewhat poorly and moderately well drained, moderately to slowly permeable soils that formed in calcareous silt loam and silty clay loam lacustrine sediments. These soils are on glacial lake plains. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

Bo − Borup Silt Loam

Bo BORUP SILT LOAM − The Borup series consists of very deep, poorly and very poorly drained soils that formed in loamy calcareous glacial lacustrine sediments on glacial lake plains. These soils have moderate or moderately rapid permeability. This soil has high available water capacity and high organic matter content. Flooding is RARE.

Roberts County, South Dakota
Non Technical Soil Descriptions--Continued

BpF − Buse−Forman Loams, 20 To 40 Percent Slopes

BpF BUSE−FORMAN LOAMS, 20 TO 40 PERCENT SLOPES − The Buse series consists of very deep, well drained soils that formed in loamy glacial till on moraines. These soils have moderate and moderately slow permeability. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
BpF BUSE−FORMAN LOAMS, 20 TO 40 PERCENT SLOPES − The Forman series consists of deep, well drained, moderately slowly permeable soils formed in calcareous till. These soils are on till plains. This soil has high available water capacity and high organic matter content. Flooding is NONE.

Co − Colvin Silt Loam, Saline

Co COLVIN SILT LOAM, SALINE − The Colvin series consists of very deep, poorly and very poorly drained, moderately slow or moderately permeable soils formed in silt loam and silty clay loam sediments. These soils are in concave shallow swales and depressions on glacial lake plains, in outwash channels, on stream terraces and in drainageways on till plains. This soil has moderate available water capacity and high organic matter content. Flooding is NONE.

DcA − Dickey Fine Sandy Loam, 0 To 2 Percent Slopes

DcA DICKEY FINE SANDY LOAM, 0 TO 2 PERCENT SLOPES − The Dickey series consists of very deep, well drained soils that formed in wind and water deposited sands over loam or clay loam till or lacustrine sediments. Permeability is moderately rapid or rapid in the upper part and moderate or moderately slow in the loamy material. These soils are on sand mantled till or glaciolacustrine plains. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.

DcB − Dickey Fine Sandy Loam, 2 To 6 Percent Slopes

DcB DICKEY FINE SANDY LOAM, 2 TO 6 PERCENT SLOPES − The Dickey series consists of very deep, well drained soils that formed in wind and water deposited sands over loam or clay loam till or lacustrine sediments. Permeability is moderately rapid or rapid in the upper part and moderate or moderately slow in the loamy material. These soils are on sand mantled till or glaciolacustrine plains. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.

Dm − Divide−Marysland Loams

Dm DIVIDE−MARYSLAND LOAMS − The Divide series consists of very deep, somewhat poorly or moderately well drained soils that formed in loamy sediment over sand and gravel. Permeability is moderate over rapid or very rapid. These soils are on slightly depressed areas in outwash plains, terraces and interbeach areas. This soil has moderate available water capacity and high organic matter content. Flooding is OCCAS.
Dm DIVIDE−MARYSLAND LOAMS − The Marysland series consists of very deep, poorly and very poorly drained soils that formed in glacial lacustrine or outwash sediments which consists of a 20 to 40 inch loamy mantle over sandy or sandy−skeletal sediments. These soils are on stream terraces, outwash channels, outwash plains, and lacustrine plains. They have moderate permeability in the upper part and rapid permeability in the underlying material. This soil has moderate available water capacity and organic matter content. Flooding is OCCAS.

Do − Doran Loam

Do DORAN LOAM − The Doran series consists of deep, somewhat poorly drained, slowly permeable soils that formed in water worked till or lacustrine sediments over till. These soils are on lake plains and water modified till plains and have slopes of 0 to 3 percent. This soil has high available water capacity and high organic matter content. Flooding is NONE.

Dv − Castlewood Clay

Dv CASTLEWOOD CLAY − The Castlewood series consists of deep, poorly drained soils formed in clayey alluvium on floodplains. Permeability is slow. This soil has high available water capacity and high organic matter content. Flooding is OCCAS.

EcA − Eckman Loam, 0 To 2 Percent Slopes

EcA ECKMAN LOAM, 0 TO 2 PERCENT SLOPES − The Eckman series consists of deep, well drained, moderately permeable soils that formed in calcareous stratified glaciolacustrine silt loam and very fine sandy loams. These soils are on glacial lake plains and glacial stream terraces and have slopes ranging from 0 to 15 percent. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

Roberts County, South Dakota
Non Technical Soil Descriptions--Continued

EcB − Eckman Loam, 2 To 6 Percent Slopes

EcB ECKMAN LOAM, 2 TO 6 PERCENT SLOPES − The Eckman series consists of deep, well drained, moderately permeable soils that formed in calcareous stratified glaciolacustrine silt loam and very fine sandy loams. These soils are on glacial lake plains and glacial stream terraces and have slopes ranging from 0 to 15 percent. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

