

Appendix A

Location Map & DNR Wetlands

124 Pit - 2018 Revision

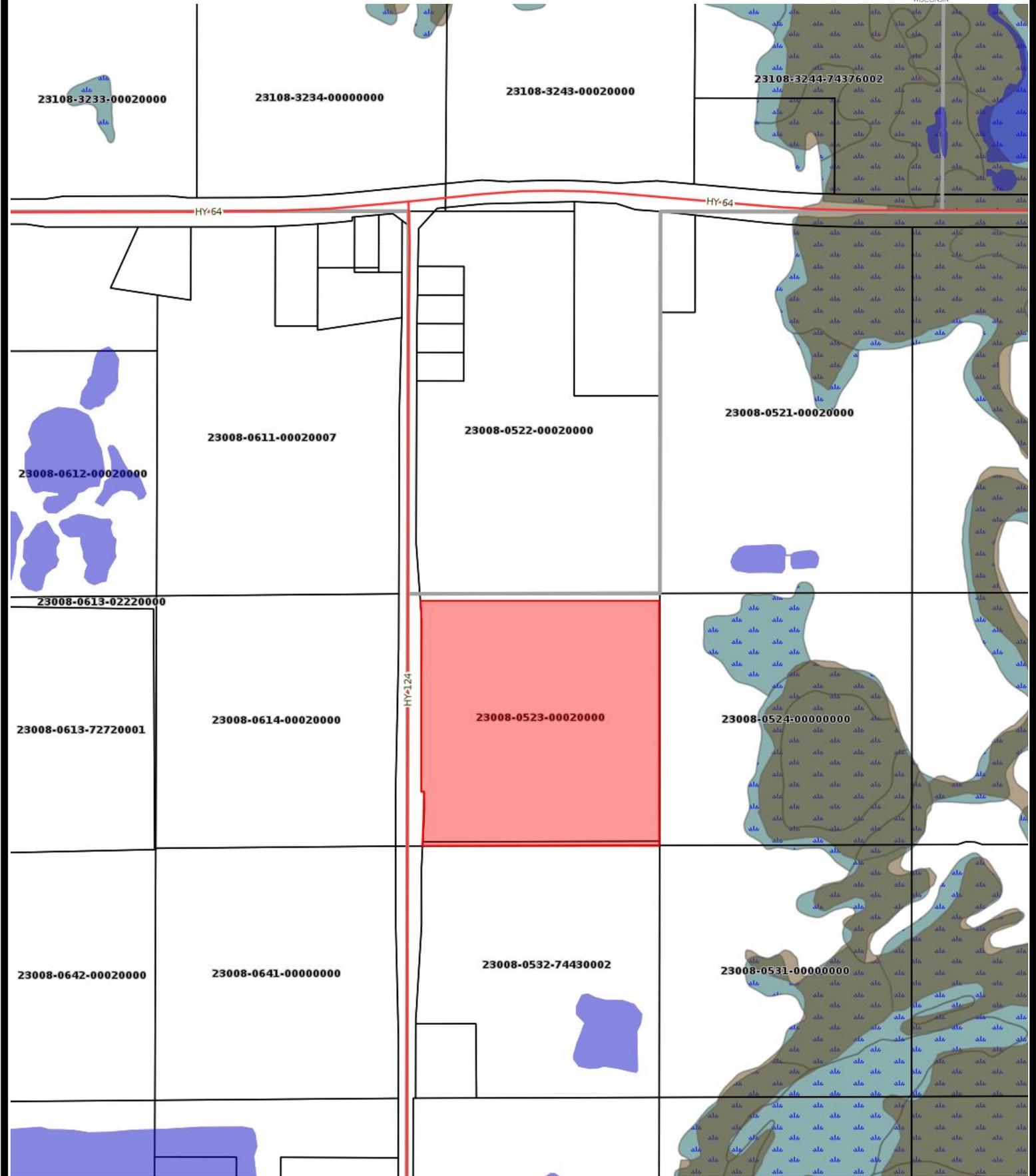
Appendix A

CHIPPEWA COUNTY
EST. 1840



Printed 03/26/2018

Scale = 1:660'



Disclaimer: This map is a compilation of records as they appear in the Chippewa County Offices affecting the area shown and is to be used only for reference purposes.

