EST 1983 VLAWMO Vadnais Lake Area Water Management Organization

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VLAWMO TECHNICAL COMMISSION MEETING

8:15 AM June 10, 2026

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

Action items:

I. Call to Order – 8:15am –Chair Ousky

II. Approval of Agenda

III. Approval of Minutes (May 13, 2026) 2

IV. Administration & Operations - Phil

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C. SHG 2026-03 Valdez & Smith Property Restoration Phase 3 Application 16, 20

D. SHG 2026-04 Koehler Turfgrass Replacement Application 17, 33

E. LL2 2026-01 City of Vadnais Heights Greenhaven Dr. Stormwater BMPs Application 17, 45

VI. Projects – Lauren & Dawn

A. City of Vadnais Heights LCCMR Proposal Status Update 18

B. Consider Resolution to the Board Authorizing WMP 18, 74

C. Update on 319/Phase 2 Project: Easement Filing Complete 18

D. Update Carp Removal Program: Minor Removals and Status 18 - 19

E. Consider Rotary Nature Preserve Restoration: Task Order 2 19, 76

VII. Commissioner Reports

VIII. NOHOA

IX. Ramsey Soil & Water Conservation Division

X. St. Paul Regional Water Services

XI. Public Comment

XII. Next meetings: TEC: July 8, 2026; Board Meeting: June 17, 2026

XIII. Adjourn

Upcoming Events: Visit vlawmo.org/events

Vadnais Heights Ice Cream Social	June 10th
Neighborhood Garden Tour	June 30th

Vadnais Lake Area Water Management Organization
Technical Commission (TEC) Minutes
May 13, 2026
Vadnais Heights City Hall, Council Chambers
800 County Road E East, Vadnais Heights, MN 55127

Commission Members Present:

Nick Ousky	Vadnais Heights (VH)
Gloria Tessier	Gem Lake (GL)
Susan Miller	North Oaks (NO)
Jami Philip	White Bear Township (WBT)
Terry Huntrods	White Bear Lake (WBL)
Tom Hoffman	Lino Lakes (LL)

Others in attendance: Phil Belfiori, Brian Corcoran, Dawn Tanner, Lauren Sampedro, Angela Hugunin (VLAWMO staff), Jeremy Erickson (SPRWS).

I. Call to Order

Chair Ousky called the meeting to order at 8:14 am.

II. Approval of Agenda

It was moved by Commissioner Philip and seconded by Commissioner Tessier to approve the May 13, 2026 TEC agenda as presented. Vote: all aye. Motion passed.

III. Approval of Minutes (April 8, 2026)

It was moved by Commissioner Philip and seconded by Commissioner Tessier to approve the April 8, 2026 meeting minutes as presented. Vote: all aye. Motion passed.

IV. Administration & Operations

A. May Financial Report and Consider Authorization for Payment

Administrator Belfiori summarized the May financial statement as included in the TEC packet. He highlighted expenses from the previous month including the remaining audit payment; payment to complete review of SSU parcels; final work with HEI for BWSR WMP review; a loan payment on sheet pile weir repair along Lambert Lake; payment for the final phase of alum application on Tamarack Lake, and work with HEI to continue preliminary design work for the project upstream of Wilkinson Lake. He also noted early design and planning work for erosion control at two sites along Lambert Creek. Administrator Belfiori recommended approval of the May financial report and payment of the bills.

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

B. Reminder – Commissioner Huntrods to represent TEC at May 20 Subcommittee Meeting

Administrator Belfiori shared a reminder that the TEC voted to have Commissioner Huntrods represent the TEC at the Board Subcommittee's budget discussion meeting on May 20th. He thanked Commissioner Huntrods for his willingness to attend the meeting.

V. Programs

A. Update on Recent Outreach Events

Hugunin shared outreach program updates from April. She described the Planting for Clean Water workshop, which saw strong attendance and interest from prospective grant applicants. Hugunin outlined volunteer events from April, including Tamarack Nature Center's volunteer appreciation dinner, a lake cleanup event, and a Watershed Action Volunteers (WAV) planning meeting. She thanked those involved in the events and the TEC for helping to spread the word. She called out upcoming events including the educational field day at the Rotary Nature Preserve, a Smart Salting for Community Leaders workshop through the MPCA, the Vadnais Heights Ice Cream Social, and two neighborhood garden tours.

B. Update on Digital Accessibility Requirements

Hugunin presented the digital accessibility requirements VLAWMO must comply with beginning in April of 2028, noting that this requirement comes from updates to Title II of the Americans with Disabilities Act. She shared that this would ensure that VLAWMO's resources are digitally accessible for all, regardless of ability, then shared examples of what the compliance process may entail for VLAWMO. She stated that the TEC will be notified of any pertinent updates in the future.

VI. Projects

A. Update on HEI Technical Memos/Task Orders on Stabilization at Two Locations on CD 14

Corcoran presented that the 2026 Public Drainage Inspection Report identified erosion issues on the creek banks at the Koehler and Oakmede monitoring sites on Lambert Creek/CD14. He said that due to significant velocities in these locations, the project engineer (HEI) recommends hard armoring these sites to stabilize the banks.

Corcoran provided background on both sites in question—Oakmede in White Bear Township, just downstream of Rice Lake, and a site just south of Koehler Road. He described previous efforts that helped stabilize the creek banks but pointed out where these efforts have since shown

signs of degradation. Since prior restoration efforts, increased creek velocities have eroded the stream banks. Corcoran stated that VLAWMO's Board approved HEI's scopes at the April meeting.

Commissioner Miller asked if Corcoran feels that the water quantity and speed have increased over time at the sites in question. Corcoran affirmed, citing increased storm intensity over time. He pointed out that the ditch system also has limited ability to meander given it was a ditch designed to move water quickly.

Chair Ousky asked what kinds of materials are typically utilized for soil lifts as shown in the earlier photos. Corcoran stated that these are typically made with coconut coir logs that are staked down before being planted. While initially effective, the biodegradable nature of these materials means that they decompose over time.

B. Update on City of Vadnais Heights Partnership MOU for Fire Station Trail

Sampedro provided an update on the Board's approval of a Memorandum of Understanding (MOU) between the City of Vadnais Heights and VLAWMO for grant funding for a proposed native plant-lined trail to connect the City Hall campus with the proposed Legislative-Citizen Commission on Minnesota Resources (LCCMR) project site. She stated that this trail may include native plants, trees, stormwater improvement, and interpretive signage. The VLAWMO Board and the Vadnais Heights City Council both approved the MOU. The process is ongoing and further updates will be presented to the TEC as available.

Commissioner Miller commented that this will be a nice new amenity, especially as it will connect the neighborhood to the southwest and to the nearby commercial area. Sampedro affirmed and noted that staff have seen many residents utilizing the existing path that stretches from Walmart back to the adjacent neighborhoods.

C. Update 4/22 BWSR Approval and Order Authorizing WMP

Tanner stated that VLAWMO's Watershed Management Plan (WMP) was brought to the April 22nd Minnesota Board of Water and Soil Resources (BWSR) meeting. BWSR then issued an approval decision for the WMP. Now that BWSR has approved the WMP, it will be brought to the TEC and Board in June for adoption.

D. Update on 319/Phase 2 Project: Easement Filing, Dashboard

Tanner shared that the fully signed easement is completed and will be filed shortly. The engineering scope was authorized at the previous Board meeting. HEI has sampling and design work underway. Tanner pointed out that the dashboard included in the packet offers a closer look at overall project progress and spending.

E. Update Tamarack Alum Project: Project Completed and initial data

Tanner described phase four of the Tamarack Lake alum project, which was completed on April 9th. She noted that monitoring data has shown a decline in phosphorus and chlorophyll-A. Secchi readings have so far not reflected much change. Additional monitoring will continue, as well as checking the native vegetation response over time.

Commissioner Miller asked for clarification about the treatments not yet translating to visually improved water quality. Tanner responded that, while Secchi readings for clarity have not yet changed, native plant communities are expanding. As this continues, they will take up more nutrients and should help clear the water over time. She also noted that the project engineer has requested color tests to see if tannins or other factors may be impacting Secchi results.

F. Update Carp Removal Program: Spring monitoring ongoing

Tanner presented an update on the carp removal program on Pleasant and surrounding lakes. Staff regularly check the barrier to ensure that native bigmouth buffalo aren't piling up there.

Commissioner Miller asked whether these barriers are opened when accumulation of native fish is detected. Tanner affirmed this, explaining that if fish that are not carp are detected, the piping can be opened temporarily to allow them pass through. She added that no carp have yet been detected at the barrier in 2026.

G. Update on Rotary Nature Preserve Restoration: Spring photos

Tanner shared an update on the Rotary Nature Preserve restoration. Invasive reed canary grass has shown a clear reduction as a response to recent treatment efforts completed in 2025. Tanner shared that last fall, reed canary grass and invasive hybrid cattail appeared dominant when looking across the wetland, but this spring has presented promising results. Tanner stated that a new scope of work will be brought to the June meeting to make sure restoration work can continue without a gap.

Commissioner Miller asked about what sorts of plants are expected to take the place of the reed canary grass. Tanner responded that these will likely be forbs, selected for visibility near the boardwalk and pollinator benefit. In addition, there will likely be native sedges and bulrushes. They are also expecting the patches of existing native plants to expand over time as invasive treatment continues.

VII. Commissioner Reports

Commissioner Philip shared that White Bear Township recently held a tree sale. Last year, 77 tree orders were placed, while this year saw 102 orders. She shared that when people picked up trees, they also received a packet with Earth Day educational information.

Commissioner Miller shared that the City of North Oaks and NOHOA are proceeding with developing a Management Plan for Pleasant Lake. Commissioner Miller stated that she will share updates with the TEC as more information becomes available.

VIII. NOHOA

None.

IX. Ramsey Soil & Water Conservation Division (RCSWCD)

None.

X. St. Paul Regional Water Services

None.

XI. Public Comment

None.

XII. Next Meetings

TEC meeting: June 10, 2026 at 8:15 am; Board meeting: June 17, 2026.

XIII. Adjourn

It was moved by Commissioner Tessier and seconded by Commissioner Miller to adjourn the meeting at 8:46 am. Vote: all aye. Motion passed.

VLAWMO Finance Summary: June 2026

Jun-26		Actual 6/1/26	Actual to Date	2026 Budget (June 2025 Board Approved)	Carry over from 2025 to 2026	Remaining in Budget	2026 Available (Dec. 2025 Board approved)	Act vs. Budget
BUDGET #	**INCOME**							
5.11	Storm Water Utility		$27,867	$1,335,000	$0	$1,307,133	$1,335,000	2%
5.12	Service Fees			$1,000	$0	$1,000	$1,000	0%
5.13	Interest + mitigation acct	$2,463	$21,035	$30,000	$0	$8,965	$30,000	70%
5.14	Misc. income - WCA admin & other			$3,000	$0	$3,000	$3,000	0%
5.15	Other Income Grants/loan		$7,500	$180,000	$0	$172,500	$180,000	4%
5.16	Transfer from reserves			$1,138,245	$172,445	$1,310,690	$1,310,690	0%
	TOTAL	$2,463	$56,402	$2,687,245	$172,445	$2,803,288	$2,859,690	2%
EXPENSES								
3.1	**Operations & Administration**							
3.110	Office - rent, copies, post tel supplies	$2,263	$10,644	$35,544	$0	$24,900	$35,544	30%
3.120	Information Systems	$2,750	$13,821	$37,150	$0	$23,329	$37,150	37%
3.130	Insurance			$12,000	$0	$12,000	$12,000	0%
3.141	Consulting - Audit	$738	$16,238	$29,900	$0	$13,662	$29,900	54%
3.142	Consulting - Bookkeeping		$188	$1,500	$0	$1,312	$1,500	13%
3.143	Consulting - Legal		$1,978	$9,000	$0	$7,022	$9,000	22%
3.144	Consulting - Eng. & Tech.		$435	$50,000	$0	$49,565	$50,000	1%
3.150	Storm Sewer Utility	$420	$30,078	$22,500	$93,619	$86,041	$116,119	26%
3.160	Training (staff/board)	$190	$694	$18,000	$0	$17,306	$18,000	4%
3.170	Misc. & mileage	$371	$975	$7,276	$0	$6,301	$7,276	13%
3.191	Administration - staff	$38,808	$211,892	$511,724	$0	$299,832	$511,724	41%
3.192	Employer Liability	$12,743	$66,484	$169,583	$0	$103,099	$169,583	39%
3.2	**Monitoring and Studies**							
3.210	Lake and Creek lab analysis	$2,943	$3,163	$25,000	$0	$21,837	$25,000	13%
3.220	Equipment			$3,000	$0	$3,000	$3,000	0%
3.230	Wetland assessment & management			$0	$0	$0	$0	#DIV/0!
3.240	Watershed planning /special study	$11,051	$18,390	$80,000	$0	$61,610	$80,000	23%
3.3	**Education and Outreach**							
3.310	Public Education			$8,000	$0	$8,000	$8,000	0%
3.320	Comm., Outreach & Marketing	$2,039	$13,588	$25,000	$0	$11,412	$25,000	54%
3.330	Community Blue Ed Grant		$7,939	$12,000	$0	$4,061	$12,000	66%
Total Core functions: Ops, Monitoring, Education		*$74,316*	*$396,507*	*$1,057,177*	*$93,619*	*$754,289*	*$1,150,796*	*34%*
Capital Improvement Projects and Programs								
3.4	**Subwatershed Activity**							
3.410	Gem Lake			$10,000	$0	$10,000	$10,000	0%
3.420	Lambert Creek			$455,000	$0	$455,000	$455,000	0%

3.421	Lambert Lake Loan		$19,284	$38,568	$0	$19,284	$38,568	50%
3.425	Goose Lake		$4,377	$40,000	$0	$35,623	$40,000	11%
3.430	Birch Lake			$102,500	$20,000	$122,500	$122,500	0%
3.440	Gilf Black Tam Wilk Amelia	$5,412	$67,763	$383,000	$0	$315,237	$383,000	18%
3.450	Pleasant Charley Deep		$6,970	$115,000	$0	$108,030	$115,000	6%
3.460	Sucker Vadnais		$437	$271,000	$20,000	$290,563	$291,000	0%
3.48	**Programs**							
3.480	Soil Health Grant	$1,870	$1,973	$25,000	$15,530	$38,557	$40,530	5%
3.481	Landscape 1	$7,450	$7,450	$50,000	$11,558	$54,108	$61,558	12%
3.482	Landscape 2/BWSR WBF		$1,468	$80,000	$11,738	$90,270	$91,738	2%
3.483	Project Research & feasibility			$5,000		$5,000	$5,000	0%
3.485	Facilities Maintenan/ Pub. Ditch Main.	$1,287	$5,091	$50,000		$44,909	$50,000	10%
3.5	**Regulatory**							
3.510	Engineer Plan review			$5,000	$0	$5,000	$5,000	0%
	Total CIP & Program	*$16,019*	*$114,813*	$1,630,068	$78,826	*$1,594,081*	*$1,708,894*	*7%*
	Total of Core Operations & CIP	**$90,335**	$511,320	$2,687,245	$172,445	**$2,348,370**	$2,859,690	**18%**

Fund Balance	5/1/2026	6/1/2026
4M Account	$601,213	$416,208
4M Plus Savings	$266,757	$267,577
Total	$867,970	$683,785

Restricted funds	6/1/2026
Mitigation Savings	$0
Term Series	$300,000

	Type	Num	Date	Name	Item	Account	Paid Amount	Original Amount
	Check	**eft**	**05/14/2026**	**further**		**Checking - 1987**		**-7.00**
						Insurance Benefit	-7.00	7.00
TOTAL							-7.00	7.00
	Check	**eft**	**05/19/2026**	**Reliance Standard**		**Checking - 1987**		**-231.22**
						Insurance Benefit	-231.22	231.22
TOTAL							-231.22	231.22
	Check	**6173**	**05/14/2026**	**Ramsey County**		**Checking - 1987**		**-46.00**
						3.440 · Gilfillan Black Tamarack Wilkin	-46.00	46.00
TOTAL							-46.00	46.00
	Check	**6174**	**06/10/2026**	**Dawn Tanner**		**Checking - 1987**		**-150.20**
						3.170 · Misc. & mileage	-110.20	110.20
						3.440 · Gilfillan Black Tamarack Wilkin	-40.00	40.00
TOTAL							-150.20	150.20
	Check	**6175**	**06/10/2026**	**Angela Hugunin**		**Checking - 1987**		**-88.45**
						3.170 · Misc. & mileage	-88.45	88.45
TOTAL							-88.45	88.45
	Check	**6176**	**06/10/2026**	**Lauren Sampedro**		**Checking - 1987**		**-52.35**
						3.170 · Misc. & mileage	-52.35	52.35
TOTAL							-52.35	52.35
	Check	**6177**	**06/10/2026**	**Brian Corcoran**		**Checking - 1987**		**-119.97**
						3.170 · Misc. & mileage	-119.97	119.97
TOTAL							-119.97	119.97
	Check	**6178**	**06/10/2026**	**City of Vadnais Heights**		**Checking - 1987**		**-2,262.99**
						Rent	-1,865.00	1,865.00
						Phone/Internet/Machine Overhead	-335.00	335.00
						Postage	-15.44	15.44
						Copies	-47.55	47.55
TOTAL							-2,262.99	2,262.99
	Check	**6179**	**06/10/2026**	**CliftonLarsonAllen**		**Checking - 1987**		**-738.10**
						3.141 · Audit	-738.10	738.10
TOTAL							-738.10	738.10

	Check	**6180**	**06/10/2026**	**RMB Environmental Laboratories, Inc.**	**Checking - 1987**		**-2,942.72**
					3.210 · Lake & Creek lab analysis	-762.85	762.85
					3.210 · Lake & Creek lab analysis	-79.42	79.42
					3.210 · Lake & Creek lab analysis	-1,912.35	1,912.35
					3.210 · Lake & Creek lab analysis	-94.05	94.05
					3.210 · Lake & Creek lab analysis	-94.05	94.05
TOTAL						-2,942.72	2,942.72
	Check	**6181**	**06/10/2026**	**Ehlers & Associates, Inc.**	**Checking - 1987**		**-420.00**
					3.150 · Storm Sewer Utility	-420.00	420.00
TOTAL						-420.00	420.00
	Check	**6182**	**06/10/2026**	**Metro - Inet**	**Checking - 1987**		**-2,200.00**
					IT Support	-2,200.00	2,200.00
TOTAL						-2,200.00	2,200.00
	Check	**6183**	**06/10/2026**	**Houston Engineering, Inc**	**Checking - 1987**		**-9,512.75**
					3.485 · Facilities & Maintenance	-1,286.75	1,286.75
					3.240 · Watershed Plan Amendment	-2,756.25	2,756.25
					3.240 · Watershed Plan Amendment	-5,469.75	5,469.75
TOTAL						-9,512.75	9,512.75
	Check	**6184**	**06/10/2026**	**Angela Novotny**	**Checking - 1987**		**-870.20**
					3.480 · Soil Health Grant	-870.20	870.20
TOTAL						-870.20	870.20
	Check	**6185**	**06/10/2026**	**David Addis**	**Checking - 1987**		**-1,000.00**
					3.480 · Soil Health Grant	-1,000.00	1,000.00
TOTAL						-1,000.00	1,000.00
	Check	**6186**	**06/10/2026**	**Katie Ballering**	**Checking - 1987**		**-7,449.77**
					3.481 · Landscape 1 - cost-share	-7,449.77	7,449.77
TOTAL						-7,449.77	7,449.77
	Check	**6187**	**06/10/2026**	**HDR Engineering, Inc.**	**Checking - 1987**		**-1,476.52**
					3.320 · Marketing	-1,476.52	1,476.52
TOTAL						-1,476.52	1,476.52
	Check	**6188**	**06/10/2026**	**Barr Engineering Co**	**Checking - 1987**		**-5,326.25**
					3.440 · Gilfillan Black Tamarack Wilkin	-5,326.25	5,326.25
TOTAL						-5,326.25	5,326.25
	Check	**6189**	**06/10/2026**	**Gallagher**	**Checking - 1987**		**-2,825.00**

				3.240 · Watershed Plan Amendment	-2,825.00	2,825.00
TOTAL					-2,825.00	2,825.00
Check	**6190**	**06/10/2026**	**City of White Bear Lake**	**Checking - 1987**		**-51,312.90**
				payroll	-38,808.29	38,808.29
				Administration FICA	-2,838.36	2,838.36
				Administration PERA	-2,910.64	2,910.64
				Insurance Benefit	-6,294.76	6,294.76
				Admin payroll processing	-266.05	266.05
				Employer PFML	-194.80	194.80
TOTAL					-51,312.90	51,312.90
Check	**6191**	**06/10/2026**	**Press Publications**	**Checking - 1987**		**-20.00**
				3.320 · Marketing	-20.00	20.00
TOTAL					-20.00	20.00

	May 14 - Jun 10, 26
Ordinary Income/Expense	
Income	
5.1 · Income	
5.13 · Interest	2,462.95
Total 5.1 · Income	2,462.95
Total Income	2,462.95
Gross Profit	2,462.95
Expense	
3.1 · Administrative/Operations	
3.110 · Office	
Copies	47.55
Phone/Internet/Machine Overhead	335.00
Postage	15.44
Rent	1,865.00
Total 3.110 · Office	2,262.99
3.120 · Information Systems	
IT Support	2,200.00
IT Systems - Hardware	550.00
Total 3.120 · Information Systems	2,750.00
3.141 · Audit	738.10
3.150 · Storm Sewer Utility	420.00
3.160 · Training (staff/board)	189.69
3.170 · Misc. & mileage	370.97
3.191 · Employee Payroll	
payroll	38,808.29
Total 3.191 · Employee Payroll	38,808.29
3.192 · Employer Liabilities	
Admin payroll processing	266.05
Administration FICA	2,838.36
Administration PERA	2,910.64
Employer PFML	194.80
Insurance Benefit	6,532.98
Total 3.192 · Employer Liabilities	12,742.83
Total 3.1 · Administrative/Operations	58,282.87
3.2 · Monitoring and Studies	
3.210 · Lake & Creek lab analysis	2,942.72
3.240 · Watershed Plan Amendment	11,051.00
Total 3.2 · Monitoring and Studies	13,993.72
3.3 · Education and Outreach	
3.320 · Marketing	2,038.88

Total 3.3 · Education and Outreach	2,038.88
3.4 · Capital Imp. Projects/Programs	
3.440 · Gilfillan Black Tamarack Wilkin	5,412.25
Total 3.4 · Capital Imp. Projects/Programs	5,412.25
3.48 · Programs	
3.480 · Soil Health Grant	1,870.20
3.481 · Landscape 1 - cost-share	7,449.77
3.485 · Facilities & Maintenance	1,286.75
Total 3.48 · Programs	10,606.72
Total Expense	90,334.44
Net Ordinary Income	-87,871.49
Net Income	**-87,871.49**

Vadnais Lake Area Water Management Organization

2:12 PM

Custom Transaction Detail Report

06/02/2026

April 1 through June 1, 2026

Accrual Basis

	Type	Date	Num	Name	Memo	Account	Clr	Split	Amount	Balance
Apr 1 - Jun 1, 26										
	Credit Card Charge	04/01/2026		Adobe "Creative Cloud		US Bank CC	√	Software	21.66	21.66
	Credit Card Charge	04/02/2026		Google*SVCAPPS_VLAWM		US Bank CC	√	WEB	24.38	46.04
	Credit Card Charge	04/13/2026		Zoom	subscription april26-april27	US Bank CC	√	Software	149.90	195.94
	Transfer	04/20/2026			Funds Transfer	US Bank CC		Checking - 1987	-236.32	-40.38
	Credit Card Charge	04/27/2026		Canva	design software renewal	US Bank CC	√	Software	120.00	79.62
	Credit Card Charge	04/28/2026		hologram	account refill	US Bank CC	√	Software	30.00	109.62
	Credit Card Charge	04/30/2026		L.L. Bean	staff gear	US Bank CC	√	3.320 · Marketing	120.85	230.47
	Credit Card Charge	04/30/2026		Adobe "Creative Cloud		US Bank CC	√	Software	21.66	252.13
	Credit Card Charge	05/01/2026		Google*SVCAPPS_VLAWM		US Bank CC	√	WEB	21.00	273.13
	Credit Card Charge	05/12/2026		WalMart	Rotary field day supplies	US Bank CC		3.310 · Public Education	55.95	329.08
	Credit Card Charge	05/18/2026		Amazon.com	tent	US Bank CC		3.320 · Marketing	542.36	871.44
	Credit Card Charge	05/26/2026		MN Department of Natural Resources	lodging Dawn	US Bank CC		3.160 · Training (staff/board)	189.69	1,061.13
	Credit Card Charge	05/28/2026		ESRI	ArcGIS26-27 renewal	US Bank CC		IT Systems - Hardware	550.00	1,611.13
Apr 1 - Jun 1, 26									**1,611.13**	**1,611.13**

TEC Report to Board -June 2026

Programs & Projects	Effort Level (LOW / MED / HIGH)	Completion Date	Comments
Projects			
E. Vadnais Lake Subwatershed Resiliency Study		Ongoing	Staff are continuing to work with the City of Vadnais Heights on exploring construction of the recommended project from the study, additional partnership development, and state grant management. The City of Vadnais Heights received notice that the LCCMR proposal for the recommended project has been awarded funding. Staff will be working with the City to move forward with implementation activities.
Vadnais Heights Resiliency Study (Whole City)		Ongoing	Staff are continuing to work with the City of Vadnais Heights on the study. Modeling work is complete and the final report is underway. A final stakeholder meeting to discuss results will be held this month.
MPCA 319 /Wilkinson Lake BMPs		Ongoing	Project easement filed and recorded. HEI working on soil sampling and tree survey.
Pleasant Lake Carp Management		Ongoing	Spring removal likely completed. Transition to maintenance beginning.
Rotary Park partnership		2025-29	Task Order 1 complete in July; Task order 2 will carry project through the end of the year.
CD14 Stabilization		2026-27	Engineer and staff have started preliminary work on Koehler and Oakmede stabilization projects
Programs			
City/Township MS4		Ongoing	Public participation opportunities continue to be regularly shared with partners.
Communication & Outreach		Ongoing	Outreach materials continue to be updated and event season is underway. A Planting for Clean Water workshop was hosted locally in May. The Birch Lake Elementary field day was held at the Rotary Nature Preserve as a partnership between the City of WBL, Rotary Club of WBL, and VLAWMO. Neighborhood Garden Tours will take place on June 30th and August 25th.
Cost Share & BWSR WBIF		Ongoing	Site visits have ramped up for the season. Interest remains strong in turfgrass replacement projects, especially focused on increasing pollinator habitat. 2025 projects continue to be closed out as final site visits are completed. VLAWMO is working with the City of Vadnais Heights on a street reconstruction project at Greenhaven Drive. Planning work for BWSR WBIF 25-27 continues.
GIS		Ongoing	Updating online GIS viewer as needed.
Monitoring		Ongoing	2026 regular monitoring is underway. Special monitoring projects are also underway.
WAV		Ongoing	First WAV meeting of the year was held in April. Volunteers have signed up to support summer event efforts. Planning is underway for MN Water Stewards action steps.
WCA		Ongoing	Administering WCA as needed.
Website		Ongoing	New website (still at www.vlawmo.org) is live, with content updated as needed.

Administration & Operation			
Audit		2026	Board approved the 2025 VLAWMO Audit at the April 22, 2026 Board meeting
Budget		for 2027 budget	The VLAWMO Board will be considering the VLAWMO Subcommitttee recommended 2027 draft budget at the June 17, 2026 meeting.
SSU		2027	VLAWMO parcels reviewed as needed.
2027-2036 Watershed Mgmt. Plan		2026	The VLAWMO Board will consider the BWSR approved WMP at the June 17, 2026 meeting.

FINANCIAL SUMMARY as of 6/1/2026

4M Account (1.10)	4M Plus (1.23)	Total
$416,208	$267,577	$683,785

Budget Summary	Actual Expense YTD	2026 Budget "working"	Remaining in Budget	% YTD
Operations	*$396,507*	*$1,150,796*	*$754,289*	34%
CIP	*$114,813*	$1,708,894	*$1,594,081*	7%
Total	$511,320	$2,859,690	$2,348,370	18%

VLAWMO
Vadnais Lake Area
Water Management Organization

800 County Road E East, Vadnais Heights, MN 55127
www.vlawmo.org; Office@vlawmo.org

TEC Staff Memo – June 10, 2026

IV. Administration & Operations

A. June Financial Report and Consider Authorization for Payment

Please find the June financial report and authorization to pay bills for consideration and approval.

B. June TEC Report to the Board

Please find the June TEC report to the Board attached in the ePacket for review and approval.

V. Programs

A. Update on Rotary Field Day

This spring's educational field day with Birch Lake Elementary took place on Thursday, May 22nd. This day marked a continuing partnership between the City of White Bear Lake, Birch Lake Elementary School, and VLAWMO. Third through fifth grade students traveled to learning stations including a nature hike through the wetland, an "edible campfire," Adopt a Storm Drain, and a macroinvertebrate lab. Volunteers were a critical part of this field trip—staff appreciates their time and expertise, as well as the continued collaboration that makes this day possible. Staff will share photo highlights at the TEC meeting.

B. Update on Neighborhood Garden Tours

Dates and projects are solidified for this summer's Neighborhood Garden Tour events. The events will take place on Tuesday, June 30th and Tuesday, August 25th from 6:00 - 7:30 pm. Three sites will be visited each evening, with each site having received some degree of funding through VLAWMO's grant programs. Promotional materials are now available, and registration is open for both June and August.

C. SHG 2026-03 Valdez & Smith Property Restoration Phase 3 Application

Landowners Nissa Valdez and Alex Smith submitted a Soil Health Grant application for a large-scale native plant restoration on the east and south sides of their property, over a total area of about 10,000 square feet. This is the third phase of a multi-phase property restoration project that started in the fall of 2023 at their 1.4-acre property in the City of North Oaks. This is also the final phase that can be completed in consecutive years per the Soil Health Grant policy. Future phases may occur in 2028. The project area drains to Pleasant Lake, which is impaired for nutrients. The landowners have continued significant work removing invasive species from their property and will be restoring the native plant community with a variety of trees, shrubs, and forbs, specifically focused on improving pollinator habitat and reducing stormwater runoff.

The landowners will be completing the project themselves. Their multi-phase project will also be a stop at our neighborhood gardens tour this month on June 30th. The total estimated project cost is $1,368.94.

Requested action: Staff recommends approval of SHG 2026-03 in the amount of $1,000 for phase 3.

D. SHG 2026-04 Koehler Turfgrass Replacement Application

Landowner Christopher Koehler submitted a Soil Health grant application for a large-scale turfgrass replacement project in the backyard of their 3.44-acre property in the City of North Oaks. The project area drains directly to Gilfillan Lake, which is impaired for nutrients. The proposed turfgrass replacement will involve removing about 16,000 square feet of turfgrass and replacing it with a prairie. The landowner will be hiring a contractor to complete the site preparation work and install the native plant seed and plugs. Site preparation will include turfgrass removal with an aquatic safe herbicide, decompaction of the soil, and drilling in native plant seed mix and cover crop. Erosion control blanket will be added to keep the soil and seed in place. Potted native plants will also be added to enhance the seed mix. The landowner is dedicated to water conservation, improving the quality of Gilfillan Lake, and creating pollinator habitat. The total estimated project cost excluding maintenance costs is $14,136.

Requested action: Staff recommends approval of SHG 2026-04 in the amount of $1,000.

E. LL2 2026-01 City of Vadnais Heights Greenhaven Drive Stormwater BMPs Application

The City of Vadnais Heights submitted a Landscape Level 2 grant application for installing stormwater best management practices (BMPs) on Greenhaven Drive in Vadnais Heights. This project would continue VLAWMO's partnership with the City to install BMPs during street reconstruction projects that will help improve water quality. The City is installing 11 BMPs with the reconstruction of Greenhaven Drive, with nine of the BMPs providing pollution reduction benefits that are above-and-beyond the project's required water quality treatment. Seven tree trenches and four swales will be installed as part of the overall project. The project area drains to Lambert Creek, which is impaired for E.coli.

