

VLAWMO TECHNICAL COMMISSION MEETING

8:00 AM October 11, 2023

Vadnais Heights City Hall Council Chambers, 800 County Road E East, Vadnais Heights, MN 55127

Action items: ☀

- I. Call to Order: 8:00 am
- II. Approval of Agenda
- III. Approval of Minutes (September 13, 2023)
- IV. Administration & Operations
 - a. Financial report for October and authorization for payment ☀ – Phil pg. 6
 - b. October TEC report to the BOD ☀ - Phil pg. 14
 - c. BWSR 40th Anniversary plaque presentation
- V. Programs
 - a. SHG 2023-04 Hawkinson Bee Lawn ☀ - Lauren pg. 20
 - b. SHG 2023-05 Valdez & Smith Property Restoration Phase 1 ☀ - Lauren pg. 28
 - c. LL1 2023-06 Wiens Raingardens Phase 1 ☀ - Lauren pg. 42
 - d. Annual awards: Nominations - Nick pg. 16
 - e. MN Climate and Drought Discussion - Nick pg. 17
- VI. Project Updates - Dawn
 - a. Wilkinson deep-water wetland restoration update pg. 17
 - b. Spent lime update pg. 19
 - c. Flowering rush treatment with RCSWCD update pg. 19
- VII. Commissioner reports
- VIII. NOHOA
- IX. Ramsey Soil & Water Conservation Division
- X. St. Paul Regional Water Services
- XI. Public Comment
- XII. Next Meetings: TEC: November 8th, 2023 Board: October 25, 2023
- XIII. Adjourn

Upcoming Events:

October 12: Watershed Action Volunteers fall meeting
November 1: Annual Watershed Awards nominations due
November 8: TEC vote on Annual Watershed Awards
December 10: Volunteer banquet with Tamarack Nature Center
December 13: Announcement of Annual Watershed Award winners

**Vadnais Lake Area Water Management Organization
Technical Commission (TEC) Minutes
September 13, 2023
Vadnais Heights City Hall, Council Chambers
800 County Road E East, Vadnais Heights, MN 55127**

Commission Members Present:

Jim Hauth	Vadnais Heights (VH)
Gloria Tessier	Gem Lake (GL)
Jami Philip	White Bear Township (WBT)
Terry Huntrods	White Bear Lake (WBL)
Tim Payne	Lino Lakes (LL) (Alternate)
Susan Miller	City of North Oaks (NO)

Absent: Andy Nelson (LL) (with prior notice)

Others in attendance: Phil Belfiori, Brian Corcoran, Lauren Sampedro, Nick Voss, Dawn Tanner (VLAWMO staff), Ed Shapland (CAC), Jeremy Erickson (SPRWS), Julia Hupperts (NOHOA)

I. Call to Order

Chair Tessier called the meeting to order at 8:02 am.

II. Approval of Agenda

It was moved by Commissioner Philip and seconded by Commissioner Huntrods to approve the September 13, 2023 TEC agenda Vote: all aye. Motion passed.

III. Approval of Minutes (August 9th, 2023)

It was moved by Commissioner Philip and seconded by Chair Tessier to approve the August 9th meeting minutes as presented. Vote: all aye. Motion passed.

IV. Administration & Operations

A. Financial Report for September and Authorization for Payment

Administrator Belfiori outlined the September financial report. Highlights included payments related to Wilkinson BMP, biochar, and Birch Lake projects and programs.

It was moved by Commissioner Huntrods and seconded by Commissioner Philip to approve the August financial report and authorize payment. Vote: all aye. Motion passed.

V. Programs

A. SHG 2023-03 White Bear Lake Historical Society Pollinator Garden Phase 2

Sampedro introduced the grant application, noting that it is a second phase pollinator garden project at a popular community landmark. The phase one for the effort took place in October 2022. The proposed project area is predominately full sun adjacent to the entrance, parking lot, and retaining wall that would mirror the first pollinator garden. The plant design is intended to mimic native species of mesic prairie that historically grew in the area.

It was moved by Commissioner Miller and seconded by Commissioner Huntrods to approve SHG 2023-03. Vote: all aye. Motion passed.

B. Vadnais-Sucker Habitat Restoration Interpretive Series

Voss summarized the education signs efforts related to the Vadnais-Sucker Lakes Regional park restoration project. He displayed digital copies of the signs from the VLAWMO website on the Vadnais-Sucker Habitat Restoration project page. These educational signs include the benefits of restoration, history of the drinking water connection and origin of the St. Paul Regional Water Services, as well as Regional Park history. There is also a place-making component that includes perspectives on indigenous Dakota language and land use as well as European-American connections to place.

Commissioner Miller noted that she viewed these signs on the VLAWMO facebook page and that they are well done.

VI. Projects

A. Wilkinson deep-water wetland restoration project

Tanner summarized the latest update on the Wilkinson project, noting that the award for the project bid was issued in August. Tanner described a project expansion due to bids coming in lower than expected. Because of this, the footprint was expanded to better utilize grant funds. A change order was authorized by the Board and, at the time of the TEC meeting, the contractor was onsite conducting the excavation. The contractor may possibly add seed as soon as the current week. The bald eagle nest monitoring is also active.

B. Aquatic vegetation surveys completed for the 2023 season

Tanner summarized the Ramsey County Soil and Water Conservation Division partnership that has taken place to complete aquatic vegetation surveys on Birch, Gilfillan, and Pleasant Lakes. Surveys were conducted using standardized protocols and targeted to the

needs and priorities of each lake, ranging from invasive species eradication to planning future projects and developing increased understanding for public education.

C. Revised fall carp removal efforts to prepare for spring 2024 removal

The Pleasant-Deep-Wilkinson area carp removal effort is continuing into 2024. Tanner explained that a number of carp were observed by tracking devices approaching the Deep/Wilkinson barrier but returned to Deep Lake and remained there. Because of this, there appears to be a portion of the population that is remaining in Deep Lake during the spawning season and are thus unable to be removed in the Deep/Wilkinson Lake channel, where the past two years of removal efforts took place. Efforts are underway this fall to place an additional barrier and conduct removal in the Pleasant-Deep channel to capture carp that are not continuing to approach the Deep/Wilkinson barrier. Both barriers will be operational and part of the removal effort in spring 2024. Additional transmitters will be implanted also this fall to compensate for transmitters that are exceeding their battery life and no longer transmitting.

Commissioner Miller inquired about how a biomass survey is completed. Tanner responded it is completed through shocking the carp and collecting data on their weight and how many carp are captured to create a lbs/hectare estimate of carp.

D. Conservation partners legacy grant submission

Tanner described this effort to submit a proposal to the Conservation Partners Legacy grant program, which has Board authorization and has been submitted in partnership with the City of Vadnais Heights. The proposal is focused on purchasing seed for the wooded wetland behind Vadnais Heights City Hall, following 2 years of goat grazing through the Munch Bunch (a partnership effort between VLAWMO and the City of Vadnais Heights). Grant recipient results will be announced by MN DNR, likely by December.

E. Spent lime demonstration project at Oak Knoll Pond

Tanner described that the first loads of spent lime have been successfully applied with VLAWMO monitoring and reporting pH readings. The project is currently on pause as the White Bear Lake water treatment plant undergoes maintenance. The effort will continue with the remaining applications once the plant reopens likely in October 2023.

F. East Vadnais Lake subwatershed resiliency study

Sampedro provided an update that SRF's proposal was selected to move forward with the study and was approved by the Board in August. Working with SRF will expand and enhance the existing effort with Ramsey County to reduce flooding at the Centerville Rd and Edgerton St intersection. The study will include watershed modeling and the development of three potential stormwater best management practices. It will likely be presented to the TEC in April of 2024.

G. Ramsey County Ditch 13 agreement with City of White Bear Lake

Corcoran outlined the background of County Ditch 13 with a timeline as included in the September TEC packet. VLAWMO and the City agree that the City is best equipped to maintain the outlined portion of County Ditch 13, which is highlighted on a map in the County Ditch Repair Agreement. The VLAWMO Board and the City of White Bear Lake Council both approved the agreement at their August 2023 Council and Board meetings. In the approved agreement, VLAWMO agrees to transfer and the City agrees to accept the responsibility to maintain the County Ditch 13 as described within the Ditch Repair Agreement.

I. Commissioner Reports

Commissioner Philip announced that the annual White Bear Township day is taking place on Saturday the 16th.

II. NOHOA

None

III. Ramsey Soil & Water Conservation Division

None

IV. St. Paul Regional Water Services

SPRWS is hosting a family day open house on Sunday the 17th. Highlights include showing the water treatment system, distribution trucks, how water pipes are tapped, games, and food.

V. Public Comment

None

VI. Next Meetings:

Next TEC meeting October 11th, Next BOD meeting October 25th.

XIII. Adjourn

It was moved by Commissioner Huntrods and seconded by Commissioner Miller to adjourn the meeting at 8:40 am. Vote: all aye. Motion passed.

Minutes compiled by Nick Voss.

VLAWMO Finance Summary: October 2023

Oct-23		Actual 10/1/23	Actual to Date	2023 Budget	Carry over from 2022 to 2023	Remaining in Budget	2023 Available	Act vs. Budget
BUDGET #	INCOME							
5.11	Storm Water Utility	\$0	\$592,641	\$1,090,887	\$0	\$498,246	\$1,090,887	54%
5.12	Service Fees	\$0	\$0	\$200	\$0	\$200	\$200	0%
5.13	Interest + mitigation acct	\$4,650	\$38,024	\$1,000	\$0	(\$37,024)	\$1,000	3802%
5.14	Misc. income - WCA admin & other	\$19,284	\$50,281	\$3,000	\$0	(\$47,281)	\$3,000	1676%
5.15	Other Income Grants/loan	\$28,344	\$98,037	\$385,284	\$0	\$287,247	\$385,284	25%
5.16	Transfer from reserves	\$0	\$0	\$294,364	\$231,999	\$526,363	\$526,363	0%
	TOTAL	\$52,279	\$778,983	\$1,774,735	\$231,999	\$1,227,751	\$2,006,734	44%
EXPENSES								
3.1	Operations & Administration							
3.110	Office - rent, copies, post tel supplies	\$2,095	\$19,176	\$28,181	\$0	\$9,005	\$28,181	68%
3.120	Information Systems	\$1,439	\$14,109	\$33,300	\$0	\$19,191	\$33,300	42%
3.130	Insurance	\$0	\$10,058	\$7,571	\$0	(\$2,487)	\$7,571	133%
3.141	Consulting - Audit	\$0	\$10,585	\$9,000	\$0	(\$1,585)	\$9,000	118%
3.142	Consulting - Bookkeeping	\$307	\$594	\$1,500	\$0	\$906	\$1,500	40%
3.143	Consulting - Legal	\$0	\$723	\$6,000	\$0	\$5,277	\$6,000	12%
3.144	Consulting - Eng. & Tech.	\$0	\$2,178	\$30,000	\$15,000	\$42,822	\$45,000	5%
3.150	Storm Sewer Utility	\$5,253	\$9,556	\$15,000	\$0	\$5,444	\$15,000	64%
3.160	Training (staff/board)	\$625	\$9,734	\$13,250	\$0	\$3,516	\$13,250	73%
3.170	Misc. & mileage	\$612	\$2,631	\$6,300	\$0	\$3,669	\$6,300	42%
3.191	Administration - staff	\$47,105	\$312,143	\$422,353	\$0	\$110,210	\$422,353	74%
3.192	Employer Liability	\$11,854	\$89,499	\$122,428	\$0	\$32,929	\$122,428	73%
3.2	Monitoring and Studies							
3.210	Lake and Creek lab analysis	\$3,155	\$11,182	\$18,000	\$0	\$6,818	\$18,000	62%
3.220	Equipment	\$0	\$928	\$3,000	\$1,000	\$3,072	\$4,000	23%
3.230	Wetland assessment & management	\$0	\$0	\$0	\$10,000	\$10,000	\$10,000	0%
3.240	Watershed planning /special study	\$0	\$0	\$10,000	\$5,000	\$15,000	\$15,000	0%
3.3	Education and Outreach							
3.310	Public Education	\$0	\$2,359	\$6,000	\$0	\$3,641	\$6,000	39%
3.320	Marketing	\$6,077	\$10,323	\$15,000	\$9,500	\$14,177	\$24,500	42%
3.330	Community Blue Ed Grant	\$2,950	\$4,450	\$8,000	\$0	\$3,550	\$8,000	56%
<i>Total Core functions: Ops, Monitoring, Education</i>		\$81,472	\$510,228	\$754,883	\$40,500	\$285,155	\$795,383	64%
Capital Improvement Projects and Programs								
3.4	Subwatershed Activity							
3.410	Gem Lake	\$0	\$0	\$15,000	\$10,000	\$25,000	\$25,000	
3.420	Lambert Creek	\$0	\$10,393	\$55,000	\$0	\$44,607	\$55,000	19%
3.421	Lambert Lake Loan	\$0	\$19,284	\$38,568	\$0	\$19,284	\$38,568	50%

