

2023 Shoreline Restoration Plan on Dresen Property

From: Robert Hager (hjr0615@yahoo.com)

To: pete.guck@eot.mnswcd.org

Cc: hjr0615@yahoo.com; tara.dresen@gmail.com; adam.dresen@gmail.com

Date: Monday, May 8, 2023 at 08:38 AM CDT

Good Morning Pete,

I have attached your worksheet as to plants and grasses to be planted in the ditch area where the City of Vergas removed the willow vegetation long established and created a erosion situation.

I have checked off what i can afford to do in 2023 and focus on the upper area of the ditch for erosion control. This totals \$515.00 and other costs and labor will be covered by me.

The maple trees along the retaining wall have been moved to the park and the Dresen property. So i am not looking to create any issues for the Shoreline Restoration Group in SWCD.

If you need payment for this order now, let me know the amount and i will send or drop off a check.

Thank you,
Bob Hager
218-841-4399



SWCD1.jpg

582kB

2023 Cost Estimate

ID #	Latin Name	Common Name	Number of 6-Packs	Sun	Color	Height	Bloom	Total \$
1	<i>Asclepias syriaca</i>	Common Milkweed	8	F-P	Pink	24-72"	June-Aug	\$80.00
2	<i>Caltha palustris</i>	Marsh Marigold	8	F-S	Yellow	12-24"	April-June	\$80.00
3	<i>Anemone canadensis</i>	Canada Anemone	8	F-P	White	24-36"	May-June	\$80.00
4	<i>Verbena hastata</i>	Blue Vervain	8	F	Blue	36-48"	July-Sept	\$80.00
5	<i>Agastache foeniculum</i>	Anise Hyssop	8	F-S	Purple	24-36"	June-Sept	\$80.00
6	<i>Monarda fistulosa</i>	Wild Bergamont	8	F-P	Purple	24-36"	July-Sept	\$80.00
7	<i>Ratibida pinnata</i>	Yellow Coneflower	8	F	Yellow	36-48"	July-Sept	\$80.00
8	<i>Penstemon grandiflorus</i>	Large Flowered Beardstongue	8	F	Pink	36-48"	May-June	\$80.00
9	<i>Aster laevis</i>	Smooth Blue Aster	8	F-P	Blue	36-48"	Aug-Oct	\$80.00
Total @ \$10 per 6-Pack								\$720.00

Latin Name	Common Name	Number of 6-Packs	Sun	Color	Height	Bloom	Total \$
<i>Andropogon gerardii</i>	Big Bluestem	12	F	Green	>84"	Warm	\$120.00
<i>Sorghastrum nutans</i>	Indian Grass	12	F	Green	60-84"	Warm	\$120.00
<i>Schizachyrium scoparium</i>	Little Bluestem	12	F-P	Green	24-36"	Warm	\$120.00
<i>Bouteloua curtipendula</i>	Sideoats Grama	12	F	Green	24-36"	Warm	\$120.00
<i>Glyceria canadensis</i>	Rattlesnake Grass	12	F	Green	24-36"	Cool	\$120.00
<i>Glyceria grandis</i>	Reed Manna Grass	12	F	Green	60"	Cool	\$120.00
<i>Spartina pectinata</i>	Prairie Cord Grass	12	F	Green	60-84"	Cool	\$120.00
<i>Carex lacustris</i>	Common Lake Sedge	12	F-S	Green	24-36"	Cool	\$120.00
<i>Carex bebbi</i>	Bebb's Oval Sedge	12	F	Green	24-36"	Cool	\$120.00
Total @ \$10 per 6-Pack							\$1,080.00

Native Seed Mixes	Pounds	\$/lb	Total
Mesic Prairie Mix	0.5	\$60.00	\$30.00
Pollinator Mix Wet Mesic	0.5	\$170.00	\$85.00
Total			\$115.00

Native Shrubs	Units	\$/Unit	Total
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Material	Quantity	\$/Each	Total
Mat= \$150 Straw 8'x112' Double Net		\$0.38	\$0.00
Coir Log (10')		\$210.00	\$0.00
Staples		\$0.11	\$0.00
Wood Wedge Stake 2'		\$2.25	\$0.00
Rope (per foot)		\$0.06	\$0.00
Wattlels 9"x25' Straw		\$31.90	\$0.00
Stake=Stakes 1" x1" x 24" 25/bundle		\$8.45	\$0.00
Herbicide		\$100.00	\$0.00
Total			\$0.00