Short Elliott Hendrickson Inc (SEH) engineers provided construction plans and designs for the BMPs which would capture and treat 3,257 cubic feet of volume more than the required water quality volume of 3,336 cubic feet, for a total provided treatment volume of 6,593 cubic feet. The project will also reduce total suspended solids by about 492.8 pounds/year and total phosphorus by about 1.85 pounds/year. Six bids were received for the project with the lowest bid for the above-and-beyond project components totaling $151,906.48. Staff recommend approval of

a 90% grant level for the above-and-beyond BMPs up to $136,715.83 to the Board of Directors at their June 17th meeting.

Requested action: Staff recommends approval of LL2 2026-01 in the amount of $136,715.83.

VI. Projects

A. City of Vadnais Heights LCCMR Proposal Status Update

The City of Vadnais Heights received an update on the Legislative-Citizen Commission on Minnesota Resources (LCCMR) Environment and Natural Resources Trust Fund (ENRTF) grant application proposal for the water quality improvement, water quantity reduction, and recreation project in the undeveloped area behind City Hall; this proposal was approved as an appropriations bill by the Minnesota State Legislature and signed into law by Governor Walz. Staff will keep the TEC in the loop as this project moves forward into implementation. The City will be in the process of signing a grant agreement and VLAWMO and the City will begin planning the community engagement campaign over the next several months.

B. Consider Resolution to the Board Authorizing WMP

At the BWSR regular meeting on April 22, 2026, the VLAWMO WMP was authorized. Following this authorization, the VLAWMO Board must adopt and implement the Plan within 120 days of the date of the Order, in accordance with MN Statutes 103B.231, Subd. 10. A recommended resolution is provided to the TEC, in advance of the June 17 regular VLAWMO Board meeting.

Requested action: Staff request that the TEC make a recommendation to the Board to implement the WMP by adopting the "Resolution to Adopt the Vadnais Lake Area Water Management Organization's (VLAWMO) Watershed Management Plan" and authorize staff to share the completed WMP with local and State agencies and partners.

Attachment:

- Resolution to Adopt the Vadnais Lake Area Water Management Organization's (VLAWMO) Watershed Management Plan

C. Update on 319/Phase 2 Project

The easement for the Phase 2 project has been accepted for filing by the Ramsey County Recorder's Office. The final filed document will be received in the mail within 5-10 days of presenting to the recorder. At the time of packet preparation, the filed easement has not yet been received.

D. Update Carp Removal Program

Carp Solutions has been managing Big-mouth buffalo at the barrier and completed minor removals for a total of ~1,300 pounds to date at the time of packet preparation.

E. Consider Rotary Nature Preserve Restoration: Task Order 2

Upon request from VLAWMO staff, NST provided Task Order 2 for the Rotary Nature Preserve Restoration. Task 1 runs through the end of July. Task Order 2 is being presented in June to allow the project to proceed without interruption through the end of the year. The cost for Task Order 2, consistent with the 2026 budget for the CPL grant is $15,299. VLAWMO staff will request a new task order in the fall to begin in 2027, to facilitate continued adaptive management of the plant community.

Requested action: Staff request a recommendation to the Board to authorize Task Order 2 with NST in the amount of $15,299 to allow restoration work to proceed at the Rotary Nature Preserve wetland area through the end of 2026.

Attachments:

- Rotary Park Wetland Restoration – Task II
- NST - Rotary Nature Preserve Assessment, pages 17-20 (Restoration Management and Prioritization)

V. C.

Soil Health Grant Application

Submit completed application to:
Lauren Sampedro
lauren.sampedro@vlawmo.org

Applicant Information:

Name:	Nissa Valdez Alex Smith
Address:	2 Falcon Lane North Oaks 55127
City/Township, State, Zip:	North Oaks MN 55127
Phone:	612 280 3000 - Nissa 612 309 7887 - Alex
Email:	npvaldez@gmail.com - nissa thedudeabides277@gmail.com Alex

Project Summary:

ESTIMATED TOTAL PROJECT COST ($)	~~$1350~~ $1,368.94
AMOUNT REQUESTED ($1,000 MAX or $1,250 in Priority Area)	$1000
EXPECTED PROJECT COMPLETION (Month, Year)	8/31/2026

PROJECT TYPE:

- ( ) Downspout/Small Rain Garden
- (X) Native Restoration/ Pollinator Garden
- ( ) Turfgrass Replacement
- ( ) Other

If other, please describe the proposed project: _____

Project Background:

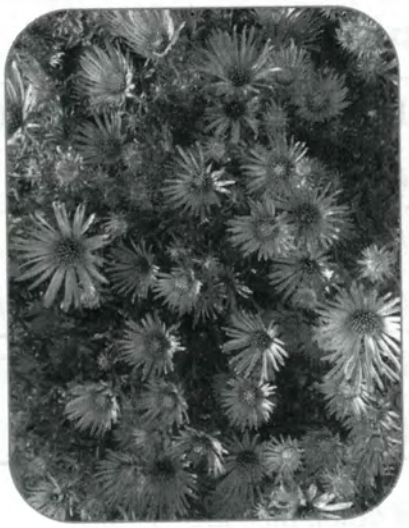
Describe your property. What is the purpose of your project? Does your property connect to a lake, creek, ditch, or wetland in VLAWMO?	1.5 acre lot overrun with buckthorn on parts we have not restored with natives. Purpose is to replace buckthorn with natives and pollinator-friendly plants, drains into a ditch on neighboring property. (see attachment)

Project Background: Continued

Describe how your project will support the goals of the Soil Health Grant Program. (See grant policy)	See attachment
Briefly describe the planned installation and maintenance activities for your project.	see attachment.

Project Specifications:

TOTAL PROPERTY AREA (Acres)	1.5
Total PROJECT SIZE (SQ FT)	~10,000 sf
IF APPLICABLE: DEPTH OF RAIN GARDEN BASIN (Inches)	



Required Attachments:

⇒ Detailed drawing or plan of the proposed project.
see "Revised Phase 3" area on attached map.

⇒ Detailed project budget estimate with itemized costs and materials that equal your total estimated cost.

Note: If any of the native plants in the plan are unacceptable to VLAWMO or are unavailable we may make substitutions of other natives.

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 Date 5/17/26

Print Nissa Valdez

VLAWMO Staff

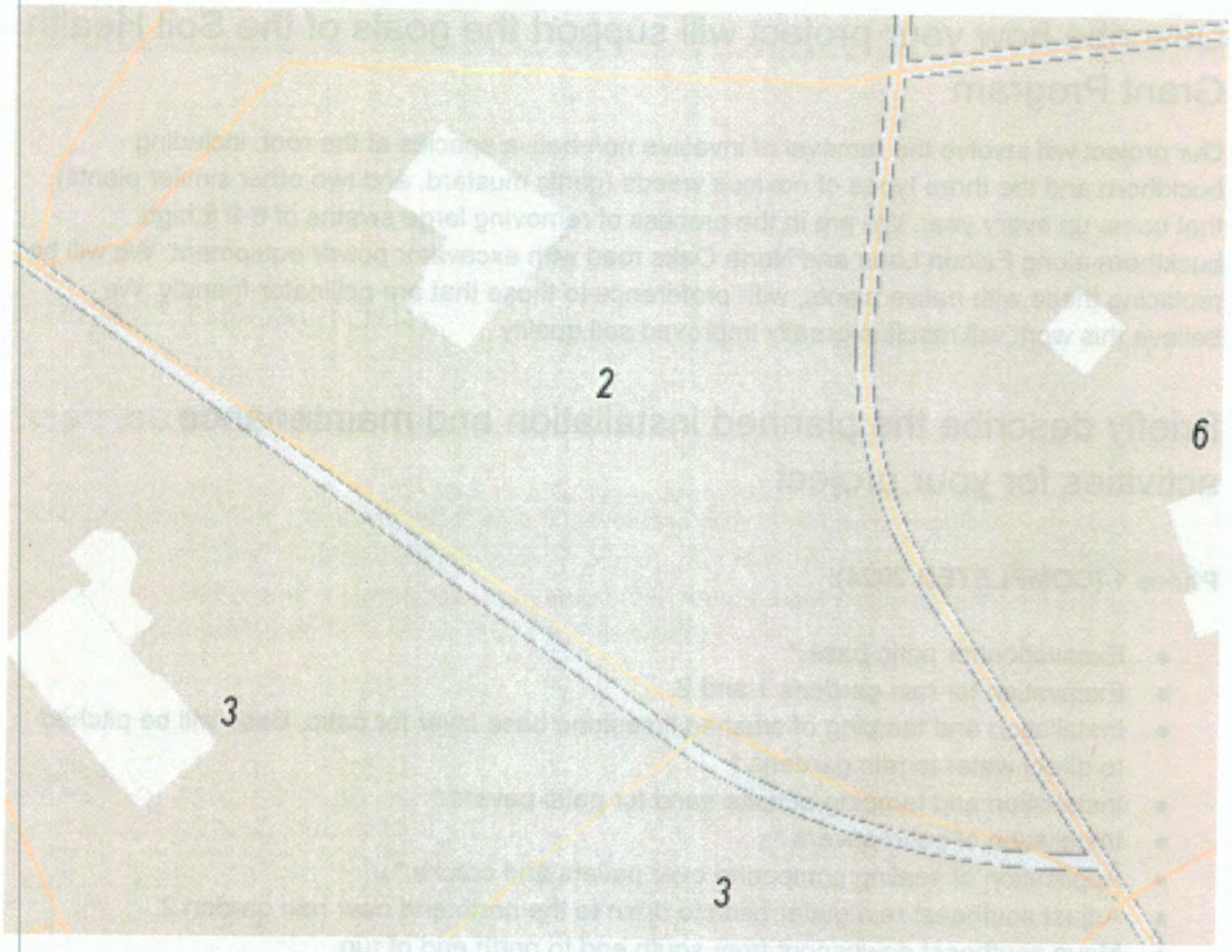
Signature _____ Date _____

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. We added a bee hive to the property this spring.



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 remove invasive plant species and replace them with native plantings. We would like to provide a pollinator friendly environment.

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 are in the process of removing large swaths of 6-9 ft high buckthorn along Falcon Lane and North Oaks road with excavator power equipment. We will be replacing these with native plants, with preference to those that are pollinator-friendly. We believe this work will result in greatly improved soil quality.

Briefly describe the planned installation and maintenance activities for your project

Phase 1 (COMPLETED 2024):

- 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.

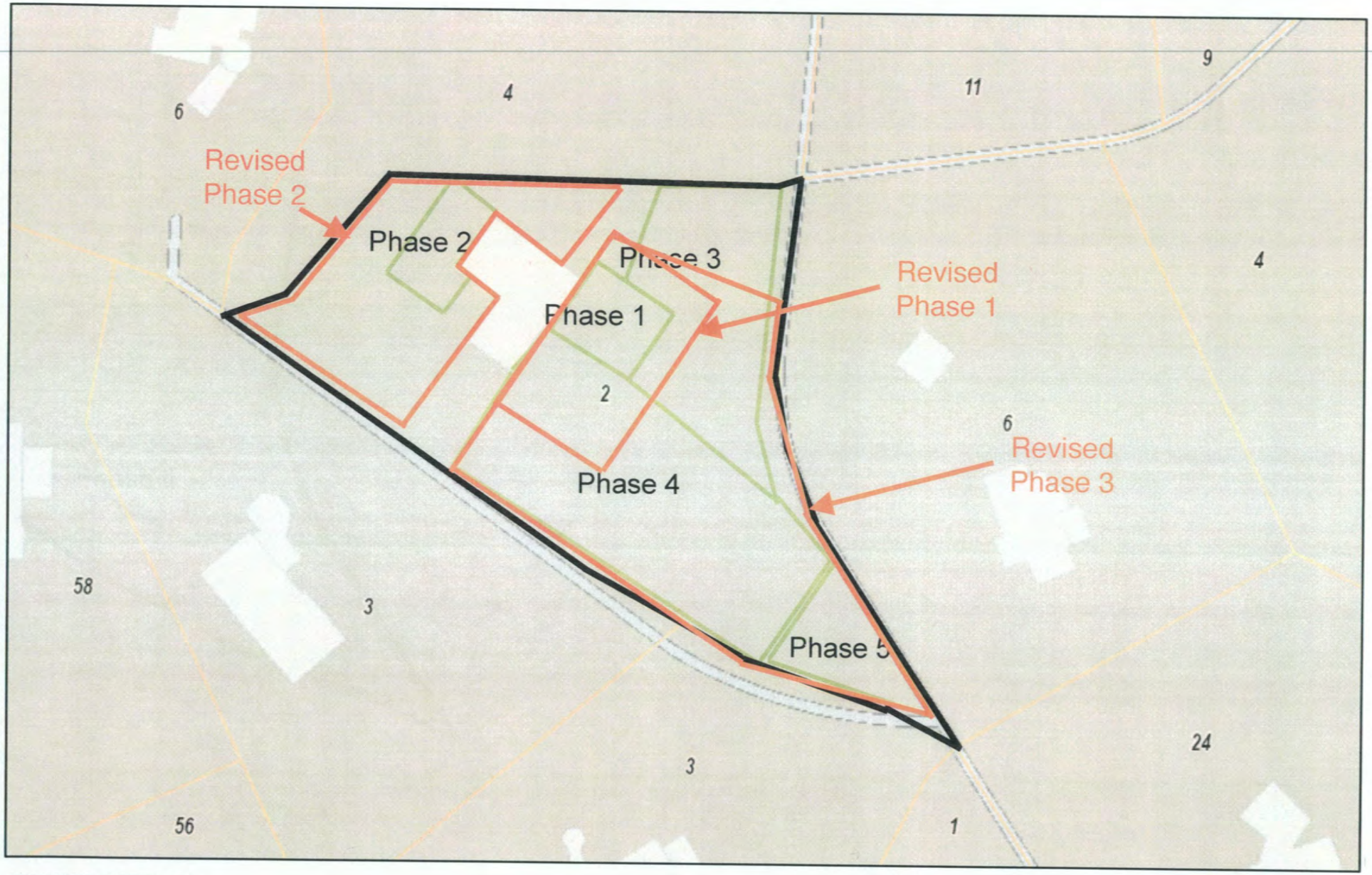
Phase 2 (COMPLETED 2025):

- Excavation for rain garden 3.
- Installation of 4" culvert to direct water from southwest downspout 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 as indicated in the plan
    - adjacent to north and sound side of rain garden 3.
    - Shrubs around the deck.
    - Understory trees around top of hill

Phase 3 (CURRENT FUNDING REQUEST):

- Removal of large dense swath of established buckthorn along Falcon Lane and North Oaks Road. (removal costs not included in grant request)
- Planting of native species of trees, shrubs, and plants. Installation of wire cages to protect trees and shrubs from deer. (wire cages not included in grant request)

Map Ramsey



10/1/2023, 9:07:26 AM

Override 1
Tax Parcels
County Offices
Personal Property
Cities

1:948

0 0.01 0.01 0.03 mi

0 0.01 0.03 0.05 km

Ramsey County MN

SHG 2026-03 Valdez & Smith Property Restoration Phase 3

VLAWMO Boundary 2020
VLAWMO lakes
Project Location
Flow Arrows

1:4,514

0 0.03 0.05 0.1 mi

0 0.04 0.09 0.17 km

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

Date	Item	Vendor	Quantity	Units	Cost/Unit	Tax Included?	Est. Cost
	TOTAL COST						$1,368.94
MECHANICALS:							
							$0.00
							$0.00
TREES:							
Northern white cedar			1		28		$28.00
Blue beech			2		45		$90.00
American basswood			1		28		$28.00
SHRUBS:							
Pagoda dogwood			1		38		$38.00
Regent serviceberry			2		37		$74.00
Sand serviceberry			1		22		$22.00
Nanny berry			3		25		$75.00
Dogwood			3		25		$75.00
American hazelnut			2		25		$50.00
St johnswort			1		25		$25.00
Winterberry			1		16		$16.00
Nine bark			2		25		$50.00
Prairie, Carolina, meadow rose			1		19		$19.00
Red berried elder			2		25		$50.00
Highbush cranberry			1		16		$16.00
American bladdernut			2		43		$86.00
Hardhack spirea - steeplebush			1		16		$16.00
							$0.00
							$0.00
							$0.00
							$0.00
WILDFLOWERS/SMALL PLANTS:							
Thimbleweed			1		13		$13.00
Spikenard			1		17		$17.00
Butterfly milkweed			2		10		$20.00
White indigo			1		17		$17.00
Coneflower			1		13		$13.00
Rattlesnake master			2		13		$26.00
Culver's root			1		13		$13.00
Giant hyssop			1		13		$13.00
Cardinal flower			1		13		$13.00
Mountain mint			1		13		$13.00
Canada mayflower			1		10		$10.00
White Turtlehead			1		17		$17.00

Coreopsis			1		13		$13.00
Dutchman's Breeches			1		9		$9.00
Fireweed			1		13		$13.00
Boneset			1		13		$13.00
Queen of the prairie			1		17		$17.00
Blanket flower			1		13		$13.00
Sneezeweed			2		13		$26.00
Halberdleaf rosemallow			1		17		$17.00
Blazing star			1		13		$13.00
Lobelia			1		13		$13.00
Wild quinine			2		13		$26.00
Prairie purple clover			2		13		$26.00
Royal catchfly			1		17		$17.00
Late figwort			1		13		$13.00
Prairie blue eyed grass			1		10		$10.00
Aromatic aster			1		15		$15.00
Vervain			1		13		$13.00
							$0.00
							$0.00
AMENDMENTS,ETC:							
	mulch	Wood chips - Budget Tree Service	1	pile	$0.00	N	$0.00
	Compost	Mother Earth Gardens	15	bags	$9.80	N	$158.94

Tax Rate 8.13%

V. C. Valdez & Smith Property Restoration Phase 3

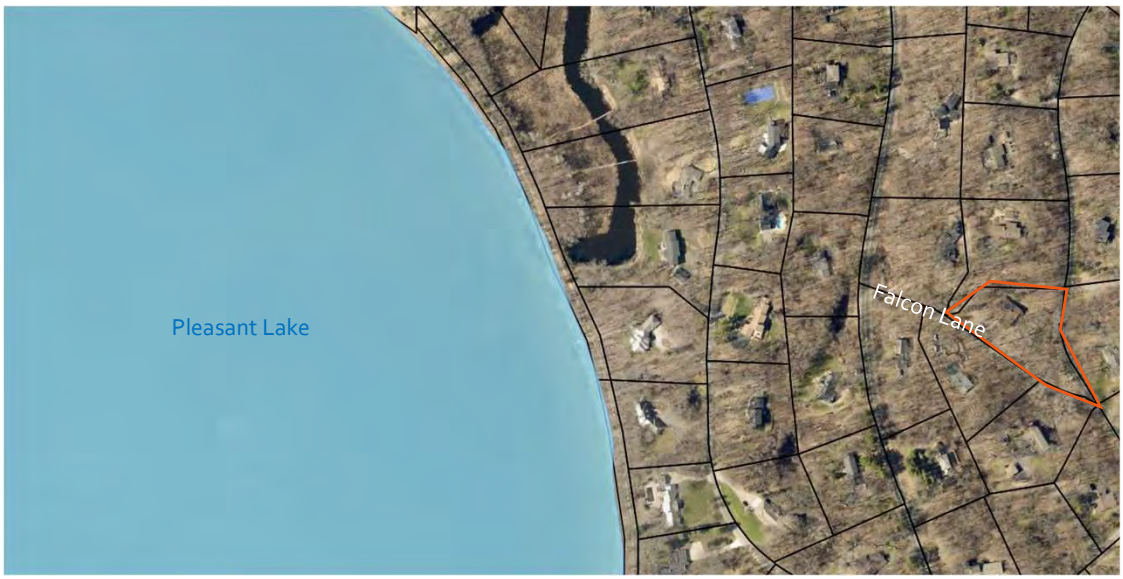
SHG 2026-03 Grant Application

Lauren Sampedro
TEC Meeting
6/10/2026

EST 1983 VLAWMO Vadnais Lake Area Water Management Organization

1

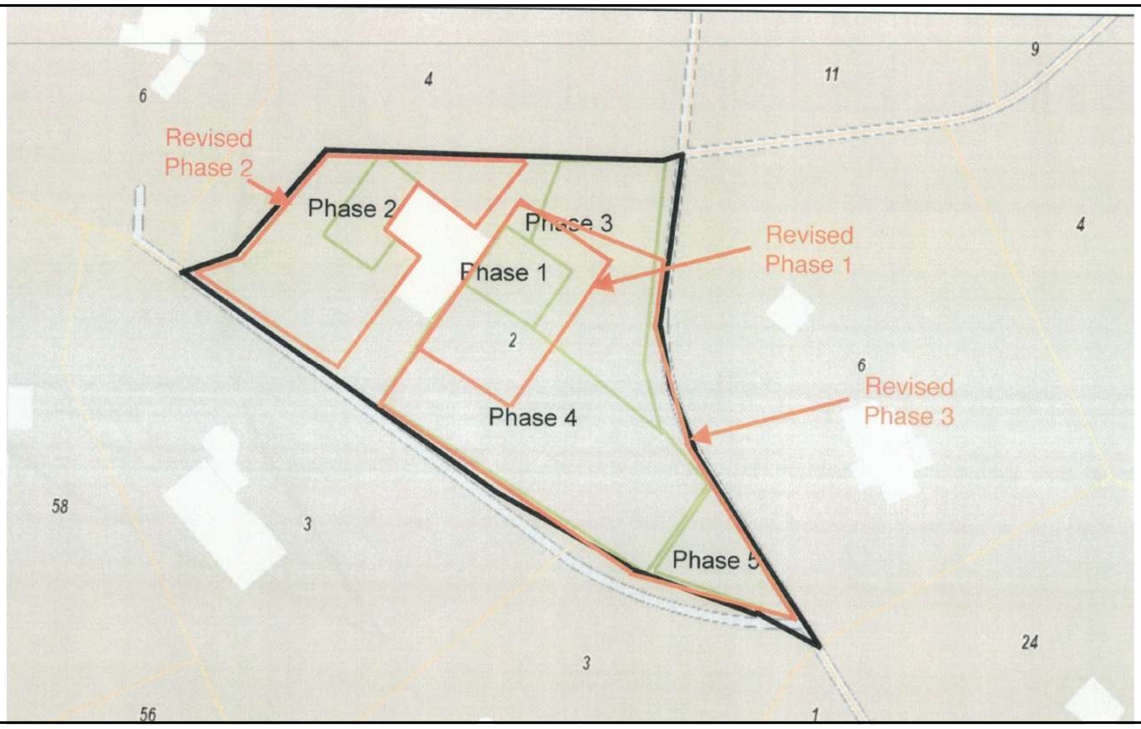
SHG 2026-03–Location Aerial



2

Existing Area

3



4

Proposed Restoration Plan Highlights

- American basswood tree
- Pagoda dogwood shrub
- Winterberry shrub
- Wild rose
- Steeplebush
- Rattlesnake master
- Cardinal flower
- Dutchman's breeches
- Aromatic aster

5

Soil Health Grant Application

Submit completed application to:
Lauren Sampedro
lauren.sampedro@vlawmo.org

Applicant Information:

Name:	Christopher Koehler
Address:	32 E Oaks Rd
City/Township, State, Zip:	North Oaks, MN 55127
Phone:	5125573993
Email:	cleekoehler@gmail.com

Project Summary:

ESTIMATED TOTAL PROJECT COST ($)	~~$14,991.00~~ $14,136
AMOUNT REQUESTED ($1,000 MAX or $1,250 in Priority Area)	$1,000.00
EXPECTED PROJECT COMPLETION (Month, Year)	September, 2026

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, creek, ditch, or wetland in VLAWMO?	We have ~400 feet of shoreline along the north side of Gilfillan Lake. Previous owners have maintained a fertilized and insectacide-treated turf grass lawn. We intend to convert roughly 16,000 sq feet of it to native plants in the current phase of the project and stop all fertilzation/insectacide treatments.

Project Background: Continued

Describe how your project will support the goals of the Soil Health Grant Program. **(See grant policy)**	The current landscape is a turfgrass monoculture that had been routinely watered, fertilized, and treated. Our conversion project aims to replace the turf with native plants to encourage pollinator habitat, reduce water dependency, and improve soil health. At least 50 species of native plant (forbs and grasses) will be used to replace the current turf. The native planting, along with erosion control measures during install are also aimed at reducing runoff into Gilfillan Lake.

Briefly describe the planned installation and maintenance activities for your project.	A prarie seed drill will install a custom, native prarie seed mix at 15lbs/ac. Site will be harrowed and a forb mix will be broadcast before rolling the site to ensure seed/soil contact. On slopes, biodegradable erosion control blankets (NAG-SC-150BN) will be anchored in place and flats will be covered with clean straw. After seeding, 600 3" plant containers will be installed at 4ft spacing. Maintenance is contracted to NST.

Project Specifications:

TOTAL PROPERTY AREA (Acres)	3.44 acres
Total PROJECT SIZE (SQ FT)	16,000 sq ft
IF APPLICABLE: DEPTH OF RAIN GARDEN BASIN (Inches)	N/A

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 6/1/2026

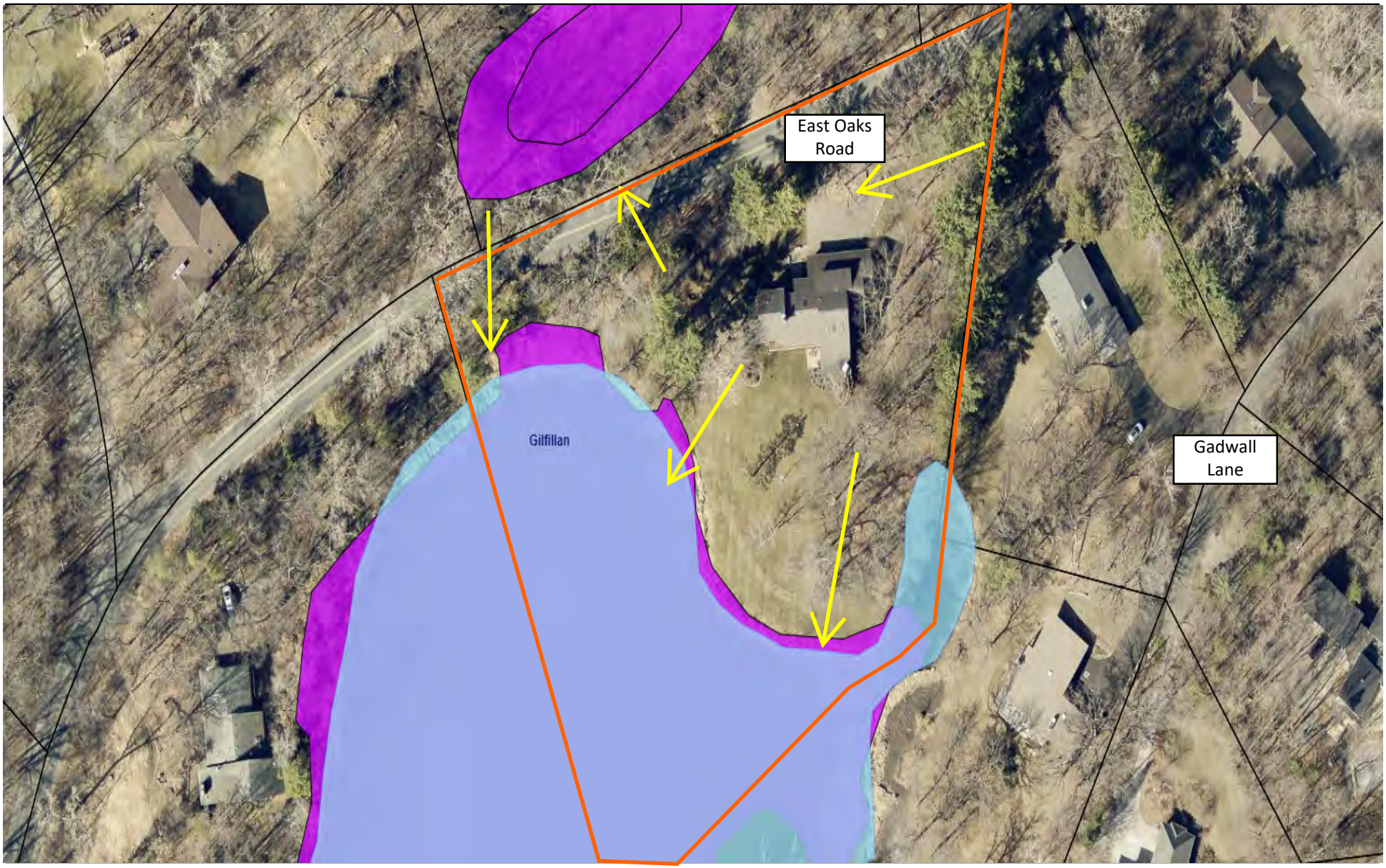
Print Christopher Koehler

VLAWMO Staff

Signature _____ Date _____

Print _____

SHG 2026-04 Koehler Turfgrass Replacement Application



Ramsey County Parcels

Project Location

Flow Arrows

Wetland

1:1,128

0 0.01 0.01 0.02 mi

0 0.01 0.02 0.04 km

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

Soil Health Grant - Map and Plan

Chris and Katherine Koehler

32 E Oaks Road
North Oaks, MN 55127

Turf removal and native planting contracted through Natural Shoreline Technologies.

Site Map ***(approx. 16,000 SF with informal pathways – will be flagged)***

Plant Species List

Common Name	Scientific Name	Height (ft)	Color	Bloom Time

PRAIRIE

Grasses, Sedges

Blue Grama	*Bouteloua gracilis*	.5 to 1	Green-purple	July-September
Canada Wild Rye	*Elymus canadensis*	3 to 4	Green	July - August
Indian Grass	*Sorghastrum nutans*	4 to 6	Amber	July - September
June grass	*Koeleria macrantha*	1 to 2	Amber	May-June
Little Bluestem	*Schizachyrium scoparium*	1.5 to 3	Amber	July - September
Plains oval sedge	*Carex brevior*	1 to 2	Green	June-July
Prairie Dropseed	*Sporobolus heterolepis*	1.5 to 3	Green	August - October
Side Oats Grama	*Bouteloua curtipendula*	1.5 to 2.5	Red-green	July - September
Switch grass	*Panicum virgatum*	4	Amber	July-September

Forbs

Anise Hyssop	*Agastache foeniculum*	2 to 4	Purple	June-October
Aromatic aster	*Symphyotrichum oblongifolium*	2	Puprle	August-November
Black Eyed Susan	*Rudbeckia hirta*	2 to 3	Yellow	June - October
Blue wild indigo	*Baptisia australis*	4.0	Blue	May-July
Butterfly Milkweed	*Asclepias tuberosa*	1 to 2	Orange	June - September
Dotted blazing star	*Liatris punctata*	1 to 2	Purple	August, September
Foxglove Beardtongue	*Penstemon digitalis*	3 to 4	White	July-August
Golden Alexanders	*Zizia aurea*	1 to 3	Yellow	May-July
Grey-headed Coneflower	*Ratibida pinnata*	5.0	Yellow	July-September

Harebell	*Campanula rotundifolia*	1.0	Purple	June-August
Heath aster	*Symphyotrichum ericoides*	2 to 4	White	August-September
Hoary vervain	*Verbena stricta*	1 to 3	Purple	July-August
Horsemint	*Monarda punctata*	2.0	Purple	July-August
Lance-leaved Tickseed	*Coreopsis lanceolata*	2 to 3	Yellow	June-August
Large-flowered beardtongue	*Penstemon grandiflorus*	2 to 3	Purple	May-June
Meadow Blazing Star	*Liatris ligulistylis*	2 to 3.5	Purple	June - July
Mountain Mint	*Pycnanthemum virginianum*	2 to 3	White	July - September
Ohio Spiderwort	*Tradescantia ohiensis*	2 to 4	Blue	July - October
Oxeye	*Heliopsis helianthoides*	5.0	Yellow	June-September
Pale purple coneflower	*Echinacea pallida*	2 to 4	Lavender	June-July
Pasque flower	*Pulsatilla patens*	1.0	Purple	May-June
Prairie blazing star	*Liatris pycnostachya*	2 to 5	Purple	August - September
Prairie tickseed	*Coreopsis palmata*	1.5 to 2.5	Yellow	June - September
Prairie Onion	*Allium stellatum*	1 to 1.5	Pink	July - September
Prairie Phlox	*Phlox pilosa*	1.5 to 2	Pink	May - June
Prairie Smoke	*Geum triflorum*	0.5 to 1	Rose	May - June
Purple coneflower	*Echinacea purpurea*	4.0	Purple	July-September
Purple prairie clover	*Dalea purpurea*	2.0	Purple	July-September
Rattlesnake master	*Eryngium yuccifolium*	4.0	White	July-September
Rough Blazingstar	*Liatris aspera*	1.5 to 3	Purple	July - September
Showy Goldenrod	*Solidago speciosa*	2 to 3	Yellow	August - September
Sky Blue Aster	*Symphyotrichum oolentangiense*	2 to 3.5	Purple	August-October
Smooth blue aster	*Symphyotrichum laeve*	4	Blue	August-October
Stiff Goldenrod	*Solidago rigida*	2 to 5	Yellow	August-October
White prairie clover	*Dalea candida*	2.0	White	June - September
Wild bergamot	*Monarda fistulosa*	4.0	Pink-Purple	July-September
Wild petunia	*Ruellia humilis*	1.0	Purple	June-August

Project Summary and Timeline

1. Project site: 16,000 SF (turf to prairie conversion – see map above)
2. Kill selected turf areas with an herbicide appropriate for upland or aquatic use. A licensed herbicide applicator from Natural Shore Technologies will apply the treatment.
3. Cut and remove any weedy plant material from planting area.
4. Use a prairie seed drill to install a custom prairie seed mix (@ 15 lbs/ac) and oats cover crop.
5. Harrow the site, surface broadcast the forb mix and then roll the entire site to increase seed/soil contact.
6. On the slopes, a biodegradable erosion control blanket (NAG SC-150BN) will be anchored in place. On the flats areas, clean, weed free staw will be broadcast.
7. After seeding 600 3” plant containers will be installed @ 4’ spacing (closer spacing in higher profile areas). These are species more difficult to establish from seed.
8. Site monitoring and maintenance (see below for specifics)

Site Monitoring and Maintenance

Invasive Weed Control Methods

- Mechanical approaches
  - Hand-Pulling and Spot Weed Whipping: For mulched planting areas, we will use manual techniques like hand-pulling and spot weed whipping to remove unwanted plants.
  - Targeted Mowing: Seeded prairie areas will receive periodic mowings timed to control invasive species and encourage native plant growth. These timed mowings allow native plants to establish while preventing weed seed maturation.