3.425	Goose Lake	\$2,795	\$22,580	\$92,500	\$0	\$69,920	\$92,500	24%
3.430	Birch Lake	\$0	\$1,710	\$20,000	\$0	\$18,290	\$20,000	9%
3.440	Gilf Black Tam Wilk Amelia	\$39,819	\$129,150	\$157,500	\$43,000	\$71,350	\$200,500	64%
3.450	Pleasant Charley Deep	\$0	\$23,460	\$48,000	\$30,000	\$54,540	\$78,000	30%
3.460	Sucker Vadnais	\$0	\$1,857	\$35,000	\$28,000	\$61,143	\$63,000	3%
3.48	Programs							
3.480	Soil Health Grant	\$1,250	\$3,157	\$8,000	\$0	\$4,843	\$8,000	39%
3.481	Landscape 1	\$5,000	\$10,000	\$30,000	\$6,263	\$26,263	\$36,263	28%
3.482	Landscape 2/BWSR WBF	\$0	\$15,929	\$35,000	\$36,636	\$55,707	\$71,636	22%
3.483	Project Research & feasibility	\$0	\$0	\$5,000	\$0	\$5,000	\$5,000	0%
3.485	Facilities Maintenanc/ Pub. Ditch Main.	\$60	\$13,989	\$90,000	\$37,600	\$113,611	\$127,600	11%
3.5	Regulatory							
3.510	Engineer Plan review	\$0	\$0	\$5,000	\$0	\$5,000	\$5,000	0%
	<i>Total CIP & Program</i>	\$48,924	\$251,509	\$634,568	\$191,499	\$574,558	\$826,067	30%
	Total of Core Operations & CIP	\$130,395	\$761,737	\$1,389,451	\$231,999	\$859,713	\$1,621,450	47%

Fund Balance	9/1/2023	10/1/2023
4M Account	\$846,426	\$798,045
4M Plus Savings	\$235,924	\$236,964
Total	\$1,082,350	\$1,035,009

Restricted funds	10/1/2023
Mitigation Savings	\$21,018
Term Series	\$300,000

Vadnais Lake Area Water Management Organization
Check Detail

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10/03/2023

September 14 through October 11, 2023

Type	Num	Date	Name	Item	Account	Paid Amount	Original Amount
Check	eft	10/03/2023	US Bank		Checking - 1987		-44.02
				3.142 · Bookkeeping help		-44.02	44.02
TOTAL						-44.02	44.02
Check	5632	10/11/2023	Dawn Tanner		Checking - 1987		-171.88
				3.170 · Misc. & mileage		-171.88	171.88
TOTAL						-171.88	171.88
Check	5633	10/11/2023	Brian Corcoran		Checking - 1987		-199.12
				3.170 · Misc. & mileage		-199.12	199.12
TOTAL						-199.12	199.12
Check	5634	10/11/2023	Lauren Sampedro		Checking - 1987		-70.09
				3.170 · Misc. & mileage		-70.09	70.09
TOTAL						-70.09	70.09
Check	5635	10/11/2023	Nicholas Voss		Checking - 1987		-54.37
				3.170 · Misc. & mileage		-54.37	54.37
TOTAL						-54.37	54.37
Check	5636	10/11/2023	Phil Belfiori		Checking - 1987		-65.50
				3.170 · Misc. & mileage		-65.50	65.50
TOTAL						-65.50	65.50
Check	5637	10/11/2023	RMB Environmental Laboratories, Inc.		Checking - 1987		-3,155.00
				3.210 · Lake & Creek lab analysis		-343.00	343.00
				3.210 · Lake & Creek lab analysis		-804.00	804.00
				3.210 · Lake & Creek lab analysis		-55.00	55.00
				3.210 · Lake & Creek lab analysis		-343.00	343.00
				3.210 · Lake & Creek lab analysis		-804.00	804.00
				3.210 · Lake & Creek lab analysis		-55.00	55.00
				3.210 · Lake & Creek lab analysis		-353.00	353.00
				3.210 · Lake & Creek lab analysis		-343.00	343.00
				3.210 · Lake & Creek lab analysis		-55.00	55.00
TOTAL						-3,155.00	3,155.00
Check	5638	10/11/2023	Resilience Resources LLC		Checking - 1987		-1,344.00
				3.150 · Storm Sewer Utility		-1,344.00	1,344.00
TOTAL						-1,344.00	1,344.00
Check	5639	10/11/2023	Metro - Inet		Checking - 1987		-1,439.00
				IT Support		-1,439.00	1,439.00

TOTAL					-1,439.00	1,439.00
	Check	5640	10/11/2023 Tracy McCarthy	Checking - 1987		-1,250.00
				3.480 · Soil Health Grant	-1,250.00	1,250.00
TOTAL					<u>-1,250.00</u>	<u>1,250.00</u>
	Check	5641	10/11/2023 Lori Olinger	Checking - 1987		-5,000.00
				3.481 · Landscape 1 - cost-share	-5,000.00	5,000.00
TOTAL					<u>-5,000.00</u>	<u>5,000.00</u>
	Check	5642	10/11/2023 Ehlers & Associates, Inc.	Checking - 1987		-3,908.75
				3.150 · Storm Sewer Utility	-3,908.75	3,908.75
TOTAL					<u>-3,908.75</u>	<u>3,908.75</u>
	Check	5643	10/11/2023 Houston Engineering, Inc	Checking - 1987		-28,344.26
				Wilkinson 319 grant 320705.50	-28,344.26	28,344.26
TOTAL					<u>-28,344.26</u>	<u>28,344.26</u>
	Check	5644	10/11/2023 City of White Bear Lake	Checking - 1987		-58,646.61
				payroll	-47,104.91	47,104.91
				Administration FICA	-3,484.14	3,484.14
				Administration PERA	-3,532.86	3,532.86
				Insurance Benefit	-4,479.78	4,479.78
				Admin payroll processing	-44.92	44.92
TOTAL					<u>-58,646.61</u>	<u>58,646.61</u>
	Check	5645	10/11/2023 CliftonLarsonAllen	Checking - 1987		-262.50
				3.142 · Bookkeeping help	-262.50	262.50
TOTAL					<u>-262.50</u>	<u>262.50</u>
	Check	5646	10/11/2023 City of Vadnais Heights	Checking - 1987		-2,095.36
				Rent	-1,715.00	1,715.00
				Phone/Internet/Machine Overhead	-305.00	305.00
				Postage	-35.01	35.01
				Copies	-40.35	40.35
TOTAL					<u>-2,095.36</u>	<u>2,095.36</u>
	Check	5647	10/11/2023 Bolton & Menk	Checking - 1987		-2,950.00
				3.330 · Community Blue Education Grant	-2,950.00	2,950.00
TOTAL					<u>-2,950.00</u>	<u>2,950.00</u>
	Check	5648	10/11/2023 BWSR	Checking - 1987		-225.00
				3.160 · Training (staff/board)	-225.00	225.00
TOTAL					<u>-225.00</u>	<u>225.00</u>
	Check	5649	10/11/2023 HDR Engineering, Inc.	Checking - 1987		-5,805.75

			3.320 · Marketing	-5,805.75	5,805.75
TOTAL				<u>-5,805.75</u>	<u>5,805.75</u>
Check	5650	10/11/2023	Barr Engineering Co	Checking - 1987	-14,269.54
			3.440 · Gilfillan Black Tamarack Wilkin	-720.00	720.00
			3.425 · Goose Lake	-1,600.00	1,600.00
			Oak Knoll	-1,195.00	1,195.00
			3.440 · Gilfillan Black Tamarack Wilkin	-10,754.54	10,754.54
TOTAL				<u>-14,269.54</u>	<u>14,269.54</u>
Check	5651	09/18/2023	Reliance Standard	Checking - 1987	-312.17
			Insurance Benefit	-91.50	91.50
			Insurance Benefit	-220.67	220.67
TOTAL				<u>-312.17</u>	<u>312.17</u>

Vadnais Lake Area Water Management Organizatio
Profit & Loss
September 14 through October 11, 2023

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10/03/2023

Cash Basis

Sep 14 - Oct 11, 23

Ordinary Income/Expense	
Income	
Misc.	19,284.48
5.1 · Income	
5.13 · Interest	4,650.15
Total 5.1 · Income	4,650.15
6.6.6 · Grants	28,344.26
Total Income	52,278.89
Gross Profit	
	52,278.89
Expense	
3.1 · Administrative/Operations	
3.110 · Office	
Copies	40.35
Phone/Internet/Machine Overhead	305.00
Postage	35.01
Rent	1,715.00
Total 3.110 · Office	2,095.36
3.120 · Information Systems	
IT Support	1,439.00
Total 3.120 · Information Systems	1,439.00
3.142 · Bookkeeping help	306.52
3.150 · Storm Sewer Utility	5,252.75
3.160 · Training (staff/board)	625.07
3.170 · Misc. & mileage	612.37
3.191 · Employee Payroll	
payroll	47,104.91
Total 3.191 · Employee Payroll	47,104.91
3.192 · Employer Liabilities	
Admin payroll processing	44.92
Administration FICA	3,484.14
Administration PERA	3,532.86
Insurance Benefit	4,791.95
Total 3.192 · Employer Liabilities	11,853.87
Total 3.1 · Administrative/Operations	69,289.85
3.2 · Monitoring and Studies	
3.210 · Lake & Creek lab analysis	3,155.00
Total 3.2 · Monitoring and Studies	3,155.00
3.3 · Education and Outreach	
3.320 · Marketing	6,076.98
3.330 · Community Blue Education Grant	2,950.00
Total 3.3 · Education and Outreach	9,026.98
3.4 · Capital Imp. Projects/Programs	

3.425 · Goose Lake	
Oak Knoll	1,195.00
3.425 · Goose Lake - Other	1,600.00
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Total 3.425 · Goose Lake	2,795.00
3.440 · Gilfillan Black Tamarack Wilkin	
Wilkinson 319 grant 320705.50	28,344.26
3.440 · Gilfillan Black Tamarack Wilkin - Other	11,474.54
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Total 3.440 · Gilfillan Black Tamarack Wilkin	39,818.80
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Total 3.4 · Capital Imp. Projects/Programs	42,613.80
3.48 · Programs	
3.480 · Soil Health Grant	1,250.00
3.481 · Landscape 1 - cost-share	5,000.00
3.485 · Facilities & Maintenance	59.85
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Total 3.48 · Programs	6,309.85
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Total Expense	130,395.48
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Net Ordinary Income	-78,116.59
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Net Income	-78,116.59
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Vadnais Lake Area Water Management Organization
Custom Transaction Detail Report
 August 1 through October 1, 2023