EeC − Eckman−Zell Complex, 6 To 9 Percent Slopes

EeC ECKMAN−ZELL COMPLEX, 6 TO 9 PERCENT SLOPES − The Eckman series consists of deep, well drained, moderately permeable soils that formed in calcareous stratified glaciolacustrine silt loam and very fine sandy loams. These soils are on glacial lake plains and glacial stream terraces and have slopes ranging from 0 to 15 percent. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
EeC ECKMAN−ZELL COMPLEX, 6 TO 9 PERCENT SLOPES − The Zell series consists of very deep, well drained moderately permeable soils formed in glaciolacustrine sediments. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

Eh − Embden−Hamar Fine Sandy Loams

Eh EMBDEN−HAMAR FINE SANDY LOAMS − The Embden series consists of very deep, well or moderately well drained, moderately rapidly permeable soils that formed in glaciofluvial and glaciolacustrine deposits. These soils are on lake, delta, and outwash plains. This soil has moderate available water capacity and high organic matter content. Flooding is NONE.
Eh EMBDEN−HAMAR FINE SANDY LOAMS − The Hamar series consists of very deep, poorly or somewhat poorly drained soils formed in eolian sand in upland swales and depressions. Permeability is rapid or moderately rapid. This soil has low available water capacity and moderate organic matter content. Flooding is NONE.

FdA − Fordville Loam, 0 To 3 Percent Slopes

FdA FORDVILLE LOAM, 0 TO 3 PERCENT SLOPES − The Fordville series consists of very deep, well drained soils formed in loamy sediments that are moderately deep over sand and gravel on outwash plains, terraces, and flood plains. Permeability is moderate in the solum and rapid in the underlying sand and gravel. This soil has low available water capacity and moderate organic matter content. Flooding is NONE.

FeB − Fordville−Renshaw Loams, 3 To 6 Percent Slopes

FeB FORDVILLE−RENSHAW LOAMS, 3 TO 6 PERCENT SLOPES − The Fordville series consists of very deep, well drained soils formed in loamy sediments that are moderately deep over sand and gravel on outwash plains, terraces, and flood plains. Permeability is moderate in the solum and rapid in the underlying sand and gravel. This soil has low available water capacity and moderate organic matter content. Flooding is NONE.
FeB FORDVILLE−RENSHAW LOAMS, 3 TO 6 PERCENT SLOPES − The Renshaw series consists of very deep, somewhat excessively drained soils formed in loamy sediments and the underlying sand and gravel on outwash plains, terraces, and flood plains. Permeability is rapid or very rapid. This soil has low available water capacity and moderate organic matter content. Flooding is NONE.

FoA − Forman−Aastad Loams, 0 To 2 Percent Slopes

FoA FORMAN−AASTAD LOAMS, 0 TO 2 PERCENT SLOPES − The Forman series consists of deep, well drained, moderately slowly permeable soils formed in calcareous till. These soils are on till plains. This soil has high available water capacity and high organic matter content. Flooding is NONE.
FoA FORMAN−AASTAD LOAMS, 0 TO 2 PERCENT SLOPES − The Aastad series consists of very deep, moderately well drained soils that formed in calcareous loamy glacial till on till plains and ground moraines. These soils have moderately slow permeability. This soil has high available water capacity and high organic matter content. Flooding is NONE.

FoB − Forman−Aastad Loams, 2 To 6 Percent Slopes

FoB FORMAN−AASTAD LOAMS, 2 TO 6 PERCENT SLOPES − The Forman series consists of deep, well drained, moderately slowly permeable soils formed in calcareous till. These soils are on till plains. This soil has high available water capacity and high organic matter content. Flooding is NONE.
FoB FORMAN−AASTAD LOAMS, 2 TO 6 PERCENT SLOPES − The Aastad series consists of very deep, moderately well drained soils that formed in calcareous loamy glacial till on till plains and ground moraines. These soils have moderately slow permeability. This soil has high available water capacity and high organic matter content. Flooding is NONE.

Roberts County, South Dakota
Non Technical Soil Descriptions--Continued

FoC – Forman–Aastad Loams, 6 To 9 Percent Slopes

FoC FORMAN–AASTAD LOAMS, 6 TO 9 PERCENT SLOPES – The Forman series consists of deep, well drained, moderately slowly permeable soils formed in calcareous till. These soils are on till plains. This soil has high available water capacity and high organic matter content. Flooding is NONE.
FoC FORMAN–AASTAD LOAMS, 6 TO 9 PERCENT SLOPES – The Aastad series consists of very deep, moderately well drained soils that formed in calcareous loamy glacial till on till plains and ground moraines. These soils have moderately slow permeability. This soil has high available water capacity and high organic matter content. Flooding is NONE.

FoD – Forman–Aastad Loams, 9 To 15 Percent Slopes

FoD FORMAN–AASTAD LOAMS, 9 TO 15 PERCENT SLOPES – The Forman series consists of deep, well drained, moderately slowly permeable soils formed in calcareous till. These soils are on till plains. This soil has high available water capacity and high organic matter content. Flooding is NONE.
FoD FORMAN–AASTAD LOAMS, 9 TO 15 PERCENT SLOPES – The Aastad series consists of very deep, moderately well drained soils that formed in calcareous loamy glacial till on till plains and ground moraines. These soils have moderately slow permeability. This soil has high available water capacity and high organic matter content. Flooding is NONE.