- Herbicide Treatments: (only when necessary)
  - Targeted Applications: Selective herbicide treatments will be applied in spring and fall to manage non-native forbs and invasive cool-season

grasses, minimizing their spread and ensuring that native species can thrive.
    - Precision and Safety: Herbicides will be used responsibly, targeting only invasive species while avoiding harm to native plants. This approach will support long-term plant diversity.

- Volunteer Woody Plant Removal
    - Volunteer woody species such as green ash, buckthorn, and amur maple will be removed during regular maintenance visits.
    - These species will be carefully removed using appropriate methods to minimize damage to the surrounding native plants and restore ecological balance.
    - Disposal: Proper disposal of removed vegetation to prevent regrowth and ensure a clean, healthy landscape.

Native Plant Enhancement

- Supplemental Planting:
    - Over-Seeding: Areas with low plant diversity or poor establishment will receive additional native plant seed to enhance species richness.
    - Potted Plants: Where necessary, potted native plants will be added to further increase biodiversity and support ecosystem health.

- Diversity Goals:
    - Emphasis on increasing plant diversity in both seeded prairie areas and mulched plantings, ensuring that both project types develop into robust ecosystems that can support a rich diversity of native pollinators.

Aesthetic and Structural Goals

- Natural, Defined Appearance:
    - Maintenance activities will focus on creating a landscape that retains a natural, wild appearance but with more defined, aesthetically pleasing boundaries.
    - The goal is a landscape that looks intentional yet seamlessly blends with the surrounding environment.

- Control Over Plant Height, Density, and Spread:
    - Height and Density Management: Periodic mowing and selective interventions will ensure native plants do not become too dense or overgrown.
    - Controlled Spread: We will manage the spread of certain aggressive native species to prevent them from encroaching on other areas and to maintain a diverse range of species.

Soil Health Grant - Itemized Budget

Chris and Katherine Koehler

32 E Oaks Road
North Oaks, MN 55127

Turf removal and native planting contracted through Natural Shoreline Technologies.

Site Design, Project Management, Mobilization			$1,882.00
Site preparation, herb. trts, seeding, harrow, rolling			$3,074.00
Seed - Erosion Control - installed - NAG SC150BN, Clean			$5,364.00
600 Plants - 3" - containers @ 4' spacing			$3,816.00
Maintenance Plan - 3 visits - 2026			$855.00
		TOTAL =	~~**$14,991.00**~~
			$14,136

V. D. Koehler Turfgrass Replacement

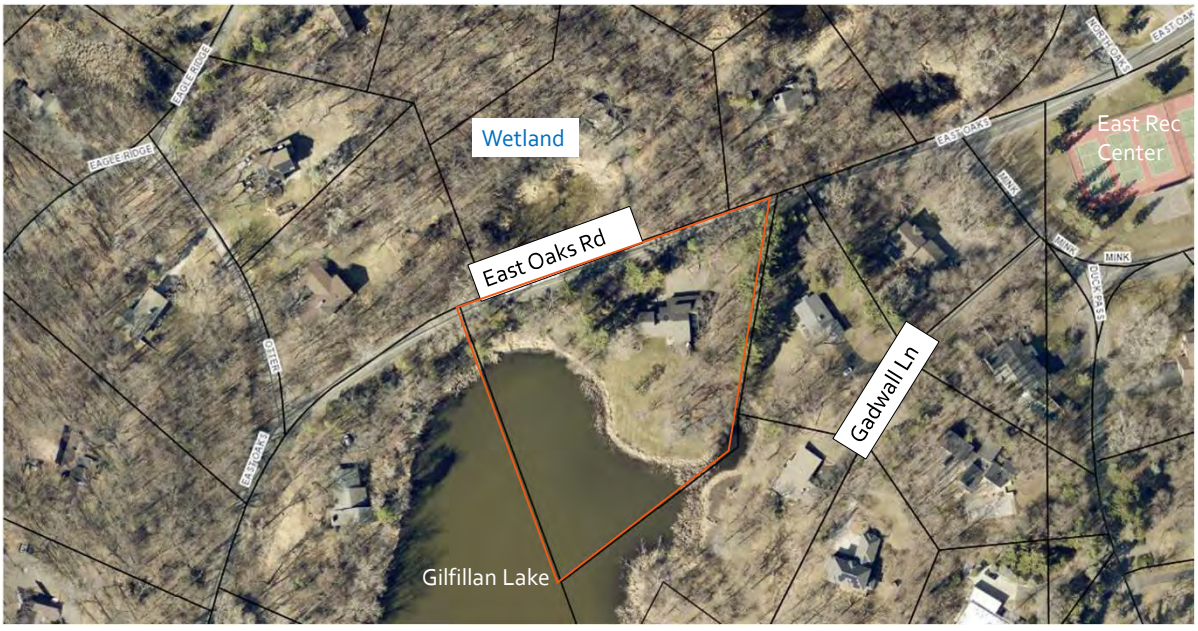
SHG 2026-04 Grant Application

Lauren Sampedro
TEC Meeting
6/10/2026

EST 1983 VLAWMO Vadnais Lake Area Water Management Organization

6

SHG 2026-04–Location Aerial



7

Existing Area

8

Proposed Plan

9

LL2 Grant Application

Submit completed application to:
Lauren Sampedro
lauren.sampedro@vlawmo.org

Applicant Information:

Organization Name:	City of Vadnais Heights
Project Contact:	Jim Hauth, Public Works Director
Address:	800 East County Road E
City/Township, State, Zip:	Vadnais Heights, MN 55127
Phone:	651-204-6050
Email:	Jim.Hauth@cityvadnaisheights.com

Project Summary:

ESTIMATED TOTAL PROJECT COST (Lowest responsible bid $)	$151,906.48
AMOUNT REQUESTED	$136,715.83
EXPECTED PROJECT COMPLETION (Month, Year)	October 2026

PROJECT TYPE:

- ☑ Water Quality Treatment
- ☑ Stormwater Rate and Volume Control
- ☐ Water Conservation
- ☐ Other

If other, please describe the proposed project: _____

Project Background:

Describe the project location and water resources that will benefit from the project. What issues will be addressed with this project?	Greenhaven Drive will be reconstructed and rehabilitated between CSAH 96 and Centerville Road. Seven tree trenches are proposed to be located adjacent low points in the roadway where the longitudinal slope of the roadway flattens. Four proposed grassed filtration swales are located in areas where the storm sewer is too shallow to support a tree trench. Runoff from Greenhaven Drive and the adjacent roadways are generally otherwise untreated and discharge directly to the adjacent wetland areas. The project will address untreated runoff and provide attenuation of discharge leaving the site.

Project Background: Continued

Provide estimated water quality results, stormwater rate/volume reduction, or water conservation benefits associated with the project.	The proposed project will create 1.67 acres of new and reconstructed impervious surfaces, yielding 3,336 cf of water quality volume. The proposed stormwater management facilities offer 6,593 cf of treatment. This is 3,257 cf above the required treatment volume. The tree trenches and grass swales will provide water quality benefits by filtering stormwater through a biofiltration media mix that retains sediment particles, nutrients, and bacteria. The tree trenches will provide additional benefits as the trees and shrubs will uptake additional pollutants, nutrients, bacteria, and stormwater runoff. Peak discharge rates for the 2-, 10-, and 100-year, 24-hour event are reduced by approximately 2 cfs, per event.
Describe the public education and outreach efforts or signage planned for the project.	At least one article will be written in the City's newsletter on the multiple benefits of the planned stormwater structures, highlighting positive impacts to local water resources and wildlife. Signage may be incorporated somewhere along the trail to discuss the purpose of the structures along the project and their multiple benefits.
List or describe any partnerships or other forms of support for the project, including external funding sources.	The City applied and was selected for an Accelerated Implementation Grant from the Board of Water and Soil Resources (BWSR) to support the design of stormwater management facilities.

Project Specifications:

TOTAL PROPERTY AREA (Acres)	ROW Area: 11.3 ac	**Total PROJECT SIZE (Sq Ft)**	Project Limits: 72,745 sf
IMPERVIOUS AREA DRAINING TO PROJECT (Sq Ft):	ROW impervious draining to BMPs: 70,344 sf	**PERVIOUS AREA DRAINING TO PROJECT (Sq Ft):**	ROW pervious draining to BMPs: 39,353 sf

Required Attachments:

- ⇒ Detailed final plan set of the proposed project that includes the estimated, quantitative outcomes of the project.
- ⇒ At least 2 bids for construction of proposed project.
- ⇒ Detailed project budget estimate with itemized materials and costs that equal the total project cost.

LL2 2026-01 Greenhaven Street Stormwater BMPs

VLAWMO Boundary 2020

Project Location

Flow Arrows

Approximate Tree Trench Locations

Approximate Swale Locations

Building a Better World for All of Us®

MEMORANDUM

TO: Lauren Sampedro, Vadnais Lake Area Water Management Organization

FROM: Emily Jennings, PE (Lic. MN), Senior Water Resources Engineer
Scott Haupt, PE (Lic. MN, WI), Senior Civil Engineer

DATE: May 29, 2026

RE: Vadnais Heights 2026 Street Improvement Project - Stormwater Best Management Practices
SEH No. VADNA 187516 14.00

INTRODUCTION

The City of Vadnais Heights is reconstructing and rehabilitating Greenhaven Drive between CSAH 96 and Centerville Road (SAP #209-101-004). The project will include approximately 1.4 miles of roadway, utility improvements, and the addition of a trail. This memorandum summarizes the efficacy of the green stormwater infrastructure (GSI) provided by the project. Cost information related to the GSI is attached.

The existing roadway is entirely residential with a section width of approximately 36-feet with on-street parking. The proposed project will include narrowing the roadway section to 26-feet to allow for a trail to be constructed along the north side of the roadway. The project will increase impervious surfaces by 0.29 acres and reconstruct 1.38 acres of impervious surfaces. Tree trenches and grassed filtration swales are proposed green stormwater infrastructure (GSI) throughout the corridor to provide water quality benefits.

STORMWATER MANAGEMENT

The project is located within the Vadnais Lake Area Watershed Management Organization (VLAWMO) boundary. While VLAWMO is not a regulatory agency, the City has adopted development standards consistent with the watershed's standards. In regard to water quality, the project must retain the larger of 0.55 inches of runoff across the new and fully reconstructed impervious or one inch of runoff across the net increase in impervious

The City has sought to maximize water quality treatment beyond that required. Linear GSI features were considered to maximize treatment along the roadway. Seven tree trenches are proposed to be located adjacent to low points in the roadway where the longitudinal slope of the roadway flattens. Curb cuts along the roadway will convey runoff to a proprietary pretreatment device, the Rain Guardian Bunker, before reaching the tree trench. Tree trenches will be underlain by a minimum of 2.5 feet of filter media to support tree growth and subdrain will be provided. Area intake structures are proposed to discharge the tree trenches during larger storm events; the outlets have been designed using HydroCAD to prevent the trenches from overflowing the top-back-of-curb during storm events smaller than the 10-year storm event. Construction site plans showing GSI details and locations are attached.

Proposed grassed filtration swales are located in areas where the storm sewer is too shallow to support a tree trench. Curb cuts along the roadway will convey runoff to the proposed swales. Volume filtered is quantified only at the low point of the swale; filter media and subdrain will underlay this portion of the swale. The upstream portions of the swales act as pretreatment.

Water Quality Treatment & Volume Control

The project is subject to the volume control requirement for linear projects and must provide 3,336 cubic feet of water quality volume. Due to the limited available locations for GSI, constrained by storm sewer elevations, ROW slopes, and soil conditions, some new and reconstructed impervious areas are untreated. The required water quality volumes listed in the table below are based on the ROW impervious draining to each feature. The untreated area is listed separately to indicate what volume is being offset by the proposed GSI. The "above and beyond" provided volume lists the volume provided in excess by each BMP beyond that required for the upstream ROW impervious.

The proposed GSI features will also provide water quality benefits by filtering stormwater through a biofiltration media mix that retains sediment particles, nutrients, and bacteria. The tree trenches will provide additional benefits as the trees and shrubs will uptake additional pollutants, nutrients, bacteria, and stormwater runoff. The proposed GSI features were modeled in MIDS to quantify their annual total phosphorus (TP) and total suspended solids (TSS) removals from ROW areas, as shown in the table below. MIDS modeling results can be provided upon request. Additionally, while MIDS does not quantify bacteria (e. coli and fecal coliforms) removal, the MPCA Minnesota Stormwater Manual suggests that tree trenches remove greater than 65% of bacteria.

BMP	Required Water Quality Volume (cf)	Above & Beyond Water Quality Volume (cf)	Annual TP Reduction (lbs)	Annual TSS Reduction (lbs)
Swale 1	129	64	0.042	15.5
Tree Trench 1	633	538	0.378	98.5
Tree Trench 2	88	310	0.062	15.4
Tree Trench 3	180	517	0.119	28.4
Tree Trench 4	450	233	0.286	72.2
Swale 2	106	0	0.119	50.3
Swale 3	53	61	0.017	6.4
Tree Trench 5	387	1,373	0.290	67.0
Tree Trench 6	445	44	0.276	70.1
Tree Trench 7	205	729	0.190	43.3
Swale 4	48	0	0.068	25.7
Untreated Areas	612	-612*	-	-
Total	**3,336**	**3,257**	**1.846**	**492.8**

*To account for the proposed GSI offsetting the untreated areas; this volume is not technically "above and beyond" but needed to meet the total required WQV and cannot be attributed to a single BMP.

LCH

Attachment GSI Plans
Received Project Bids
Project Budget

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Highlighted Items and Costs for Stormwater BMP's are summarized on the attached "Estimated Stormwater BMP Costs" Worksheet.

** Total costs related to Stormwater BMP's for items 61, 110 & 111 are less than the totals shown (***these items have quantities in other areas of the project area***); refer to the "Estimated Stormwater BMP Costs Worksheet" for BMP-related costs for each item.

SEH

TABULATION OF BIDS

2026 Street Improvements
Vadnais Heights, Minnesota
SEH No.: VADNA 187516
Bid Date: 10:00 am, Thursday, April 2, 2026

					Engineer's Estimate		1 Forest Lake Contracting, Inc. Forest Lake, MN 55025		2 Veit & Company, Inc.		3 S.M. Hentges & Sons, Inc.		4 Bituminous Roadways Inc.		5 Dresel Contracting Inc.		6 Park Construction Company	
					$9,335,620.25		$8,338,841.34		$8,505,601.79		$8,807,665.50		$9,113,382.58		$9,761,801.23		$9,920,392.30	
Item No.		**Item**	**Unit**	**Est. Quantity**	**Unit Price**	**Total Price**	**Unit Price**	**Total Price**	**Unit Price**	**Total Price**	**Unit Price**	**Total Price**	**Unit Price**	**Total Price**	**Unit Price**	**Total Price**	**Unit Price**	**Total Price**
STREET																		
1	2021.501	MOBILIZATION	LS	1	$483,000.00	$483,000.00	$418,000.00	$418,000.00	$274,628.88	$274,628.88	$444,999.20	$444,999.20	$450,000.00	$450,000.00	$937,875.00	$937,875.00	$450,000.00	$450,000.00
2	2101.502	CLEARING	EACH	13	$500.00	$6,500.00	$1,000.00	$13,000.00	$216.83	$2,818.79	$223.00	$2,899.00	$1,500.00	$19,500.00	$240.00	$3,120.00	$1,030.00	$13,390.00
3	2101.502	GRUBBING	EACH	74	$400.00	$29,600.00	$100.00	$7,400.00	$96.49	$7,140.26	$99.00	$7,326.00	$150.00	$11,100.00	$106.80	$7,903.20	$103.00	$7,622.00
4	2101.505	CLEARING (BRUSH)	ACRE	0.1	$30,000.00	$3,000.00	$10,000.00	$1,000.00	$30,355.50	$3,035.55	$31,190.00	$3,119.00	$15,000.00	$1,500.00	$33,600.00	$3,360.00	$10,300.00	$1,030.00
5	2104.502	SALVAGE SIGN	EACH	73	$50.00	$3,650.00	$40.00	$2,920.00	$43.37	$3,166.01	$44.50	$3,248.50	$45.00	$3,285.00	$30.00	$2,190.00	$41.20	$3,007.60
6	2104.503	REMOVE CONCRETE CURB AND GUTTER	LF	12989	$6.50	$84,428.50	$4.00	$51,956.00	$3.38	$43,902.82	$3.50	$45,461.50	$8.00	$103,912.00	$7.21	$93,650.69	$6.05	$78,583.45
7	2104.503	SALVAGE CHAIN LINK FENCE	LF	97	$25.00	$2,425.00	$12.00	$1,164.00	$16.85	$1,634.45	$17.00	$1,649.00	$22.00	$2,134.00	$47.21	$4,579.37	$15.50	$1,503.50
8	2104.504	REMOVE BITUMINOUS PAVEMENT (DRIVEWAY/PATCHING/TRAIL)	SY	2026	$10.00	$20,260.00	$5.00	$10,130.00	$5.34	$10,818.84	$7.50	$15,195.00	$11.00	$22,286.00	$11.91	$24,129.66	$11.50	$23,299.00
9	2104.504	REMOVE CONCRETE DRIVEWAY PAVEMENT	SY	587	$13.00	$7,631.00	$5.00	$2,935.00	$5.11	$2,999.57	$12.50	$7,337.50	$18.00	$10,566.00	$16.17	$9,491.79	$14.00	$8,218.00
10	2104.518	REMOVE CONCRETE WALK	SF	1103	$4.00	$4,412.00	$1.50	$1,654.50	$2.99	$3,297.97	$2.00	$2,206.00	$8.00	$8,824.00	$8.94	$9,860.82	$1.35	$1,489.05
11	2104.602	SALVAGE SIGN TYPE SPECIAL (STREET NAME SIGN)	EACH	26	$55.00	$1,430.00	$50.00	$1,300.00	$54.21	$1,409.46	$56.00	$1,456.00	$50.00	$1,300.00	$30.00	$780.00	$51.50	$1,339.00
12	2104.602	SALVAGE MAILBOX	EACH	18	$200.00	$3,600.00	$180.00	$3,240.00	$94.55	$1,701.90	$167.00	$3,006.00	$150.00	$2,700.00	$180.00	$3,240.00	$155.00	$2,790.00
13	2104.602	SALVAGE MAILBOX BANK	EACH	4	$500.00	$2,000.00	$205.00	$820.00	$141.82	$567.28	$223.00	$892.00	$200.00	$800.00	$240.00	$960.00	$206.00	$824.00
14	2104.603	EDGE MILL BITUMINOUS SURFACE (2.0")	LF	1320	$6.00	$7,920.00	$6.29	$8,302.80	$6.82	$9,002.40	$3.30	$4,356.00	$4.00	$5,280.00	$1.20	$1,584.00	$0.84	$1,108.80
15	2104.603	SALVAGE LANDSCAPE BOULDERS	LF	66	$15.00	$990.00	$11.00	$726.00	$12.89	$850.74	$31.00	$2,046.00	$20.00	$1,320.00	$23.13	$1,526.58	$21.00	$1,386.00
16	2104.603	SALVAGE BRICK LANDSCAPE EDGING	LF	160	$15.00	$2,400.00	$14.00	$2,240.00	$5.32	$851.20	$8.00	$1,280.00	$5.00	$800.00	$19.08	$3,052.80	$5.25	$840.00
17	2104.604	REMOVE CONCRETE VALLEY GUTTER	SY	266	$16.00	$4,256.00	$4.00	$1,064.00	$5.11	$1,359.26	$12.00	$3,192.00	$20.00	$5,320.00	$20.71	$5,508.86	$14.00	$3,724.00
18	2105.607	COMMON EXCAVATION (EV) (P)	CY	5938	$25.00	$148,450.00	$22.00	$130,636.00	$27.29	$162,048.02	$26.50	$157,357.00	$42.50	$252,365.00	$41.42	$245,951.96	$44.90	$266,616.20
19	2105.607	SUBGRADE EXCAVATION (EV)	CY	1421	$40.00	$56,840.00	$22.00	$31,262.00	$16.43	$23,347.03	$26.50	$37,656.50	$32.00	$45,472.00	$29.34	$41,692.14	$35.00	$49,735.00
20	2105.609	SELECT GRANULAR BORROW (MOD 5%)	TON	2611	$28.00	$73,108.00	$16.50	$43,081.50	$11.21	$29,269.31	$23.50	$61,358.50	$22.00	$57,442.00	$32.61	$85,144.71	$33.20	$86,685.20
21	2108.504	GEOTEXTILE FABRIC TYPE 5	SY	589	$4.00	$2,356.00	$4.00	$2,356.00	$1.90	$1,119.10	$4.50	$2,650.50	$4.00	$2,356.00	$6.95	$4,093.55	$2.10	$1,236.90
22	2112.619	AGGREGATE BASE PREPARATION (STREETS)	RD STA	116	$375.00	$43,500.00	$525.00	$60,900.00	$278.59	$32,316.44	$482.00	$55,912.00	$600.00	$69,600.00	$664.76	$77,112.16	$454.00	$52,664.00
23	2123.610	STREET SWEEPER (WITH PICKUP BROOM)	HOUR	116	$175.00	$20,300.00	$0.01	$1.16	$200.56	$23,264.96	$236.00	$27,376.00	$200.00	$23,200.00	$197.38	$22,896.08	$191.00	$22,156.00
24	2130.523	WATER (FOR DUST CONTROL)	MGAL	116	$60.00	$6,960.00	$45.00	$5,220.00	$30.68	$3,558.88	$102.00	$11,832.00	$65.00	$7,540.00	$78.95	$9,158.20	$65.00	$7,540.00
25	2211.509	SELECT GRANULAR (MOD 5%) (12" MIN AROUND STRUCTURES FOR UTILITY WORK)	TON	998	$24.00	$23,952.00	$24.00	$23,952.00	$19.89	$19,850.22	$30.50	$30,439.00	$50.00	$49,900.00	$39.47	$39,391.06	$58.00	$57,884.00
26	2211.509	AGGREGATE BASE CLASS 5 (18" MIN AROUND STRUCTURES FOR UTILITY WORK)	TON	864	$24.00	$20,736.00	$22.00	$19,008.00	$27.08	$23,397.12	$33.50	$28,944.00	$50.00	$43,200.00	$50.22	$43,390.08	$35.50	$30,672.00
27	2211.509	AGGREGATE BASE CLASS 5 (STREET)	TON	1269	$24.00	$30,456.00	$17.00	$21,573.00	$19.16	$24,314.04	$19.00	$24,111.00	$20.00	$25,380.00	$43.03	$54,605.07	$13.60	$17,258.40
28	2211.509	AGGREGATE BASE CLASS 5 (TRAIL)	TON	3112	$24.00	$74,688.00	$22.00	$68,464.00	$25.54	$79,480.48	$28.50	$88,692.00	$20.00	$62,240.00	$56.51	$175,859.12	$28.30	$88,069.60
29	2232.504	MILL BITUMINOUS SURFACE (2.0")	SY	641	$2.00	$1,282.00	$7.69	$4,929.29	$8.34	$5,345.94	$9.55	$6,121.55	$6.00	$3,846.00	$15.53	$9,954.73	$8.70	$5,576.70
30	2215.504	FULL DEPTH RECLAMATION (P)	SY	42291	$3.75	$158,591.25	$2.50	$105,727.50	$0.65	$27,489.15	$6.50	$274,891.50	$6.50	$274,891.50	$4.33	$183,120.03	$5.10	$215,684.10
31	2357.506	BITUMINOUS MATERIAL FOR TACK COAT	GAL	2008	$3.50	$7,028.00	$4.06	$8,152.48	$4.40	$8,835.20	$4.00	$8,032.00	$0.01	$20.08	$4.39	$8,815.12	$3.20	$6,425.60
32	2360.509	TYPE SP 9.5 WEARING COURSE MIX (3,C)	TON	3955	$102.00	$403,410.00	$89.59	$354,328.45	$97.13	$384,149.15	$95.60	$378,098.00	$92.00	$363,860.00	$91.87	$363,345.85	$97.00	$383,635.00
33	2360.509	TYPE SP 9.5 WEARING COURSE MIX (2,B) (DRIVEWAYS)	TON	275	$210.00	$57,750.00	$149.30	$41,057.50	$198.25	$54,518.75	$171.00	$47,025.00	$170.00	$46,750.00	$131.43	$36,143.25	$243.00	$66,825.00
34	2360.509	TYPE SP 9.5 WEARING COURSE MIX (3,C) (PATCHING)	TON	81	$210.00	$17,010.00	$162.31	$13,147.11	$175.96	$14,252.76	$171.00	$13,851.00	$165.00	$13,365.00	$176.55	$14,300.55	$216.00	$17,496.00
35	2360.509	TYPE SP 9.5 WEARING COURSE MIX (2,B) (TRAIL)	TON	1338	$130.00	$173,940.00	$84.30	$112,793.40	$91.39	$122,279.82	$92.50	$123,765.00	$85.00	$113,730.00	$88.32	$118,172.16	$95.30	$127,511.40
36	2360.509	TYPE SP 12.5 WEARING COURSE MIX (3,C)	TON	4418	$95.00	$419,710.00	$83.10	$367,135.80	$90.09	$398,017.62	$89.00	$393,202.00	$92.00	$406,456.00	$84.95	$375,309.10	$90.60	$400,270.80
37	2360.618	REMOVE AND REPLACE BITUMINOUS PAVEMENT (COUNTY ROAD PATCHING)	SY	653	$50.00	$32,650.00	$63.00	$41,139.00	$49.91	$32,591.23	$47.00	$30,691.00	$65.00	$42,445.00	$59.55	$38,886.15	$138.00	$90,114.00