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10/03/2023

Accrual Basis

Type	Date	Num	Name	Memo	Account	Clr	Split	Amount	Balance
Aug 1 - Oct 1, 23									
Credit Card Charge	08/02/2023		Google*SVCAPPS_VLAWM		US Bank CC	√ WEB		42.00	42.00
Credit Card Charge	08/10/2023		ATS	carp transmitters	US Bank CC	√ 3.450 · Pleasant Charley Deep		1,020.00	1,062.00
Credit Card Charge	08/14/2023		field environmental instruments Inc	pH meter	US Bank CC	√ Oak Knoll		325.00	1,387.00
Credit Card Charge	08/16/2023		Office Max	40th event signs	US Bank CC	√ 3.310 · Public Education		112.79	1,499.79
Transfer	08/21/2023			Funds Transfer	US Bank CC	√ Checking - 1987		-1,039.09	460.70
Credit Card Charge	08/23/2023		Prairie Moon Nursery	wilkinson seed	US Bank CC	√ 3.440 · Giffillan Black Tamarack Wilkin		286.94	747.64
Credit Card Charge	08/25/2023		Adobe "Creative Cloud		US Bank CC	√ Software		32.20	779.84
Credit Card Charge	08/30/2023		Office Max	oak knoll signs	US Bank CC	√ 3.310 · Public Education		83.71	863.55
Credit Card Charge	08/31/2023		University of Minnesota	lauren WRC 2023	US Bank CC	√ 3.160 · Training (staff/board)		300.00	1,163.55
Credit Card Charge	09/04/2023		Google*SVCAPPS_VLAWM		US Bank CC	√ WEB		42.00	1,205.55
Credit Card Charge	09/05/2023		POND5	pictures	US Bank CC	3.320 · Marketing		3.40	1,208.95
Credit Card Charge	09/07/2023		EDCO	sandblasted	US Bank CC	3.320 · Marketing		129.15	1,338.10
Credit Card Charge	09/08/2023		adobe *photography plan		US Bank CC	√ Software		9.99	1,348.09
Credit Card Charge	09/11/2023		Prairie Moon Nursery	wilkinson seed	US Bank CC	3.440 · Giffillan Black Tamarack Wilkin		760.87	2,108.96
Credit Card Charge	09/14/2023		Ace Hardware	mulch remenant	US Bank CC	3.485 · Facilities & Maintenance		17.91	2,126.87
Credit Card Charge	09/15/2023		Eventeny	white bear township	US Bank CC	3.320 · Marketing		74.72	2,201.59
Credit Card Charge	09/20/2023		POND5	pictures	US Bank CC	3.320 · Marketing		5.00	2,206.59
Credit Card Charge	09/20/2023		Arrowwood Resort & Conference Center	Dawn MAWD	US Bank CC	3.160 · Training (staff/board)		172.57	2,379.16
Credit Card Charge	09/21/2023		Ace Hardware	gloves for workday	US Bank CC	3.485 · Facilities & Maintenance		41.94	2,421.10
Credit Card Charge	09/22/2023		Fresh Thyme	ICWC crew snacks	US Bank CC	3.170 · Misc. & mileage		33.94	2,455.04
Credit Card Charge	09/22/2023		jersey mikes	ICWC food	US Bank CC	3.320 · Marketing		115.12	2,570.16
Credit Card Charge	09/27/2023		Craguns	Hotel during BWSR Academy - Nick 2023	US Bank CC	3.160 · Training (staff/board)		227.50	2,797.66
Credit Card Charge	09/29/2023		Fresh Thyme	ICWC crew snacks	US Bank CC	3.170 · Misc. & mileage		17.47	2,815.13
Credit Card Charge	09/29/2023		jersey mikes	ICWC food	US Bank CC	3.320 · Marketing		76.39	2,891.52
								2,891.52	2,891.52

Aug 1 - Oct 1, 23

**TEC Report to the Board
Oct. 2023**

Programs & Projects	Effort Level	Completion Date	Comments	Administration & Operation						
	LOW			Audit	2023	RFP process completed on Sept. 27. Board will consider two year auditing proposal at the Oct. 25 Board meeting.				
	MED					Budget	for 2024 budget	VLAWMO Board approved 2024 budget at June 28 meeting. Working /2023 carryover budget will be considered at the Dec. Board meeting.		
	HIGH							Personnel /HR	ongoing	Mid year review and discussion on employee work objectives complete
319 Biochar			Final report and grant close-out complete. Close-out confirmation provided by MPCA.							
Oak Knoll Pond/Wood Lake		ongoing	Project paused due to City of WBL water treatment plant maintenance; restart date extended from Oct. 2 to Oct. 23 by the City.							
Public Ditch Maintenance		ongoing	Fall downed tree inhibiting flow maintenance planned for later in fall as weather permits							
MPCA 319 /Wilkinson Lake BMP		2021-24	Construction nearly completed; HEI overseeing punchlist items.							
Pleasant Lake Carp Management		2022-28	Fall tasks underway to build a second barrier and implant active transmitters to replace ones that have exceeded battery life and are no longer functioning.							
Programs				FINANCIAL SUMMARY as of 10/1/2023						
City/Township MS4		Nov	Illicit discharge training video (Minimum Control Measure #3)							
Education/Outreach		Sept-Oct	VLAWMO 40th anniversary series concluded with White Bear Township Day on September 16. Annual Watershed Awards program launches for 2023 with the opening of nominations. Nominations are due November 1st.	4M Account (1.10)	4M Plus (1.23)	Total				
Website		Oct-Dec	Website renovation in final stage of developing content.	\$798,045	\$236,964	\$1,035,009				
WAV		June-Sept	Volunteer fall meeting is scheduled for October 10th. VLAWMO volunteer banquet shared with Tamarack Nature Center volunteers scheduled for December 13th. Adopt-a-Raingarden growth and success with 6 active public raingardens and pollinator plantings being maintained.							
Cost Share & BWSR WBIF		ongoing	Several cost share applications moving forward and site visits continue. Continuing to work on projects for the BWSR WBIF grant program with partners, such as a potential raingarden through a Vadnais Heights street reconstruction project and potential raingardens in the Birch Lake subwatershed. Funding for all grant programs are almost fully awarded for 2023.							
GIS		ongoing	Managing ESRI storage, updating the online GIS viewer as needed.							
Monitoring		ongoing	2023 season complete, end of year reports started							
WCA		ongoing	Administering WCA as needed.							

Budget Summary	Actual Expense YTD	2023 Budget "working"	Remaining in Budget	% YTD
Operations	\$510,288	\$795,383	\$285,095	64%
CIP	\$251,509	\$826,067	\$574,558	30%
Total	\$761,797	\$1,621,450	\$859,653	47%

October TEC: Staff Memo

IV. Administration & Operations

A. Financial report for October and authorization for payment

Please find the October financial report and authorization to pay bills in the ePacket for review and approval.

B. October 2023 TEC Report to the VLAWMO Board - For TEC consideration and approval.

V. Programs

A. SHG 2023-04 Hawkinson Bee Lawn

Landowners Linda and Steve Hawkinson submitted a Soil Health grant application for a bee lawn covering their front yard over an area of about 3,500 square feet at their property in White Bear Lake. A bee lawn mix and native trees will be planted to replace existing turf grass. This bee lawn will create pollinator habitat and will require less irrigation and fertilizer than a conventional turf grass yard. Native trees will also be planted with the bee lawn, but only the aspen tree will be covered by the grant as noted with red strikeout text, as aspen trees host many pollinators and will create additional pollinator habitat. The project area drains to East Goose Lake, which is impaired for nutrients and is included in the Lambert Creek TMDL for nutrient reduction. This project is also located within VLAWMO's targeted habitat priority zone. The work will be completed by the landowners. The revised total estimated cost is \$2,880. Staff recommends approval of SHG 2023-04 in the amount of \$1,250.

B. SHG 2023-05 Valdez & Smith Property Restoration Phase 1

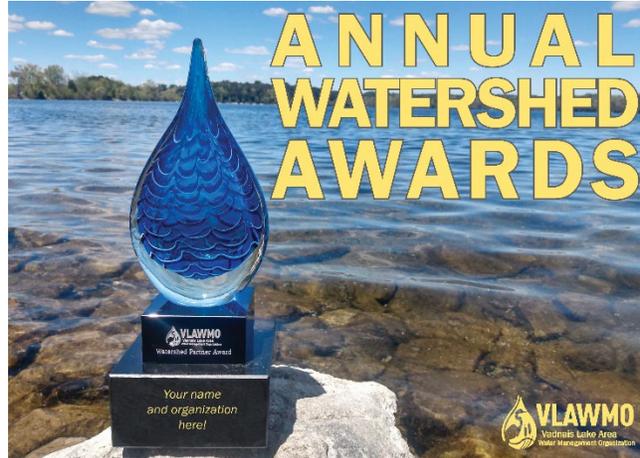
Landowners Nissa Valdez and Alex Smith submitted a Soil Health grant application for two 600 square foot downspout raingardens in their backyard as the first phase of a multi-phase property restoration project at their 1.4-acre property in North Oaks. The raingardens would capture runoff from the roof of their home and back patio, and will create pollinator habitat. The raingardens will also receive water from the home's water filter and water conditioning system to prevent runoff from the pipe outlets. The project area drains to Pleasant Lake, which is impaired for nutrients. The landowners are enthusiastic to restore their property with native vegetation and to reduce as much stormwater runoff from their property as possible. The total estimated cost is \$1,644.45. Staff recommends approval of SHG 2023-05 in the amount of \$1,000 for phase 1.

C. LL1 2023-06 Wiens Raingardens Phase 1

Landowners Royce and Volatiana Wiens submitted a Landscape Level 1 grant application for a ~225 square foot dry creek bed and ~450 square foot raingarden at their property in Vadnais Heights. This is the first phase of a three-phased stormwater rate and volume reduction project. The homeowners receive runoff from two neighboring properties to the north due to property elevation differences. The dry creek bed and raingarden would capture runoff from the neighboring homes as well as from part of the Wiens' roof and backyard deck and patio. The project drains to East Vadnais Lake, which is a Saint Paul Regional Water Services reservoir for providing drinking water. The project is also located near a recommended raingarden location identified in the West Vadnais Lake Subwatershed Urban Stormwater Retrofit Analysis report. A formal project design will be received after a contractor is chosen, but a draft plan is provided by the landowners. The majority of the work will be completed by a contractor and the planting will be done by the landowners. The estimated pollutant reductions are about 8,237 cubic ft/yr (21%), total suspended solids by about 28 lbs/yr (21%), and 0.16 lbs/yr (21%) of total phosphorus. The applicant received two bids for the project; one from Southview Design at \$13,675 and another from

Field Outdoor Spaces at \$10,503.73. Staff recommends approval of LL1 2023-06 in the amount of 50% of eligible project expenses, not to exceed \$5,000 for phase 1 in accordance with program guidelines.

D. Annual awards: Nominations



Fall is the time for watershed awards! We are excited to continue our growing tradition of thanking and acknowledging the community members that are advancing VLAWMO's mission in their communities. 2023 is the 5th year of the program.

TEC members, municipal partners and affiliates, and the general public are invited to partake in the nomination process.

Nominations are due November 1st, with the finalists to be voted on by the TEC at the November 8th, 2023 TEC meeting. The official announcement and celebration of this year's winners will occur at the December TEC and BOD meetings.

There are two award categories: Watershed Partner Award and Watershed Steward Award

Who's eligible to be nominated?

The Watershed Partner Award is for municipality, state, public school, or county staff operating within the VLAWMO watershed.

The Watershed Steward Award is for volunteers, businesses, neighborhood or lake associations, and community groups who have worked independently or with VLAWMO staff to improve water resources or community awareness on water.

What kinds of projects and efforts should be highlighted?

The Watershed Partner Award should highlight partnership with VLAWMO capital improvement projects, use of VLAWMO education or MS4 programming, success stories from carrying out a VLAWMO cost-share grant, initiative to reference and apply the VLAWMO water plan or water policy, or other efforts that show water resource leadership (to be reviewed by the TEC on a case by case basis).

Watershed Steward Award nominations should focus on initiative in education and outreach, outstanding volunteer efforts, carrying out a cost-share program in a publicly visible place or involving community in its installation or maintenance, and/or pioneering neighborhood or community programs that bring people into closer involvement and understanding with local water resources.

Find all the info, examples of past year award winners, and links to online nomination forms at VLAWMO.org/get-involved/awards.

Thank you for helping us celebrate the terrific water resource leaders right here in our community!

E. MN Climate and Current Drought

Drought in Minnesota, flooding in New York, climate news is all around us. Staff will provide a brief summary of climate change in Minnesota and provide basic talking points that TEC members and affiliates can refer to in their communities. These include:

- How a drought and trend towards a wetter climate can both be true.
- How to conceptualize climate trends according to winter (non-growing) and summer (growing) seasons.
- Tips for practicing climate discussions and steering towards a local focus.

VI. Projects

F. Wilkinson deep-water wetland restoration project update

The 50% expanded project footprint was implemented as a change order for the project immediately upon signing the contract for construction, following approval from the Board at the August meeting. The expanded footprint project design was included in an update article to North Oaks News for the October issue. Project construction began in early September. HEI has been conducting oversight and inspection during construction. VLAWMO has been conducting the eagle nest monitoring. Natural Shore Technologies visited the site with VLAWMO staff in September to discuss possible plans to continue supporting the project area and function.

Project dashboard:

Project construction photos:

Early construction work	Deeper pool area completed	Fall rain increased the water level
		

B. Spent lime update

The City of White Bear Lake is conducting maintenance on the water treatment plant. While the water treatment plant is shut down, spent lime is not available for the Oak Knoll spent lime treatment project. The project was scheduled to resume on Oct. 2 when the plant maintenance was completed. The maintenance has not been completed according to the original schedule. The plant is now scheduled to have spent lime once again available for the project to resume on Oct. 23. Updates will continue to be provided as they are received by VLAWMO staff.