Appendix B

Parcel Map

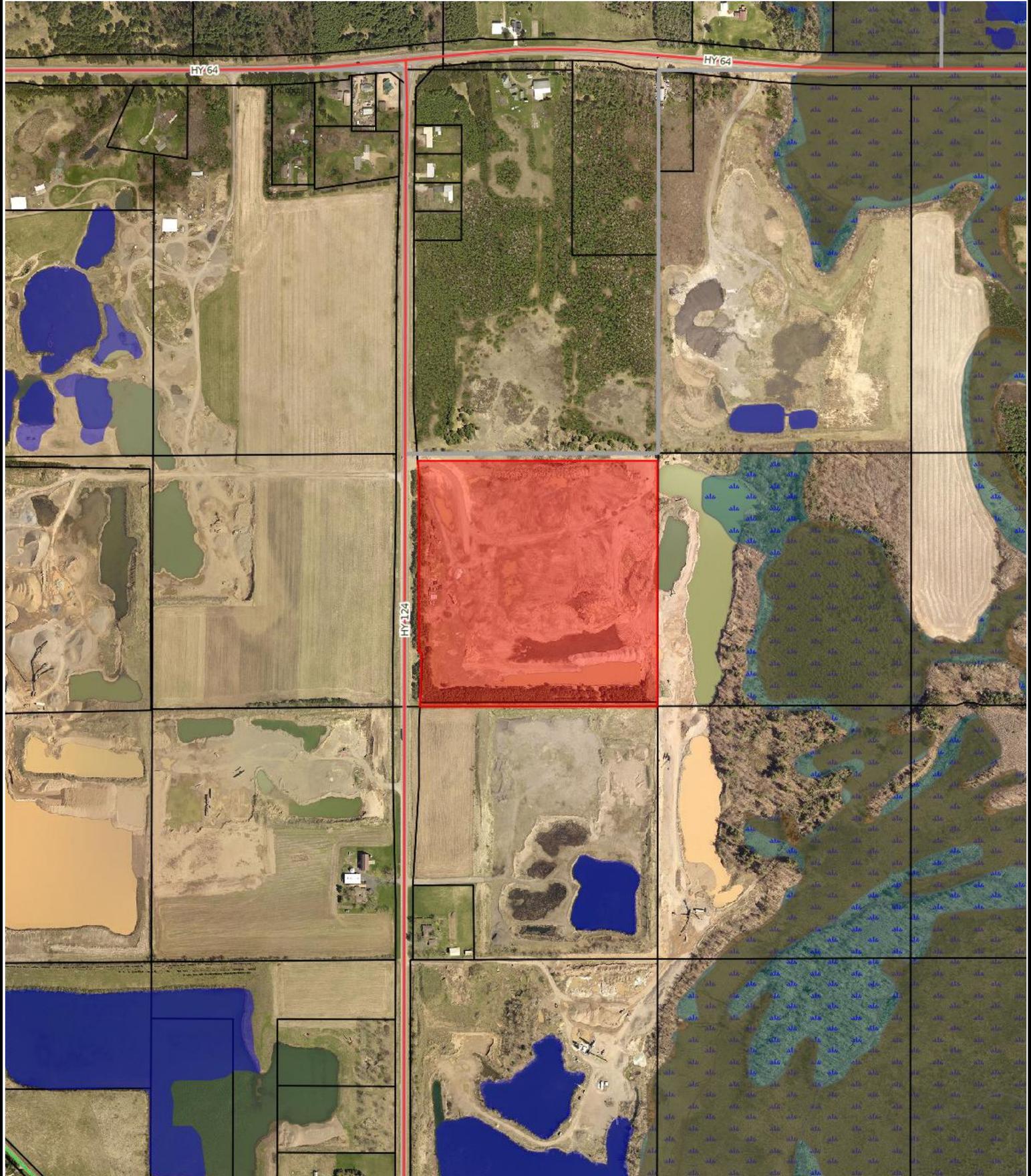
124 Pit - 2018 Revision

Appendix B



Printed 03/26/2018

Scale = 1:660'



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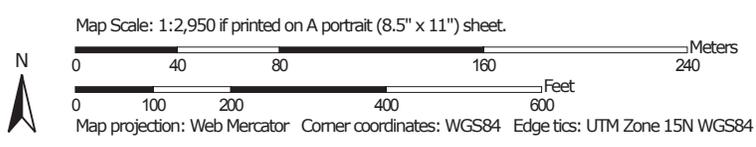
Appendix C

Soils Map

Soil Map—Chippewa County, Wisconsin
(124 Pit - 2018 Revision)



Soil Map may not be valid at this scale.