FsB – Forman–Aastad Stony Complex, 0 To 9 Percent Slopes

FsB FORMAN–AASTAD STONY COMPLEX, 0 TO 9 PERCENT SLOPES – The Forman series consists of deep, well drained, moderately slowly permeable soils formed in calcareous till. These soils are on till plains. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

FuC – Forman–Buse Loams, 6 To 9 Percent Slopes, Eroded

FuC FORMAN–BUSE LOAMS, 6 TO 9 PERCENT SLOPES, ERODED – The Forman series consists of deep, well drained, moderately slowly permeable soils formed in calcareous till. These soils are on till plains. This soil has high available water capacity and high organic matter content. Flooding is NONE.
FuC FORMAN–BUSE LOAMS, 6 TO 9 PERCENT SLOPES, ERODED – The Buse series consists of very deep, well drained soils that formed in loamy glacial till on moraines. These soils have moderate and moderately slow permeability. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

FuD – Forman–Buse Loams, 9 To 15 Percent Slopes, Eroded

FuD FORMAN–BUSE LOAMS, 9 TO 15 PERCENT SLOPES, ERODED – The Forman series consists of deep, well drained, moderately slowly permeable soils formed in calcareous till. These soils are on till plains. This soil has high available water capacity and high organic matter content. Flooding is NONE.
FuD FORMAN–BUSE LOAMS, 9 TO 15 PERCENT SLOPES, ERODED – The Buse series consists of very deep, well drained soils that formed in loamy glacial till on moraines. These soils have moderate and moderately slow permeability. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

FuE – Forman–Buse Loams, 15 To 25 Percent Slopes

FuE FORMAN–BUSE LOAMS, 15 TO 25 PERCENT SLOPES – The Forman series consists of deep, well drained, moderately slowly permeable soils formed in calcareous till. These soils are on till plains. This soil has high available water capacity and high organic matter content. Flooding is NONE.
FuE FORMAN–BUSE LOAMS, 15 TO 25 PERCENT SLOPES – The Buse series consists of very deep, well drained soils that formed in loamy glacial till on moraines. These soils have moderate and moderately slow permeability. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

FvE – Forman–Buse Stony Complex, 9 To 40 Percent Slopes

FvE FORMAN–BUSE STONY COMPLEX, 9 TO 40 PERCENT SLOPES – The Forman series consists of deep, well drained, moderately slowly permeable soils formed in calcareous till. These soils are on till plains. This soil has high available water capacity and high organic matter content. Flooding is NONE.

Ga – Gardena Silt Loam

Ga GARDENA SILT LOAM – The Gardena series consists of very deep, well drained and moderately well drained, moderately permeable soils that formed in calcareous silty and loamy glaciolacustrine sediments. These soils are on terraces, deltas and glacial lake plains. This soil has high available water capacity and high organic matter content. Flooding is NONE.

Roberts County, South Dakota
Non Technical Soil Descriptions--Continued

GyA – Glyndon Silt Loam, 0 To 3 Percent Slopes

GyA GLYNDON SILT LOAM, 0 TO 3 PERCENT SLOPES – The Glyndon series consists of very deep, moderately well and somewhat poorly drained soils that formed in silty glacial lacustrine sediments and delta sediments on glacial lake plains. They have moderate permeability in the upper part and moderately rapid permeability in the lower part. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

Ha – Hamar Fine Sandy Loam

Ha HAMAR FINE SANDY LOAM – The Hamar series consists of very deep, poorly or somewhat poorly drained soils formed in eolian sand in upland swales and depressions. Permeability is rapid or moderately rapid. This soil has low available water capacity and moderate organic matter content. Flooding is NONE.

HbA – Hamerly–Tonka Complex, 0 To 3 Percent Slopes

HbA HAMERLY–TONKA COMPLEX, 0 TO 3 PERCENT SLOPES – The Hamerly series consists of very deep, somewhat poorly or moderately well drained soils that formed in calcareous loamy glacial till. Permeability is moderate in the upper horizons and moderate or moderately slow in the lower horizons. These soils are on flats on till–floored lake plains and on convex slopes surrounding shallow depressions and on slight rises on till plains. This soil has high available water capacity and high organic matter content. Flooding is NONE.
HbA HAMERLY–TONKA COMPLEX, 0 TO 3 PERCENT SLOPES – The Tonka series consists of very deep, poorly drained, slowly permeable soils that formed in local alluvium over glacial till or glaciolacustrine deposits. These soils are in closed basins and depressions on glacial till and glacial lake plains. This soil has high available water capacity and high organic matter content. Flooding is NONE. Ponding duration is LONG.