TABULATION OF BIDS

							1		2		3		4		5		6	
2026 Street Improvements **Vadnais Heights, Minnesota** **SEH No.: VADNA 187516** **Bid Date: 10:00 am, Thursday, April 2, 2026**					Engineer's Estimate $9,335,620.25		Forest Lake Contracting, Inc. Forest Lake, MN 55025 $8,338,841.34		Veit & Company, Inc. $8,505,601.79		S.M. Hentges & Sons, Inc. $8,807,665.50		Bituminous Roadways Inc. $9,113,382.58		Dresel Contracting Inc. $9,761,801.23		Park Construction Company $9,920,392.30	
Item No.		**Item**	**Unit**	**Est. Quantity**	**Unit Price**	**Total Price**	**Unit Price**	**Total Price**	**Unit Price**	**Total Price**	**Unit Price**	**Total Price**	**Unit Price**	**Total Price**	**Unit Price**	**Total Price**	**Unit Price**	**Total Price**
38	2411.502	CONCRETE FLUME	EACH	11	$500.00	$5,500.00	$375.00	$4,125.00	$731.79	$8,049.69	$1,508.00	$16,588.00	$375.00	$4,125.00	$626.18	$6,887.98	$1,060.00	$11,660.00
39	2521.518	4" CONCRETE WALK	SF	666	$8.00	$5,328.00	$9.00	$5,994.00	$8.41	$5,601.06	$6.60	$4,395.60	$7.25	$4,828.50	$9.02	$6,007.32	$7.30	$4,861.80
40	2521.518	6" CONCRETE WALK (SPECIAL)	SF	7556	$11.50	$86,894.00	$14.00	$105,784.00	$14.71	$111,148.76	$15.00	$113,340.00	$13.00	$98,228.00	$15.77	$119,158.12	$13.30	$100,494.80
41	2531.503	CONCRETE CURB DESIGN V10	LF	187	$50.00	$9,350.00	$38.00	$7,106.00	$41.20	$7,704.40	$57.00	$10,659.00	$38.00	$7,106.00	$44.98	$8,411.26	$39.10	$7,311.70
42	2531.504	6" CONCRETE DRIVEWAY PAVEMENT	SY	834	$80.00	$66,720.00	$72.00	$60,048.00	$83.62	$69,739.08	$95.50	$79,647.00	$71.50	$59,631.00	$83.93	$69,997.62	$73.70	$61,465.80
43	2531.503	CONCRETE CURB & GUTTER DESIGN B618	LF	10300	$20.00	$206,000.00	$20.65	$212,695.00	$22.39	$230,617.00	$22.00	$226,600.00	$21.00	$216,300.00	$25.23	$259,869.00	$21.30	$219,390.00
44	2531.603	CONCRETE CURB & GUTTER SPECIAL (SPOT)	LF	2824	$38.00	$107,312.00	$29.25	$82,602.00	$31.71	$89,549.04	$39.00	$110,136.00	$30.00	$84,720.00	$33.73	$95,253.52	$30.10	$85,002.40
45	2531.604	9" CONCRETE VALLEY GUTTER (HIGH-EARLY STRENGTH)	SY	654	$140.00	$91,560.00	$116.75	$76,354.50	$126.57	$82,776.78	$137.00	$89,598.00	$117.00	$76,518.00	$113.26	$74,072.04	$120.00	$78,480.00
46	2531.618	TRUNCATED DOMES	SF	1432	$68.00	$97,376.00	$60.00	$85,920.00	$65.05	$93,151.60	$65.00	$93,080.00	$60.00	$85,920.00	$57.75	$82,698.00	$61.80	$88,497.60
47	2540.602	TEMPORARY MAILBOXES	LS	1	$5,000.00	$5,000.00	$500.00	$500.00	$1,510.10	$1,510.10	$8,911.50	$8,911.50	$15,000.00	$15,000.00	$9,600.00	$9,600.00	$8,240.00	$8,240.00
48	2540.602	INSTALL MAILBOX	EACH	18	$300.00	$5,400.00	$185.00	$3,330.00	$94.55	$1,701.90	$195.00	$3,510.00	$175.00	$3,150.00	$210.00	$3,780.00	$180.00	$3,240.00
49	2540.602	INSTALL MAILBOX BANK	EACH	4	$1,000.00	$4,000.00	$305.00	$1,220.00	$162.39	$649.56	$334.00	$1,336.00	$300.00	$1,200.00	$360.00	$1,440.00	$309.00	$1,236.00
50	2540.603	INSTALL BRICK LANDSCAPE EDGING	LF	160	$25.00	$4,000.00	$21.00	$3,360.00	$5.32	$851.20	$56.00	$8,960.00	$10.00	$1,600.00	$47.70	$7,632.00	$10.50	$1,680.00
51	2540.603	INSTALL LANDSCAPE BOULDERS	LF	66	$25.00	$1,650.00	$16.00	$1,056.00	$12.89	$850.74	$56.00	$3,696.00	$20.00	$1,320.00	$231.27	$15,263.82	$21.00	$1,386.00
52	2557.603	INSTALL CHAIN LINK FENCE	LF	97	$35.00	$3,395.00	$17.00	$1,649.00	$28.09	$2,724.73	$28.00	$2,716.00	$32.00	$3,104.00	$30.00	$2,910.00	$25.80	$2,502.60
53	2563.601	TRAFFIC CONTROL	LS	1	$70,000.00	$70,000.00	$13,900.00	$13,900.00	$15,069.36	$15,069.36	$15,484.00	$15,484.00	$75,000.00	$75,000.00	$143,760.00	$143,760.00	$14,300.00	$14,300.00
54	2564.502	INSTALL SIGN	EACH	73	$250.00	$18,250.00	$250.00	$18,250.00	$271.03	$19,785.19	$279.00	$20,367.00	$250.00	$18,250.00	$558.00	$40,734.00	$258.00	$18,834.00
55	2564.602	INSTALL SIGN TYPE SPECIAL (STREET NAME SIGN)	EACH	26	$275.00	$7,150.00	$325.00	$8,450.00	$352.34	$9,160.84	$362.00	$9,412.00	$325.00	$8,450.00	$558.00	$14,508.00	$335.00	$8,710.00
56	2564.518	SIGN PANEL (TYPE C)	SF	18	$55.00	$990.00	$235.00	$4,230.00	$254.77	$4,585.86	$262.00	$4,716.00	$235.00	$4,230.00	$600.00	$10,800.00	$242.00	$4,356.00
57	2565.616	REVISE SIGNAL SYSTEM	SYSTEM	1	$32,000.00	$32,000.00	$18,000.00	$18,000.00	$17,373.12	$17,373.12	$29,408.00	$29,408.00	$30,000.00	$30,000.00	$28,209.50	$28,209.50	$16,500.00	$16,500.00
58	2572.602	TREE PROTECTION FENCING	EACH	10	$200.00	$2,000.00	$105.00	$1,050.00	$280.86	$2,808.60	$279.00	$2,790.00	$225.00	$2,250.00	$247.50	$2,475.00	$368.00	$3,680.00
59	2572.503	CLEAN ROOT CUTTING	LF	160	$10.00	$1,600.00	$3.50	$560.00	$3.93	$628.80	$11.00	$1,760.00	$3.50	$560.00	$88.00	$14,080.00	$10.30	$1,648.00
60	2571.502	CONIFEROUS TREE 5' HT CONT	EACH	12	$850.00	$10,200.00	$695.00	$8,340.00	$757.52	$9,090.24	$769.00	$9,228.00	$595.00	$7,140.00	$759.00	$9,108.00	$625.00	$7,500.00
61	2571.502	DECIDUOUS TREE 2.5" CAL CONT	EACH	127	$800.00	$101,600.00	$752.00	** $95,504.00	$824.48	$104,708.96	$837.00	$106,299.00	$725.00	$92,075.00	$826.10	$104,914.70	$762.00	$96,774.00
62	2571.502	DECIDUOUS SHRUB NO 5 CONT	EACH	133	$90.00	$11,970.00	$153.00	$20,349.00	$166.87	$22,193.71	$169.00	$22,477.00	$77.00	$10,241.00	$167.20	$22,237.60	$80.90	$10,759.70
63	2571.502	PERENNIAL NO 1 CONT	EACH	409	$40.00	$16,360.00	$58.00	$23,722.00	$62.58	$25,595.22	$64.00	$26,176.00	$35.00	$14,315.00	$62.70	$25,644.30	$36.80	$15,051.20
64	2573.502	STORM DRAIN INLET PROTECTION	EACH	155	$190.00	$29,450.00	$126.00	$19,530.00	$221.16	$34,279.80	$167.00	$25,885.00	$200.00	$31,000.00	$225.68	$34,980.40	$166.00	$25,730.00
65	2573.503	SEDIMENT CONTROL LOG TYPE WOOD FIBER	LF	2640	$4.50	$11,880.00	$2.45	$6,468.00	$3.00	$7,920.00	$3.00	$7,920.00	$3.00	$7,920.00	$2.70	$7,128.00	$3.70	$9,768.00
66	2573.503	SILT FENCE	LF	313	$4.50	$1,408.50	$3.25	$1,017.25	$2.25	$704.25	$2.50	$782.50	$3.00	$939.00	$3.58	$1,120.54	$4.20	$1,314.60
67	2574.507	ORGANIC TOPSOIL BORROW (LV) (IMPORTED)	CY	3732	$37.00	$138,084.00	$42.00	$156,744.00	$42.41	$158,274.12	$44.50	$166,074.00	$50.00	$186,600.00	$48.71	$181,785.72	$52.60	$196,303.20
68	2575.523	WATERING	MGAL	375	$50.00	$18,750.00	$45.00	$16,875.00	$56.17	$21,063.75	$56.00	$21,000.00	$50.00	$18,750.00	$49.50	$18,562.50	$36.80	$13,800.00
69	2575.608	SEED WET DITCH	LB	8	$150.00	$1,200.00	$100.00	$800.00	$84.26	$674.08	$84.00	$672.00	$75.00	$600.00	$109.07	$872.56	$84.10	$672.80
70	2575.608	SEED MIXTURE 34-182 (EMERGENT WETLAND)	LB	6	$350.00	$2,100.00	$427.00	$2,562.00	$314.57	$1,887.42	$312.00	$1,872.00	$280.00	$1,680.00	$469.37	$2,816.22	$263.00	$1,578.00
71	2575.504	EROSION CONTROL BLANKETS CATEGORY 20	SY	1700	$3.00	$5,100.00	$1.75	$2,975.00	$1.63	$2,771.00	$1.50	$2,550.00	$1.45	$2,465.00	$1.82	$3,094.00	$5.25	$8,925.00
72	2575.604	HYDROSEEDING (INCLUDES SEED, FERTILIZER & HYDRAULIC MULCH)	SY	17884	$3.50	$62,594.00	$2.25	$40,239.00	$1.67	$29,866.28	$4.00	$71,536.00	$1.50	$26,826.00	$2.31	$41,312.04	$4.20	$75,112.80
73	2582.503	4" SOLID LINE MULTI COMP	LF	502	$2.00	$1,004.00	$2.50	$1,255.00	$2.71	$1,360.42	$3.00	$1,506.00	$2.50	$1,255.00	$2.75	$1,380.50	$2.60	$1,305.20
74	2582.503	4" DOUBLE SOLID LINE MULTI COMP	LF	5828	$3.00	$17,484.00	$1.00	$5,828.00	$1.08	$6,294.24	$1.10	$6,410.80	$1.00	$5,828.00	$1.10	$6,410.80	$1.05	$6,119.40
75	2582.518	PAVEMENT MESSAGE MULTI COMPONENT GROUND IN (WR)	SF	20	$22.00	$440.00	$15.00	$300.00	$16.26	$325.20	$17.00	$340.00	$15.00	$300.00	$16.50	$330.00	$15.50	$310.00
76	2582.518	CROSSWALK MULTI-COMPONENT GROUND IN (WR)	SF	300	$18.00	$5,400.00	$10.00	$3,000.00	$10.84	$3,252.00	$11.15	$3,345.00	$10.00	$3,000.00	$11.00	$3,300.00	$10.30	$3,090.00

TABULATION OF BIDS

2026 Street Improvements Vadnais Heights, Minnesota SEH No.: VADNA 187516 Bid Date: 10:00 am, Thursday, April 2, 2026					Engineer's Estimate $9,335,620.25		1 Forest Lake Contracting, Inc. Forest Lake, MN 55025 $8,338,841.34		2 Veit & Company, Inc. $8,505,601.79		3 S.M. Hentges & Sons, Inc. $8,807,665.50		4 Bituminous Roadways Inc. $9,113,382.58		5 Dresel Contracting Inc. $9,761,801.23		6 Park Construction Company $9,920,392.30	
Item No.		**Item**	**Unit**	**Est. Quantity**	**Unit Price**	**Total Price**	**Unit Price**	**Total Price**	**Unit Price**	**Total Price**	**Unit Price**	**Total Price**	**Unit Price**	**Total Price**	**Unit Price**	**Total Price**	**Unit Price**	**Total Price**
STORM SEWER																		
77	2104.502	REMOVE DRAINAGE STRUCTURE	EACH	74	$600.00	$44,400.00	$425.00	$31,450.00	$611.19	$45,228.06	$957.00	$70,818.00	$550.00	$40,700.00	$508.22	$37,608.28	$758.00	$56,092.00
78	2104.502	REMOVE PIPE APRON	EACH	2	$500.00	$1,000.00	$300.00	$600.00	$300.14	$600.28	$792.00	$1,584.00	$200.00	$400.00	$190.15	$380.30	$584.00	$1,168.00
79	2104.502	REMOVE CASTING (STORM)	EACH	47	$225.00	$10,575.00	$200.00	$9,400.00	$143.59	$6,748.73	$61.30	$2,881.10	$100.00	$4,700.00	$31.72	$1,490.84	$199.00	$9,353.00
80	2104.502	SALVAGE CASTING (STORM)	EACH	54	$225.00	$12,150.00	$200.00	$10,800.00	$138.77	$7,493.58	$65.00	$3,510.00	$150.00	$8,100.00	$63.42	$3,424.68	$199.00	$10,746.00
81	2104.503	REMOVE SEWER PIPE (STORM)	LF	2509	$15.00	$37,635.00	$10.00	$25,090.00	$15.90	$39,893.10	$29.50	$74,015.50	$12.00	$30,108.00	$19.68	$49,377.12	$40.90	$102,618.10
82	2106.603	DITCH GRADING	LF	261	$5.00	$1,305.00	$20.00	$5,220.00	$7.41	$1,934.01	$5.20	$1,357.20	$45.00	$11,745.00	$14.01	$3,656.61	$11.00	$2,871.00
83	2106.603	BIOFILTRATION SWALE	LF	202	$35.00	$7,070.00	$38.00	$7,676.00	$6.21	$1,254.42	$26.00	$5,252.00	$0.00	$0.00	$72.42	$14,628.84	$29.30	$5,918.60
84	2106.603	TREE TRENCH (4.2' WIDTH)	LF	426	$76.00	$32,376.00	$110.00	$46,860.00	$88.32	$37,624.32	$123.00	$52,398.00	$125.00	$53,250.00	$35.65	$15,186.90	$97.10	$41,364.60
85	2106.603	TREE TRENCH (10' WIDTH)	LF	302	$121.00	$36,542.00	$195.00	$58,890.00	$162.60	$49,105.20	$160.00	$48,320.00	$150.00	$45,300.00	$51.75	$15,628.50	$152.00	$45,904.00
86	2502.503	4" PERF PE PIPE DRAIN	LF	1680	$13.00	$21,840.00	$17.00	$28,560.00	$7.98	$13,406.40	$28.00	$47,040.00	$32.00	$53,760.00	$57.74	$97,003.20	$18.30	$30,744.00
87	2502.503	6" PERF PVC PIPE DRAIN	LF	336	$25.00	$8,400.00	$20.00	$6,720.00	$19.98	$6,713.28	$36.50	$12,264.00	$35.00	$11,760.00	$76.01	$25,539.36	$47.40	$15,926.40
88	2502.503	8" PERF PVC PIPE DRAIN	LF	611	$35.00	$21,385.00	$50.00	$30,550.00	$54.36	$33,213.96	$52.00	$31,772.00	$32.00	$19,552.00	$85.38	$52,167.18	$74.00	$45,214.00
89	2502.602	6" PVC PIPE DRAIN CLEAN OUT	EACH	5	$500.00	$2,500.00	$565.00	$2,825.00	$309.37	$1,546.85	$816.00	$4,080.00	$875.00	$4,375.00	$1,024.88	$5,124.40	$588.00	$2,940.00
90	2502.602	8" PVC PIPE DRAIN CLEAN OUT	EACH	8	$600.00	$4,800.00	$1,200.00	$9,600.00	$892.52	$7,140.16	$1,205.00	$9,640.00	$675.00	$5,400.00	$1,595.68	$12,765.44	$959.00	$7,672.00
91	2502.602	FORD COVER TYPE A1	EACH	13	$250.00	$3,250.00	$400.00	$5,200.00	$251.78	$3,273.14	$553.50	$7,195.50	$650.00	$8,450.00	$687.20	$8,933.60	$268.00	$3,484.00
92	2503.503	4" PVC PIPE SEWER SDR-35	LF	15	$40.00	$600.00	$80.00	$1,200.00	$129.35	$1,940.25	$60.00	$900.00	$55.00	$825.00	$102.18	$1,532.70	$73.00	$1,095.00
93	2503.503	22" SPAN RC PIPE-ARCH APRON W/ TRASH GUARD	EACH	1	$2,000.00	$2,000.00	$3,400.00	$3,400.00	$2,906.99	$2,906.99	$2,568.00	$2,568.00	$4,000.00	$4,000.00	$1,393.49	$1,393.49	$2,390.00	$2,390.00
94	2503.503	51" SPAN RC PIPE-ARCH APRON W/ TRASH GUARD	EACH	1	$4,000.00	$4,000.00	$8,700.00	$8,700.00	$4,513.04	$4,513.04	$6,109.00	$6,109.00	$8,000.00	$8,000.00	$4,311.76	$4,311.76	$4,840.00	$4,840.00
95	2503.503	12" RC PIPE SEWER CL V	LF	203	$72.00	$14,616.00	$87.00	$17,661.00	$67.68	$13,739.04	$70.00	$14,210.00	$39.00	$7,917.00	$60.33	$12,246.99	$121.00	$24,563.00
96	2503.503	15" RC PIPE SEWER CL V	LF	2277	$77.00	$175,329.00	$78.00	$177,606.00	$70.99	$161,644.23	$60.50	$137,758.50	$51.00	$116,127.00	$66.59	$151,625.43	$68.40	$155,746.80
97	2503.503	18" RC PIPE SEWER CL V	LF	470	$85.00	$39,950.00	$95.00	$44,650.00	$73.75	$34,662.50	$76.00	$35,720.00	$58.00	$27,260.00	$70.43	$33,102.10	$84.70	$39,809.00
98	2503.503	21" RC PIPE SEWER CL III	LF	672	$95.00	$63,840.00	$100.00	$67,200.00	$78.17	$52,530.24	$83.00	$55,776.00	$65.00	$43,680.00	$72.11	$48,457.92	$82.70	$55,574.40
99	2503.503	24" RC PIPE SEWER CL III	LF	663	$110.00	$72,930.00	$120.00	$79,560.00	$89.74	$59,497.62	$86.00	$57,018.00	$69.00	$45,747.00	$79.26	$52,549.38	$87.30	$57,879.90
100	2503.503	30" RC PIPE SEWER CL III	LF	53	$160.00	$8,480.00	$180.00	$9,540.00	$110.18	$5,839.54	$106.00	$5,618.00	$93.00	$4,929.00	$113.21	$6,000.13	$163.00	$8,639.00
101	2503.503	36" RC PIPE SEWER CL III	LF	466	$190.00	$88,540.00	$240.00	$111,840.00	$141.23	$65,813.18	$132.00	$61,512.00	$130.00	$60,580.00	$146.58	$68,306.28	$147.00	$68,502.00
102	2503.503	22" SPAN RC PIPE-ARCH SEWER CL III	LF	26	$175.00	$4,550.00	$175.00	$4,550.00	$157.22	$4,087.72	$110.00	$2,860.00	$102.00	$2,652.00	$109.69	$2,851.94	$138.00	$3,588.00
103	2503.503	36" SPAN RC PIPE-ARCH SEWER CL III	LF	79	$300.00	$23,700.00	$285.00	$22,515.00	$159.71	$12,617.09	$152.00	$12,008.00	$150.00	$11,850.00	$168.77	$13,332.83	$139.00	$10,981.00
104	2503.503	44" SPAN RC PIPE-ARCH SEWER CL III	LF	8	$325.00	$2,600.00	$550.00	$4,400.00	$206.25	$1,650.00	$202.00	$1,616.00	$200.00	$1,600.00	$234.32	$1,874.56	$557.00	$4,456.00
105	2503.603	18" PVC PIPE SEWER (C-900)	LF	147	$75.00	$11,025.00	$110.00	$16,170.00	$123.05	$18,088.35	$120.00	$17,640.00	$122.00	$17,934.00	$39.96	$5,874.12	$113.00	$16,611.00
106	2503.602	CONNECT TO EXISTING DRAINAGE STRUCTURE	EACH	3	$2,500.00	$7,500.00	$2,200.00	$6,600.00	$4,301.48	$12,904.44	$3,632.00	$10,896.00	$815.00	$2,445.00	$1,121.07	$3,363.21	$2,160.00	$6,480.00
107	2506.602	F&I CASTING ASSEMBLY (NEENAH R-1733)	EACH	10	$1,050.00	$10,500.00	$900.00	$9,000.00	$1,636.24	$16,362.40	$1,423.00	$14,230.00	$1,500.00	$15,000.00	$2,320.70	$23,207.00	$1,850.00	$18,500.00
108	2506.602	F&I CASTING ASSEMBLY (NEENAH R-3067-V)	EACH	70	$1,050.00	$73,500.00	$900.00	$63,000.00	$1,736.27	$121,538.90	$1,691.00	$118,370.00	$1,750.00	$122,500.00	$2,320.70	$162,449.00	$1,240.00	$86,800.00
109	2506.602	F&I CASTING ASSEMBLY (NEENAH R-3067-VB)	EACH	21	$1,050.00	$22,050.00	$900.00	$18,900.00	$1,178.21	$24,742.41	$1,691.00	$35,511.00	$1,750.00	$36,750.00	$2,355.53	$49,466.13	$1,240.00	$26,040.00
110	2506.602	F&I CASTING ASSEMBLY (NEENAH R-4342)	EACH	12	$1,050.00	$12,600.00	$1,700.00	** $20,400.00	$1,544.60	$18,535.20	$1,626.00	$19,512.00	$1,350.00	$16,200.00	$3,092.35	$37,108.20	$1,660.00	$19,920.00
111	2506.502	INSTALL CASTING (STORM)	EACH	44	$600.00	$26,400.00	$600.00	** $26,400.00	$1,118.13	$49,197.72	$885.00	$38,940.00	$850.00	$37,400.00	$1,018.90	$44,831.60	$1,310.00	$57,640.00
112	2506.502	CONST DRAINAGE STRUCTURE DESIGN SPECIAL	EACH	11	$2,000.00	$22,000.00	$3,100.00	$34,100.00	$2,372.84	$26,101.24	$2,397.00	$26,367.00	$3,250.00	$35,750.00	$4,212.14	$46,333.54	$3,390.00	$37,290.00
113	2506.503	CONST DRAINAGE STRUCTURE DESIGN G	LF	24	$500.00	$12,000.00	$650.00	$15,600.00	$439.87	$10,556.88	$522.00	$12,528.00	$480.00	$11,520.00	$629.83	$15,115.92	$515.00	$12,360.00
114	2506.603	CONST DRAINAGE STRUCTURE (2X3)	LF	100.4	$800.00	$80,320.00	$745.00	$74,798.00	$368.35	$36,982.34	$602.00	$60,440.80	$565.00	$56,726.00	$503.54	$50,555.42	$539.00	$54,115.60
115	2506.503	CONST DRAINAGE STRUCTURE 48-4020	LF	261.7	$1,100.00	$287,870.00	$833.00	$217,996.10	$536.67	$140,446.54	$604.00	$158,066.80	$565.00	$147,860.50	$600.97	$157,273.85	$657.00	$171,936.90

TABULATION OF BIDS

							1		2		3		4		5		6	
2026 Street Improvements **Vadnais Heights, Minnesota** **SEH No.: VADNA 187516** **Bid Date: 10:00 am, Thursday, April 2, 2026**					Engineer's Estimate $9,335,620.25		Forest Lake Contracting, Inc. Forest Lake, MN 55025 $8,338,841.34		Veit & Company, Inc. $8,505,601.79		S.M. Hentges & Sons, Inc. $8,807,665.50		Bituminous Roadways Inc. $9,113,382.58		Dresel Contracting Inc. $9,761,801.23		Park Construction Company $9,920,392.30	
Item No.		**Item**	**Unit**	**Est. Quantity**	**Unit Price**	**Total Price**	**Unit Price**	**Total Price**	**Unit Price**	**Total Price**	**Unit Price**	**Total Price**	**Unit Price**	**Total Price**	**Unit Price**	**Total Price**	**Unit Price**	**Total Price**
116	2506.503	CONST DRAINAGE STRUCTURE 54-4020	LF	55.5	$1,200.00	$66,600.00	$1,300.00	$72,150.00	$753.18	$41,801.49	$740.00	$41,070.00	$750.00	$41,625.00	$758.84	$42,115.62	$867.00	$48,118.50
117	2506.503	CONST DRAINAGE STRUCTURE 60-4020	LF	14	$1,250.00	$17,500.00	$1,500.00	$21,000.00	$874.35	$12,240.90	$1,117.00	$15,638.00	$825.00	$11,550.00	$841.50	$11,781.00	$982.00	$13,748.00
118	2506.503	CONST DRAINAGE STRUCTURE 72-4020	LF	44.3	$1,500.00	$66,450.00	$1,700.00	$75,310.00	$947.28	$41,964.50	$1,119.00	$49,571.70	$885.00	$39,205.50	$469.50	$20,798.85	$1,180.00	$52,274.00
119	2506.503	CONST DRAINAGE STRUCTURE 84-4020	LF	65.1	$1,800.00	$117,180.00	$2,500.00	$162,750.00	$1,172.57	$76,334.31	$1,405.00	$91,465.50	$1,100.00	$71,610.00	$1,288.20	$83,861.82	$1,740.00	$113,274.00
120	2506.503	CONST DRAINAGE STRUCTURE 108-4020	LF	6.6	$3,500.00	$23,100.00	$5,000.00	$33,000.00	$2,026.28	$13,373.45	$871.00	$5,748.60	$2,250.00	$14,850.00	$2,176.84	$14,367.14	$3,080.00	$20,328.00
121	2506.602	MINOR STRUCTURE REPAIR (STORM)	EACH	6	$800.00	$4,800.00	$650.00	$3,900.00	$844.45	$5,066.70	$2,422.00	$14,532.00	$915.00	$5,490.00	$4,257.90	$25,547.40	$457.00	$2,742.00
122	2511.507	RANDOM RIPRAP CLASS III	CY	80	$150.00	$12,000.00	$160.00	$12,800.00	$94.54	$7,563.20	$145.00	$11,600.00	$135.00	$10,800.00	$136.48	$10,918.40	$170.00	$13,600.00
123	2573.607	SEDIMENT REMOVAL (EV)	CY	75	$75.00	$5,625.00	$20.00	$1,500.00	$40.13	$3,009.75	$25.00	$1,875.00	$60.00	$4,500.00	$31.83	$2,387.25	$93.50	$7,012.50
WATER MAIN																		
124	2104.502	SALVAGE HYDRANT	EACH	7	$1,000.00	$7,000.00	$2,000.00	$14,000.00	$500.09	$3,500.63	$909.00	$6,363.00	$815.00	$5,705.00	$1,056.38	$7,394.66	$1,550.00	$10,850.00
125	2104.502	REMOVE GATE VALVE & BOX	EACH	64	$500.00	$32,000.00	$500.00	$32,000.00	$2,527.97	$161,790.08	$420.00	$26,880.00	$410.00	$26,240.00	$792.29	$50,706.56	$774.00	$49,536.00
126	2104.503	REMOVE WATER MAIN PIPE	LF	1392	$25.00	$34,800.00	$15.00	$20,880.00	$4.37	$6,083.04	$32.00	$44,544.00	$16.50	$22,968.00	$27.32	$38,029.44	$38.70	$53,870.40
127	2411.609	REPLACEMENT BACKFILL	TON	290	$32.00	$9,280.00	$30.00	$8,700.00	$24.06	$6,977.40	$22.00	$6,380.00	$4.25	$1,232.50	$31.08	$9,013.20	$54.60	$15,834.00
128	2503.608	DUCTILE IRON FITTINGS	LB	13295	$16.00	$212,720.00	$13.00	$172,835.00	$15.34	$203,945.30	$18.75	$249,281.25	$21.00	$279,195.00	$19.09	$253,801.55	$19.60	$260,582.00
129	2504.601	LINING PITS	LS	1	$560,000.00	$560,000.00	$208,365.00	$208,365.00	$425,744.85	$425,744.85	$141,500.00	$141,500.00	$500,000.00	$500,000.00	$343,741.11	$343,741.11	$895,000.00	$895,000.00
130	2504.601	TEMPORARY WATER SERVICE	LS	1	$150,000.00	$150,000.00	$250,000.00	$250,000.00	$274,925.43	$274,925.43	$282,500.00	$282,500.00	$500,000.00	$500,000.00	$293,131.93	$293,131.93	$525,000.00	$525,000.00
131	2504.602	REINSTATE SERVICE CONNECTION	EACH	150	$750.00	$112,500.00	$750.00	$112,500.00	$3,006.15	$450,922.50	$847.00	$127,050.00	$1,000.00	$150,000.00	$879.75	$131,962.50	$784.00	$117,600.00
132	2504.602	CONNECT TO EXISTING WATER MAIN	EACH	38	$3,000.00	$114,000.00	$1,600.00	$60,800.00	$1,000.18	$38,006.84	$3,632.00	$138,016.00	$1,000.00	$38,000.00	$923.59	$35,096.42	$1,590.00	$60,420.00
133	2504.602	RELOCATE HYDRANT	EACH	4	$6,000.00	$24,000.00	$1,500.00	$6,000.00	$2,004.89	$8,019.56	$2,533.00	$10,132.00	$5,500.00	$22,000.00	$1,204.12	$4,816.48	$3,400.00	$13,600.00
134	2504.602	F&I HYDRANT	EACH	3	$10,000.00	$30,000.00	$10,000.00	$30,000.00	$6,865.80	$20,597.40	$8,223.00	$24,669.00	$12,000.00	$36,000.00	$9,401.40	$28,204.20	$7,440.00	$22,320.00
135	2504.602	ADJUST HYDRANT	EACH	1	$1,500.00	$1,500.00	$2,000.00	$2,000.00	$1,546.90	$1,546.90	$2,036.00	$2,036.00	$2,500.00	$2,500.00	$1,583.57	$1,583.57	$1,730.00	$1,730.00
136	2504.602	ADJUST VALVE BOX - WATER	EACH	11	$500.00	$5,500.00	$350.00	$3,850.00	$363.48	$3,998.28	$604.00	$6,644.00	$700.00	$7,700.00	$389.91	$4,289.01	$485.00	$5,335.00
137	2504.602	6" GATE VALVE AND BOX	EACH	58	$4,000.00	$232,000.00	$6,500.00	$377,000.00	$3,531.15	$204,806.70	$3,010.00	$174,580.00	$2,900.00	$168,200.00	$3,041.27	$176,393.66	$3,900.00	$226,200.00
138	2504.602	8" GATE VALVE AND BOX	EACH	3	$5,000.00	$15,000.00	$8,500.00	$25,500.00	$4,387.34	$13,162.02	$3,918.00	$11,754.00	$4,000.00	$12,000.00	$3,984.43	$11,953.29	$4,740.00	$14,220.00
139	2504.602	10" GATE VALVE AND BOX	EACH	1	$6,000.00	$6,000.00	$9,500.00	$9,500.00	$5,708.26	$5,708.26	$5,905.00	$5,905.00	$6,200.00	$6,200.00	$5,434.20	$5,434.20	$6,040.00	$6,040.00
140	2504.602	12" GATE VALVE & BOX	EACH	11	$7,000.00	$77,000.00	$10,500.00	$115,500.00	$6,717.04	$73,887.44	$6,939.00	$76,329.00	$7,700.00	$84,700.00	$6,803.79	$74,841.69	$7,020.00	$77,220.00
141	2504.603	6" CIPP WATER MAIN LINING	LF	4756	$157.00	$746,692.00	$130.00	$618,280.00	$144.11	$685,387.16	$147.00	$699,132.00	$140.00	$665,840.00	$139.23	$662,177.88	$139.00	$661,084.00
142	2504.603	8" CIPP WATER MAIN LINING	LF	1394	$177.00	$246,738.00	$140.00	$195,160.00	$155.11	$216,223.34	$158.00	$220,252.00	$145.00	$202,130.00	$149.94	$209,016.36	$150.00	$209,100.00
143	2504.603	12" CIPP WATER MAIN LINING	LF	5384	$197.00	$1,060,648.00	$175.00	$942,200.00	$193.62	$1,042,450.08	$198.00	$1,066,032.00	$185.00	$996,040.00	$187.43	$1,009,123.12	$186.00	$1,001,424.00
144	2504.603	6" WATER MAIN DUCTILE IRON PIPE CL 52	LF	781	$90.00	$70,290.00	$110.00	$85,910.00	$59.48	$46,453.88	$81.00	$63,261.00	$70.00	$54,670.00	$91.48	$71,445.88	$76.30	$59,590.30
145	2504.603	8" WATER MAIN DUCTILE IRON PIPE CL 52	LF	83	$110.00	$9,130.00	$133.00	$11,039.00	$75.72	$6,284.76	$106.00	$8,798.00	$100.00	$8,300.00	$107.16	$8,894.28	$99.40	$8,250.20
146	2504.603	10" WATER MAIN DUCTILE IRON PIPE CL 52	LF	11	$120.00	$1,320.00	$170.00	$1,870.00	$139.16	$1,530.76	$183.50	$2,018.50	$160.00	$1,760.00	$118.90	$1,307.90	$156.00	$1,716.00
147	2504.603	12" WATER MAIN DUCTILE IRON PIPE CL 52	LF	446	$140.00	$62,440.00	$160.00	$71,360.00	$105.27	$46,950.42	$131.50	$58,649.00	$170.00	$75,820.00	$171.56	$76,515.76	$123.00	$54,858.00
148	2504.604	4" POLYSTYRENE INSULATION	SY	264	$60.00	$15,840.00	$37.00	$9,768.00	$47.66	$12,582.24	$47.00	$12,408.00	$65.00	$17,160.00	$35.40	$9,345.60	$29.30	$7,735.20
SANITARY SEWER																		
149	2104.502	SALVAGE CASTING (SANITARY)	EACH	55	$225.00	$12,375.00	$350.00	$19,250.00	$138.78	$7,632.90	$86.00	$4,730.00	$150.00	$8,250.00	$53.55	$2,945.25	$199.00	$10,945.00
150	2104.502	REMOVE MANHOLE (SANITARY)	EACH	2	$800.00	$1,600.00	$850.00	$1,700.00	$455.59	$911.18	$1,449.00	$2,898.00	$800.00	$1,600.00	$1,012.81	$2,025.62	$1,160.00	$2,320.00
151	2104.503	REMOVE SEWER PIPE (SANITARY)	LF	55	$25.00	$1,375.00	$12.00	$660.00	$24.78	$1,362.90	$31.50	$1,732.50	$30.00	$1,650.00	$45.60	$2,508.00	$43.10	$2,370.50
152	2503.541	8" PVC SANITARY SEWER PIPE, SDR-26	LF	20	$100.00	$2,000.00	$103.00	$2,060.00	$121.99	$2,439.80	$87.00	$1,740.00	$80.00	$1,600.00	$119.74	$2,394.80	$160.00	$3,200.00
153	2503.602	CONNECT TO EXISTING SANITARY SEWER SERVICE	EACH	2	$1,300.00	$2,600.00	$440.00	$880.00	$1,050.37	$2,100.74	$3,795.00	$7,590.00	$500.00	$1,000.00	$253.04	$506.08	$869.00	$1,738.00