C. Flowering rush treatment with RCSWCD update

RCSWCD has taken the lead on treating the invasive flowering rush infestation that was detected at a wetland near the south side of Amelia Lake as part of the SLMR completion. VLAWMO is providing funding for that treatment and providing native seed for reestablishment once the flowering rush treatment has been completed. The infestation was quite extensive. RCSWCD has treated it multiple times during 2023. Additional treatment is planned for 2024. VLAWMO is planning to carry over the funding designated for seed for this project and provide it to RCSWCD when the treatment is completed.

Photo of invasive flowering rush infestation treatment during 2023:



Soil Health Grant Application



Submit completed application to:

Lauren Sampedro

lauren.sampedro@vlawmo.org

Applicant Information:



Name:	Steve & Linda Hawkinson
Address:	2309 Southwood Drive
City/Township, State, Zip:	White Bear Lake, MN 55110
Phone:	651-238-6535 / 651-238-6532
Email:	burch6940@gmail.com

Project Summary:

ESTIMATED TOTAL PROJECT COST (\$)	4,380.00 \$2,880
AMOUNT REQUESTED (\$1,000 MAX or \$1,250 in Priority Area)	1,250.00
EXPECTED PROJECT COMPLETION (Month, Year)	November, 2023

PROJECT TYPE:

- Downspout/Small Raingarden
- Native Restoration/Pollinator Garden
- Turfgrass Replacement
- Other

If other, please describe the proposed project: _____

Project Background:

Describe your property. What is the purpose of your project?	Residential front yard approximately 50' x 70'. Plant native trees. Scrape, aerate site, distribute compost & bee lawn seed, cover site with erosion control straw blanket to create a pollinator habitat on our property.
Does your property connect to a lake, stream, ditch, or wetland in VLAWMO?	The property drains to Goose Lake in VLAWMO.

Project Background: Continued

<p>Describe how your project will support the goals of the Soil Health Grant Program. (See grant policy)</p>	<p>For 30 years we have maintained a lawn with chemical applications spring, summer & fall. We recently removed a diseased ash tree. Our goal is to plant native trees and install a bee lawn that will improve water quality and soil health within the VLAWMO watershed.</p>
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<p>Briefly describe the planned installation and maintenance activities for your project.</p>	<p>Plant native trees [white pines/aspen]. Scrape, aerate site, distribute compost & bee lawn seed [fescue, selfheal, creeping thyme, white dutch clover], cover site erosion control straw blanket to create a pollinator habitat on our property.</p>
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Project Specifications:

<p>TOTAL PROPERTY AREA (Acres)</p>	<p>< 1 acre</p>
<p>Total PROJECT SIZE (SQ FT)</p>	<p>50'x70'</p>
<p>IF APPLICABLE: DEPTH OF RAINGARDEN BASIN (Inches)</p>	



Required Attachments:

- ⇒ Detailed drawing or plan of the proposed project.
- ⇒ Detailed project budget estimate with itemized costs and materials that equal your total estimated cost.

VLAWMO Soil Health Grant Agreement



It is understood that:

1. The grantee is responsible for maintaining the project for at least 5 years after its installation. VLAWMO is not responsible for completing maintenance activities.
2. The grantee will participate in VLAWMO's outreach and project sharing efforts.
3. A project may be visited and inspected by a VLAWMO representative during the 5-year maintenance period.
4. Grant awards will expire within 1 year of grant approval unless the project is extended with VLAWMO approval.

The applicant's signature indicates their agreement to the above terms and certifies the grant application information is true and accurate. A VLAWMO staff signature will constitute an approved and executed grant agreement between the grantee and the VLAWMO.

Applicant/Grantee

Signature  Date 09.17.23

Linda Hawkinson
Print

VLAWMO Staff

Signature _____ Date _____

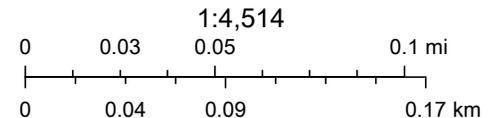
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SHG 2023-04 Hawkinson Bee Lawn



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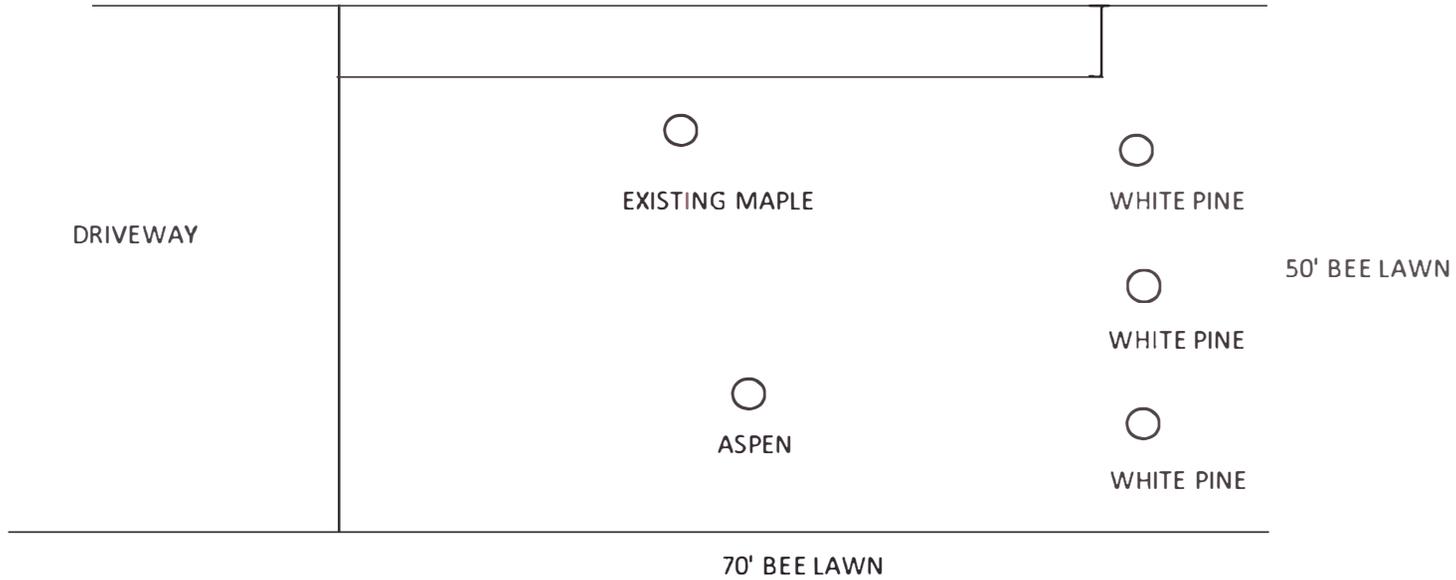
- VLAWMO Boundary 2020
- VLAWMO lakes
- Catch Basin
- Project Location
- Flow Arrows



Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, County of Ramsey, Esri, HERE, Garmin, GeoTechnologies, Inc.,

ArcGIS Web AppBuilder
County of Ramsey, Esri, HERE, Garmin, GeoTechnologies, Inc., USGS, EPA

HOME
2309 SOUTHWOOD DRIVE



TASK	COST
RENTAL AERATOR	80
COMPOST/DELIVERY	900
SEEDS	1,200
STRAW BLANKET	200
TREES/DELIVERY	2,000 \$500 Aspen
TOTAL	\$ 4,380 \$2,880 <i>LL</i>

Bee Lawn Seed Mix Detail

From Twin City Seed:

TCS Bee Lawn Seed Mixture™

Percent Composition:

- 23.5% Boreal Creeping Red Fescue
- 23% Intrigue Chewings Fescue
- 23% Gladiator GT Hard Fescue
- 23% Blue Mesa Sheep Fescue
- 4.5% White Dutch Clover
- 2.7% Self Heal
- 0.3% Creeping Thyme

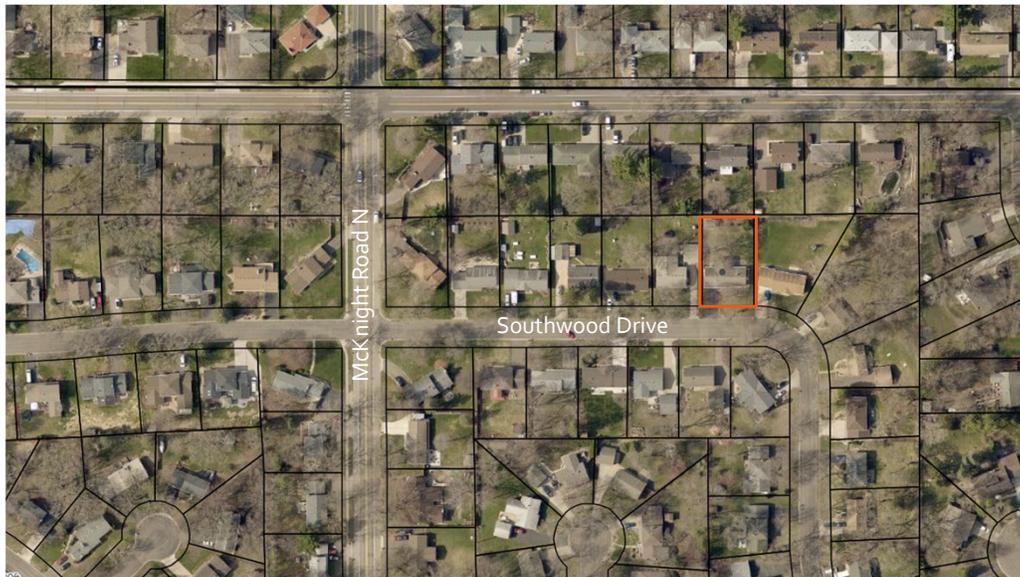
V. A. Hawkinson Bee Lawn

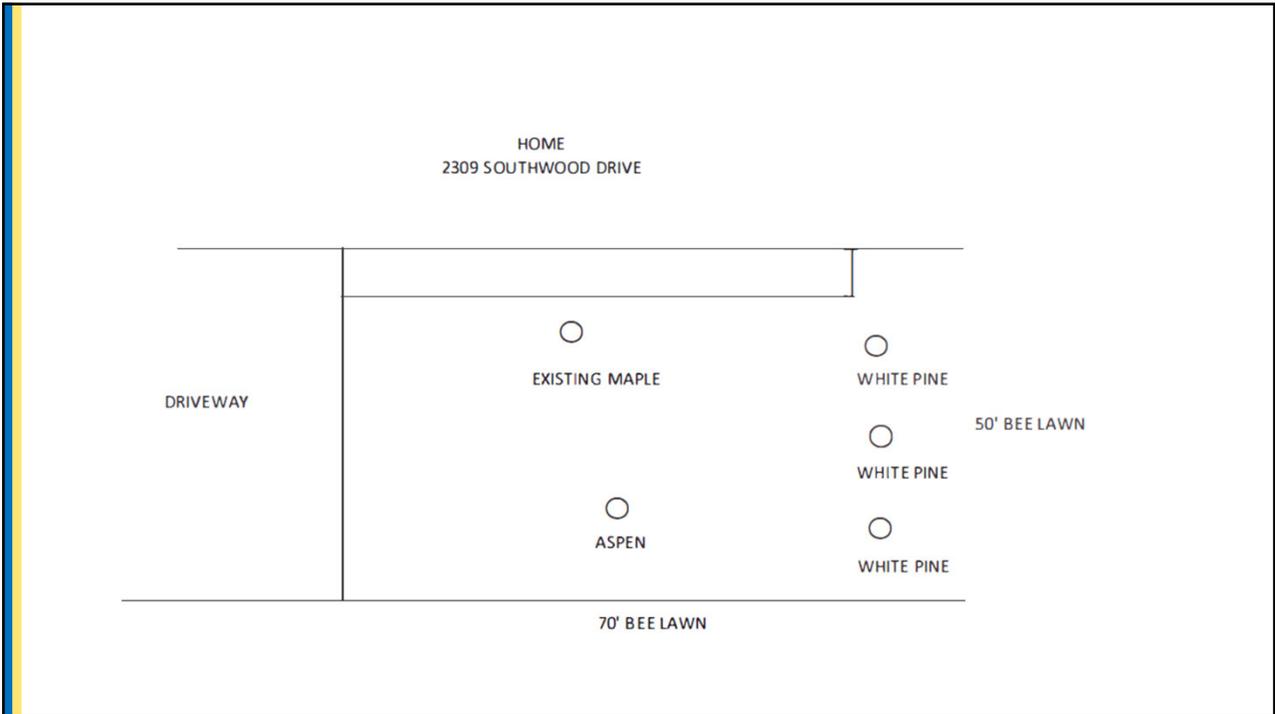
SHG 2023-04 Grant Application

Lauren Sampedro
TEC Meeting
10/11/2023



Soil Health - Bee Lawn





Soil Health Grant Application



Submit completed application to:

Lauren Sampedro

lauren.sampedro@vlawmo.org

Applicant Information:



Name:	Nissa Valdez and Alex Smith
Address:	2 Falcon Lane
City/Township, State, Zip:	North Oaks, MN 55127
Phone:	612.280.3000 Nissa 612.309.7887 Alex
Email:	npvaldez@gmail.com thedudeabides277@gmail.com

Project Summary:

ESTIMATED TOTAL PROJECT COST (\$)	\$1580 \$1,644.45
AMOUNT REQUESTED (\$1,000 MAX or \$1,250 in Priority Area)	\$1000
EXPECTED PROJECT COMPLETION (Month, Year)	8/2024

PROJECT TYPE:

- Downspout/Small Rain garden
- Native Restoration/Pollinator Garden
- Turfgrass Replacement
- Other

If other, please describe the proposed project:

Project Background:

Describe your property: What is the purpose of your project? Does your property connect to a lake, stream, ditch, or wetland in VLAWMO?	see attached sheet
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Project Background: Continued

<p>Describe how your project will support the goals of the Soil Health Grant Program, (See grant policy)</p>	<p>See attached sheet</p>
<p>Briefly describe the planned installation and maintenance activities for your project.</p>	<p>see attached sheet</p>

Project Specifications:

<p>TOTAL PROPERTY AREA (Acres)</p>	<p>1.4 acres</p>
<p>Total PROJECT SIZE (SQ FT)</p>	<p>1200 sq ft</p>
<p>IF APPLICABLE: DEPTH OF RAINGARDEN BASIN (Inches)</p>	<p>6 in.</p>



Required Attachments:

- ⇒ Detailed drawing or plan of the proposed project.
- ⇒ Detailed project budget estimate with itemized costs and materials that equal your total estimated cost.