HcA – Hamerly–Vallers Loams, 0 To 2 Percent Slopes

HcA HAMERLY–VALLERS LOAMS, 0 TO 2 PERCENT SLOPES – The Hamerly series consists of very deep, somewhat poorly or moderately well drained soils that formed in calcareous loamy glacial till. Permeability is moderate in the upper horizons and moderate or moderately slow in the lower horizons. These soils are on flats on till–floored lake plains and on convex slopes surrounding shallow depressions and on slight rises on till plains. This soil has high available water capacity and high organic matter content. Flooding is NONE.
HcA HAMERLY–VALLERS LOAMS, 0 TO 2 PERCENT SLOPES – The Vallers series consists of deep, poorly drained soils that formed in calcareous loamy glacial till on glacial moraines. These soils have moderately slow permeability. This soil has high available water capacity and high organic matter content. Flooding is RARE.

HcB – Hamerly–Vallers Loams, 2 To 4 Percent Slopes

HcB HAMERLY–VALLERS LOAMS, 2 TO 4 PERCENT SLOPES – The Hamerly series consists of very deep, somewhat poorly or moderately well drained soils that formed in calcareous loamy glacial till. Permeability is moderate in the upper horizons and moderate or moderately slow in the lower horizons. These soils are on flats on till–floored lake plains and on convex slopes surrounding shallow depressions and on slight rises on till plains. This soil has high available water capacity and high organic matter content. Flooding is NONE.
HcB HAMERLY–VALLERS LOAMS, 2 TO 4 PERCENT SLOPES – The Vallers series consists of deep, poorly drained soils that formed in calcareous loamy glacial till on glacial moraines. These soils have moderately slow permeability. This soil has high available water capacity and high organic matter content. Flooding is RARE.

HdD – Hattie Clay Loam, 9 To 15 Percent Slopes

HdD HATTIE CLAY LOAM, 9 TO 15 PERCENT SLOPES – The Hattie series consists of deep well and moderately well drained soils that formed in clayey glacial till on glacial moraines. They have slow permeability. Their This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.

HdE – Hattie Clay Loam, 15 To 40 Percent Slopes

HdE HATTIE CLAY LOAM, 15 TO 40 PERCENT SLOPES – The Hattie series consists of deep well and moderately well drained soils that formed in clayey glacial till on glacial moraines. They have slow permeability. Their This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.

HkD – Hattie And Kloten Soils, 9 To 25 Percent Slopes

HkD HATTIE AND KLOTEN SOILS, 9 TO 25 PERCENT SLOPES – The Hattie series consists of deep well and moderately well drained soils that formed in clayey glacial till on glacial moraines. They have slow permeability. Their This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.
HkD HATTIE AND KLOTEN SOILS, 9 TO 25 PERCENT SLOPES – The Kloten series consists of shallow, well drained, moderately permeable soils that formed in glacial till overlying shale bedrock or material weathered from shale bedrock. These soils are on gently sloping to very steep valley side slopes and upland. This soil has very low available water capacity and moderate organic matter content. Flooding is NONE.

Roberts County, South Dakota
Non Technical Soil Descriptions--Continued

HmA – Hecla–Hamar Loamy Fine Sands, 0 To 3 Percent Slopes

HmA HECLA–HAMAR LOAMY FINE SANDS, 0 TO 3 PERCENT SLOPES – The Hecla series consists of deep, moderately well drained soils formed in sandy sediments on lake plains and glacial outwash plains. Permeability is moderately rapid or rapid. This soil has low available water capacity and low organic matter content. Flooding is NONE.
HmA HECLA–HAMAR LOAMY FINE SANDS, 0 TO 3 PERCENT SLOPES – The Hamar series consists of very deep, poorly or somewhat poorly drained soils formed in eolian sand in upland swales and depressions. Permeability is rapid or moderately rapid. This soil has low available water capacity and moderate organic matter content. Flooding is NONE.

HsB – Heimdal–Sisseton Loams, 2 To 6 Percent Slopes

HsB HEIMDAL–SISSETON LOAMS, 2 TO 6 PERCENT SLOPES – The Heimdal series consists of very deep, well drained, moderately permeable soils that formed in calcareous glacial till. These soils are on glacial till plains and moraines. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
HsB HEIMDAL–SISSETON LOAMS, 2 TO 6 PERCENT SLOPES – The Sisseton series consists of deep, well drained soils formed in calcareous, stratified, loamy and silty glacial drift on uplands. These soils have moderate permeability. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

HsC – Heimdal–Sisseton Loams, 6 To 9 Percent Slopes

HsC HEIMDAL–SISSETON LOAMS, 6 TO 9 PERCENT SLOPES – The Heimdal series consists of very deep, well drained, moderately permeable soils that formed in calcareous glacial till. These soils are on glacial till plains and moraines. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
HsC HEIMDAL–SISSETON LOAMS, 6 TO 9 PERCENT SLOPES – The Sisseton series consists of deep, well drained soils formed in calcareous, stratified, loamy and silty glacial drift on uplands. These soils have moderate permeability. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

HvA – Heimdal–Svea Loams, 0 To 2 Percent Slopes

HvA HEIMDAL–SVEA LOAMS, 0 TO 2 PERCENT SLOPES – The Heimdal series consists of very deep, well drained, moderately permeable soils that formed in calcareous glacial till. These soils are on glacial till plains and moraines. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
HvA HEIMDAL–SVEA LOAMS, 0 TO 2 PERCENT SLOPES – The Svea series consists of deep, well or moderately well drained soils that formed in calcareous glacial till and local alluvium from the till. Permeability is moderate in the solum and moderate or moderately slow in the C horizon. These soils are on concave positions on glacial till plains and have slopes ranging from 0 to 25 percent. This soil has high available water capacity and high organic matter content. Flooding is NONE.