TABULATION OF BIDS

							1		2		3		4		5		6	
2026 Street Improvements **Vadnais Heights, Minnesota** **SEH No.: VADNA 187516** **Bid Date: 10:00 am, Thursday, April 2, 2026**					Engineer's Estimate $9,335,620.25		Forest Lake Contracting, Inc. Forest Lake, MN 55025 $8,338,841.34		Veit & Company, Inc. $8,505,601.79		S.M. Hentges & Sons, Inc. $8,807,665.50		Bituminous Roadways Inc. $9,113,382.58		Dresel Contracting Inc. $9,761,801.23		Park Construction Company $9,920,392.30	
Item No.		**Item**	**Unit**	**Est. Quantity**	**Unit Price**	**Total Price**	**Unit Price**	**Total Price**	**Unit Price**	**Total Price**	**Unit Price**	**Total Price**	**Unit Price**	**Total Price**	**Unit Price**	**Total Price**	**Unit Price**	**Total Price**
154	2503.602	CONNECT TO EXISTING SANITARY SEWER PIPE	EACH	4	$1,500.00	$6,000.00	$470.00	$1,880.00	$1,050.37	$4,201.48	$3,811.00	$15,244.00	$1,050.00	$4,200.00	$505.01	$2,020.04	$1,750.00	$7,000.00
155	2503.603	4" PVC SANITARY SEWER PIPE, SDR-26	LF	35	$60.00	$2,100.00	$155.00	$5,425.00	$103.47	$3,621.45	$84.00	$2,940.00	$50.00	$1,750.00	$37.84	$1,324.40	$66.90	$2,341.50
156	2503.603	4" PVC SANITARY SEWER RISER, SDR-26	LF	10	$100.00	$1,000.00	$175.00	$1,750.00	$102.80	$1,028.00	$143.00	$1,430.00	$125.00	$1,250.00	$54.14	$541.40	$71.60	$716.00
157	2506.502	INSTALL CASTING (SANITARY)	EACH	44	$850.00	$37,400.00	$550.00	$24,200.00	$1,118.13	$49,197.72	$540.00	$23,760.00	$1,050.00	$46,200.00	$930.30	$40,933.20	$1,290.00	$56,760.00
158	2506.502	CASTING ASSEMBLY (SANITARY)	EACH	10	$1,100.00	$11,000.00	$1,150.00	$11,500.00	$1,636.24	$16,362.40	$1,079.00	$10,790.00	$550.00	$5,500.00	$1,780.80	$17,808.00	$1,810.00	$18,100.00
159	2506.602	MINOR STRUCTURE REPAIR (SANITARY)	EACH	22	$900.00	$19,800.00	$800.00	$17,600.00	$1,020.69	$22,455.18	$2,422.00	$53,284.00	$1,300.00	$28,600.00	$1,744.47	$38,378.34	$526.00	$11,572.00
160	2506.603	RECONSTRUCT SANITARY STRUCTURE	LF	51.4	$850.00	$43,690.00	$410.00	$21,074.00	$377.41	$19,398.87	$357.00	$18,349.80	$340.00	$17,476.00	$443.12	$22,776.37	$447.00	$22,975.80
161	2506.603	F&I MANHOLE (SANITARY)	LF	23.8	$1,100.00	$26,180.00	$1,000.00	$23,800.00	$632.25	$15,047.55	$227.00	$5,402.60	$435.00	$10,353.00	$792.62	$18,864.36	$444.00	$10,567.20
TOTAL BID PRICE						**$9,335,620.25**		**$8,338,841.34**		**$8,505,601.79**		**$8,807,665.50**		**$9,113,382.58**		**$9,761,801.23**		**$9,920,392.30**

Greenhaven Drive Reconstruction
VLAWMO Landscape Level 2 Grant Application - Estimated Stormwater BMP Costs
City of Vadnais Heights
5/29/2026

LINE NO.	ITEM NO.	ITEM DESCRIPTION	UNIT	FOREST LAKE CONTRACTING UNIT PRICE	TOTAL ESTIMATED QUANTITY	TOTAL ESTIMATED COST
		STREET				
38	2411.502	CONCRETE FLUME	EACH	$375.00	11	$4,125.00
61	2571.502	DECIDUOUS TREE 2.5" CAL CONT	EACH	$752.00	23	$17,296.00
62	2571.502	DECIDUOUS SHRUB NO 5 CONT	EACH	$153.00	133	$20,349.00
63	2571.502	PERENNIAL NO 1 CONT	EACH	$58.00	409	$23,722.00
69	2575.608	SEED WET DITCH	LB	$100.00	8	$800.00
71	2575.504	EROSION CONTROL BLANKETS CATEGORY 20	SY	$1.75	1,700	$2,975.00
		STORM SEWER				
82	2106.603	DITCH GRADING	LF	$20.00	261	$5,220.00
83	2106.603	BIOFILTRATION SWALE	LF	$38.00	202	$7,676.00
84	2106.603	TREE TRENCH (4.2' WIDTH)	LF	$110.00	426	$46,860.00
85	2106.603	TREE TRENCH (10' WIDTH)	LF	$195.00	302	$58,890.00
87	2502.503	6" PERF PVC PIPE DRAIN	LF	$20.00	336	$6,720.00
88	2502.503	8" PERF PVC PIPE DRAIN	LF	$50.00	611	$30,550.00
89	2502.602	6" PVC PIPE DRAIN CLEAN OUT	EACH	$565.00	5	$2,825.00
90	2502.602	8" PVC PIPE DRAIN CLEAN OUT	EACH	$1,200.00	8	$9,600.00
91	2502.602	FORD COVER TYPE A1	EACH	$400.00	13	$5,200.00
92	2503.503	4" PVC PIPE SEWER SDR-35	LF	$80.00	15	$1,200.00
110	2506.602	F&I CASTING ASSEMBLY (NEENAH R-4342)	EACH	$1,700.00	6	$10,200.00
111	2506.502	INSTALL CASTING (STORM)	EACH	$600.00	6	$3,600.00
112	2506.502	CONST DRAINAGE STRUCTURE DESIGN SPECIAL	EACH	$3,100.00	11	$34,100.00
113	2506.503	CONST DRAINAGE STRUCTURE DESIGN G	LF	$650.00	24.0	$15,600.00

Total Estimated BMP Cost w/ Low Bidder Pricing =	**$307,508.00**

Total Treatment Volume Provided (CF) =	**6593**
Estimated cost per CF of Treatment =	**$46.64**

Required Treatment Volume (CF) =	**3336**
Excess Treatment Volume Provided (CF) =	**3257**
Estimated Cost of Excess Treatment =	**$151,906.48**

Requested LL2 Grant Funding (90% of Excess Treatment Cost) =	**$136,715.83**

EXISTING

- RIGHT OF WAY
- PERMANENT EASEMENT
- PROPERTY LINE
- HORIZONTAL CONTROL POINT
- BENCHMARK
- SURVEY MARKER
- SOIL BORING
- SANITARY SEWER AND MANHCLE
- FORCE MAIN AND LIFT STATION
- SANITARY SEWER SERVICE & CLEANOUT
- WATER MAIN, HYDRANT, VALVE AND MANHOLE
- WATER SERVICE AND CURB STOP BOX
- STORM SEWER, MANHOLE AND CATCH BASIN
- CULVERT AND APRON ENDWALL
- GAS MAIN, VALVE, VENT AND METER
- HANDHOLE
- BURIED FIBER OPTIC CABLE AND MANHOLE
- BURIED PHONE CABLE, PEDESTAL AND MANHOLE
- BURIED TV CABLE, PEDESTAL AND MANHOLE
- BURIED ELECTRIC CABLE, PEDESTAL, MANHOLE, TRANSFORMER AND METER
- OVERHEAD WIRE, POLE AND GUY WIRE
- LIGHT POLE
- TRAFFIC SIGNAL
- STREET NAME SIGN
- SIGN (NON STREET NAME)
- RAILROAD TRACKS
- DECIDUOUS AND CONIFEROUS TREE
- BUSH / SHRUB AND STUMP
- EDGE OF WOODED AREA
- WETLAND
- BUILDING
- FENCE (UNIDENTIFIED)
- BARBED WIRE FENCE
- CHAIN LINK FENCE
- ELECTRIC WIRE FENCE
- WOOD FENCE
- WOVEN WIRE FENCE
- PLATE BEAM GUARDRAIL
- CABLE GUARDRAIL
- POST / BOLLARD
- RETAINING WALL

PROPOSED

- STREET CENTERLINE
- RIGHT-OF-WAY
- PERMANENT EASEMENT
- TEMPORARY EASEMENT
- CONSTRUCTION LIMITS
- SANITARY SEWER, BULKHEAD AND MANHOLE
- FORCE MAIN
- SANITARY SERVICE AND CLEANOUT
- WATER MAIN, TEE, HYDRANT, BULKHEAD AND VALVE
- WATER VALVE MANHOLE, REDUCER, BEND AND CROSS
- WATER SERVICE AND CURB STOP BOX
- STORM SEWER, MANHOLE AND CATCH BASIN
- CULVERT AND APRON ENDWALL
- DRAIN TILE
- DITCH / SWALE
- RIPRAP
- STREET NAME SIGN
- SIGN (NON STREET NAME)
- RETAINING WALL

CONSTRUCTION PLANS

MINNESOTA DEPARTMENT OF TRANSPORTATION
CITY OF
VADNAIS HEIGHTS, MINNESOTA

CONSTRUCTION PLANS FOR

REMOVALS, GRADING, UTILITY IMPROVEMENTS, TRAFFIC SIGNAL IMPROVEMENTS, CONCRETE CURB & GUTTER, BITUMINOUS TRAIL CONSTRUCTION, BITUMINOUS SURFACING, SIGNING & STRIPING, LANDSCAPING & TURF RESTORATION

2026 STREET IMPROVEMENTS

CITY PROJECT NO. 26-01

S.A.P. 209-101-004

GREENHAVEN DRIVE FROM CSAH 96 TO CENTERVILLE ROAD (CSAH 59)

N

N.T.S.

END S.A.P. 209-101-004
STA. 75+14

SECTION 20, T30N, R20W
SECTION 21, T30N, R22W

STREET IMPROVEMENTS
WATERMAIN LINING ONLY

PROJECT LOCATION

CITY OF VADNAIS HEIGHTS, RAMSEY COUNTY

Know what's below. Call before you dig.

NOTE:

THE SUBSURFACE UTILITY QUALITY INFORMATION IN THIS PLAN IS LEVEL D. THIS UTILITY QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-22, ENTITLED "STANDARD GUIDELINES FOR INVESTIGATING AND DOCUMENT EXISTING UTILITIES".

THE CONTRACTOR SHALL CALL THE ONE CALL SYSTEM AT 811 BEFORE COMMENCING EXCAVATION.

GOVERNING SPECIFICATIONS

THE 2025 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN EXCEPT AS MODIFIED BY THE SPECIFICATIONS FOR THIS PROJECT.

ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE LATEST EDITION OF THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, INCLUDING THE LATEST FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS.

INDEX

THIS PLAN CONTAINS 125 SHEETS.

DESIGN DESIGNATION

STOPPING SIGHT DISTANCE BASED ON:
3.5' HEIGHT OF EYE
2' HEIGHT OF OBJECT

	GREENHAVEN DRIVE (CSAH 96 TO N. SPRINGHILL ROAD) S.A.P. 209-101-004	GREENHAVEN DRIVE (N. SPRINGHILL ROAD TO THORNHILL LANE) S.A.P. 209-101-004	GREENHAVEN DRIVE (THORNHILL LANE TO CENTERVILLE ROAD) S.A.P. 209-101-004
GROSS LENGTH	2,126 FEET 0.403 MILES	3,494 FEET 0.662 MILES	1,844 FEET 0.349 MILES
BRIDGE LENGTH	0 FEET 0.000 MILES	0 FEET 0.000 MILES	0 FEET 0.000 MILES
EXCEPTION LENGTH	0 FEET 0.000 MILES	0 FEET 0.000 MILES	0 FEET 0.000 MILES
NET LENGTH	2,126 FEET 0.403 MILES	3,494 FEET 0.662 MILES	1,844 FEET 0.349 MILES
DESIGN	9 TON	9 TON	9 TON
DESIGN SPEED	30 M.P.H.	30 M.P.H.	30 M.P.H.
R-VALUE	20	20	20
ESALS	195,000	28,000	268,000
EXISTING A.D.T. (2023)	2,416	847	3,223
20 YR. PROJECTED A.D.T. (2046)	2,710	950	3,615
% HCADT (2046)	3.6%	3.6%	3.6%
FUNCTIONAL CLASSIFICATION	URBAN COLLECTOR	URBAN COLLECTOR	URBAN COLLECTOR
NO. OF TRAFFIC LANES	2	2	2
NO. OF PARKING LANES	0	0	0

BIKE TRAIL

DESIGN SPEED: 20 M.P.H.

STOPPING SIGHT DISTANCE BASED ON:
4.5' HEIGHT OF EYE
0.0' HEIGHT OF OBJECT

APPROVED:
VADNAIS HEIGHTS DIRECTOR OF PUBLIC WORKS — DATE 2/17/2026

APPROVED:
Brad Estochen — 02/23/2025
RAMSEY COUNTY ENGINEER — DATE

RECOMMENDED FOR APPROVAL:
Lucas Lortie — Digitally signed by Lucas Lortie Date: 2026.03.02 13:54:13 -06'00'
REVIEWED FOR COMPLIANCE WITH STATE AID RULES/POLICY (DISTRICT STATE AID ENGINEER) — DATE

RECOMMENDED FOR APPROVAL:
Lucas Lortie — Digitally signed by Lucas Lortie Date: 2026.03.02 13:54:24 -06'00'
APPROVED FOR STATE AID FUNDING (STATE AID ENGINEER) — DATE

VADNAIS HEIGHTS, MINNESOTA

SEH
PHONE: 651.490.2000
3535 VADNAIS CENTER DRIVE
ST. PAUL, MN 55110-5196
www.sehinc.com

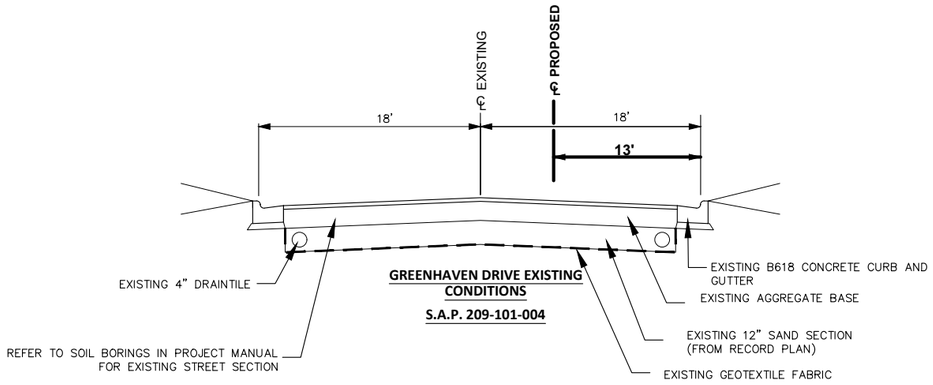
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED LICENSE PROFESSIONAL UNDER THE LAWS OF THE STATE OF MINNESOTA.

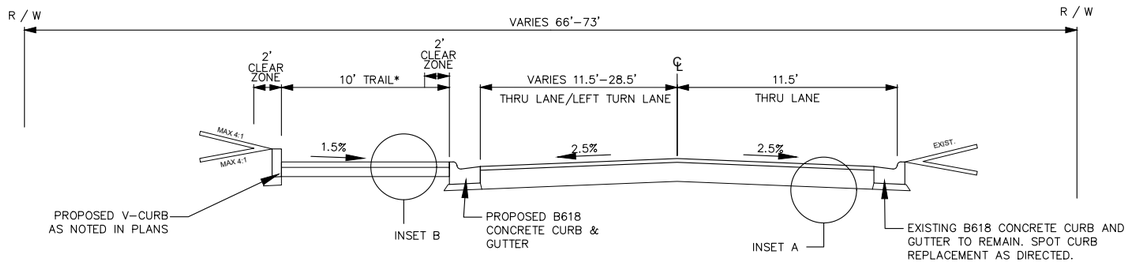
Scott D. Haupt
Signature — SCOTT D. HAUPT
Date 02/03/2026 — Lic. No. 46603

PROJECT NO. VADNA 187516

1 of 125

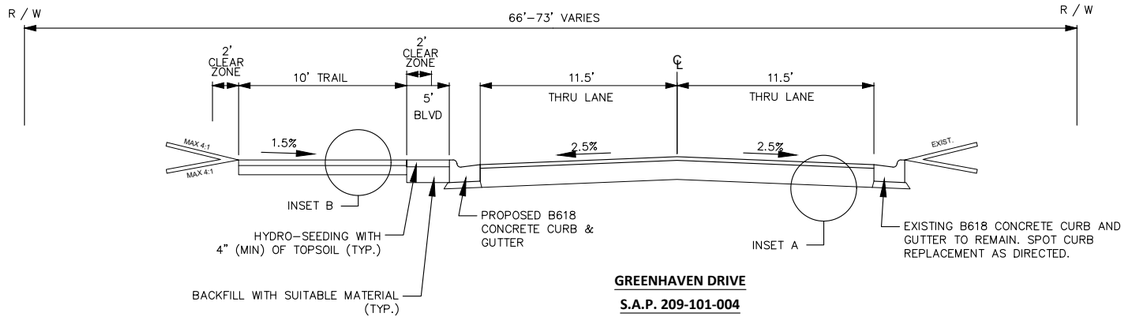
S.A.P. 209-101-004





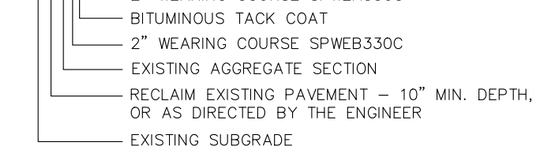
*TRAIL WIDTH IS 12'
WHERE ADJACENT TO V–CURB
STA. 0+73–1+41
STA. 54+38–STA. 55+23

GREENHAVEN DRIVE
S.A.P. 209-101-004
STA. 0+50 - STA. 2+90
STA. 72+00 - STA. 75+14

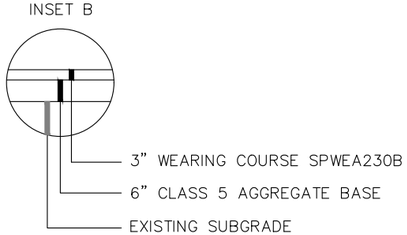


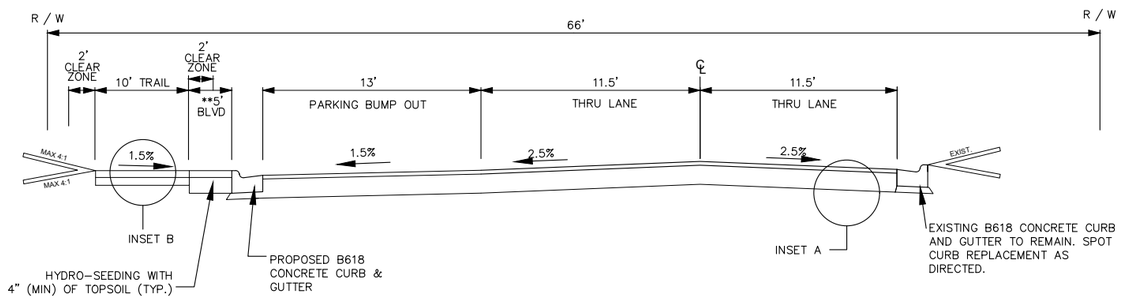
GREENHAVEN DRIVE
S.A.P. 209-101-004
STA. 2+90 - STA. 9+08 STA. 11+15 - STA 12+20
STA. 21+00 - STA 34+00 STA. 37+80 - STA. 69+00

INSET A



INSET B





**STA. 35+70 TO STA. 37+80 LT HAS NO BOULEVARD.

GREENHAVEN DRIVE
S.A.P. 209-101-004
STA. 9+08 - STA. 11+15
STA. 35+70 - STA. 37+80

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SEH Project	VADNA187516	Rev.#	Plan Revision Issue Description	Date	Rev.#	Sheet Revision Issue Description	Date	
Drawn By	BRM, HRC							
Designed By	BRM, HRC							
Checked By	SDH							

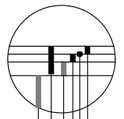
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED LICENSE PROFESSIONAL UNDER THE LAWS OF THE STATE OF MINNESOTA.
Scott D. Haupt
SCOTT D. HAUPT, PE
DATE 02/03/2026 LICENSE NO. 46603

2026 STREET IMPROVEMENTS
VADNAIS HEIGHTS, MINNESOTA
S.A.P. 209-101-004 CITY PROJECT NO. 26-01

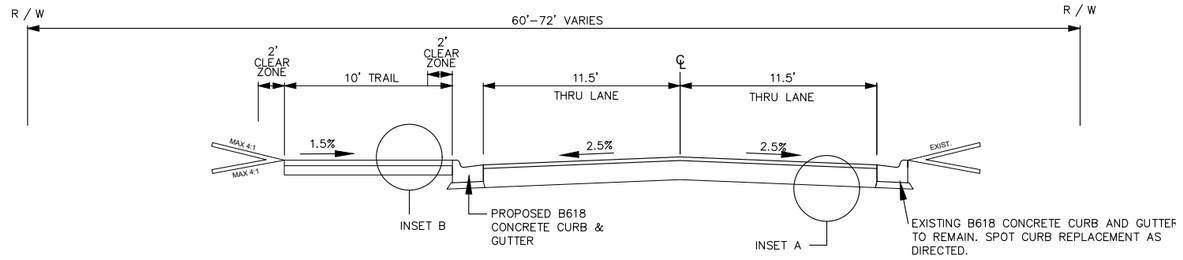
TYPICAL SECTIONS

13
of 125

INSET A

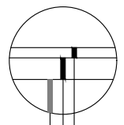


2" WEARING COURSE SPWEA330C
BITUMINOUS TACK COAT
2" WEARING COURSE SPWEB330C
EXISTING AGGREGATE SECTION
RECLAIM EXISTING PAVEMENT – 10" MIN. DEPTH, OR AS DIRECTED BY THE ENGINEER
EXISTING SUBGRADE

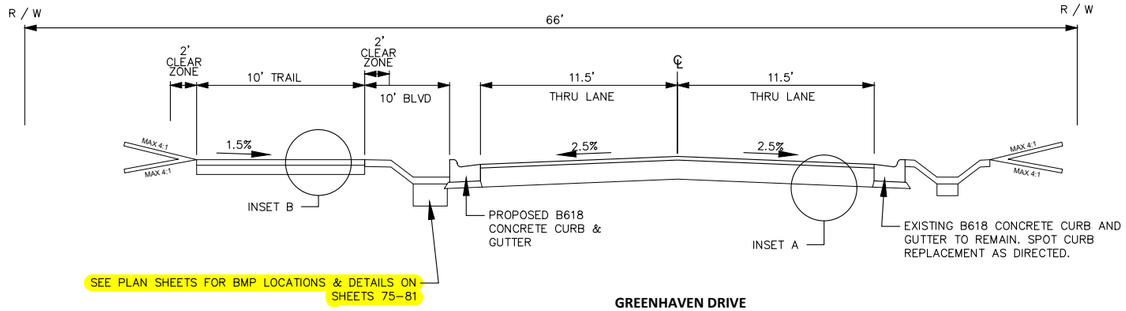


GREENHAVEN DRIVE
S.A.P. 209-101-004
STA. 12+20 - STA. 13+80
STA. 69+00 - STA. 72+00

INSET B



3" WEARING COURSE SPWEA230B
6" CLASS 5 AGGREGATE BASE
EXISTING SUBGRADE



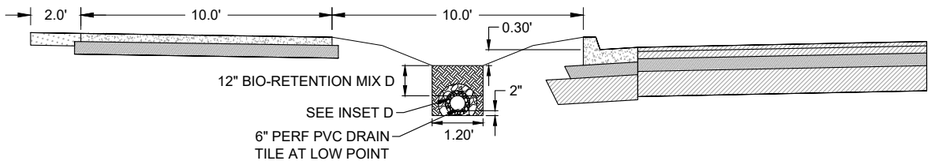
GREENHAVEN DRIVE
S.A.P. 209-101-004
STA. 13+80 - STA. 21+00
STA. 34+00 - STA. 35+70

SEH Project	VADNA187516	Rev.#	Plan Revision Issue Description	Date	Rev.#	Sheet Revision Issue Description	Date	
Drawn By	BRM, HRC							
Designed By	BRM, HRC							
Checked By	SDH							

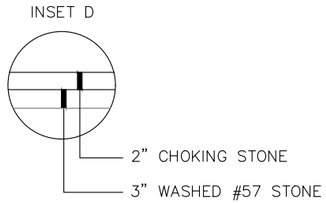
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED LICENSE PROFESSIONAL UNDER THE LAWS OF THE STATE OF MINNESOTA.
SCOTT D. HAUPT, PE
DATE 02/03/2026 LICENSE NO. 46603

2026 STREET IMPROVEMENTS
VADNAIS HEIGHTS, MINNESOTA
S.A.P. 209-101-004 CITY PROJECT NO. 26-01

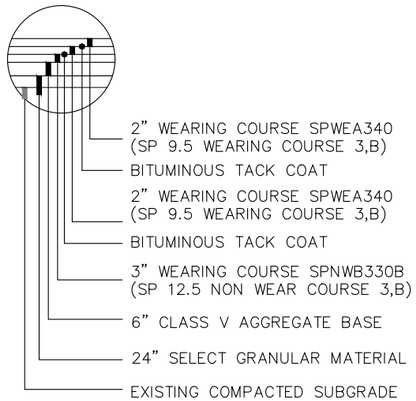
TYPICAL SECTIONS



BIO FILTRATION SWALE TYPICAL SECTION

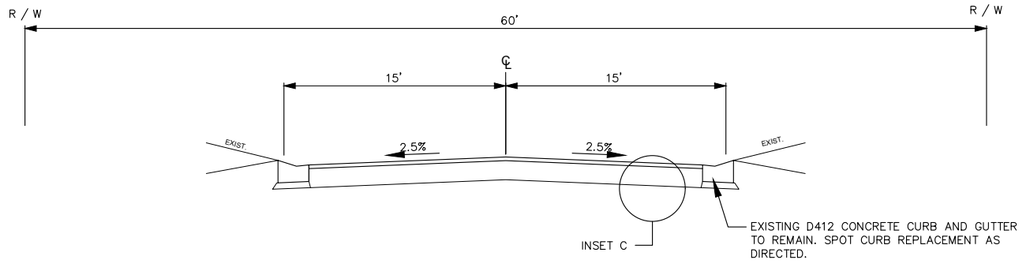


CENTERVILLE ROAD (CSAH 59)
COUNTY ROAD PATCHING
TYPICAL SECTION

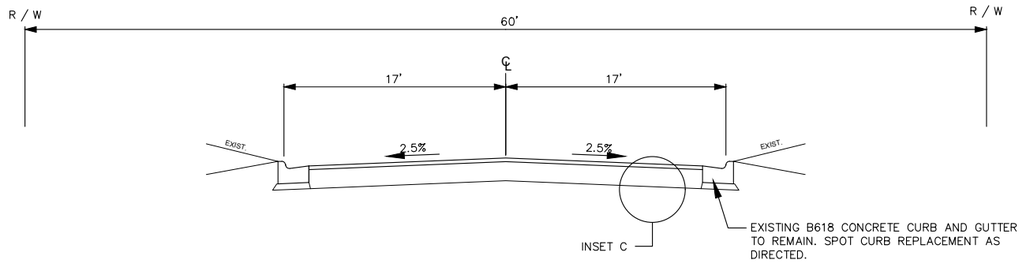


NOTES:

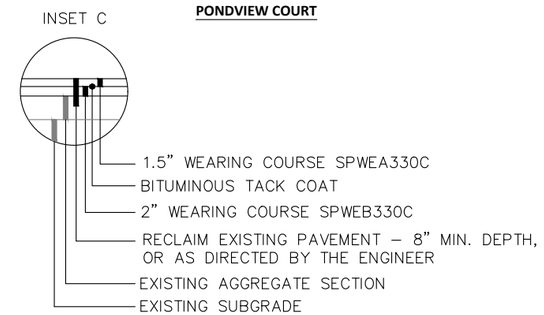
1. PAVEMENT REMOVED WITHIN CENTERVILLE ROAD (CSAH 59) SHALL BE PATCHED UP TO THE FINAL 2" OF BITUMINOUS THE SAME DAY IT IS REMOVED. "BUMP" TRAFFIC SIGNS WILL BE REQUIRED ALONG CENTERVILLE ROAD AND GREENHAVEN DRIVE WHILE 2" DROP OFF IS PRESENT.
2. FULL DEPTH BITUMINOUS REPLACEMENT FOLLOWING THE COUNTY ROAD TYPICAL SECTION IS ONLY NEEDED WHERE UTILITY WORK HAS TAKEN PLACE. EXCAVATION PITS SHALL BE SAWCUT TO HAVE CLEAN EDGES PRIOR TO BEING PATCHED (INCIDENTAL).
3. RAMSEY COUNTY WILL MARK OUT 2" BITUMINOUS MILLING LIMITS ON CENTERVILLE ROAD ONCE UTILITY WORK IS COMPLETED.
4. PATCHES REQUIRING LESS THAN 10 TONS OF NON-WEAR BITUMINOUS MIXTURE MAY SUBSTITUTE THE WEARING COURSE MIXTURE FOR THE ENTIRE PATCH.
5. BITUMINOUS LAYERS BELOW THE FINAL WEARING COURSE MAY USE SP 12.5, AGGREGATE SIZE B MIX.
6. TYPICAL BITUMINOUS MIX FOR RAMSEY COUNTY ROADWAYS SHALL BE TRAFFIC LEVEL 3.
7. SAW CUT FULL DEPTH ALL PAVEMENT REMOVALS.
8. INSTALL BITUMINOUS LAP JOINTS AS DIRECTED BY THE ENGINEER FOR PATCHING OR MILL AND OVERLAY OPERATIONS.