VLAWMO Soil Health Grant Agreement



It is understood that:

1. The grantee is responsible for maintaining the project for at least 5 years after its installation. VLAWMO is not responsible for completing maintenance activities.
2. The grantee will participate in VLAWMO's outreach and project sharing efforts.
3. A project may be visited and inspected by a VLAWMO representative during the 5-year maintenance period.
4. Grant awards will expire within 1 year of grant approval unless the project is extended with VLAWMO approval.

The applicant's signature indicates their agreement to the above terms and certifies the grant application information is true and accurate. A VLAWMO staff signature will constitute an approved and executed grant agreement between the grantee and the VLAWMO.

Applicant/Grantee

Signature Nissa Valdez / Alex Smith Date 10/2/23

Print Nissa Valdez / Alex Smith

VLAWMO Staff

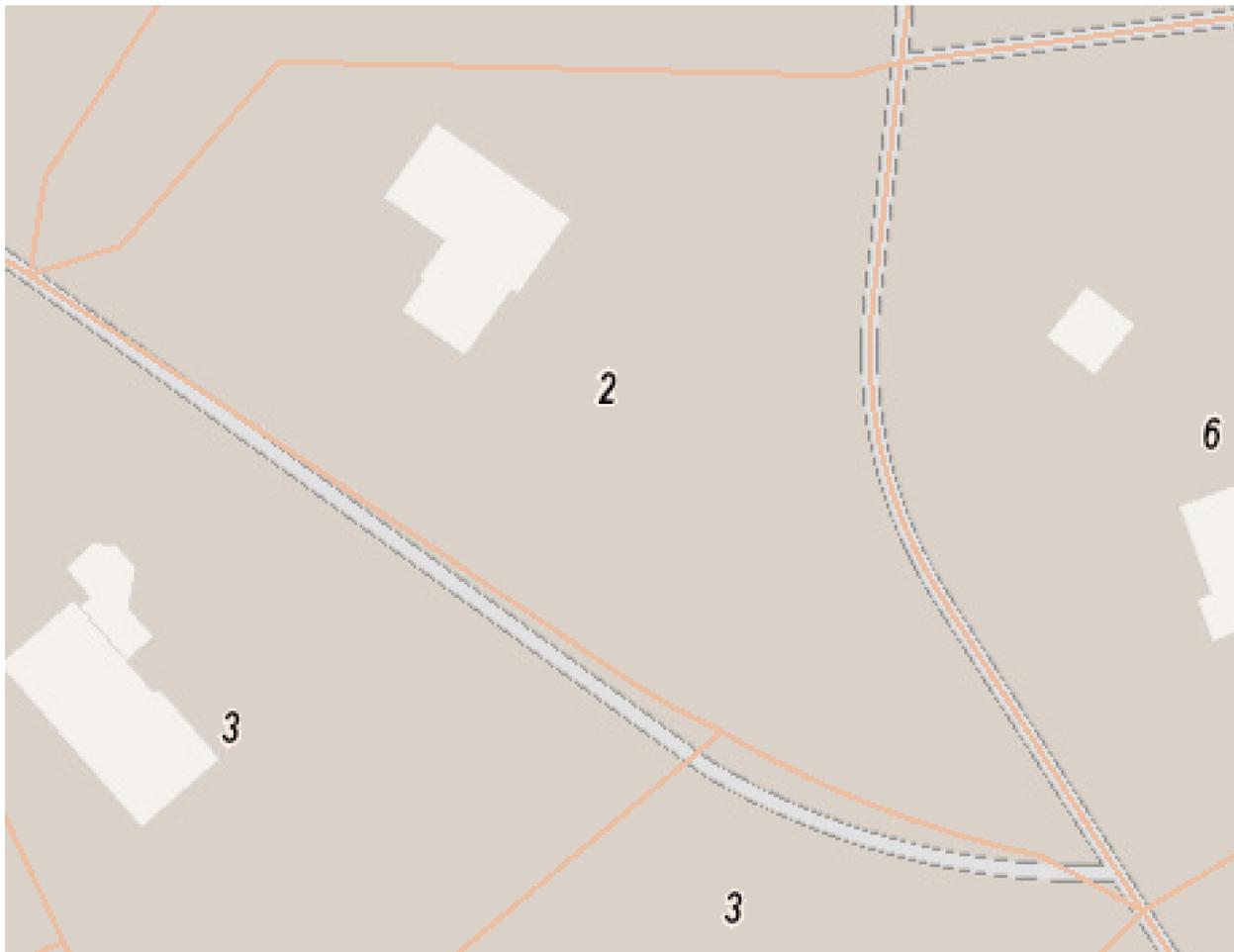
Signature _____ Date _____

Print _____

Project Background

Describe your property

Our property is about 1.4 acres, all of which is wooded with large oaks, maples, cottonwoods, elms, birch, and pine. The property is on a hill sloping to the southeast. The soil is quite sandy loam. Most of the property is shaded, but some small patches get pretty direct sun for much of the day.



What is the purpose of your project?

Our goal is to restore our property to a native woodland with native understory plants, shrubs, and trees. We would like to direct rainwater for use by plantings, rather than being lost to runoff. We would like to remove invasive plant species and replace them with native plantings.

Does your property connect to a lake, stream, ditch, or wetland in VLAWMO?

We are not on a lake, but we are not far from Pleasant Lake. Runoff on part of the property runs through a culvert under Falcon Ln to a low area.

Describe how your project will support the goals of the Soil Health Grant Program

Our project will involve the removal of invasive non-native species at the root, including buckthorn and the three types of noxious weeds (garlic mustard, and two other similar plants) that come up every year. We will be replacing these with native plants, with preference to those that are pollinator-friendly. We believe this work will result in greatly improve the soil quality.

Our project involves multiple rain gardens to harvest runoff from the roof, as well as waste water from our reverse osmosis water filter and the wash-down water from regeneration of the iron/sulfur filter section of our home water conditioning system. We will install three-way valves on these outputs so we can redirect waste water to the rain garden during above-freezing weather. Water from these components should not harm plants.

Briefly describe the planned installation and maintenance activities for your project

Phase 1 (current funding request):

- Excavation for patio base.*
- Excavation for rain gardens 1 and 2.
- Installation and tamping of crushed limestone base layer for patio. Base will be pitched to direct water to rain gardens.*
- Installation and tamping of base sand for patio pavers.*
- Installation of patio pavers.*
- Application of sealing compound over pavers and cracks.*
- Adjust southeast rain gutter pitch to drain to the north end near rain garden 2.
- Move southeast downspout from south end to north end of run.
- Installation of 4" PVC waste pipe to direct water from downspouts to rain gardens 1 and 2.
- Install steel edging around rain gardens.
- Addition of compost soil amendment for rain gardens 1 and 2.
- Install plantings in rain gardens 1 and 2

- Removal of invasive plants in the Phase 1 region.
- Planting of native species of trees, shrubs, and plants. Installation of wire cages to protect trees and shrubs from deer.
- Installation of 3-way valves and outlet tubing extensions to outside for reverse osmosis filter and iron/sulfur water conditioner filter.

* Cost related to patio and not counted toward grant proposal cost.

Phase 2 (future funding request):

- Excavation for rain garden 3.
- Installation of 4" PVC waste pipe to direct water from two southwest downspouts to rain garden 3.
- Install steel edging around rain garden 3.
- Addition of compost soil amendment for rain garden 3.
- Install plantings in rain garden 3.
- Install trees/shrubs adjacent to north side of rain garden 3.

Phase 3 (future funding request):

- Removal of invasive plants.
- Planting of native species of trees, shrubs, and plants. Installation of wire cages to protect trees and shrubs from deer.

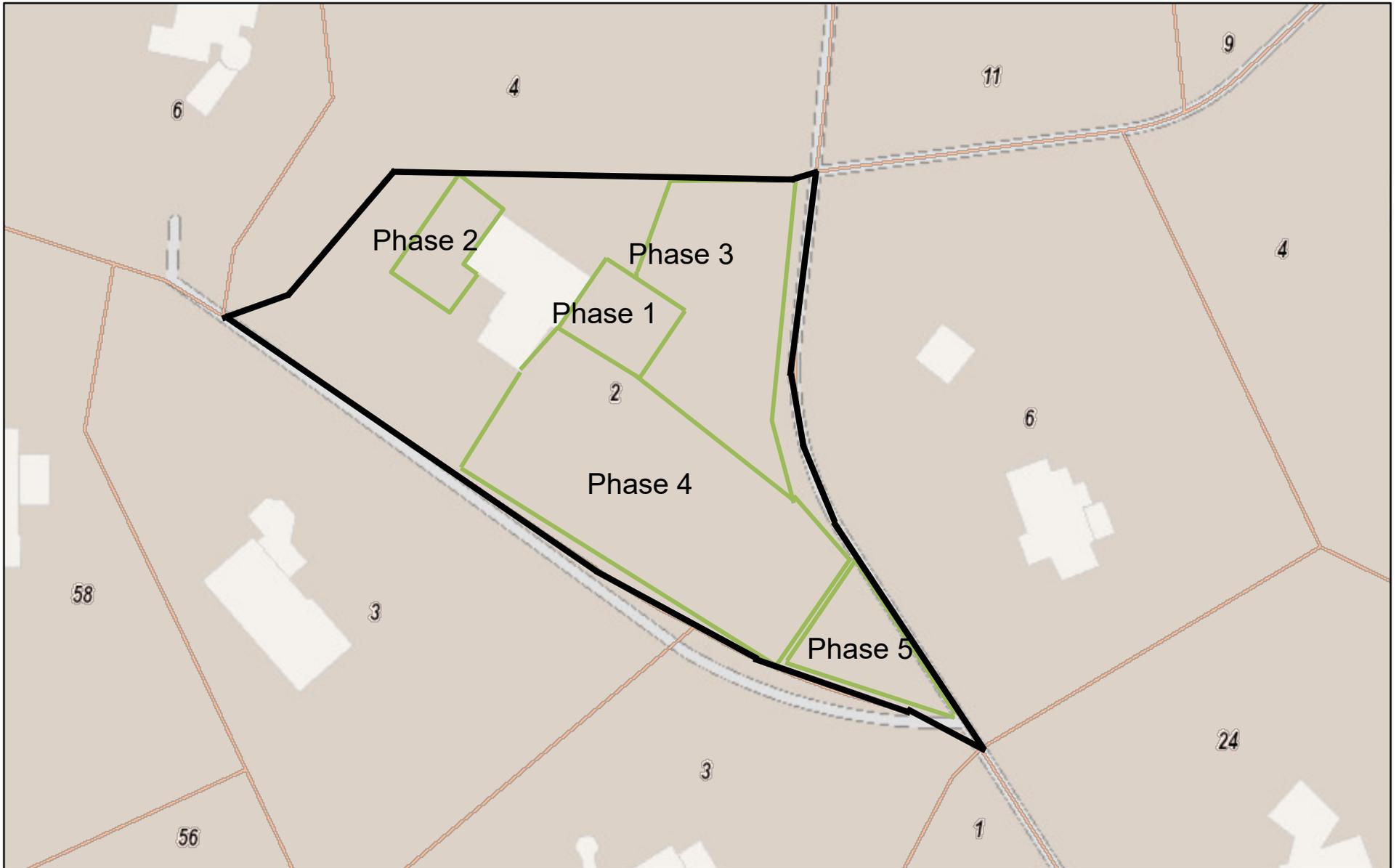
Phase 4 (future funding request):

- Removal of invasive plants.
- Planting of native species of trees, shrubs, and plants. Installation of wire cages to protect trees and shrubs from deer.