HvB – Heimdal–Svea Loams, 2 To 6 Percent Slopes

HvB HEIMDAL–SVEA LOAMS, 2 TO 6 PERCENT SLOPES – The Heimdal series consists of very deep, well drained, moderately permeable soils that formed in calcareous glacial till. These soils are on glacial till plains and moraines. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
HvB HEIMDAL–SVEA LOAMS, 2 TO 6 PERCENT SLOPES – The Svea series consists of deep, well or moderately well drained soils that formed in calcareous glacial till and local alluvium from the till. Permeability is moderate in the solum and moderate or moderately slow in the C horizon. These soils are on concave positions on glacial till plains and have slopes ranging from 0 to 25 percent. This soil has high available water capacity and high organic matter content. Flooding is NONE.

La – Ladelle Silt Loam

La LADELLE SILT LOAM – The LaDelle series consists of deep, moderately well drained soils formed in alluvium on terraces and flood plains. Permeability is moderately slow or moderate. This soil has high available water capacity and moderate organic matter content. Flooding is OCCAS.

Lm – Lamoure Silty Clay Loam

Lm LAMOURE SILTY CLAY LOAM – The Lamoure series consists of very deep, somewhat poorly drained or poorly drained soils formed in silty alluvium on flood plains. Permeability is moderate or moderately slow. This soil has high available water capacity and high organic matter content. Flooding is OCCAS.

Lt – Lamoure Silty Clay Loam, Channeled

Lt LAMOURE SILTY CLAY LOAM, CHANNELED – The Lamoure series consists of very deep, somewhat poorly drained or poorly drained soils formed in silty alluvium on flood plains. Permeability is moderate or moderately slow. This soil has high available water capacity and high organic matter content. Flooding is FREQ.

Roberts County, South Dakota
Non Technical Soil Descriptions--Continued

Lu – Ludden Clay

Lu LUDDEN CLAY – The Ludden series consists of deep, poorly or very poorly drained, slowly permeable soils that formed in clayey alluvium. These soils are on bottom lands of streams. This soil has high available water capacity and high organic matter content. Flooding is FREQ.

MaB – Maddock Loamy Fine Sand, 0 To 6 Percent Slopes

MaB MADDOCK LOAMY FINE SAND, 0 TO 6 PERCENT SLOPES – The Maddock series consists of very deep, well drained or somewhat excessively drained, rapidly permeable soils that formed in fine sands deposited by wind or water. These soils are on sandy glaciolacustrine or glaciofluvial, outwash and delta plains. This soil has low available water capacity and moderate organic matter content. Flooding is NONE.

MaD – Maddock Loamy Fine Sand, 6 To 25 Percent Slopes

MaD MADDOCK LOAMY FINE SAND, 6 TO 25 PERCENT SLOPES – The Maddock series consists of very deep, well drained or somewhat excessively drained, rapidly permeable soils that formed in fine sands deposited by wind or water. These soils are on sandy glaciolacustrine or glaciofluvial, outwash and delta plains. This soil has low available water capacity and moderate organic matter content. Flooding is NONE.

Mr – Southam Silty Clay Loam

Mr SOUTHAM SILTY CLAY LOAM – The Southam series consists of deep, very poorly drained, slowly permeable soils that formed in local alluvial sediments from glacial drift. These soils are in basins and depressions on glacial till plains, glacial moraines, and glaciolacustrine plains. This soil has high available water capacity and organic matter content. Flooding is NONE. Ponding duration is VERY LONG.

Mw – Marysland Silt Loam, Wet

Mw MARYSLAND SILT LOAM, WET – The Marysland series consists of very deep, poorly and very poorly drained soils that formed in glacial lacustrine or outwash sediments which consists of a 20 to 40 inch loamy mantle over sandy or sandy–skeletal sediments. These soils are on stream terraces, outwash channels, outwash plains, and lacustrine plains. They have moderate permeability in the upper part and rapid permeability in the underlying material. This soil has moderate available water capacity and organic matter content. Flooding is OCCAS.

Pa – Parnell Silty Clay Loam

Pa PARNELL SILTY CLAY LOAM – The Parnell series consists of very deep, very poorly drained and poorly drained soils that formed in clayey water–sorted sediments from glacial drift in depressions, swales and drainageways on glacial moraines. These soils have slow permeability. This soil has high available water capacity and high organic matter content. Flooding is NONE. Ponding duration is LONG.

PeA – Peever Clay Loam, 0 To 2 Percent Slopes

PeA PEEVER CLAY LOAM, 0 TO 2 PERCENT SLOPES – The Peever series consists of deep, well drained soils on uplands. Permeability is moderately slow or slow. These soils form in fine textured glacial till. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.