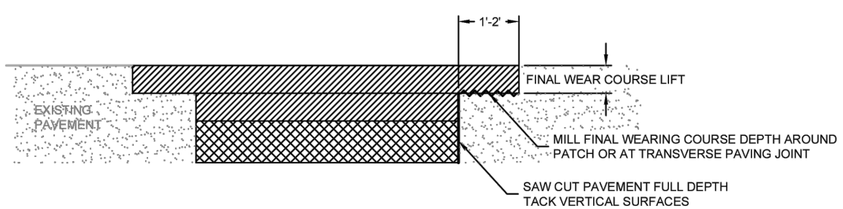
GREENDALE LANE
CLEARBROOK LANE



PONDVIEW COURT



BITUMINOUS LAP JOINT



SEH Project	VADNA187516	Rev.#	Plan Revision Issue Description	Date	Rev.#	Sheet Revision Issue Description	Date
Drawn By	BRM, HRC						
Designed By	BRM, HRC						
Checked By	SDH						

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SCOTT D. HAUPT, PE
DATE 02/03/2026 LICENSE NO. 46603

2026 STREET IMPROVEMENTS

VADNAIS HEIGHTS, MINNESOTA
S.A.P. 209-101-004 CITY PROJECT NO. 26-01

TYPICAL SECTIONS

15 of 125

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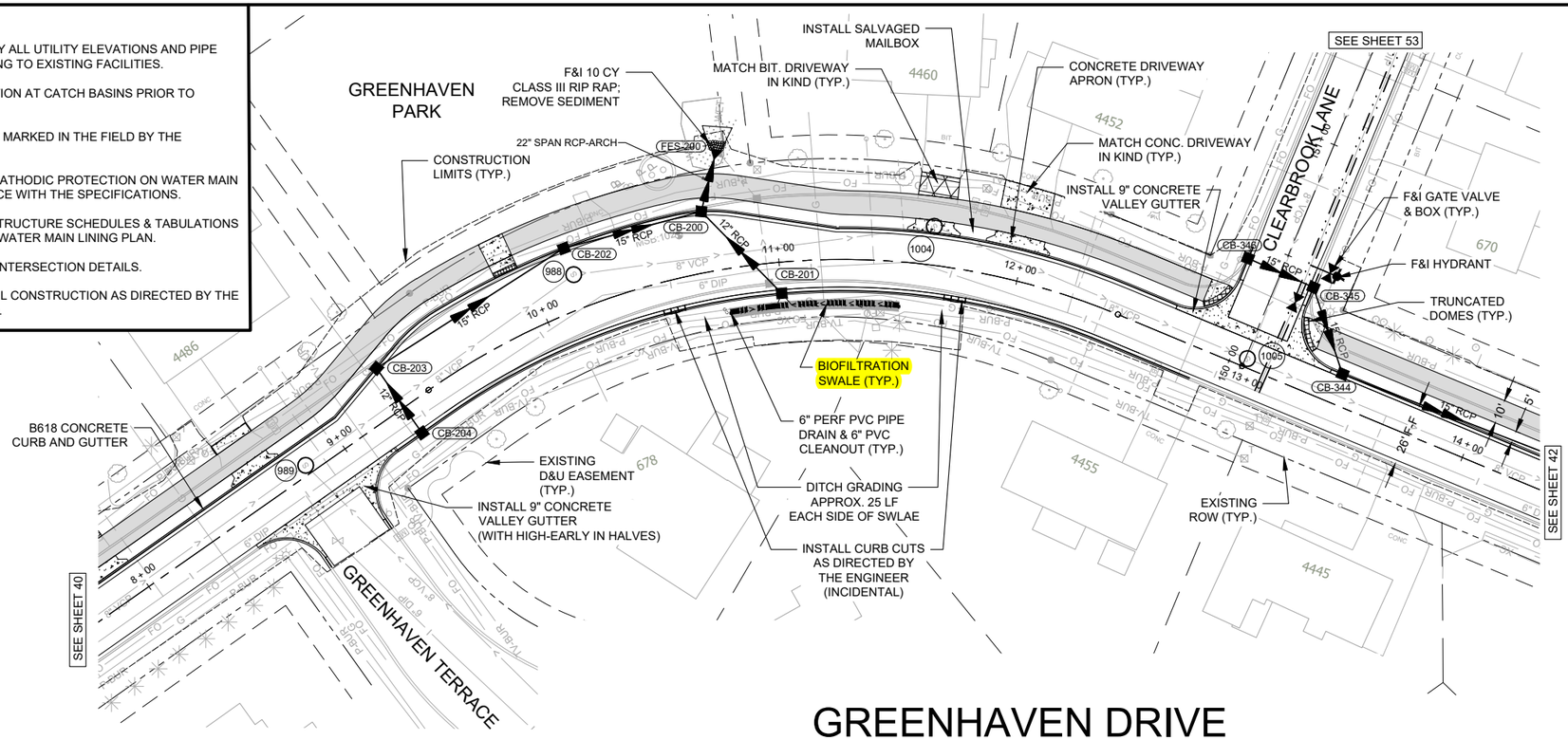
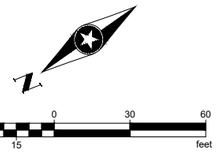
NOTES:

1. CONTRACTOR TO VERIFY ALL UTILITY ELEVATIONS AND PIPE SIZES WHEN CONNECTING TO EXISTING FACILITIES.
2. INSTALL INLET PROTECTION AT CATCH BASINS PRIOR TO BEGINNING WORK.
3. SPOT CURB REPAIRS AS MARKED IN THE FIELD BY THE ENGINEER.
4. FURNISH AND INSTALL CATHODIC PROTECTION ON WATER MAIN FITTINGS IN ACCORDANCE WITH THE SPECIFICATIONS.
5. SEE SHEETS 6-12 FOR STRUCTURE SCHEDULES & TABULATIONS AND SHEETS 56-62 FOR WATER MAIN LINING PLAN.
6. SEE SHEETS 63-70 FOR INTERSECTION DETAILS.
7. TRIM TREES AFTER TRAIL CONSTRUCTION AS DIRECTED BY THE ENGINEER (INCIDENTAL).



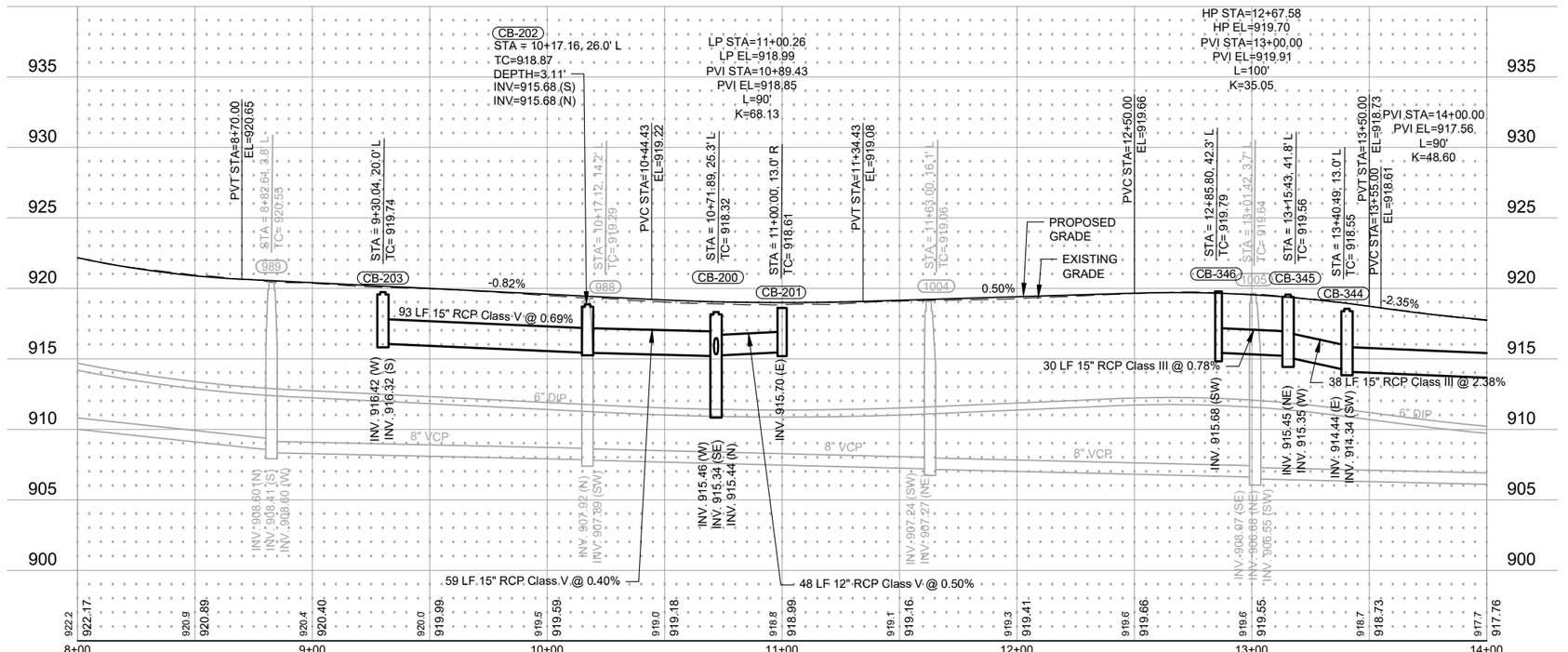
GREENHAVEN DRIVE

BENCHMARK EL. 922.62 TNH
STA. 13+21 OFFSET 37.4 L



LEGEND

- BITUMINOUS TRAIL
- BITUMINOUS DRIVEWAY PAVEMENT
- CONCRETE DRIVEWAY PAVEMENT OR WALK
- EDGE MILL BITUMINOUS SURFACE
- SALVAGE AND INSTALL CASTING
- MINOR STRUCTURE REPAIR
- RECONSTRUCT STRUCTURE
- F&I STORM SEWER AND CATCH BASIN/MANHOLE
- ADJUST GATE VALVE BOX
- F&I GATE VALVE AND BOX
- DITCH GRADING/BIOFILTRATION SWALE
- TREE TRENCH



SEH Project	VADNA187516	Rev.#	Plan Revision Issue Description	Date	Rev.#	Sheet Revision Issue Description	Date	I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED LICENSE PROFESSIONAL UNDER THE LAWS OF THE STATE OF MINNESOTA.	2026 STREET IMPROVEMENTS
Drawn By	BRM, HRC	.			.			Scott D. Haupt	VADNAIS HEIGHTS, MINNESOTA
Designed By	BRM, HRC	.			.			SCOTT D. HAUPT, PE	S.A.P. 209-101-004 CITY PROJECT NO. 26-01
Checked By	SDH	.			.			DATE 02/03/2026 LICENSE NO. 46603	

GREENHAVEN DRIVE CONSTRUCTION PLAN

41 of 125

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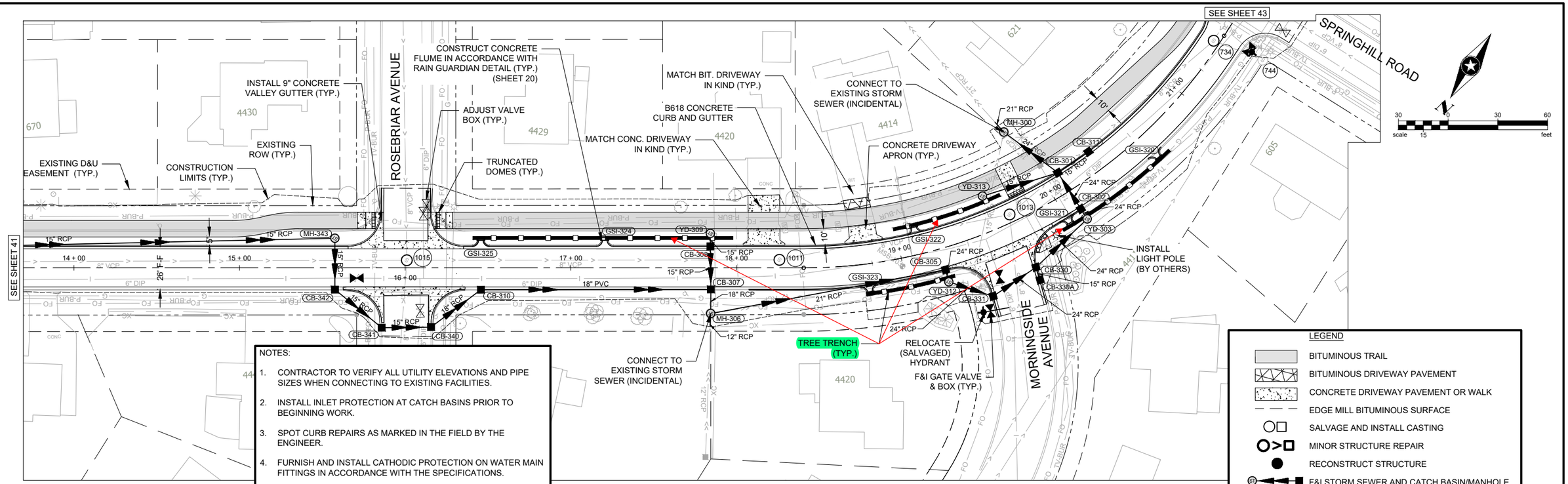

BENCHMARK EL. 920.01 TNH
STA. 16+21 OFFSET 37.6 L

GREENHAVEN DRIVE

BENCHMARK EL. 918.83 TNH
STA. 21+45 OFFSET 19.07 R

NOTES:

1. CONTRACTOR TO VERIFY ALL UTILITY ELEVATIONS AND PIPE SIZES WHEN CONNECTING TO EXISTING FACILITIES.
2. INSTALL INLET PROTECTION AT CATCH BASINS PRIOR TO BEGINNING WORK.
3. SPOT CURB REPAIRS AS MARKED IN THE FIELD BY THE ENGINEER.
4. FURNISH AND INSTALL CATHODIC PROTECTION ON WATER MAIN FITTINGS IN ACCORDANCE WITH THE SPECIFICATIONS.
5. SEE SHEETS 6-12 FOR STRUCTURE SCHEDULES & TABULATIONS AND SHEETS 56-62 FOR WATER MAIN LINING PLAN.
6. SEE SHEETS 63-70 FOR INTERSECTION DETAILS.
7. TRIM TREES AFTER TRAIL CONSTRUCTION AS DIRECTED BY THE ENGINEER (INCIDENTAL).

LEGEND

- BITUMINOUS TRAIL
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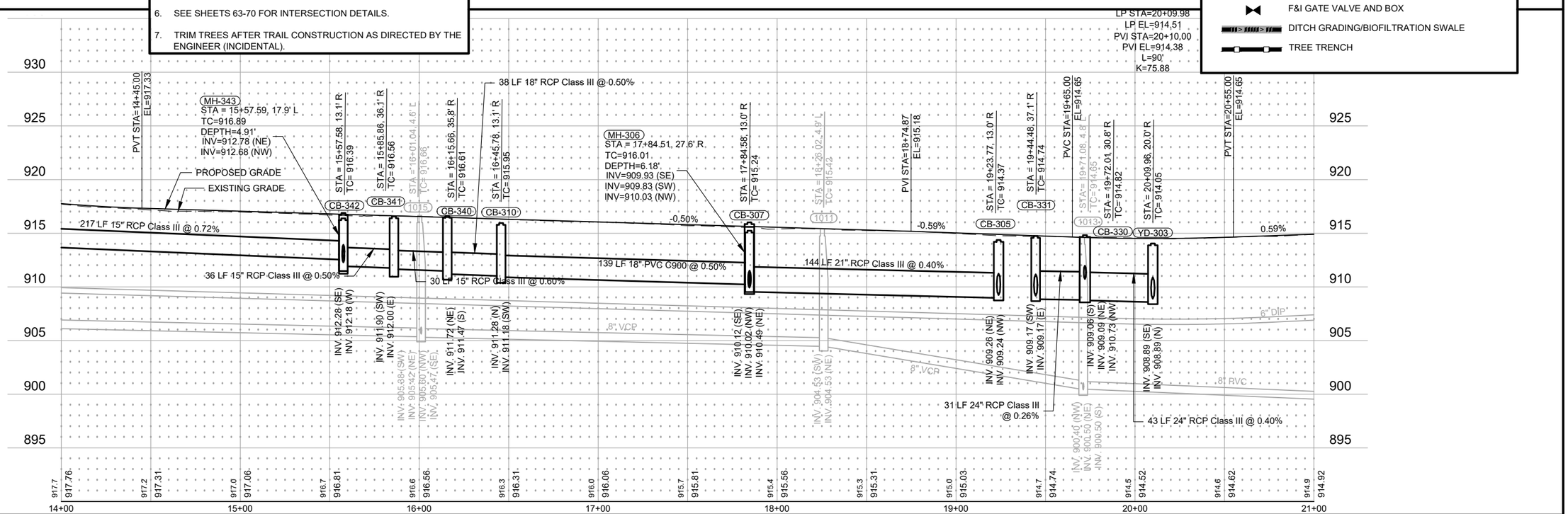
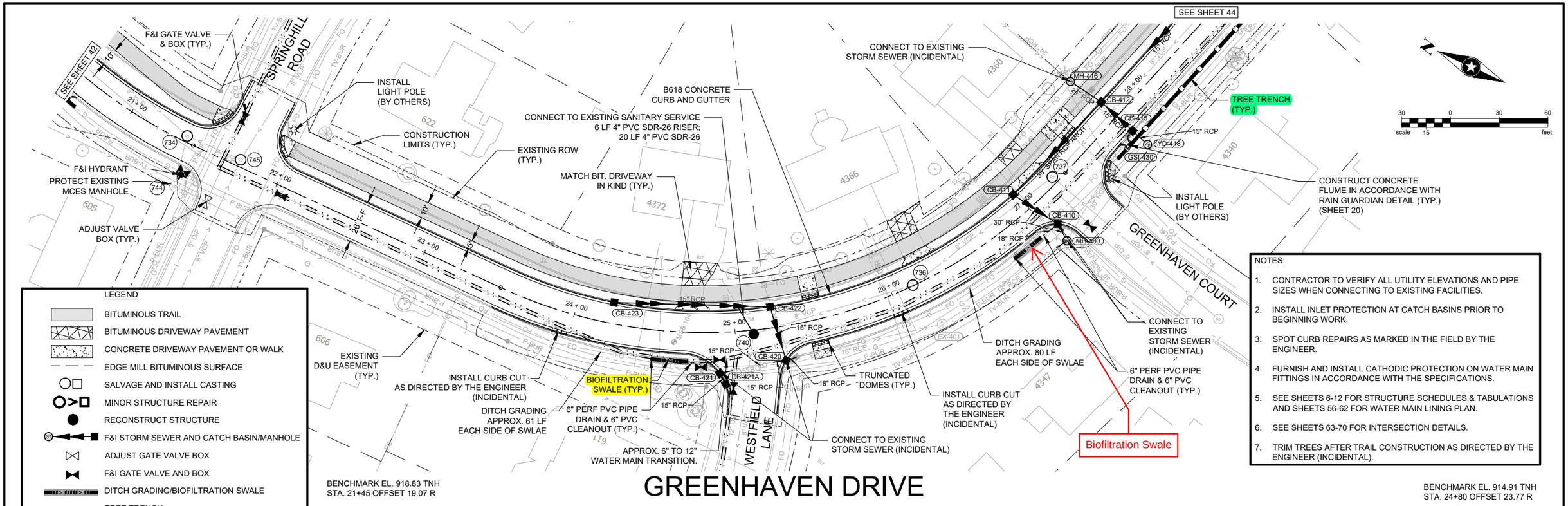
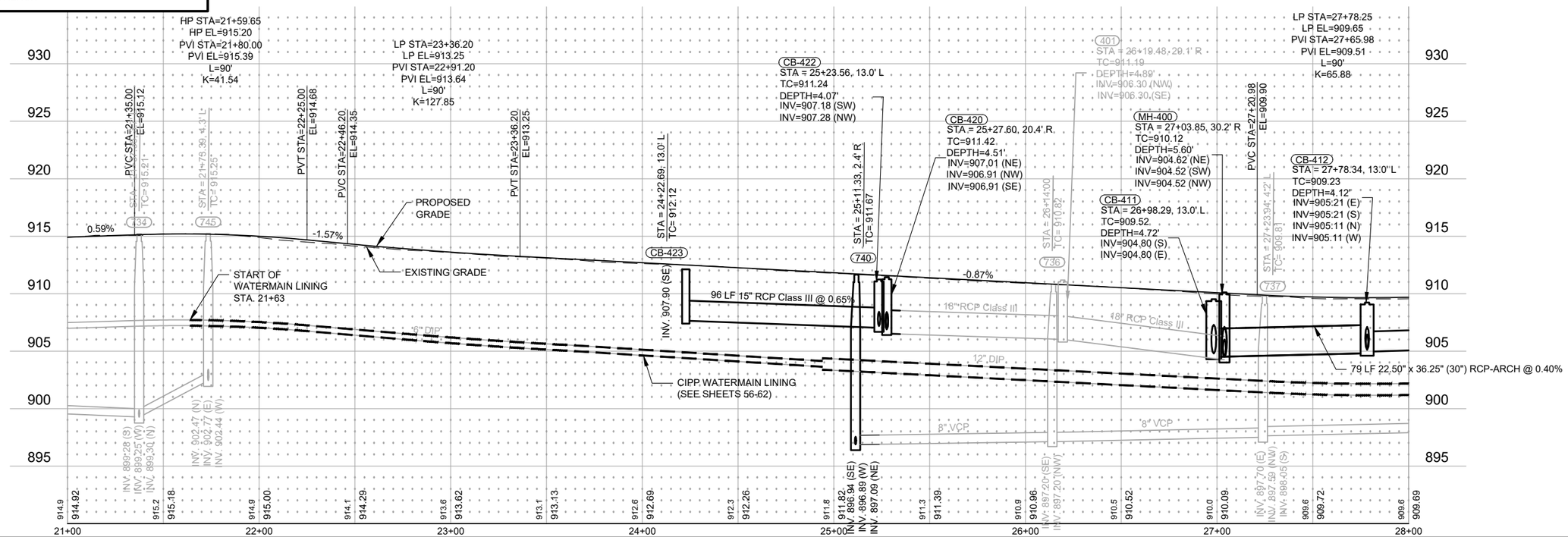
- F&I GATE VALVE AND BOX
- DITCH GRADING/BIOFILTRATION SWALE
- TREE TRENCH







SEH Project	VADNA187516
Drawn By	BRM, HRC
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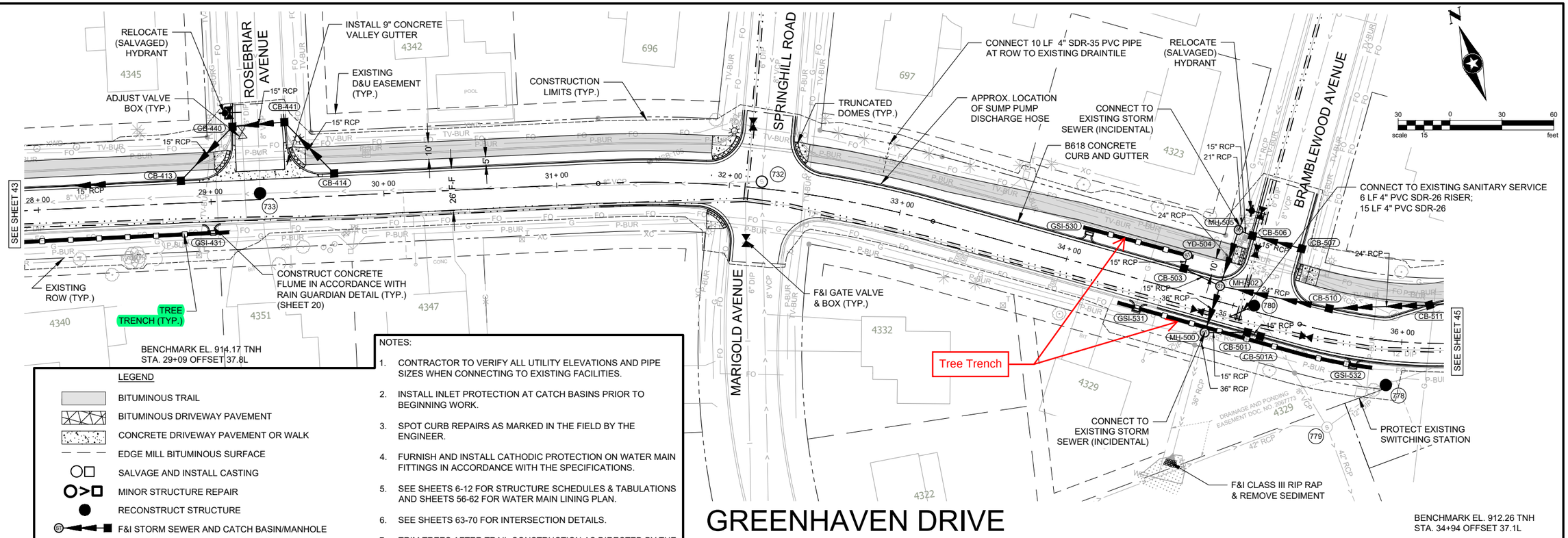
SCOTT D. HAUPT, PE
DATE 02/03/2026 LICENSE NO. 46603

2026 STREET IMPROVEMENTS

VADNAIS HEIGHTS, MINNESOTA

S.A.P. 209-101-004 CITY PROJECT NO. 26-01

GREENHAVEN DRIVE CONSTRUCTION PLAN



LEGEND

- BITUMINOUS TRAIL
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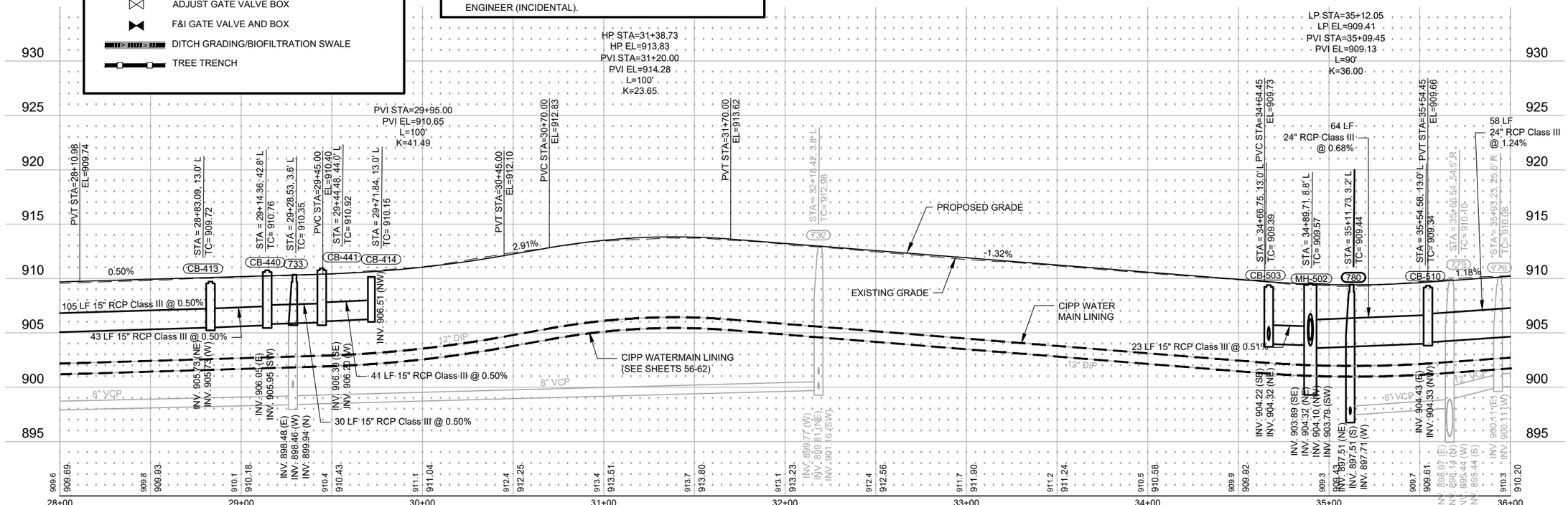

SEH Project	VADNA187516
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2026 STREET IMPROVEMENTS
VADNAIS HEIGHTS, MINNESOTA
S.A.P. 209-101-004 CITY PROJECT NO. 26-01

GREENHAVEN DRIVE CONSTRUCTION PLAN

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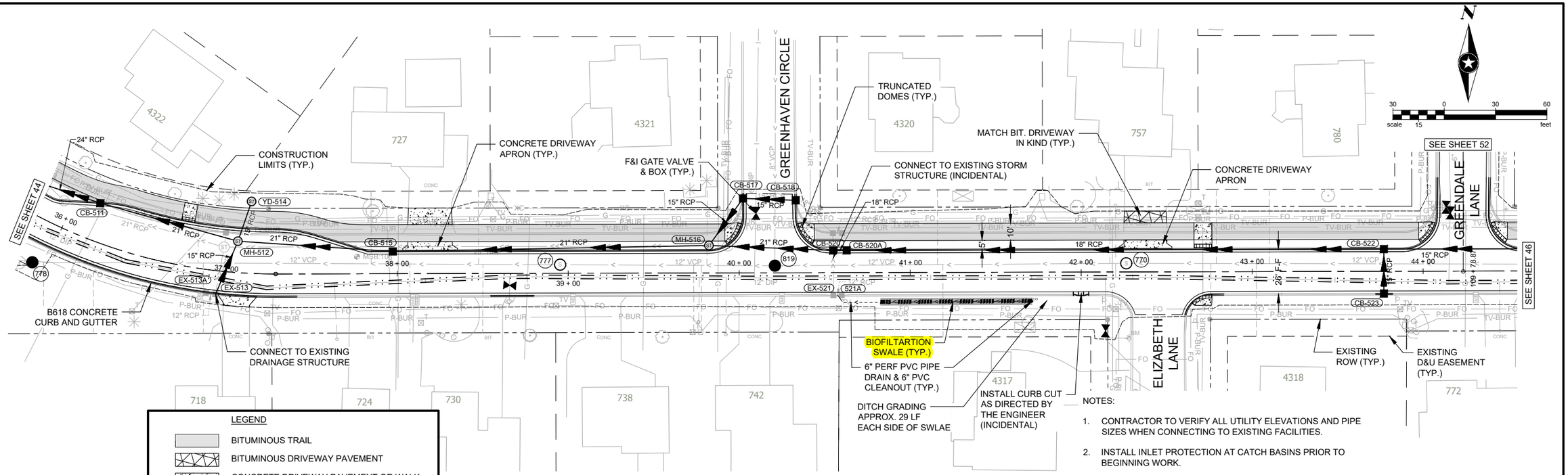
GREENHAVEN DRIVE



LEGEND

- BITUMINOUS TRAIL
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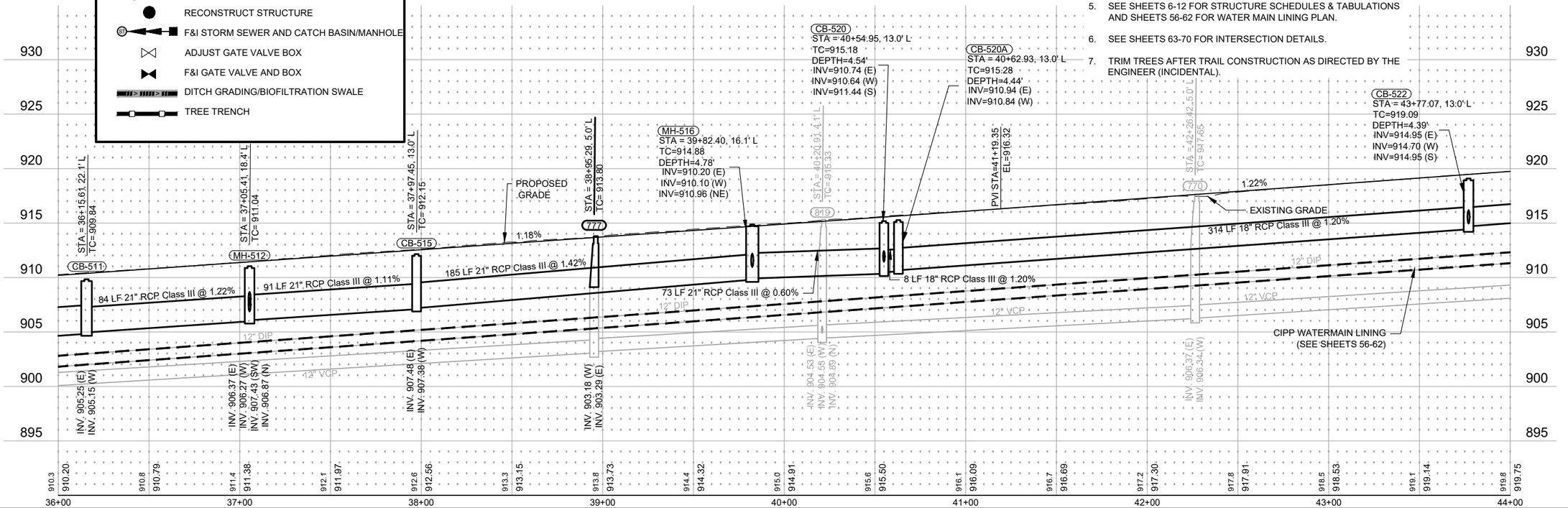
BENCHMARK EL. 922.73 TNH
STA. 44+06 OFFSET 37.4L