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Chippewa County, Wisconsin
Survey Area Data: Version 13, Oct 5, 2017

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 12, 2010—Nov 7, 2016

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
CkB	Chetek sandy loam, 2 to 6 percent slopes	4.5	12.1%
CkC2	Chetek sandy loam, 6 to 12 percent slopes, eroded	4.5	12.3%
CkD2	Chetek-Mahtomedi complex, 12 to 25 percent slopes, eroded	0.3	0.9%
Pc	Pits, gravel	27.7	74.7%
Totals for Area of Interest		37.1	100.0%

Appendix D

Erosion Control Matrices

CHANNEL EROSION CONTROL MATRIX

(Concentrated Flow Application)

TYPE OF EROSION CONTROL DEVICE	PERMISSIBLE SHEAR LBS./F.	DITCH GRADE															REMARKS
		< 2%			2% - 4%			4% - 6%			6% - 9% *			9% - 12% *			
		Max. Length (ft.)			Max. Length (ft.)			Max. Length (ft.)			Max. Length (ft.)			Max. Length (ft.)			
		300	600	1200	300	600	1200	300	600	1200	300	600	1200	300	600	1200	
Seed with properly anchored mulch	0.6	██████████															Anchor mulch per specifications.
Sod ditch checks with seed and mulch	N/A	████████████████████			C												Install one ditch check for every 1 foot of drop. Sod stakes required.
Temporary ditch checks (hay bales or approved manufactured alternatives listed in the WisDOT PAL)	N/A	████████████████████████████████████████															Install one ditch check for every 2 feet of drop. Maximum 200' spacing. Not recommended for slopes less than 1%.
Sod ditch liner	1.0	██████████															Upstream end must be buried. Additional sod stakes required.
Double netted light duty (WisDOT Class I Type B) erosion mat	1.5	████████████████████████████████████████															Only mat type products allowed.
Sod reinforced with a double netted jute (WisDOT Class II Type A) erosion mat	1.5	████████████████████████████████████████															Upstream end must be buried. Additional sod stakes required. Two bid items needed.
Stone or rock ditch checks, or Rock-Filled Filter Bags	N/A	●●●●●●●●●●████████████████████████████████████████															Use No. 2 coarse aggregate, railroad ballast, or breaker run. Install one ditch check for every 2 feet of drop. Use in conjunction with a channel lining.
Medium duty coconut erosion mat (WisDOT Class II Type B or C)	2.0	●●●●●●●●●●████████████████████████████████████████															
Heavy duty synthetic (WisDOT Class III Type A) erosion mat or turf reinforcement mat (WisDOT Class III Type B)	2.0	●●●●●●●●●●████████████████████████████████████████															Germination may be a problem with Class III Type A mats. An ECRM is required for initial erosion protection for Class III Type B mats.
Heavy duty synthetic turf reinforcement (WisDOT Class III Type C) mat	3.5	●●●●●●●●●●████████████████████████████████████████															An ECRM is required for initial erosion protection. Contact manufacturer if higher shears are needed.
Riprap ditch checks	N/A	●●●●●●●●●●████████████████████████████████████████															Place top of downstream ditch check level with bottom of upstream ditch check. Use in conjunction with a channel lining.
Heavy duty synthetic turf reinforcement (Class III Type D) mat	5	●●●●●●●●●●████████████████████████████████████████															An ECRM is required for initial erosion protection. Contact manufacturer if higher shears are needed.
Light riprap	4	●●●●●●●●●●████████████████████████████████████████															Outfalling, overtopping and scour need to be addressed. Use 2' minimum ditch depth.
Medium riprap	5	●●●●●●●●●●████████████████████████████████████████															
Heavy riprap	8	●●●●●●●●●●████████████████████████████████████████															

Riprap measures apply to all ditch types. Use of these measure requires engineering judgement and design.