Phase 5 (future funding request):

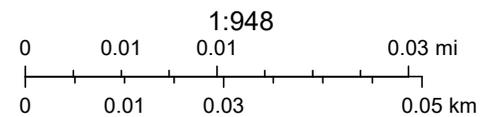
- Removal of invasive plants.
- Planting of native species of trees, shrubs, and plants. Installation of wire cages to protect trees and shrubs from deer.
- Rain garden to collect runoff from Falcon Ln and North Oaks Rd.

Map Ramsey



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- Override 1
- Tax Parcels
- County Offices
- Personal Property
- Cities

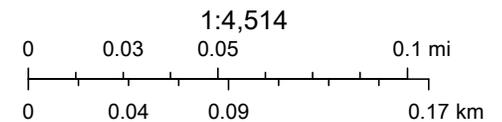


SHG 2023-05 Valdez & Smith Downspout Raingardens



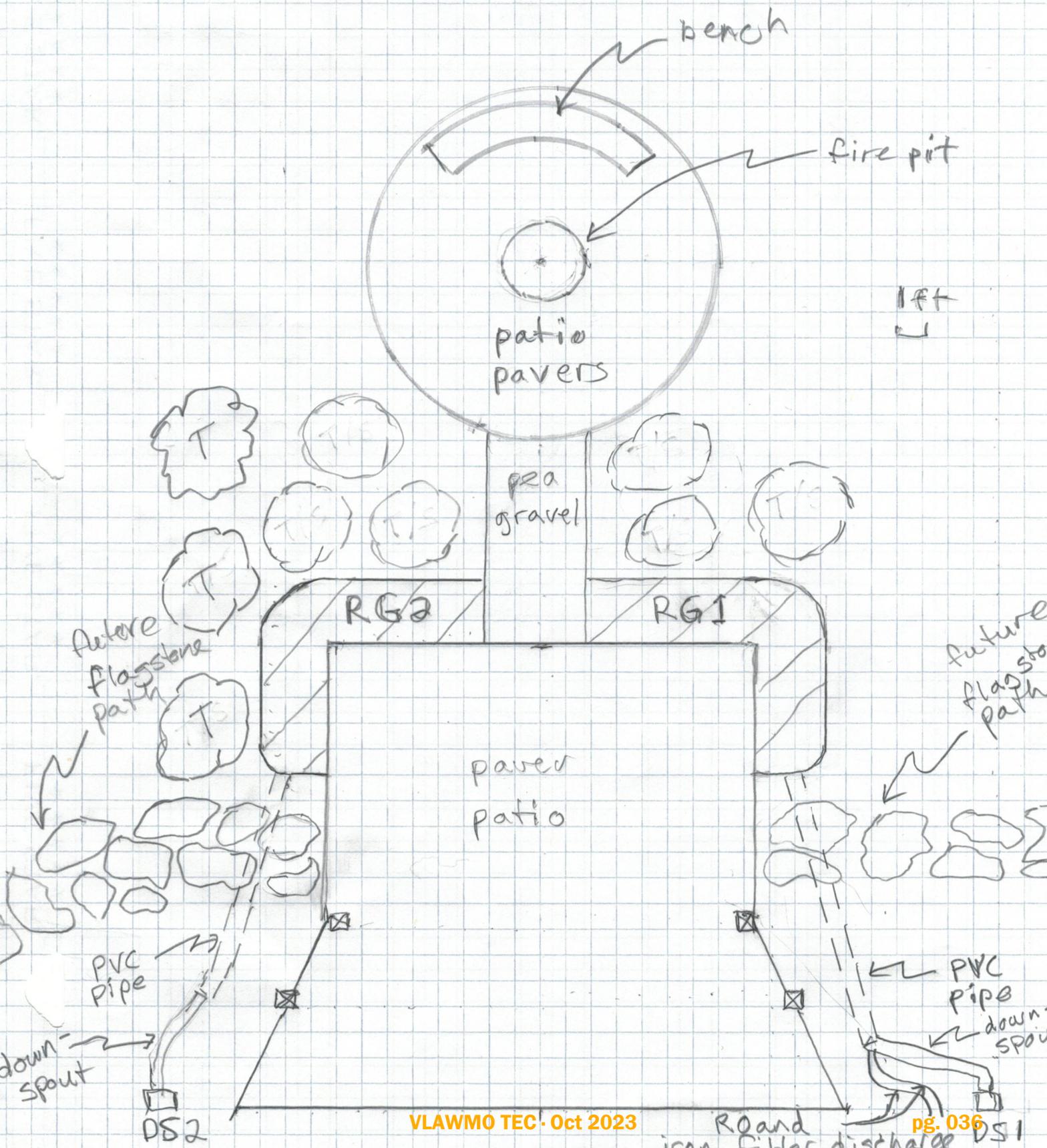
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- VLAWMO Boundary 2020
- VLAWMO lakes
- Project Location
- Flow Arrows



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ArcGIS Web AppBuilder
County of Ramsey, Esri, HERE, Garmin, GeoTechnologies, Inc., USGS, EPA



Item	Quantity	Units	Cost/Unit	Is Grant Cost?	Grant Cost
Total Cost					\$1,644.45
Rain garden steel edging	40	ft	\$3.37	Y	\$134.90
Compost mix for rain garden soil amendment	8	cu ft	\$13.00	Y	\$104.00
Trees for around rain gardens (Allegheny Serviceberry)	2		\$135.00	Y	\$270.00
Trees for around rain gardens (Autumn Brilliance Serviceberry)	1		\$75.00	Y	\$75.00
4" PVC pipe	2	10 ft	\$38.21	Y	\$76.42
Shrubs for around rain gardens (Dogwood, or other)	6	ea	\$35.00	Y	\$210.00
Raingarden: Blue wild indigo	2	ea	\$10.00	Y	\$20.00
Raingarden: Rose/Swamp Milkweed	3	ea	\$10.00	Y	\$30.00
Raingarden: Purple Coneflower	3	ea	\$10.00	Y	\$30.00
Raingarden: Sneezeweed	3	ea	\$10.00	Y	\$30.00
Raingarden: Early sunflower/Smooth oxeye	3	ea	\$10.00	Y	\$30.00
Raingarden: Meadow blazing star	3	ea	\$10.00	Y	\$30.00
Raingarden: Palm sedge	3	ea	\$10.00	Y	\$30.00
Raingarden: Cardinal FLower	3	ea	\$10.00	Y	\$30.00
Raingarden: Great blue lobelia	3	ea	\$10.00	Y	\$30.00
Raingarden: Wild bergamot	2	ea	\$10.00	Y	\$20.00
Raingarden: Obedient plant	3	ea	\$10.00	Y	\$30.00
Raingarden: Orange coneflower	2	ea	\$10.00	Y	\$20.00
Raingarden: Southern blue flag	2	ea	\$10.00	Y	\$20.00
Raingarden: Prairie dropseed	3	ea	\$10.00	Y	\$30.00
Small shrubs: Buttonbush	1	ea	\$20.00	Y	\$20.00
Small shrubs: cranberry	1	ea	\$20.00	Y	\$20.00
Small shrubs: elderberry	1	ea	\$20.00	Y	\$20.00
Small shrubs: winterberry	1	ea	\$20.00	Y	\$20.00
Small shrubs: coralberry	1	ea	\$20.00	Y	\$20.00
1/2" tube for iron filter redirect	1	50 ft	\$19.65	Y	\$19.65
1/4" tube for RO filter redirect	1	50 ft	\$26.98	Y	\$26.98

3 way ball valve, 1/4 for RO filter output redirect	1	ea	\$7.90	Y	\$7.90
3-way ball valve, 1/2" push to connect, for iron filter output redirect	1	ea	\$30.21	Y	\$30.21
Rain gutter downspout drop (for relocating downspout 1)	1	ea	\$8.39	Y	\$8.39
Downspout material for extensions	2	10 ft	\$16.00	Y	\$32.00
Dingo excavator rental (White Bearl Lake Rentals), 6" rain garden depth	1	24 hours	\$169.00	Y	\$169.00