PeB – Peever Clay Loam, 2 To 6 Percent Slopes

PeB PEEVER CLAY LOAM, 2 TO 6 PERCENT SLOPES – The Peever series consists of deep, well drained soils on uplands. Permeability is moderately slow or slow. These soils form in fine textured glacial till. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.

PeC – Peever Clay Loam, 6 To 9 Percent Slopes

PeC PEEVER CLAY LOAM, 6 TO 9 PERCENT SLOPES – The Peever series consists of deep, well drained soils on uplands. Permeability is moderately slow or slow. These soils form in fine textured glacial till. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.

PhA – Peever–Cavour Complex, 0 To 3 Percent Slopes

PhA PEEVER–CAVOUR COMPLEX, 0 TO 3 PERCENT SLOPES – The Peever series consists of deep, well drained soils on uplands. Permeability is moderately slow or slow. These soils form in fine textured glacial till. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.
PhA PEEVER–CAVOUR COMPLEX, 0 TO 3 PERCENT SLOPES – The Cavour series consists of very deep, moderately well and well drained soils formed in glacial till on uplands. The soils have slow or very slow permeability. This soil has moderate available water capacity and high organic matter content. Flooding is NONE.

Roberts County, South Dakota
Non Technical Soil Descriptions--Continued

Pk − Peever−Tonka Complex

Pk PEEVER−TONKA COMPLEX − The Peever series consists of deep, well drained soils on uplands. Permeability is moderately slow or slow. These soils form in fine textured glacial till. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.
Pk PEEVER−TONKA COMPLEX − The Tonka series consists of very deep, poorly drained, slowly permeable soils that formed in local alluvium over glacial till or glaciolacustrine deposits. These soils are in closed basins and depressions on glacial till and glacial lake plains. This soil has high available water capacity and high organic matter content. Flooding is NONE. Ponding duration is LONG.

Pm − Playmoor Silty Clay Loam

Pm PLAYMOOR SILTY CLAY LOAM − The Playmoor series consists of deep, poorly drained soils formed in alluvium on flood plains. Permeability is moderate or moderately slow. This soil has high available water capacity and high organic matter content. Flooding is FREQ.

PoA − Poinsett Silt Loam, 0 To 2 Percent Slopes

PoA POINSETT SILT LOAM, 0 TO 2 PERCENT SLOPES − The Poinsett series consists of very deep, well drained soils formed in silty glacial drift on uplands. Permeability is moderate. This soil has high available water capacity and high organic matter content. Flooding is NONE.

PoB − Poinsett Silt Loam, 2 To 6 Percent Slopes

PoB POINSETT SILT LOAM, 2 TO 6 PERCENT SLOPES − The Poinsett series consists of very deep, well drained soils formed in silty glacial drift on uplands. Permeability is moderate. This soil has high available water capacity and high organic matter content. Flooding is NONE.

Ra − Rauville Mucky Silt Loam

Ra RAUVILLE MUCKY SILT LOAM − The Rauville series consists of deep, very poorly drained soils formed in alluvium on flats and bottom lands. Permeability is moderate or moderately slow in the upperpart and moderately rapid in the underlying sand and gravel. This soil has high available water capacity and high organic matter content. Flooding is FREQ.

ReA − Renshaw Loam, 0 To 3 Percent Slopes

ReA RENSHAW LOAM, 0 TO 3 PERCENT SLOPES − The Renshaw series consists of very deep, somewhat excessively drained soils formed in loamy sediments and the underlying sand and gravel on outwash plains, terraces, and flood plains. Permeability is rapid or very rapid. This soil has low available water capacity and moderate organic matter content. Flooding is NONE.

ReB − Renshaw Loam, 3 To 9 Percent Slopes

ReB RENSHAW LOAM, 3 TO 9 PERCENT SLOPES − The Renshaw series consists of very deep, somewhat excessively drained soils formed in loamy sediments and the underlying sand and gravel on outwash plains, terraces, and flood plains. Permeability is rapid or very rapid. This soil has low available water capacity and moderate organic matter content. Flooding is NONE.

RhB − Renshaw−Sioux Loams, 3 To 9 Percent Slopes

RhB RENSHAW−SIOUX LOAMS, 3 TO 9 PERCENT SLOPES − The Renshaw series consists of very deep, somewhat excessively drained soils formed in loamy sediments and the underlying sand and gravel on outwash plains, terraces, and flood plains. Permeability is rapid or very rapid. This soil has low available water capacity and moderate organic matter content. Flooding is NONE.
RhB RENSHAW−SIOUX LOAMS, 3 TO 9 PERCENT SLOPES − The Sioux series consists of excessively drained soils formed in sand and gravel on outwash plains, terraces, and eskers. They are very shallow over gravelly sand. Permeability is rapid or very rapid. This soil has low available water capacity and moderate organic matter content. Flooding is NONE.