SLOPE EROSION CONTROL MATRIX

Benches	Consider benches when cuts exceed 20', bench at approximately 15' vertical intervals to collect and drain water. Treat benches as channels (ditches). Adjust elevations to provide drainage. Consider flumes at transitions.
Intercepting embankments	Used to intercept runoff from abutting lands. Flumes may be necessary to direct runoff.
Silt fence	Used at toe of slopes to intercept and detain small amounts of sediment. Use only WisDOT approved silt fence as listed in the PAL.
Temporary ditch checks or Erosion bales	Used at toe of slopes to intercept and detain small amounts of sediment.
Slope drains/flumes	May be necessary on slopes (see channel matrix for design guidance).
Sediment traps	Used to trap sediment laden runoff. Could be used at the inlet or outlet end of slope drain.
<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <p>KEY:</p> <p>Not applicable. Use in conjunction with other BMPs: </p> <p>Effective range of device for Sandy or Clayey Soil: </p> <p>Device applicable, may not be cost effective: </p> <p>* Soils that are not sandy should be treated as clay soils.</p> <p>ECRM - Erosion control revegetation mat. All Class I and II mats are ECRMs.</p> <p>TRM - Turf reinforcement mat.</p> <p>FDM - WisDOT Facilities Development Manual</p> <p>PAL - See Note 5</p> </div> <div style="width: 65%;"> <p>NOTES</p> <ol style="list-style-type: none"> 1) Cost shall be a consideration in the selection of these devices. 2) Designers should review FDM Chapter 10 prior to selection of erosion mats. 3) Install intercepting ditches to limit slope lengths to 15' vertical intervals. (See FDM Chapter 10) 4) Refer to FDM Chapter 10 for any slopes exceeding the limits shown. 5) Approved materials for erosion products are referenced from the Wisconsin Department of Transportation Erosion Control Product Acceptability Lists (PAL), found at the web site: http://www.dot.wisconsin.gov/business/engrserv/pal.htm 6) On steeper slopes that require a higher class mat, use the appropriate lower class mat or seed and mulch for the first 30 ft to 60 ft of the slope. 7) Unless project conditions require otherwise, seed and mulch all slopes that are flatter than a 5% grade, regardless of length. If practicable, bench the slopes. 8) Effective erosion control involves minimizing the amount of time soil is exposed and the selection of a combination of practices, and not reliance on just one practice. </div> </div>	

Appendix E

DNR Seed Mix 3

MIX 2 – STABILIZATION/WILDLIFE/GRAZING (Mix 3 would be suitable too)

<u>Common Name</u>	<u>Scientific Name</u>	<u>pounds per acre*</u>
Agricultural Rye	<i>Secale cereale</i>	4
Timothy	<i>Phleum pratense</i>	2
Tall Fescue	<i>Festuca arundinaceae</i>	3
Switchgrass	<i>Panicum virgatum</i>	1
Big Bluestem	<i>Andropogon gerardi</i>	1
Canada Wild Rye	<i>Elymus canadensis</i>	3
Alsike Clover**	<i>Trifolium hybridum</i>	4
Red clover**	<i>Trifolium repens</i>	4
Alfalfa**	<i>Medicago sativa</i>	5
		27 pounds total

MIX 3 – NATIVE MIX FOR WILDLIFE/PASSIVE RECREATION**Grasses, sedges and similar plants**

<u>Common Name</u>	<u>Scientific Name</u>	<u>pounds per acre*</u>
Big Bluestem	<i>Andropogon gerardi</i>	1
Canada Wild Rye	<i>Elymus canadensis</i>	3
Switchgrass	<i>Panicum virgatum</i>	1
Indiangrass	<i>Sorghastrum nutans</i>	3
		8 pounds total

Forbs and legumes**

<u>Common Name</u>	<u>Scientific Name</u>	<u>ounces per acre*</u>
Purple Prairie Clover**	<i>Dalea purpurea</i>	2
Canada Tick-trefoil**	<i>Desmodium canadensis</i>	5
New England Aster	<i>Aster novae-angliae</i>	0.2
Purple cone flower	<i>Echinacea purpurea</i>	4
Dotted Mint	<i>Monarda punctata</i>	4
Bergamot	<i>Monarda fistulosa</i>	5
Yellow coneflower	<i>Ratibida pinnata</i>	3
Blackeyed Susan	<i>Rudbeckia hirta</i>	0.5
Blue Vervain	<i>Verbena hastata</i>	1
		24.5 oz. total

Appendix F

Exhibit A

(newly acquired parcel)



PIN: 23008-0523-07770000

Computer Number: 020-1584.7700

Owner Name: CHARLES MORNING III ETAL

Owner Address: 13951 STATE HWY 64

Owner Address: BLOOMER WI, 54724

Physical Address:

GIS Acres: 0.6

Deed Acres: 0.7

School Code: 1092

Assessed Value: 100

Fair Market Value: 100

Description: SW NW THE S 22' FOR ACESS TO SE NW & NE SW



Scale = 1":332'

Printed 05/01/2018

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