V. B. Valdez & Smith Property Restoration Phase 1

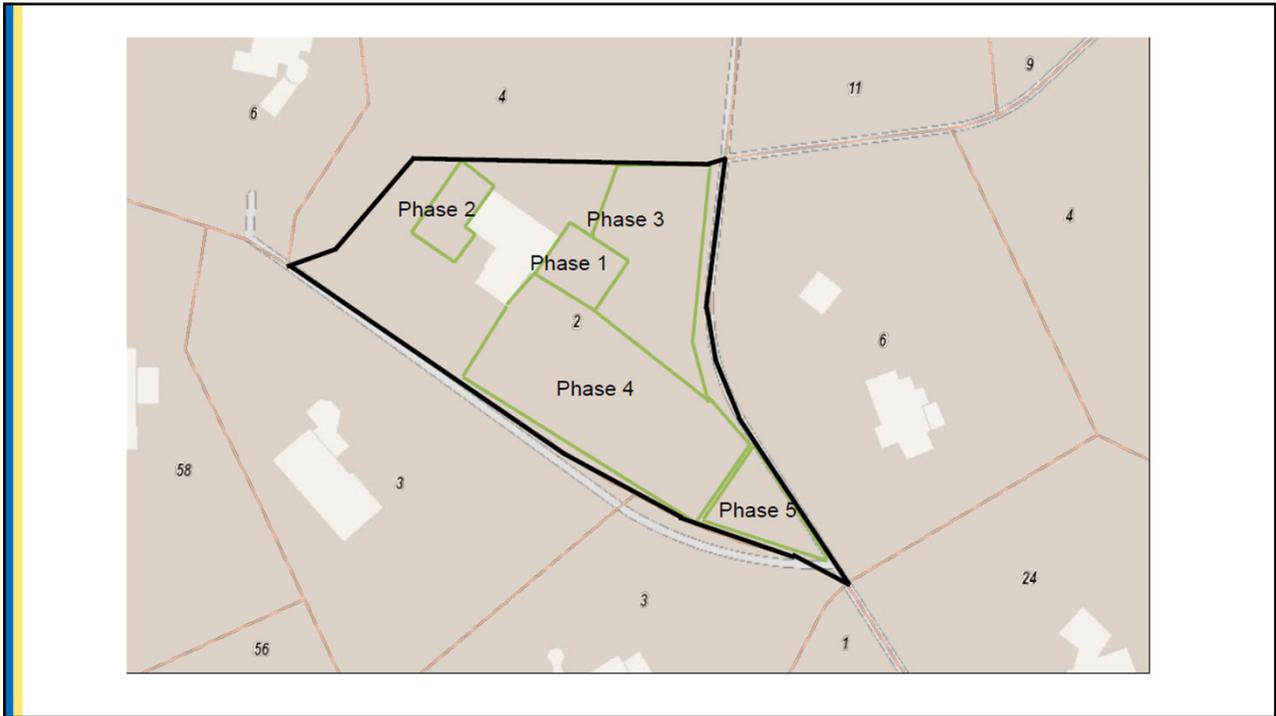
SHG 2023-05 Grant Application

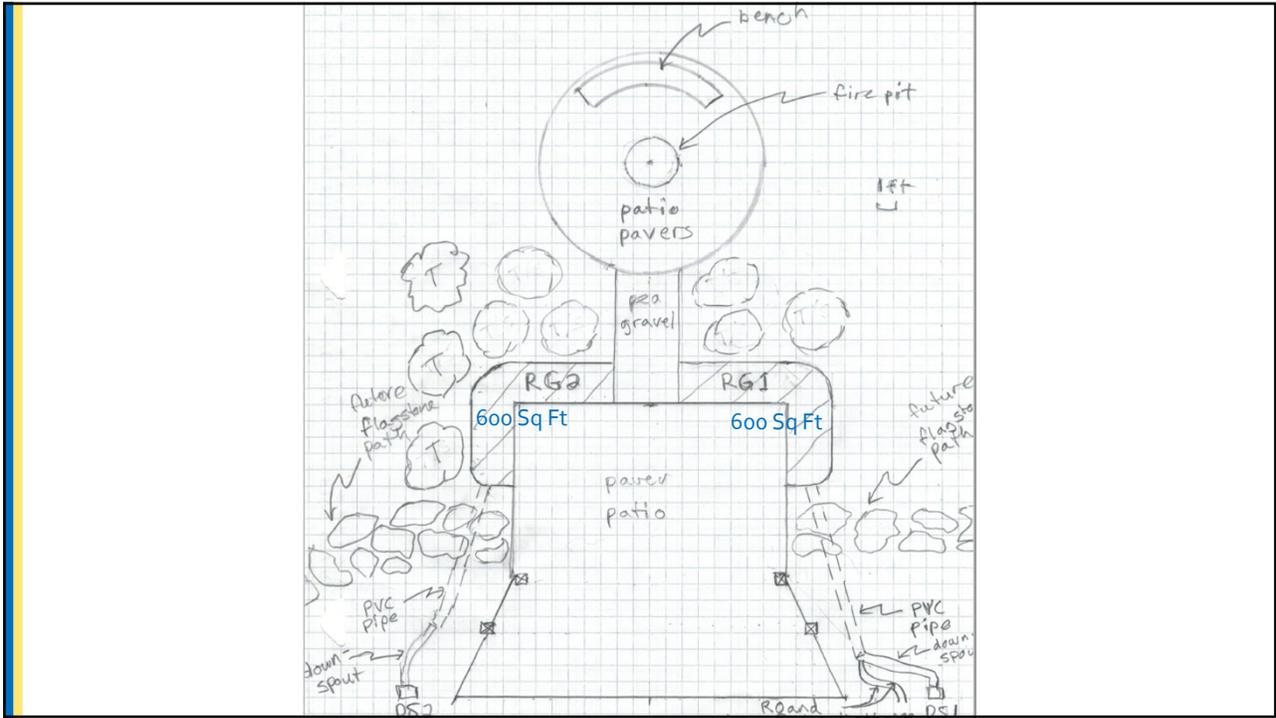
Lauren Sampedro
TEC Meeting
10/11/2023



Soil Health – 2 Downspout Raingardens







LL1 Grant Application



Submit completed application to:

Lauren Sampedro

lauren.sampedro@vlawmo.org



Applicant Information:

Name:	Royce and Volatiana Wiens
Address:	3784 Tessier Trail
City/Township, State, Zip:	Vadnais Heights, MN 55127
Phone:	651-771-5589
Email:	rvwiens@yahoo.com

Project Summary:

PROJECT TYPE:

ESTIMATED TOTAL PROJECT COST (\$)	Ph 1 - \$13,675 \$10,503.73 Ph 2 - \$16,075 \$12,520.07 Ph 3 - \$13,310 \$10,601.77
AMOUNT REQUESTED (\$5,000 reg, \$7,500 curb cut)	\$5,000 for each of the 3 phases
EXPECTED PROJECT COMPLETION (Month, Year)	Ph 1 - Sept 2024 Ph 2 - Sept 2025 Ph 3 - Sept 2026

- Raingarden/Infiltration Basin: Curb cut
- Raingarden/Infiltration Basin: Regular
- Shoreline/Streambank Stabilization and/or Restoration
- Filtration
- Other

If other, please describe the proposed project: N/A

Project Background:

Describe the project location. Does it connect to a lake, stream, ditch, or wetland in VLAWMO? What issues will be addressed with this project?	See attached supplementary information
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Project Background: Continued

<p>Describe how your project will support the goals of the Landscape Level 1 Grant Program. (See LL1 policy)</p>	<p>See attached supplementary information</p>
<p>Briefly describe the planned installation and maintenance activities for your project.</p>	<p>See attached supplementary information</p>

Project Specifications:

<p>TOTAL PROPERTY AREA (Acres)</p>	<p>.26</p>	<p>Total PROJECT SIZE (Sq Ft)</p>	<p>675 sq ft</p>
<p>IMPERVIOUS (HARD) AREA DRAINING TO PROJECT (Sq Ft):</p>	<p>1,472</p>	<p>PERVIOUS (GRASSY, NON-PAVEMENT) AREA DRAINING TO PROJECT (Sq Ft):</p>	<p>2,178</p>
<p>DEPTH OF PRACTICE (In): <i>Provide if project includes infiltration/filtration</i></p>	<p>6-9"</p>	<p>BOTTOM SURFACE AREA (Sq Ft): <i>Provide if project includes infiltration/filtration</i></p>	<p>600</p>

Required Attachments:

- ⇒ Detailed drawing or plan of the proposed project. If project is complex, VLAWMO may require project final designs to be completed by a qualified professional or engineer. Drawing must include project dimensions that enable VLAWMO staff to model the project for estimated water quality benefits.
- ⇒ At least 2 bids for construction of proposed project.
- ⇒ Detailed project budget estimate with itemized materials and costs that equal the total project cost.

**LL1 Grant Application
Supplement for
3784 Tessier Trail**

Project Summary

Estimated Total Project Cost Notes:

- The project costs for each phase is based on the ~~highest~~ **Lowest** estimated cost for each phase.
- The Phase 1 cost includes the design fee.

Project Background

1. Describe the Project Location:

- 3784 Tessier Trail is located to the east of Vadnais Lake and north of Koehler Road.

2. Does it connect to a lake, stream, ditch, or wetland in VLAWMO?

- It is part of the Sucker-Vadnais Sub watershed.

3. What issues will be addressed with this project?

- Capturing and infiltrating rainwater runoff from our impervious surfaces including the roof, sidewalk, and site (understanding that turf is semi-impervious) with the front, back, and side yard rain gardens.
- Capturing and infiltrating rainwater runoff from adjacent property (380 Tessier Circle) to the north with both the front and back yard rain gardens.
- Capturing and infiltrating rainwater runoff from our impervious driveway with the new trench drain, which will drain to the side rain garden (phase 3).
- Reducing the need for utilizing treated water to water typical turf grass by reducing the turf grass area, overseeding the turf grass area at the front and side yards with fescue grasses that requires less water, and utilizing native plants in the proposed planting areas that are appropriate to the soil condition, daylight access, and natural water availability.

- Reducing the cooling needs for our home over the summer by incorporating VLAWMO approved trees on the east and west sides of house.

4. Describe how your project will support the goals of the Landscape Level 1 Grant Program?

- It will improve water quality by reducing both the rate and volume of storm water runoff to adjacent properties and to the street (specifically Tessier Trail), which ultimately benefits the water quality of Vadnais Lake. This will reduce the impact on the local storm sewer system.
- It will preserve and enhance the local groundwater by infiltrating more of the the water that falls on site on our property. The native plants and trees that will also play an important role in absorbing local rainwater runoff and using it for plant growth and transpiration.
- Stormwater reuse for irrigation by directing house and driveway runoff to the proposed rain gardens. As part of this project, we may also incorporate rain barrels to store rainwater for later use on site.

5. Briefly describe the planned installation and maintenance activities for your project:

- **Phase 1 Installation:** The chosen vendor will complete the work shown in the attached drawing and written scope by September of 2024. The new dry creek bed will help direct site drainage to the proposed rain garden, following the existing contours.
- **Phase 1 Maintenance:** The planned rock and wood mulch will reduce the turf area, further reducing the need to use treated water for irrigation. These material choices will reduce the need for maintenance. We are also diligent in weeding and so we will catch any weeds that do pop up. We are intentionally keeping the size of the work to a reasonable size so that we can easily maintain it. As we work with the chosen vendor on the final design, we will make every effort to create a low maintenance project. We are locating the plants so that they will be get a nice drink with any rain. In case there is less rain as plants are getting established, they will be close to a water source so that we can make sure they receive the water they need.

- **Phase 2 Installation:** The chosen vendor will complete the work shown in the attached drawing and written scope by September of 2025. It will include all work in the front yard including the rain garden and the crabapple garden. The planned crabapple tree in the front is the only non-native plant, but it is included as an acceptable alternative on the VLAWMO list. The rain garden in the front yard will also be located at the natural low spot to minimize the amount of earthwork required. The crabapple garden will be located in an area where the turf grass is currently having its challenges to be established.
- **Phase 2 Maintenance:** The combination of plants will create a more eco-friendly front yard that will also reduce required maintenance. Like the backyard project, the scope of planting work is smaller to make it easier to maintain. We are intentionally incorporating hard edges to create a clean appearance that will be easier to maintain. As mentioned earlier, the reduced turf area that incorporates the fescue grass will reduce the need for watering a create a more sustainable environment.
- **Phase 3 Installation:** The chosen vendor will complete the work shown in the attached drawing and written scope by September of 2026. This will be the smallest of the 3 phases, but will be just as important. This phase will incorporate a trench drain that will pick up runoff from the driveway and direct that to the side rain garden. This rain garden will also be taking runoff from the south side of the garage roof as well as the area to the north that slopes towards it.
- **Phase 3 Maintenance:** A good portion of the remaining Phase 3 areas will be finished with a rock mulch and native plants that will reduce the maintenance needs for these areas will creating a more pollinator friendly environment that will provide fruit that we can use in the home. Like the other 2 phases, the non-turf area is not that large and should reduce the maintenance and water required when compared with the current use for this area that is 100% turf.

6. Project Size

- **Phase 1** – 675 sf
- **Phase 2** – approximately 2,600 sf including area to be overseeded with fescue grass including the right of way.
- **Phase 3** – approximately 710 sf including area to be overseeded with fescue grass including the right of way.

LL1 2023-06 Wiens Dry Creek Bed & Raingarden



3784 Tessier Trail

VLAWMO – Landscape Level 1 Grant

Landscape Design Plan – 1 plan with 3 phases

Phase 1 – Summer 2024 – Backyard Scope

- Provides 1 Backyard Rain Garden (450 sf) as shown on drawing at the low point of the backyard to collect rainwater runoff with the following features:
 - o Provide stone edging
 - o Wood mulch
 - o 1 River Birch Tree (*Betula nigra*)
 - o 4 Swamp Milkweed – (*Asclepias incarnata*)
 - o 5 Pennsylvania Sedge – (*Carex pennsylvanica*)
 - o 4 Red Columbine – (*Aquilegia canadensis*)
- Provide 225 sf river rock dry creek bed as shown in gray to east of existing stone mulch that wraps around the deck and patio area)
- Provide 150 sf wood mulch border to define edge of swale as shown on drawing to east of dry creek bed
 - o Provide and install 2 River Birch trees as shown in this mulch border
 - o Provide black plastic edging to prevent mulch from getting into adjacent areas.

Phase 2 – Summer 2025 – Front Yard Scope

- Remove underground plastic corrugated pipe and pop-up water drain in front of house and install new piping and two pop up drains from the 2 downspouts in front of the house and install 2 new in-ground catch basins with buried pvc piping (approx. 70 lf total – see dashed blue line) and pop up drains in the new rain garden.
- Provide 1 Front Rain Garden (255 sf) as shown on drawing with the following:
 - o Provide stone edging
 - o Wood mulch
 - o 2 River Birch Trees (*Betula nigra*)
 - o 4 Swamp Milkweed – (*Asclepias incarnata*)
 - o 3 Cardinal Flowers – (*Lobelia cardinalis*)
 - o 6 Pennsylvania Sedge – (*Carex pennsylvanica*)
 - o 4 Red Columbine – (*Aquilegia canadensis*)
- Provide Crabapple Garden – 225 sf
 - o 1 Snowdrift Crabapple tree (*Malus 'Snowdrift'*)
 - o 9 Pennsylvania Sedge – (*Carex pennsylvanica*)
 - o 7 Creeping Phlox – (*Phlox subulata*)
 - o Stone edging in front and plastic edging at property line

- Overseed existing grass with Fescue blend after removing weeds

Phase 3 – Summer 2026 – South Side Yard Scope

- Maintain 5'w grass strip from driveway to the south gate.
 - o Overseed existing grass with Fescue blend after removing weeds at the end of the project.
- Provide and install 1 rain barrel at downspout at SE corner of garage with screens at existing downspout locations with overflow directed to new grass swale referenced below.
- Provide 45 sf grass swale from overflow referenced above to the side rain garden referenced below.
- Install 1 trench drain (Approx. 20' long – see blue line) across asphalt driveway sloped to drain to new rain garden described below. Trench drain must have sufficient capacity to support vehicle traffic.
- Provide 1 Side Rain Garden (90 sf) as shown on drawing with the following:
 - o Wood mulch
 - o Hard edge
 - o 4 Indian Grass plants (*Sorghastrum nutans*) along the center
 - o 5 Nodding onion plants (*Allium Cernum*) around perimeter alternating with 5 swamp milkweed plants (*Asciepias incarnata*)
- Provide 3' wide rock (90 sf total) mulch strip between driveway and side rain garden sloped to rain garden.
 - o Provide 5 Priarie Dropseed (*Sporobolus heterolepis*) along the center of this rock mulch strip.
- Provide 5' wide rock mulch strip (140 sf total) between side rain garden and fence with the following plants:
 - o Provide and install 2 Serviceberry trees (*Amelanchier* spp.) at 20' spacing
 - o Provide and install 3 Currant plants (*Ribes* spp) as shown on the drawing (red circles). N

3784 Tessier Trl, Saint Paul, MN, X

Show search results for 3784 Tessier ...