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SCOTT D. HAUPT, PE
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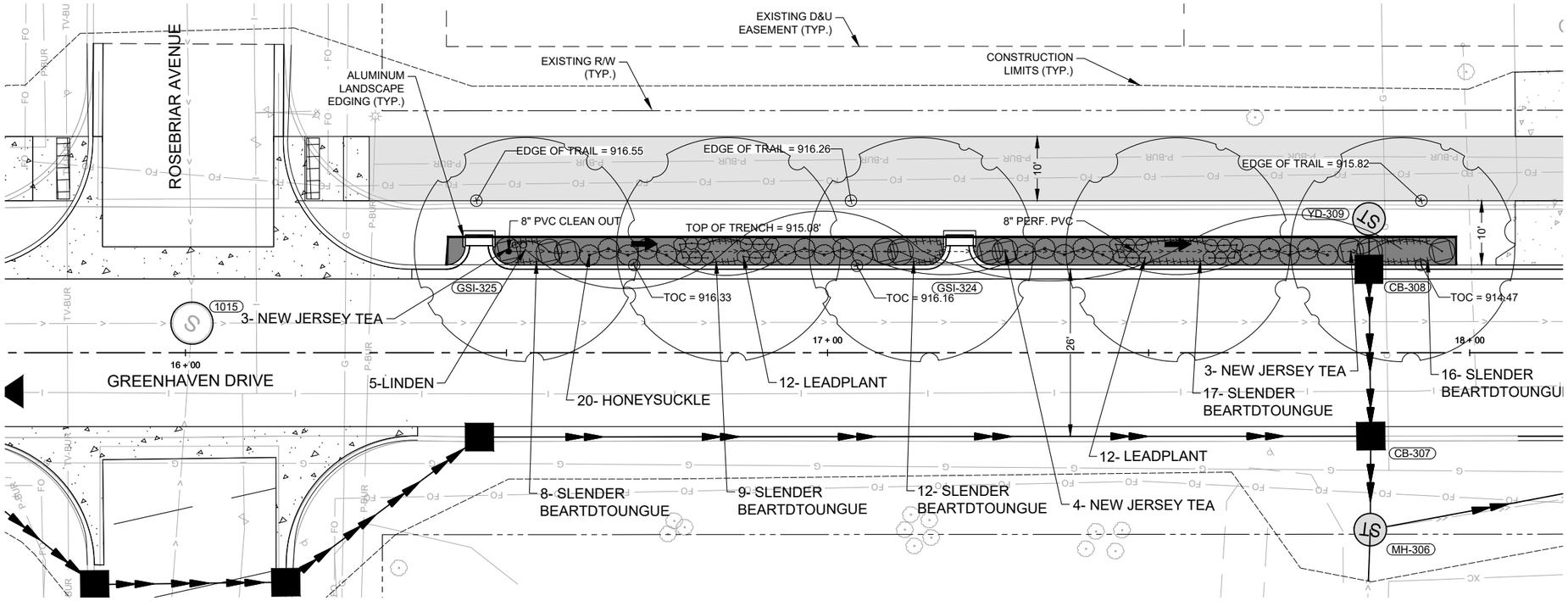
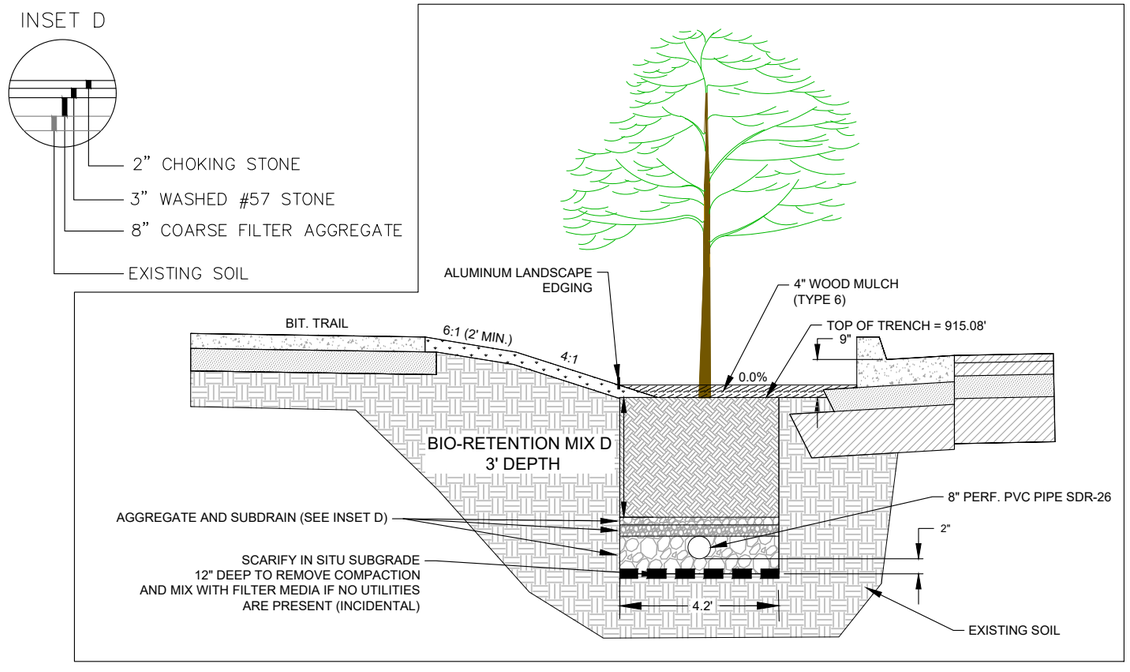
2026 STREET IMPROVEMENTS
VADNAIS HEIGHTS, MINNESOTA
S.A.P. 209-101-004 CITY PROJECT NO. 26-01

GREENHAVEN DRIVE CONSTRUCTION PLAN





TREE TRENCH 1 (STA.16+41 TO STA. 17+97)

PLANTING SCHEDULE TRENCH 1

Quantity	Common Name	Scientific Name	Size	Notes
5	Trees			
5	Linden, Boulevard	*Tilia americana* 'Boulevard'	2.5" Cal. Cont.	
54	Shrubs			
20	Honeysuckle, Dwarf Bush	*Diervilla lonicera*	#5 Cont.	
24	Leadplant	*Amorpha canescens*	#5 Cont.	
10	New Jersey Tea	*Ceanothus americanus*	#5 Cont.	Cage from rabbits first 3 years
62	Ornamental Grass & Forbs			
62	Slender Beardtongue	Penstemon gracilis	#1 Cont.	

CONSTRUCTION NOTES:

1. BIORETENTION MIX D SHALL BE A MIXTURE OF COARSE SAND, COMPOST AND TOPSOIL IN THE FOLLOWING PORTIONS BY VOLUME: 50-65% COARSE SAND, 25-35% TOPSOIL AND 10-15% MNDOT GRADE 2 COMPOST. INSTALL IN 12" LIFTS. ACHIEVE 85%-90% COMPACTION PRIOR TO PLACING MULCH.
2. SEE PLANTING TABULATIONS FOR LOCATIONS AND TYPES OF PLANTINGS AND EROSION AND SEDIMENT CONTROL PLANS FOR TEMPORARY STABILIZATION METHODS.
3. KEEP ALL PERSONNEL AND EQUIPMENT OFF FILTRATION MEDIA AND STAKE OFF THE PERIMETER OF THE TREE TRENCH AREAS AFTER INSTALLATION OF THE FILTRATION MEDIA TO PREVENT COMPACTION.
4. UTILITIES ARE ACCEPTABLE WITHIN THE BMP FILTER MEDIA AND AGGREGATE, CONTRACTOR SHALL COORDINATE PIPE ALIGNMENT TO AVOID UTILITY CONFLICTS. ALL UTILITIES SHOULD AVOID IMPACTS TO PLANT AND TREE ROOTS (INCIDENTAL).
5. RIGOROUS EROSION PREVENTION AND SEDIMENT CONTROLS SHALL BE INSTALLED AROUND THE TREE TRENCHES IF THE CONTRIBUTING DRAINAGE AREA TO THE TRENCHES IS NOT FULLY CONSTRUCTED AND STABILIZED PRIOR TO PLACEMENT OF FILTER MEDIA.
6. CONTRACTOR SHALL INSTALL TREE PROTECTION AROUND EXISTING TREES PRIOR TO STARTING CONSTRUCTION OF TREE TRENCHES.
7. UNDERDRAINS SHALL BE 8" PERF PIPE THAT MEETS THE FOLLOWING SPECIFICATIONS:
   - SMOOTH WALL INTERIOR
   - MINIMUM SLOPE OF 0.5 PERCENT
   - PERFORATIONS OF 3/8 INCHES
8. FURNISHED PLANTS SHALL NOT BE TREATED WITH SYSTEMIC PESTICIDES. CONTRACTOR SHALL SUBMIT GROWER DOCUMENTATION TO THE ENGINEER.
9. ALUMINUM LANDSCAPE EDGING SHALL BE 3/16" X 5", WITH PRE-FORMED SLOTS AT 30" INTERVALS FOR 15" STEEL OR ALUMINUM STAKES. INSTALL PER MANUFACTURER'S INSTRUCTIONS. FURNISHING AND INSTALLING ALUMINUM EDGING IS INCIDENTAL TO TREE TRENCH BID ITEM.

SEH Project	VADNA187516
Drawn By	BRM, HRC
Designed By	BRM, HRC
Checked By	SDH

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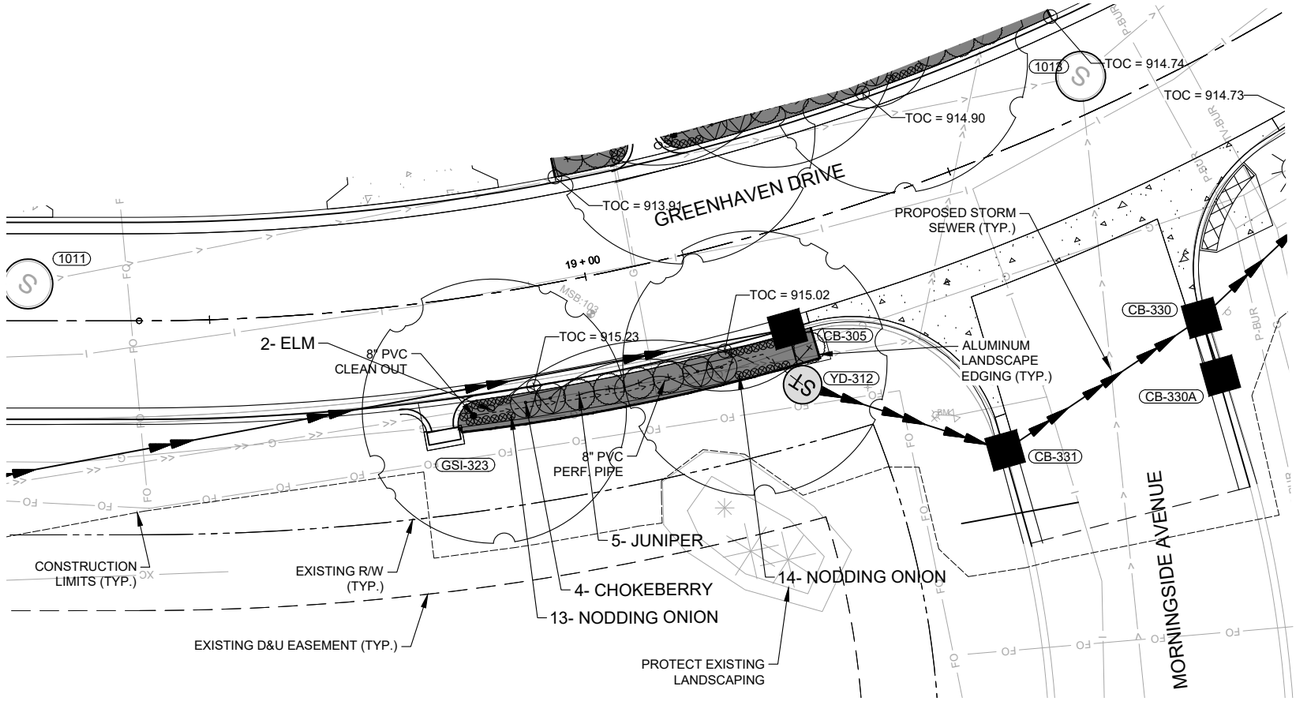
Scott D. Haupt

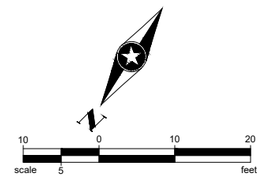
SCOTT D. HAUPT, PE

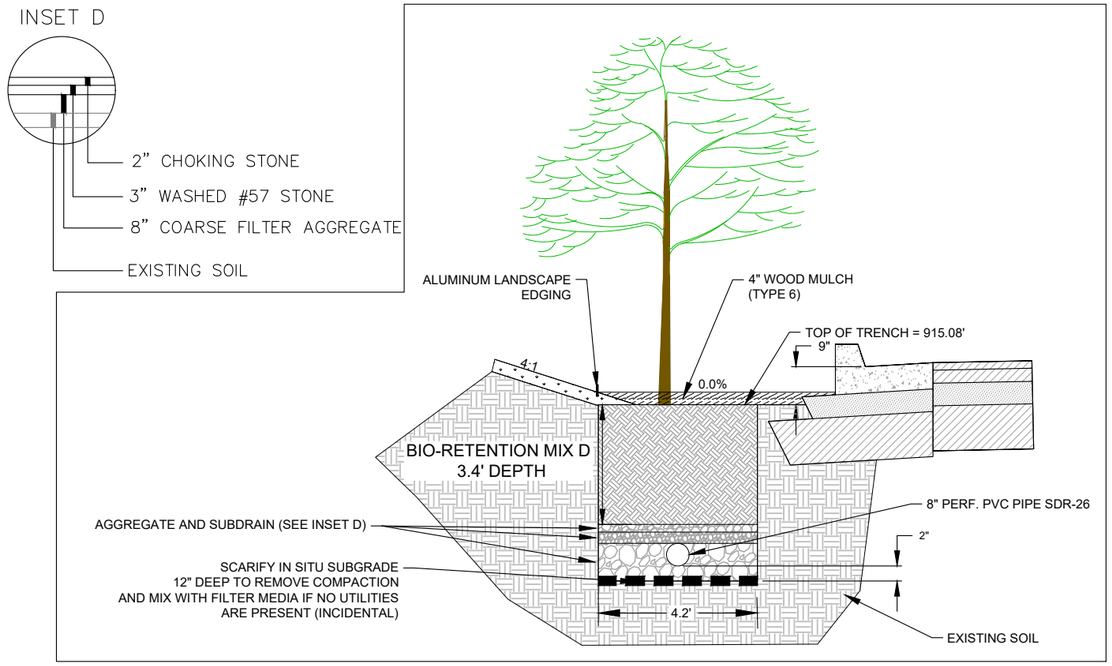
DATE 02/03/2026 LICENSE NO. 46603

2026 STREET IMPROVEMENTS
VADNAIS HEIGHTS, MINNESOTA

TREE TRENCH 1 DETAIL







TREE TRENCH 2 (STA. 18+81 TO 19+26)

PLANTING SCHEDULE TRENCH 2

Quantity	Common Name	Scientific Name	Size	Notes
2	Trees			
2	Elm, Discovery	*Ulmus davidiana var. japonica* ' Discovery'	2.5" Cal. Cont.	
9	Shrubs			
5	Juniper, Blueberry Delight	*Juniperus communis depressa* ' AmiDak'	#5 Cont.	
4	Chokeberry, Black	Aronia melanocarpa elata	#5 Cont.	Trim as needed
27	Ornamental Grass & Forbs			
27	Nodding Onion	Allium cernuum	#1 Cont.	

CONSTRUCTION NOTES:

1. BIORETENTION MIX D SHALL BE A MIXTURE OF COARSE SAND, COMPOST AND TOPSOIL IN THE FOLLOWING PORTIONS BY VOLUME: 50-65% COARSE SAND, 25-35% TOPSOIL AND 10-15% MNDOT GRADE 2 COMPOST. INSTALL IN 12" LIFTS. ACHIEVE 85%-90% COMPACTION PRIOR TO PLACING MULCH.
2. SEE PLANTING TABULATIONS FOR LOCATIONS AND TYPES OF PLANTINGS AND EROSION AND SEDIMENT CONTROL PLANS FOR TEMPORARY STABILIZATION METHODS.
3. KEEP ALL PERSONNEL AND EQUIPMENT OFF FILTRATION MEDIA AND STAKE OFF THE PERIMETER OF THE TREE TRENCH AREAS AFTER INSTALLATION OF THE FILTRATION MEDIA TO PREVENT COMPACTION.
4. UTILITIES ARE ACCEPTABLE WITHIN THE BMP FILTER MEDIA AND AGGREGATE, CONTRACTOR SHALL COORDINATE PIPE ALIGNMENT TO AVOID UTILITY CONFLICTS. ALL UTILITIES SHOULD AVOID IMPACTS TO PLANT AND TREE ROOTS (INCIDENTAL).
5. RIGOROUS EROSION PREVENTION AND SEDIMENT CONTROLS SHALL BE INSTALLED AROUND THE TREE TRENCHES IF THE CONTRIBUTING DRAINAGE AREA TO THE TRENCHES IS NOT FULLY CONSTRUCTED AND STABILIZED PRIOR TO PLACEMENT OF FILTER MEDIA.
6. CONTRACTOR SHALL INSTALL TREE PROTECTION AROUND EXISTING TREES PRIOR TO STARTING CONSTRUCTION OF TREE TRENCHES.
7. UNDERDRAINS SHALL BE 8" PERF PIPE THAT MEETS THE FOLLOWING SPECIFICATIONS:
   - SMOOTH WALL INTERIOR
   - MINIMUM SLOPE OF 0.5 PERCENT
   - PERFORATIONS OF 3/8 INCHES
8. FURNISHED PLANTS SHALL NOT BE TREATED WITH SYSTEMIC PESTICIDES. CONTRACTOR SHALL SUBMIT GROWER DOCUMENTATION TO THE ENGINEER.
9. ALUMINUM LANDSCAPE EDGING SHALL BE 3/16" X 5", WITH PRE-FORMED SLOTS AT 30" INTERVALS FOR 15" STEEL OR ALUMINUM STAKES. INSTALL PER MANUFACTURER'S INSTRUCTIONS. FURNISHING AND INSTALLING ALUMINUM EDGING IS INCIDENTAL TO TREE TRENCH BID ITEM.

SEH Project	VADNA187516
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Designed By	BRM, HRC
Checked By	SDH

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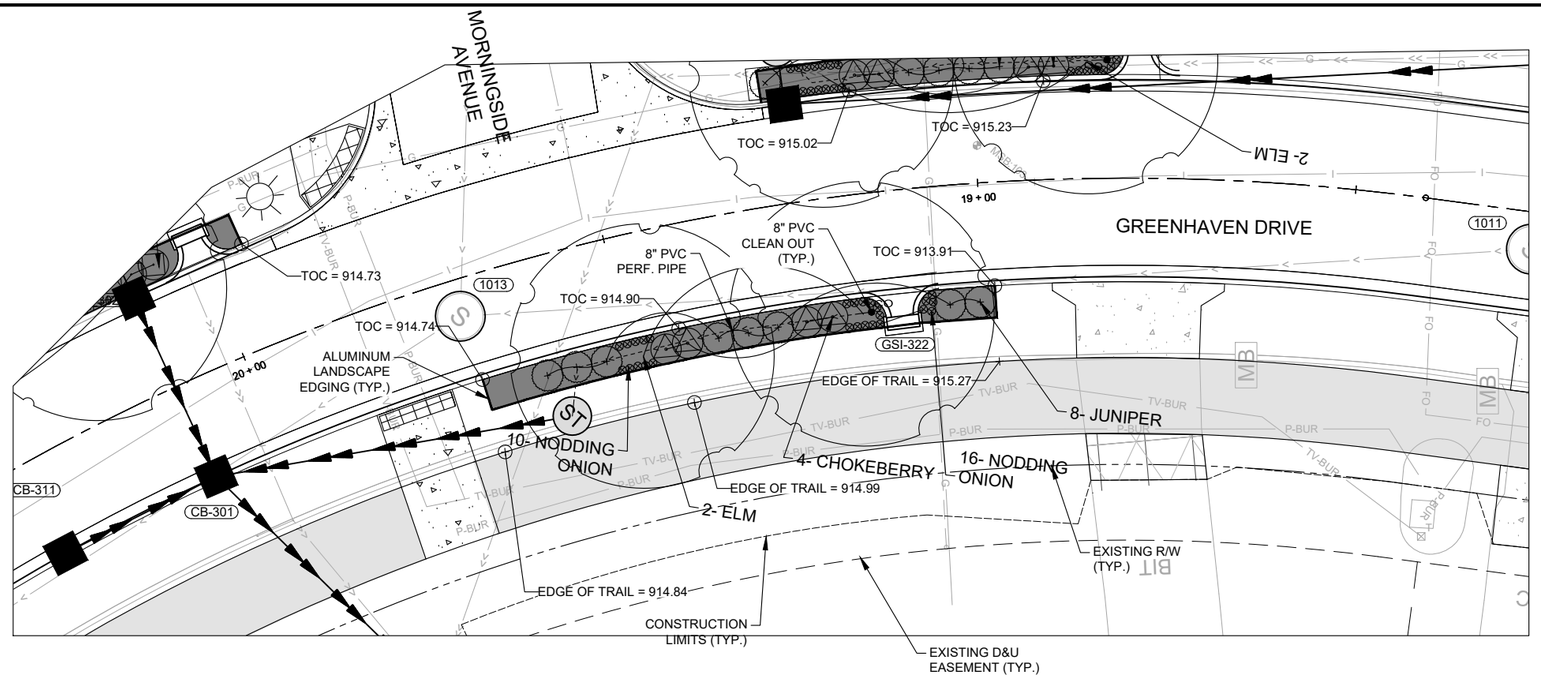
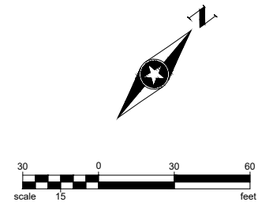
Scott D. Haupt

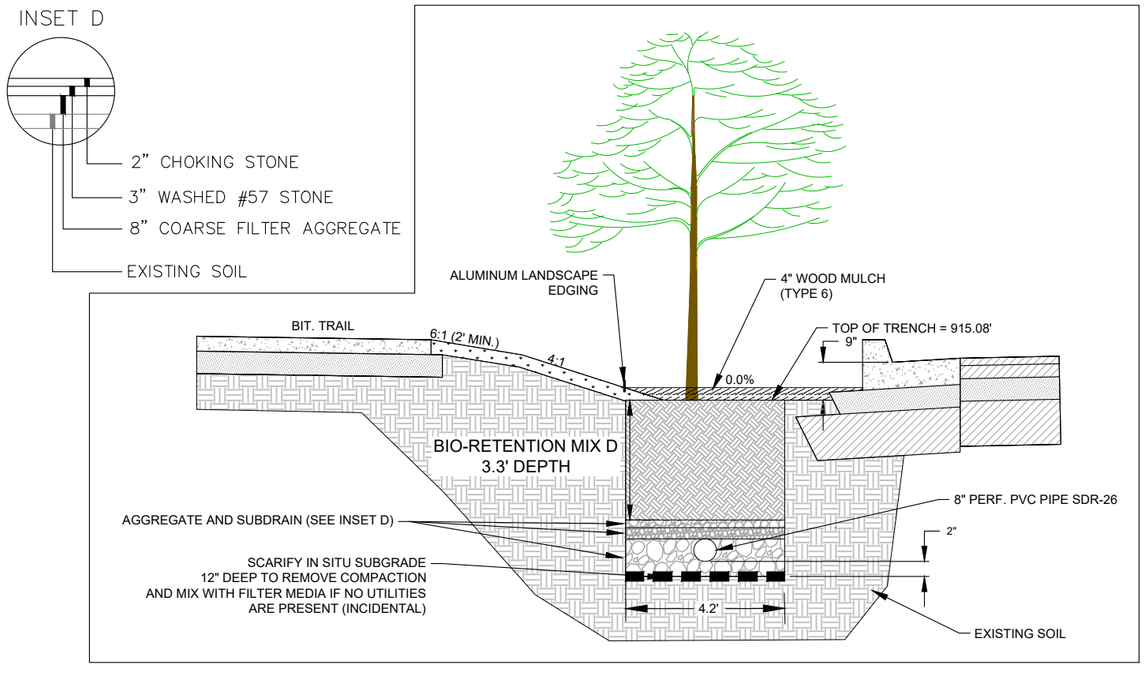
SCOTT D. HAUPT, PE
DATE 02/03/2026 LICENSE NO. 46603

2026 STREET IMPROVEMENTS
VADNAIS HEIGHTS, MINNESOTA

TREE TRENCH 2 DETAIL







TREE TRENCH 3 (STA. 18+99 TO 19+71)

PLANTING SCHEDULE TRENCH 3				
Quantity	**Common Name**	**Scientific Name**	**Size**	**Notes**
2	Trees			
2	Elm, Discovery	*Ulmus davidiana var. japonica* ' Discovery'	2.5" Cal. Cont.	
12	Shrubs			
8	Juniper, Blueberry Delight	*Juniperus communis depressa* ' AmiDak'	#5 Cont.	
4	Chokeberry, Black	Aronia melanocarpa elata	#5 Cont.	Trim as needed
26	Ornamental Grass & Forbs			
26	Nodding Onion	Allium cernuum	#1 Cont.	

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2. SEE PLANTING TABULATIONS FOR LOCATIONS AND TYPES OF PLANTINGS AND EROSION AND SEDIMENT CONTROL PLANS FOR TEMPORARY STABILIZATION METHODS.
3. KEEP ALL PERSONNEL AND EQUIPMENT OFF FILTRATION MEDIA AND STAKE OFF THE PERIMETER OF THE TREE TRENCH AREAS AFTER INSTALLATION OF THE FILTRATION MEDIA TO PREVENT COMPACTION.
4. UTILITIES ARE ACCEPTABLE WITHIN THE BMP FILTER MEDIA AND AGGREGATE, CONTRACTOR SHALL COORDINATE PIPE ALIGNMENT TO AVOID UTILITY CONFLICTS. ALL UTILITIES SHOULD AVOID IMPACTS TO PLANT AND TREE ROOTS (INCIDENTAL).
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7. UNDERDRAINS SHALL BE 8" PERF PIPE THAT MEETS THE FOLLOWING SPECIFICATIONS:
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2026 STREET IMPROVEMENTS
VADNAIS HEIGHTS, MINNESOTA

TREE TRENCH 3 DETAIL

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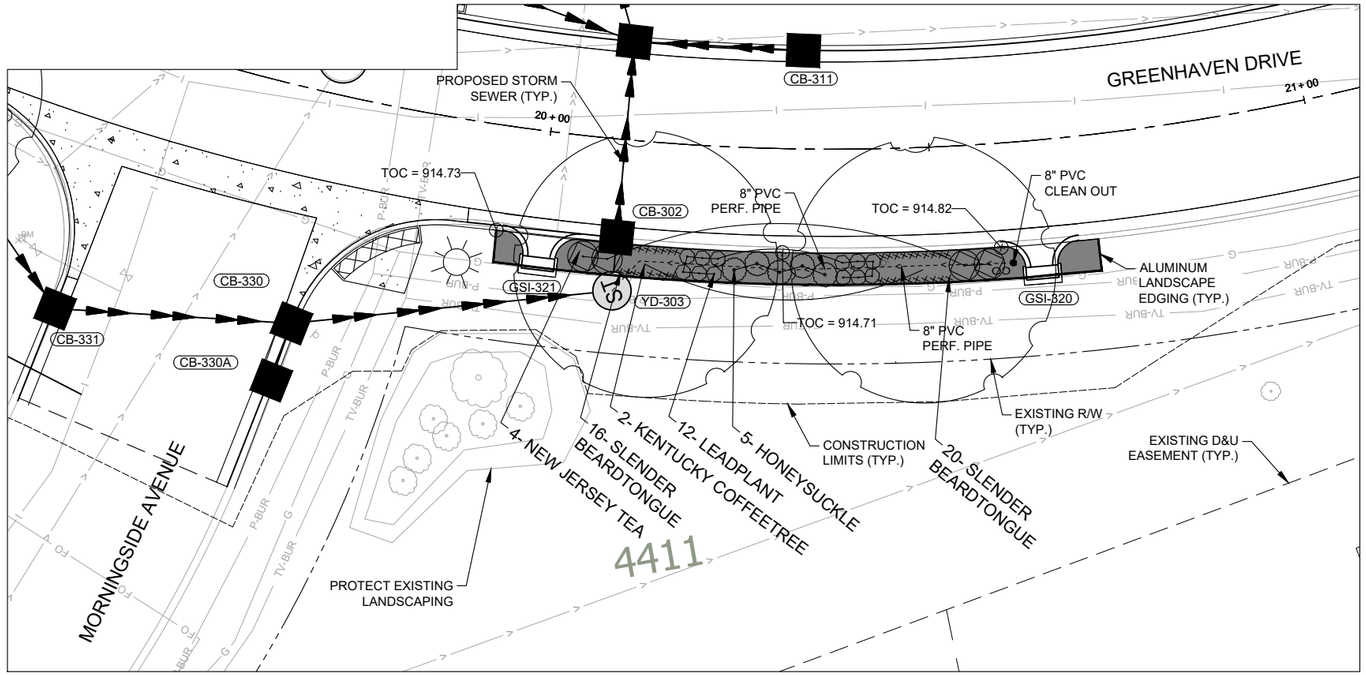
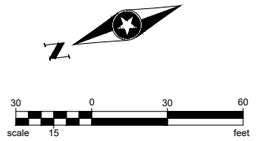
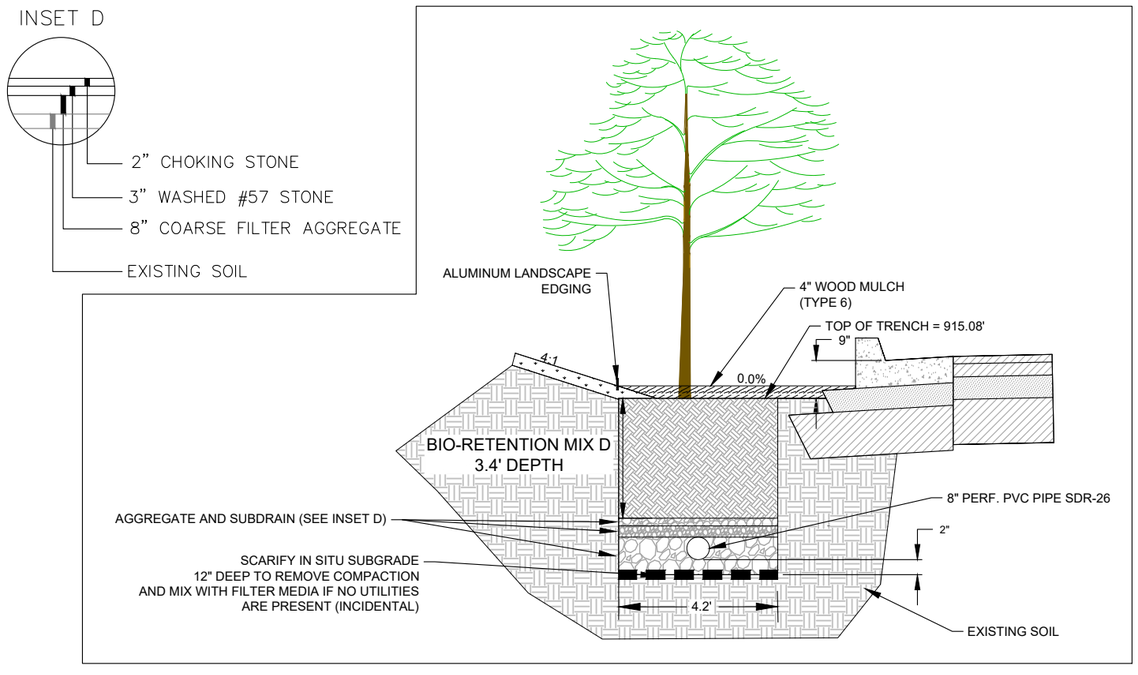
of 125







TREE TRENCH 4 (STA. 19+95 TO STA. 20+71)

PLANTING SCHEDULE TRENCH 4				
Quantity	**Common Name**	**Scientific Name**	**Size**	**Notes**
2	Trees			
2	Coffeetree, Kentucky	*Gymnocladus dioicus*	2.5" Cal. Cont.	
21	Shrubs			
5	Honeysuckle, Dwarf Bush	*Diervilla lonicera*	#5 Cont.	
12	Leadplant	*Amorpha canescens*	#5 Cont.	
4	New Jersey Tea	*Ceanothus americanus*	#5 Cont.	Cage from rabbits first 3 years
36	Ornamental Grass & Forbs			
36	Slender Beardtongue	Penstemon gracilis	#1 Cont.	