RhD − Renshaw−Sioux Loams, 9 To 21 Percent Slopes

RhD RENSHAW−SIOUX LOAMS, 9 TO 21 PERCENT SLOPES − The Renshaw series consists of very deep, somewhat excessively drained soils formed in loamy sediments and the underlying sand and gravel on outwash plains, terraces, and flood plains. Permeability is rapid or very rapid. This soil has low available water capacity and moderate organic matter content. Flooding is NONE.
RhD RENSHAW−SIOUX LOAMS, 9 TO 21 PERCENT SLOPES − The Sioux series consists of excessively drained soils formed in sand and gravel on outwash plains, terraces, and eskers. They are very shallow over gravelly sand. Permeability is rapid or very rapid. This soil has low available water capacity and moderate organic matter content. Flooding is NONE.

Roberts County, South Dakota
Non Technical Soil Descriptions--Continued

RsE − Renshaw−Sioux Stony Loams, 9 To 40 Percent Slopes

RsE RENSHAW−SIOUX STONY LOAMS, 9 TO 40 PERCENT SLOPES − The Renshaw series consists of very deep, somewhat excessively drained soils formed in loamy sediments and the underlying sand and gravel on outwash plains, terraces, and flood plains. Permeability is rapid or very rapid. This soil has low available water capacity and moderate organic matter content. Flooding is NONE.
RsE RENSHAW−SIOUX STONY LOAMS, 9 TO 40 PERCENT SLOPES − The Sioux series consists of excessively drained soils formed in sand and gravel on outwash plains, terraces, and eskers. They are very shallow over gravelly sand. Permeability is rapid or very rapid. This soil has low available water capacity and moderate organic matter content. Flooding is NONE.

RtA − Rentill Loam, 0 To 2 Percent Slopes

RtA RENTILL LOAM, 0 TO 2 PERCENT SLOPES − The Rentill series consists of deep, well drained soils formed in loamy outwash sediments over clayey glacial till on uplands. Permeability is moderate to rapid in the upper part and moderately slow or slow in the underlying glacial till. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.

RtB − Rentill Loam, 2 To 6 Percent Slopes

RtB RENTILL LOAM, 2 TO 6 PERCENT SLOPES − The Rentill series consists of deep, well drained soils formed in loamy outwash sediments over clayey glacial till on uplands. Permeability is moderate to rapid in the upper part and moderately slow or slow in the underlying glacial till. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.

Sb − Minnewaukan Loamy Sand

Sb MINNEWAUKAN LOAMY SAND − The Minnewaukan series consists of very deep, poorly drained, rapidly permeable soils that formed in calcareous sorted sands. These soils are on beaches and basins of current and glacial lakes. This soil has low available water capacity and moderate organic matter content. Flooding is OCCAS. Ponding duration is LONG.

ScF − Sieche Loam, 15 To 40 Percent Slopes

ScF SIECHE LOAM, 15 TO 40 PERCENT SLOPES − The Sieche series consists of deep, well drained soils formed in glacial till on steep or very steep uplands. These soils have moderately slow permeability. This soil has high available water capacity and high organic matter content. Flooding is NONE.

SnA − Sinai Silty Clay, 0 To 2 Percent Slopes

SnA SINAI SILTY CLAY, 0 TO 2 PERCENT SLOPES − The Sinai series consists of very deep, moderately well drained and well drained soils formed in glaciolacustrine sediments on uplands. Permeability is slow or very slow. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.

SnB − Sinai Silty Clay, 2 To 6 Percent Slopes

SnB SINAI SILTY CLAY, 2 TO 6 PERCENT SLOPES − The Sinai series consists of very deep, moderately well drained and well drained soils formed in glaciolacustrine sediments on uplands. Permeability is slow or very slow. This soil has moderate available water capacity and moderate organic matter content. Flooding is NONE.

SsF − Sisseton Loam, 25 To 40 Percent Slopes

SsF SISSETON LOAM, 25 TO 40 PERCENT SLOPES − The Sisseton series consists of deep, well drained soils formed in calcareous, stratified, loamy and silty glacial drift on uplands. These soils have moderate permeability. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

StD − Sisseton−Heimdal Loams, 9 To 25 Percent Slopes

StD SISSETON−HEIMDAL LOAMS, 9 TO 25 PERCENT SLOPES − The Sisseton series consists of deep, well drained soils formed in calcareous, stratified, loamy and silty glacial drift on uplands. These soils have moderate permeability. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
StD SISSETON−HEIMDAL LOAMS, 9 TO 25 PERCENT SLOPES − The Heimdal series consists of very deep, well drained, moderately permeable soils that formed in calcareous glacial till. These soils are on glacial till plains and moraines. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

Roberts County, South Dakota
Non Technical Soil Descriptions--Continued

SvC – Svea Loam, 5 To 9 Percent Slopes

SvC SVEA LOAM, 5 TO 9 PERCENT SLOPES – The Svea series consists of deep, well or moderately well drained soils that formed in calcareous glacial till and local alluvium from the till. Permeability is moderate in the solum and moderate or moderately slow in the C horizon. These soils are on concave positions on glacial till plains and have slopes ranging from 0 to 25 percent. This soil has high available water capacity and high organic matter content. Flooding is NONE.