County Easement
Crabapple Garden
Fescue overseed area

Area: 223.6 Square feet

Phase 2

Buried Rain Water Drain to Rain Garden

Area: 2,588.6 Square feet
Phase 2 Project Area

River Rock Dry Creek Bed
Wood Mulch Border w 2 River Birch Trees
Backyard Rain Garden

Phase 1

Front Rain Garden

Area: 259.7 Square feet

Area: 226.7 Square feet

Area: 233.7 Square feet

Trench Drain to Side Rain Garden

Phase 3

Fescue Overseed Areas

Rock Mulch Strip w/ Prairie Dropseed

Side Rain Garden

Fescue Overseed Area

Rock Mulch Strip w/ 2 Serviceberry Trees and 3 Currant Bushes

Area: 96.9 Square feet
Phase 3 Project Area

Grass Swale from DS to Side Rain Garden

20ft

-93.084 45.056 Degrees

VLAWMO TEC - Oct 2020

Customer

Royce Wiens
3784 Tessier Trl
Vadnais Heights, MN 55127

Project

Wiens-3784 Tessier Trl
3784 Tessier Trl
Vadnais Heights, MN 55127

Contract

September 18, 2023
Page 1 of 6

Home Ph: **Mobile Ph:** 651-392-9251
Work Ph: **Email:** rvwiens@yahoo.com

Designer/Sales Rep:
Angela Cesar

Project Name: Preliminary Budget - Grant Submission Rev.1

Quantity Item Description

Design Fee

Design Fees

Sub-Total: \$750.00



Phase 1

- 1,389.00 Bed Prep - Sod Stripping/Disposal - SF
- 12.00 Excavation for Rain Garden - CY
- 1.00 Disposal Hauling Fee - Yard Waste/Mulch - LOAD
- 58.00 Chilton 4" x 4" x Random Edging - Installed - LF
- 235.00 Shredded Hardwood Mulch - Installed 3" - SF
Barricade Pre-Emergent To Be Applied Prior To Installation Of New Mulch Material At Approx. 3" Overall Depth.
- 1.00 Betula nigra - River Birch - Installed - 2" BB
- 4.00 Asclepias incarnata - Swamp Milkweed - #1 CONT.

Materials with delivery only. No planting labor.
- 5.00 Carex pensylvanica - Pennsylvania Sedge - #1 CONT.

Materials with delivery only. No planting labor.
- 4.00 Aquilegia canadensis - Red Columbine - #1 CONT.

Materials with delivery only. No planting labor.
- 225.00 Bed Prep - Sod Stripping/Disposal - SF
- 4.00 Excavation - CY
- 1.00 Disposal Hauling Fee - Yard Waste/Mulch - LOAD
- 225.00 Hand Grading - SF
- 225.00 Washed River Rock 1 1/2 - Installed 3" - SF
Installation Of New Rock Material At Approx. 3" Overall Depth.
- 225.00 Landscape Fabric - Installed - SF
5 oz, 6'x250' roll
- 150.00 Shredded Hardwood Mulch - Installed 3" - SF
Barricade Pre-Emergent To Be Applied Prior To Installation Of New Mulch Material At Approx. 3" Overall Depth.
- 80.00 Poly Landscape Edging - Installed - LF
- 2.00 Betula nigra - River Birch - Installed - 2" BB

Sub-Total: \$12,925.00

Grand Total: \$13,675.00

ADDRESS

2383 Pilot Knob Rd.
St. Paul, MN 55120

PHONE

East Metro 651-203-3000
NW Metro 763-422-0188
SW Metro 952-881-2296

- Landscape Design-Build
- Landscape Care & Maintenance
- Irrigation
- Outdoor Living
- Poolscaping
- Greenscaping
- Hardscaping
- Perennial & Native Gardens
- Waterscaping
- Outdoor Kitchens & Fireplaces

WEBSITE

southviewdesign.com



Scope of Work - "Phase 1 Ballpark"

Royce Wiens
3784 Tessier Trail
Vadnais Heights, MN 55127
Phone:
rvwiens@yahoo.com



412 Harding St. N.E.
Minneapolis, MN 55413

Notes & Unresolved Issues

-This estimate was done off of a very rough plan without detailed specs. A detailed design will be needed to get a more exact estimate.

OTHERS TO: Provide and install 2 rain barrels at corner downspouts with screens at existing downspout locations with overflow directed to new swales.

Field Scope and Assumptions

-Excavate 1 Backyard Rain Garden (235 sf) to an initial depth of 8". Final depth of 6". Rip bottom of rain garden and amend with 1" of compost. Total sq. ft. of rain garden plus sloped sides assumed to be 450 sf. Excavation assumed to be 11 yards in this area.

Provide stone edging, assumed at 75 lin ft.

Wood mulch, assumed at 450 sf

1 River Birch Tree (Betula nigra)

4 Swamp Milkweed – (Asclepias incarnata)

5 Pennsylvania Sedge – (Carex pennsylvanica)

4 Red Columbine – (Aquilegia canadensis)

Provide 225 sf river rock dry creek bed as shown in gray to east of existing stone mulch that wraps around the deck and patio area)

Provide 150 sf wood mulch border to define edge of swale as shown on drawing to east of dry creek bed

Provide and install 2 River Birch trees as shown in this mulch border

Provide black plastic edging to prevent mulch from getting into adjacent areas. - Assumes 80 ft

Estimate - "Phase 1 Ballpark"

Demolition and Preparation

QTY	UNIT SIZE	DESCRIPTION	PRICE	PRICE TOTAL
1 ea.		Design and Planning Fee	\$500.00	\$500.00
11 yd.		Sod and Soil Disposal (Rain Garden)	\$62.84	\$691.24
3.5 yd.		Sod and Soil Disposal (Dry Creek and Mulch)	\$62.84	\$219.94
total material costs				\$911.18
total labor costs				\$2,890.00
Demolition and Preparation			Total	\$3,801.18

Landscape Finishes

QTY	UNIT SIZE	DESCRIPTION	PRICE	PRICE TOTAL
3	20' Strip	Standard Vinyl Edging (includes 4 stakes + 1 connector)	\$15.75	\$47.25
75	lin. ft.	Chilton 4" x 4" Snapped Stone Edging	\$6.59	\$494.12
2	yd.	Green Loon Soil Conditioner G (Rain Garden)	\$75.35	\$150.70
4.5	yd.	Shredded Hardwood Bark Mulch (Rain Garden)	\$57.54	\$258.93
1	ea.	Mulch delivery	\$175.00	\$175.00
3	yd.	3/4 River Rock Gravel	\$83.36	\$250.08
1	3'X100'roll	4 oz. Woven Needle Punch Fabric	\$60.42	\$60.42
1	ea.	Gravel Delivery	\$150.00	\$150.00
total material costs				\$1,586.51
total labor costs				\$4,930.00
Landscape Finishes			Total	\$6,516.51

Fuel Charge

Fuel pricing is approximate for estimating purposes.

Crew will update fuel costs to reflect average Twin Cities fuel pricing at the time of invoicing.

DEISEL	GAS COST	PRICE TOTAL
\$5.20	\$3.50	\$186.04

GRAND TOTAL	\$10,503.73
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Plant List*included in grand total

Quantity	Size	Botanical Name	Unit Price	Total Price
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Trees

3	#20	River Birch Tree (Betula nigra)	\$252.00	\$756.00
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Perennials

			\$0.00	\$0.00
4		Swamp Milkweed – (Asclepias incarnata)	\$12.60	\$50.40
5		Pennsylvania Sedge – (Carex pennsylvanica)	\$12.60	\$63.00
4		Red Columbine – (Aquilegia canadensis)	\$12.60	\$50.40

		Total:		<hr/> <hr/>
				\$919.80

Project Information

Calculator Version: Version 4: July 2020
 Project Name: Wiens Dry Creek Bed and Raingarden
 User Name / Company Name:
 Date: 10/3/2023
 Project Description:
 Construction Permit?: No

Site Information

Retention Requirement (inches): 1.1
 Site's Zip Code: 55127
 Annual Rainfall (inches): 31.8
 Phosphorus EMC (mg/l): 0.3
 TSS EMC (mg/l): 54.5

Total Site Area

Land Cover	A Soils (acres)	B Soils (acres)	C Soils (acres)	D Soils (acres)	Total (acres)
Forest/Open Space - Undisturbed, protected forest/open space or reforested land					0
Managed Turf - disturbed, graded for yards or other turf to be mowed/managed			0.5		0.5
			Impervious Area (acres)		0.28
			Total Area (acres)		0.78

Site Areas Routed to BMPs

Land Cover	A Soils (acres)	B Soils (acres)	C Soils (acres)	D Soils (acres)	Total (acres)
Forest/Open Space - Undisturbed, protected forest/open space or reforested land					0
Managed Turf - disturbed, graded for yards or other turf to be mowed/managed			0.05		0.05
			Impervious Area (acres)		0.08
			Total Area (acres)		0.13

Summary Information

Performance Goal Requirement

Performance goal volume retention requirement:	1118	ft ³
Volume removed by BMPs towards performance goal:	319	ft ³
Percent volume removed towards performance goal	29	%

Annual Volume and Pollutant Load Reductions

Post development annual runoff volume	0.8968	acre-ft
Annual runoff volume removed by BMPs:	0.1891	acre-ft
Percent annual runoff volume removed:	21	%

Post development annual particulate P load:	0.4025	lbs
Annual particulate P removed by BMPs:	0.085	lbs
Post development annual dissolved P load:	0.329	lbs
Annual dissolved P removed by BMPs:	0.07	lbs
Total P removed by BMPs	0.155	lbs
Percent annual total phosphorus removed:	21	%

Post development annual TSS load:	132.9	lbs
Annual TSS removed by BMPs:	28	lbs
Percent annual TSS removed:	21	%

BMP Summary

Performance Goal Summary

BMP Name	BMP Volume Capacity (ft ³)	Volume Recieved (ft ³)	Volume Retained (ft ³)	Volume Outflow (ft ³)	Percent Retained (%)
1 - Bioretention basin (w/o underdrain)	319	319	319	1	100

Annual Volume Summary

BMP Name	Volume From Direct Watershed (acre-ft)	Volume From Upstream BMPs (acre-ft)	Volume Retained (acre-ft)	Volume outflow (acre-ft)	Percent Retained (%)
1 - Bioretention basin (w/o underdrain)	0.2075	0	0.1892	0.0183	91

Particulate Phosphorus Summary

BMP Name	Load From Direct Watershed (lbs)	Load From Upstream BMPs (lbs)	Load Retained (lbs)	Outflow Load (lbs)	Percent Retained (%)
1 - Bioretention basin (w/o underdrain)	0.0931	0	0.0849	0.0082	91

Dissolved Phosphorus Summary

BMP Name	Load From Direct Watershed (lbs)	Load From Upstream BMPs (lbs)	Load Retained (lbs)	Outflow Load (lbs)	Percent Retained (%)
1 - Bioretention basin (w/o underdrain)	0.0762	0	0.0695	0.0067	91

Total Phosphorus Summary

BMP Name	Load From Direct Watershed (lbs)	Load From Upstream BMPs (lbs)	Load Retained (lbs)	Outflow Load (lbs)	Percent Retained (%)
1 - Bioretention basin (w/o underdrain)	0.1693	0	0.1544	0.0149	91

TSS Summary

BMP Name	Load From Direct Watershed (lbs)	Load From Upstream BMPs (lbs)	Load Retained (lbs)	Outflow Load (lbs)	Percent Retained (%)
1 - Bioretention basin (w/o underdrain)	30.76	0	28.04	2.72	91

BMP Schematic

V. C. Wiens Raingardens Phase 1

LL1 2023-06 Grant Application

Lauren Sampedro
TEC Meeting
10/11/2023



LL1- Dry Creek Bed & Raingarden