Labor	Quantity	\$/Each	Total
SWCD Labor		\$30.00	\$0.00
Volunteer Labor		\$29.95	\$0.00
Total			\$0.00

Flowers	\$720.00
Grasses	\$1,080.00
Seed	\$115.00
Shrubs	\$0.00
<i>Plant Subtotal</i>	<i>\$1,915.00</i>
Material	\$0.00
Labor	\$0.00
Grand Total	\$1,915.00

Grand Total + 10% Contingency	\$2,106.50
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BOB HAGAR
88 PARK VIEW DRIVE
VERGAS, MN
LONG LAKE
~2,400 SQUARE FEET

The map shows a wetland site with a grid of 100 cells. The grid is 10 cells wide and 10 cells high. The cells are numbered 1-9 and color-coded. The colors are: 1 (pink), 2 (yellow), 3 (white), 4 (blue), 5 (purple), 6 (green), 7 (orange), 8 (light pink), 9 (light blue). The grid is surrounded by a 'Lake' to the north, a 'Bike Path' to the south, and 'Drainage' channels to the east. A red line runs diagonally across the grid. Dimensions are given as 60 feet by 70 feet, with a total area of ~2,400 square feet.

Row \ Column	1	2	3	4	5	6	7	8	9	10
1	6	2	1	4	3	2	1	3	3	3
2	7	9	8	3	4	2	1	4	3	3
3	5	6	7	3	4	2	1	4	3	3
4	9	8	7	3	4	2	1	4	3	3
5	6	2	1	4	3	2	1	4	3	3
6	7	9	8	3	4	2	1	4	3	3
7	5	6	7	3	4	2	1	4	3	3
8	9	8	7	3	4	2	1	4	3	3
9	6	2	1	4	3	2	1	4	3	3
10	7	9	8	3	4	2	1	4	3	3

HOW DOES THIS PROJECT RELATE TO MINNESOTA?

- Every plant species in the seed mix and plant list is native to Minnesota - it's always been here (pre-settlement)
- We support local Minnesota nurseries for our projects. The seed is carefully harvested in Minnesota and surrounding states (if necessary) and all of their native plants are grown onsite on the nursery grounds from the seed they've harvested. They really are "Minnesota-Grown"!
- Milkweed, white prairie clover, purple prairie clover, purple coneflower, wild geranium, wild lupine, wild bergamot, and blazing-stars are all flowers that Minnesota's State Bee, the Rusty Patched Bumblebee, has been documented to use for pollen. (<https://www.fws.gov/midwest/endangered/insects/rpbb/plants.html>)
- There's only less than 1% of Minnesota's original prairies remaining today due to farming and development. When you do a restoration project with us, your essentially creating your own little prairie for you and the wildlife to enjoy!
- The roots of these plants go down 8 to 10 feet into the soil, as opposed to the 4 to 6 inch roots that lawn grass has. These native plant roots are excellent at filtering out extra nutrients, such as phosphorus, nitrogen, and sediment, before they can enter the lake or river. An excess of these nutrients can cause a lake or river to become impaired (not healthy). By using these native plants in our projects, we are helping our Minnesota waters to be swimmable, fishable, and sustainable!
- Lastly, these plants are Minnesota-hardy like we are. We both can endure -20 degree temps (maybe the plants better than us) and we both long to experience those first signs of spring.

COST ESTIMATE:

Project Supplies	Estimated Costs
Plants & Seed	\$1,915.00
Estimated Project Total (+10%)	\$2,100.00



TECHNICAL ASSISTANCE

The SWCD can provide technical assistance with the installation of this project. This includes:

- Ordering seed and plants for installation
- Coordinating delivery of seed and plants on day of installation
- Providing a no-till ATV seed drill for rent to plant seed (not recommended for steep slopes)
- Staging the planting area for the plugs by laying out 6 packs in the general area they should be planted
- Helping with plant identification as the planting becomes more established to determine planted versus weedy species and suggest specific maintenance to help the planting thrive
- Being available to hold educational opportunities such as plant identification, benefits of native plants, how a buffer functions, etc. for lake associations and other organizations.

← I have reviewed this design & estimate, timeline, preparing the planting site, and operations & maintenance. →

LANDOWNER	DATE	SWCD TECHNICIAN	DATE
			



Liz Wiese, Shoreland Specialist

218-228-2381

liz.wiese@eot.mnswcd.org

Pete Guck, Assistant Shoreland Specialist

218-228-2377

pete.guck@eot.mnswcd.org