SwA – Sverdrup Sandy Loam, 0 To 3 Percent Slopes

SwA SVERDRUP SANDY LOAM, 0 TO 3 PERCENT SLOPES – The Sverdrup series consists of very deep, well drained soils that formed in glacial outwash deposits consisting of a loamy mantle and underlying sandy deposits. These soils have moderately rapid permeability in the upper part and rapid permeability in the lower part. These soils are on outwash plains, terraces, and moraines. This soil has low available water capacity and moderate organic matter content. Flooding is NONE.

SwB – Sverdrup Sandy Loam, 3 To 9 Percent Slopes

SwB SVERDRUP SANDY LOAM, 3 TO 9 PERCENT SLOPES – The Sverdrup series consists of very deep, well drained soils that formed in glacial outwash deposits consisting of a loamy mantle and underlying sandy deposits. These soils have moderately rapid permeability in the upper part and rapid permeability in the lower part. These soils are on outwash plains, terraces, and moraines. This soil has low available water capacity and moderate organic matter content. Flooding is NONE.

Tk – Tonka Silt Loam

Tk TONKA SILT LOAM – The Tonka series consists of very deep, poorly drained, slowly permeable soils that formed in local alluvium over glacial till or glaciolacustrine deposits. These soils are in closed basins and depressions on glacial till and glacial lake plains. This soil has high available water capacity and high organic matter content. Flooding is NONE. Ponding duration is LONG.

To – Towner Fine Sandy Loam

To TOWNER FINE SANDY LOAM – The Towner series consists of very deep, well or moderately well drained soils that formed in wind and water deposited sands over glacial till or lacustrine sediments. Permeability is rapid or moderately rapid in the upper part and moderate or moderately slow in the 2Bk and 2C horizons. These soils are on sand–mantled till or glaciolacustrine plains. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

Un – Ulen Sandy Loam

Un ULEN SANDY LOAM – The Ulen series consists of very deep, somewhat poorly drained and moderately well drained soils that formed in sandy glaciolacustrine deposits on glacial lake plains. Permeability is rapid. This soil has low available water capacity and moderate organic matter content. Flooding is NONE.

VhA – Vallers–Hamerly Loams, 0 To 2 Percent Slopes

VhA VALLERS–HAMERLY LOAMS, 0 TO 2 PERCENT SLOPES – The Vallers series consists of deep, poorly drained soils that formed in calcareous loamy glacial till on glacial moraines. These soils have moderately slow permeability. This soil has high available water capacity and high organic matter content. Flooding is RARE.
VhA VALLERS–HAMERLY LOAMS, 0 TO 2 PERCENT SLOPES – The Hamerly series consists of very deep, somewhat poorly or moderately well drained soils that formed in calcareous loamy glacial till. Permeability is moderate in the upper horizons and moderate or moderately slow in the lower horizons. These soils are on flats on till–floored lake plains and on convex slopes surrounding shallow depressions and on slight rises on till plains. This soil has high available water capacity and high organic matter content. Flooding is NONE.

VnA – Vienna Silt Loam, 0 To 2 Percent Slopes

VnA VIENNA SILT LOAM, 0 TO 2 PERCENT SLOPES – The Vienna series consists of very deep, well drained soils formed in silty and loamy material and the underlying loamy glacial till on uplands. These soils have moderately slow permeability. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

VnB – Vienna Silt Loam, 2 To 6 Percent Slopes

VnB VIENNA SILT LOAM, 2 TO 6 PERCENT SLOPES – The Vienna series consists of very deep, well drained soils formed in silty and loamy material and the underlying loamy glacial till on uplands. These soils have moderately slow permeability. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

Roberts County, South Dakota
Non Technical Soil Descriptions--Continued

VnC – Vienna Silt Loam, 6 To 9 Percent Slopes

VnC VIENNA SILT LOAM, 6 TO 9 PERCENT SLOPES – The Vienna series consists of very deep, well drained soils formed in silty and loamy material and the underlying loamy glacial till on uplands. These soils have moderately slow permeability. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.

Wa – Waubay Silty Clay Loam

Wa WAUBAY SILTY CLAY LOAM – The Waubay series consists of very deep, moderately well drained soils formed in local silty glaciofluvial deposits on flats or footslopes, in slight depressions and in swales. These soils have moderate permeability. This soil has high available water capacity and high organic matter content. Flooding is NONE.

ZeD – Zell–Eckman Complex, 9 To 25 Percent Slopes

ZeD ZELL–ECKMAN COMPLEX, 9 TO 25 PERCENT SLOPES – The Zell series consists of very deep, well drained moderately permeable soils formed in glaciolacustrine sediments. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.
ZeD ZELL–ECKMAN COMPLEX, 9 TO 25 PERCENT SLOPES – The Eckman series consists of deep, well drained, moderately permeable soils that formed in calcareous stratified glaciolacustrine silt loam and very fine sandy loams. These soils are on glacial lake plains and glacial stream terraces and have slopes ranging from 0 to 15 percent. This soil has high available water capacity and moderate organic matter content. Flooding is NONE.