CONSTRUCTION NOTES:

1. BIORETENTION MIX D SHALL BE A MIXTURE OF COARSE SAND, COMPOST AND TOPSOIL IN THE FOLLOWING PORTIONS BY VOLUME: 50-65% COARSE SAND, 25-35% TOPSOIL AND 10-15% MNDOT GRADE 2 COMPOST. INSTALL IN 12" LIFTS. ACHIEVE 85%-90% COMPACTION PRIOR TO PLACING MULCH.
2. SEE PLANTING TABULATIONS FOR LOCATIONS AND TYPES OF PLANTINGS AND EROSION AND SEDIMENT CONTROL PLANS FOR TEMPORARY STABILIZATION METHODS.
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SEH Project	VADNA187516
Drawn By	BRM, HRC
Designed By	BRM, HRC
Checked By	SDH

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Scott D. Haupt

SCOTT D. HAUPT, PE
DATE 02/03/2026 LICENSE NO. 46603

2026 STREET IMPROVEMENTS
VADNAIS HEIGHTS, MINNESOTA

TREE TRENCH 4 DETAIL

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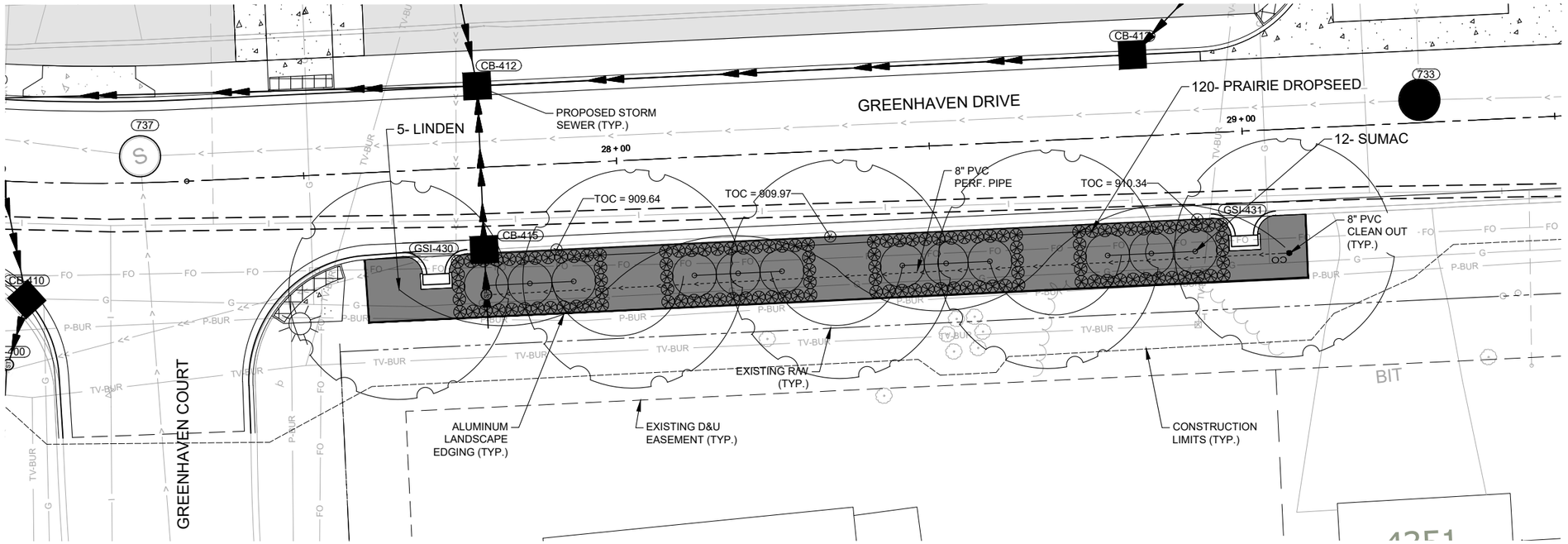
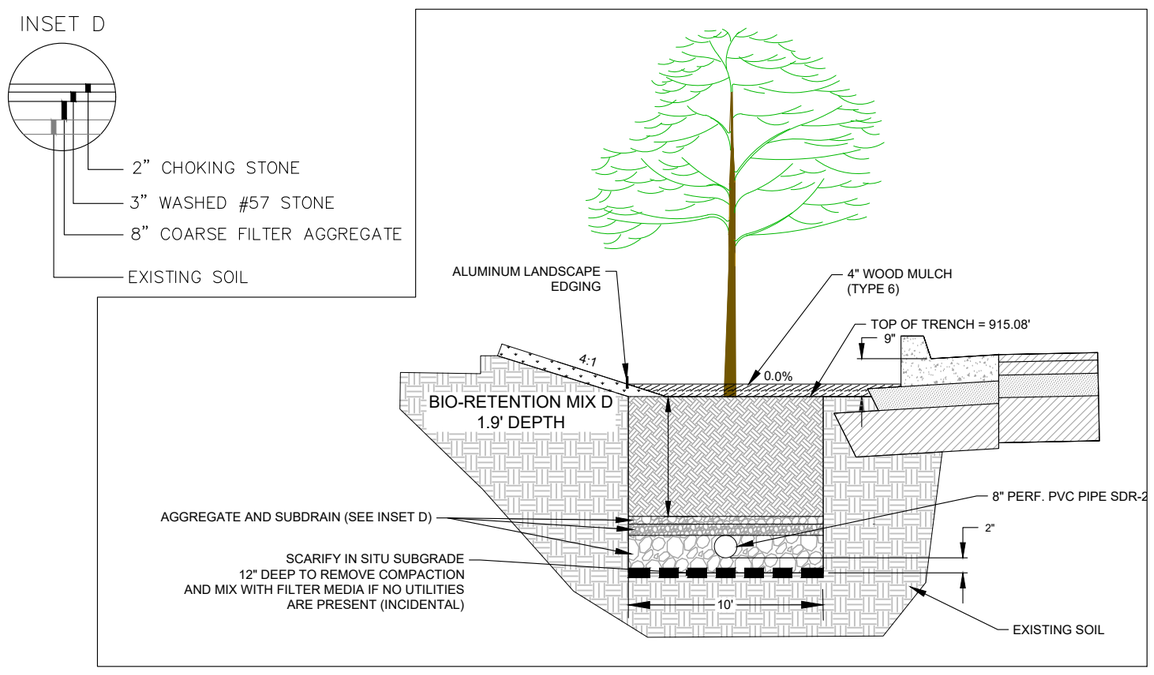
of 125





TREE TRENCH 5 (STA. 27+59 TO STA. 29+10)

PLANTING SCHEDULE TRENCH 5				
Quantity	**Common Name**	**Scientific Name**	**Size**	**Notes**
5	Trees			
5	Linden, Boulevard	*Tilia americana* 'Boulevard'	2.5" Cal. Cont.	
12	Shrubs			
12	Sumac, Gro-Low Fragrant	*Rhus aromatica* 'Gro-Low'	#5 Cont.	
120	Ornamental Grass			
120	Prairie Dropseed	*Sporobolus heterolepis*	#1 Cont.	

CONSTRUCTION NOTES:

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Designed By	BRM, HRC
Checked By	SDH

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Scott D. Haupt

SCOTT D. HAUPT, PE
DATE 02/03/2026 LICENSE NO. 46603

2026 STREET IMPROVEMENTS
VADNAIS HEIGHTS, MINNESOTA

TREE TRENCH 5 DETAIL

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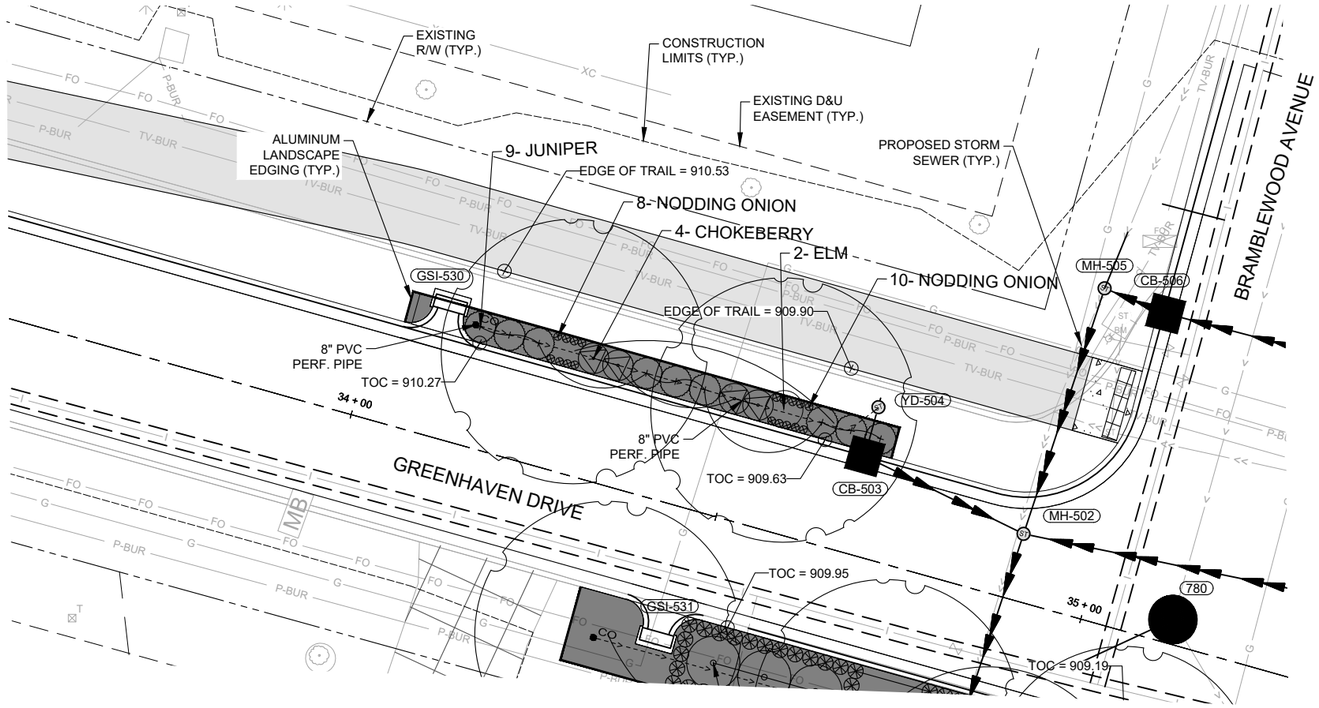

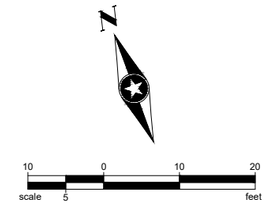

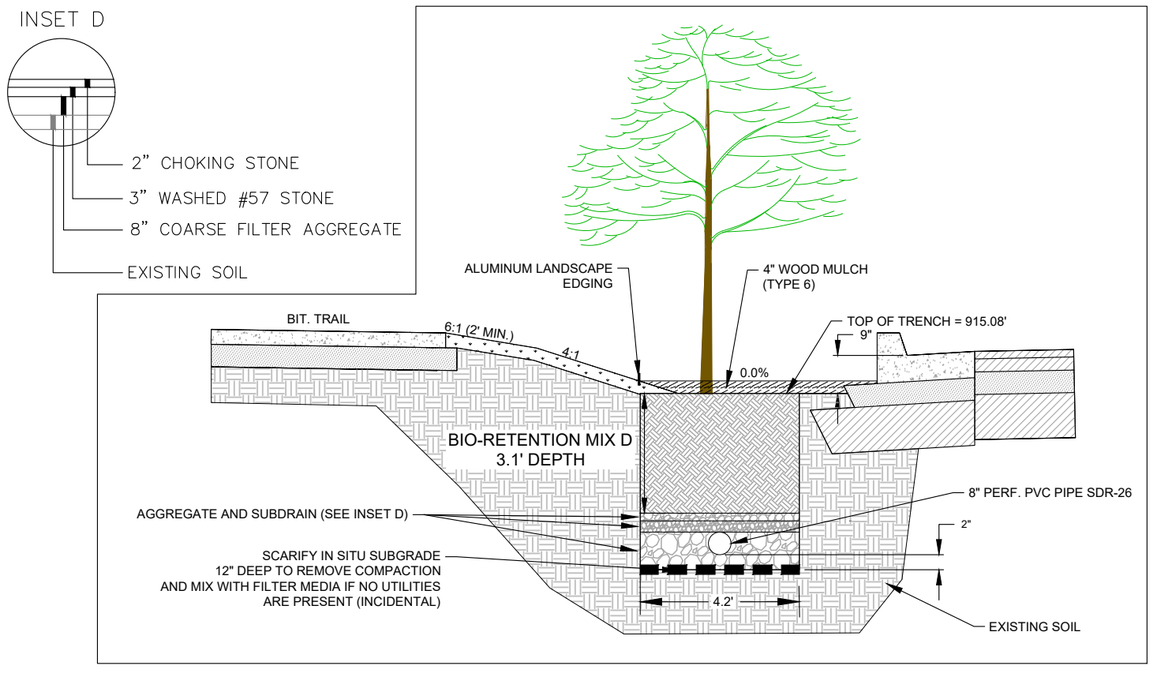

TREE TRENCH 6 (STA. 34+04 TO STA. 34+70)

PLANTING SCHEDULE TRENCH 6				
Quantity	**Common Name**	**Scientific Name**	**Size**	**Notes**
2	Trees			
2	Elm, Discovery	*Ulmus davidiana var. japonica* ' Discovery'	2.5" Cal. Cont.	
13	Shrubs			
9	Juniper, Blueberry Delight	*Juniperus communis depressa* ' AmiDak'	#5 Cont.	
4	Chokeberry, Black	Aronia melanocarpa elata	#5 Cont.	Trim as needed
18	Ornamental Grass & Forbs			
18	Nodding Onion	Allium cernuum	#1 Cont.	

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SEH Project	VADNA187516
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Designed By	BRM, HRC
Checked By	SDH

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SCOTT D. HAUPT, PE
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2026 STREET IMPROVEMENTS
VADNAIS HEIGHTS, MINNESOTA

TREE TRENCH 7 DETAIL

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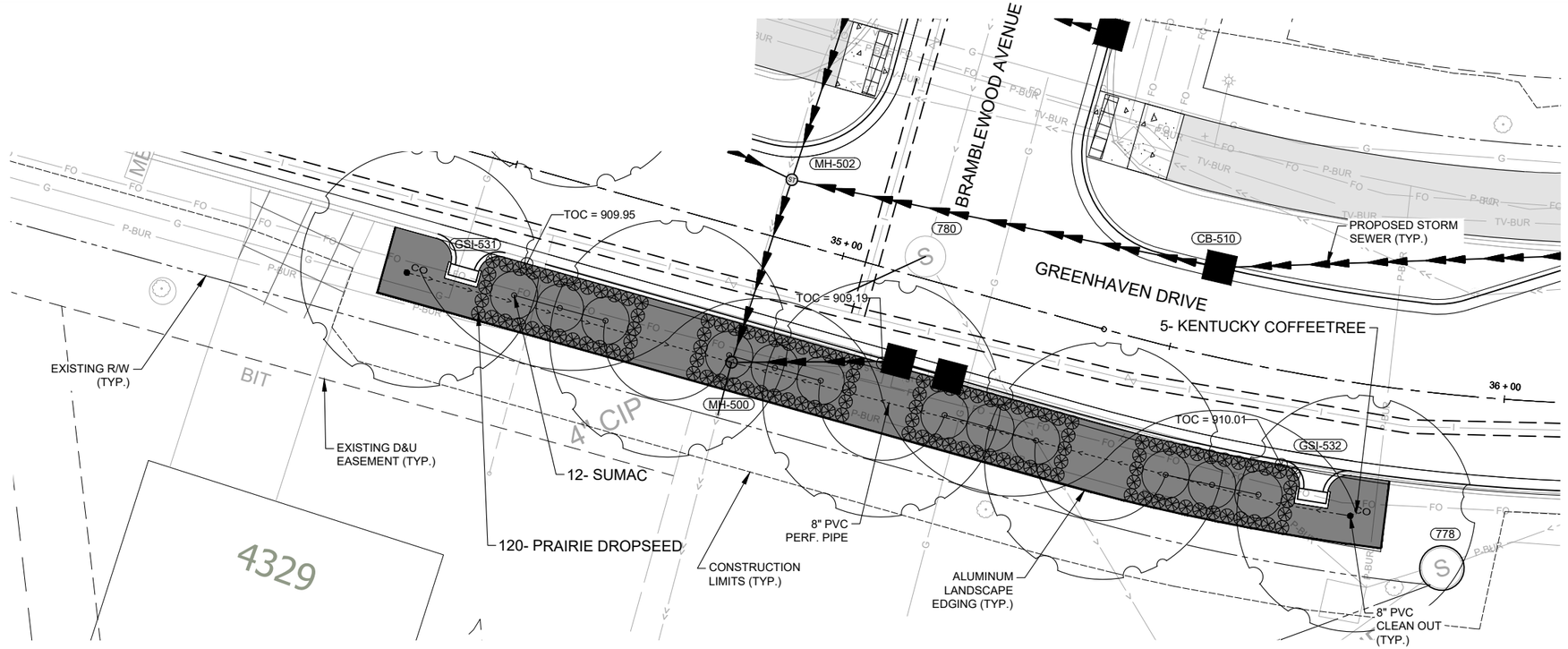
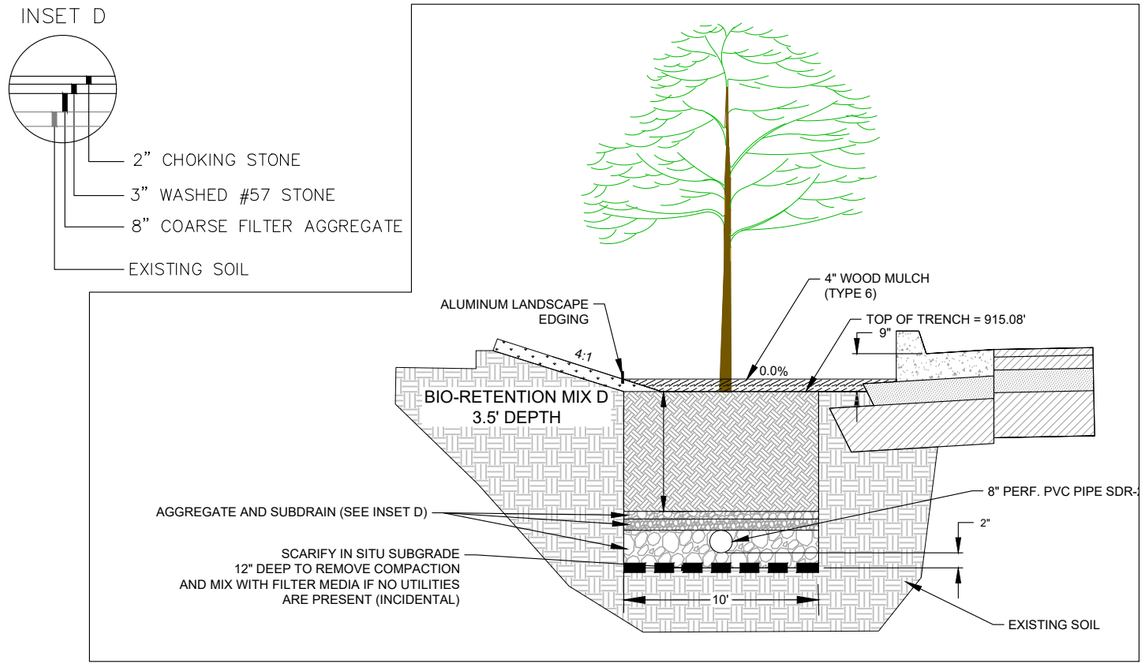
of 125





TREE TRENCH 7 (STA. 34+34 TO STA. 35+85)

PLANTING SCHEDULE TRENCH 7				
Quantity	**Common Name**	**Scientific Name**	**Size**	**Notes**
5	Trees			
5	Coffeetree, Kentucky	*Gymnocladus dioicus*	2.5" Cal. Cont.	
12	Shrubs			
12	Sumac, Gro-Low Fragrant	*Rhus aromatica* 'Gro-Low'	#5 Cont.	
120	Ornamental Grass & Forbs			
120	Prairie Dropseed	*Sporobolus heterolepis*	#1 Cont.	

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2026 STREET IMPROVEMENTS

VADNAIS HEIGHTS, MINNESOTA

TREE TRENCH 6 DETAIL

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V. E. City of Vadnais Heights Greenhaven Drive Stormwater BMPs

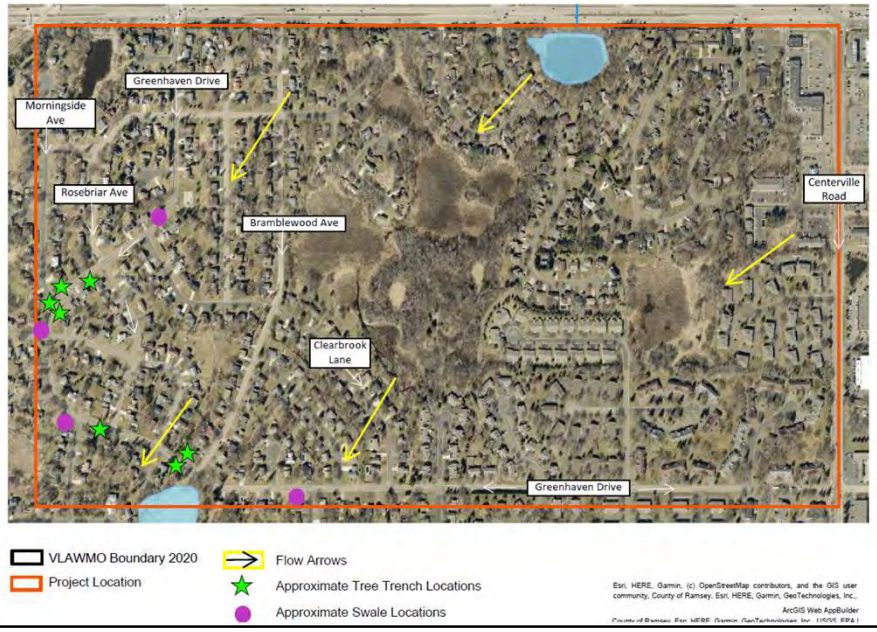
LL2 2026-01 Grant Application

Lauren Sampedro
TEC Meeting
6/10/2026

EST 1983 VLAWMO Vadnais Lake Area Water Management Organization

10

LL2 2026-01–Location Aerial



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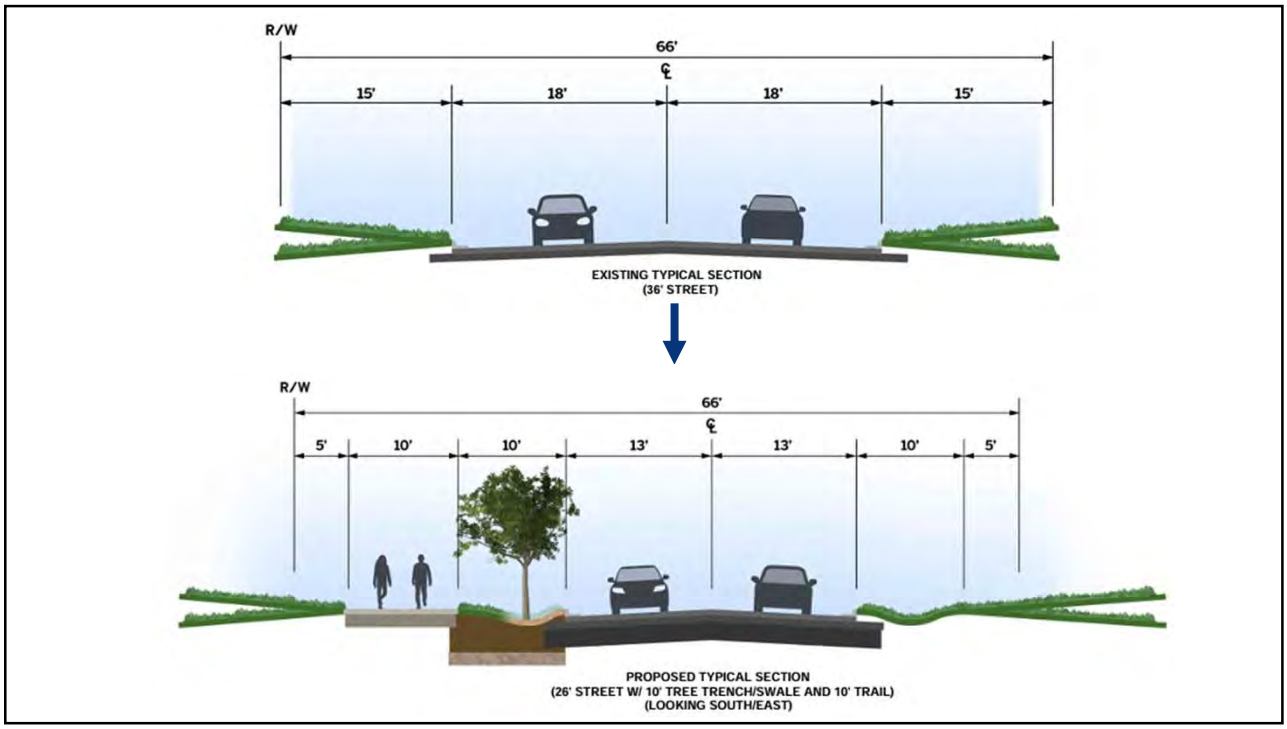
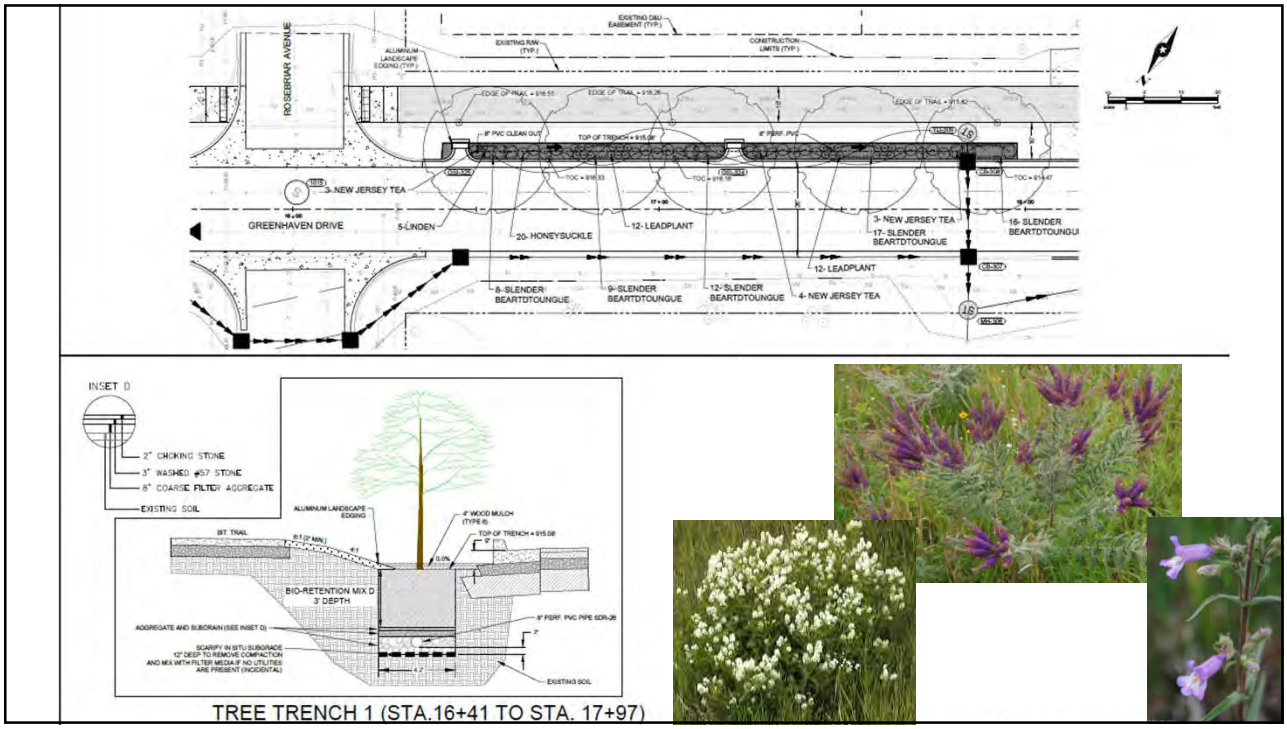

R/W
66'
℄
15'
18'
18'
15'
EXISTING TYPICAL SECTION
(36' STREET)
R/W
66'
℄
5'
10'
10'
13'
13'
10'
5'
PROPOSED TYPICAL SECTION
(26' STREET W/ 10' TREE TRENCH/SWALE AND 10' TRAIL)
(LOOKING SOUTH/EAST)

12


ROSEBRIAR AVENUE
GREENHAVEN DRIVE
3- NEW JERSEY TEA
5-LINDEN
20- HONEYSUCKLE
12- LEADPLANT
3- NEW JERSEY TEA
17- SLENDER BEARTDTOUNGUE
16- SLENDER BEARTDTOUNGUE
12- LEADPLANT
8- SLENDER BEARTDTOUNGUE
9- SLENDER BEARTDTOUNGUE
12- SLENDER BEARTDTOUNGUE
4- NEW JERSEY TEA
INSET D
2" CHOKING STONE
3" WASHED #57 STONE
8" COARSE FILTER AGGREGATE
EXISTING SOIL
BIO-RETENTION MIX D
3' DEPTH
TREE TRENCH 1 (STA.16+41 TO STA. 17+97)

13

800 County Road E East, Vadnais Heights, MN 55127
www.vlawmo.org

Resolution to Adopt the Vadnais Lake Area Water Management Organization's (VLAWMO) Watershed Management Plan

Resolution XX-2026

WHEREAS, VLAWMO has previously approved and adopted a comprehensive Watershed Management Plan ("Plan") as defined by Minnesota Statutes §103B, and Minnesota Rules §8410; and

WHEREAS, Minnesota Statutes §103B.231 requires the Plan to be updated every 10 years; and

WHEREAS, VLAWMO has identified the need to update its Plan dated (2017-2026), amended (2019, 2021, 2022); and

WHEREAS, VLAWMO must prepare a Plan and/or update in accordance to Minnesota Statutes §103B, and Minnesota Rules §8410; and

WHEREAS, VLAWMO prepared a draft Plan update and submitted the draft for 60-day review and comment according to Minnesota Statutes 103B.231 Subd. 7; and

WHEREAS, VLAWMO responded to all received comments; and

WHEREAS, VLAWMO held a public hearing on the Plan to discuss the Plan on February 25, 2026, and receive additional comment, pursuant to Minnesota Statutes 103B.231 Subd. 7 (c); and

WHEREAS, VLAWMO has completed the Plan update and prepared a 90-day review and approval copy, dated February 5, 2026, according to Minnesota Statutes 103 B.231 Subd. 9; and

WHEREAS, the Minnesota Board of Water and Soil Resources completed its review of VLAWMO's Watershed Management Plan and all relevant substantive and procedural requirements of law and rule have been fulfilled; and

WHEREAS, the Minnesota Board of Water and Soil Resources approved VLAWMO's Watershed Management Plan on April 22, 2026, pursuant to Minnesota Statutes 103B.201 to l03B.251; and

WHEREAS, VLAWMO shall adopt and implement its plan within 120 days, according to Minnesota Statutes 103B.23 1 Subd. 10.

NOW THEREFORE BE IT RESOLVED, that the VLAWMO Board of Managers adopts the VLAWMO Watershed Management Plan.

The question was on the adoption of the resolution and there were __ yeas and __ nays as follows:

	Yea	Nay	Absent
Andrea West	☐	☐	☐
Ed Prudhon	☐	☐	☐
Rob Rafferty	☐	☐	☐
Sara Shah	☐	☐	☐
Katherine Doll Kanne	☐	☐	☐
Jim Lindner	☐	☐	☐

Adopted this 17th day of June 2026.

BY THE VLAWMO BOARD

_____
Chairperson

Attest:_____

Administrator

USING ECOLOGY TO RESTORE LAND AND WATER
NATURAL SHORE

Date: May 25, 2026

To: Dawn Tanner, PhD, Ecologist, VLAWMO

Project name: Rotary Park Wetland Restoration – Task II

Description: Main restoration elements detailed in a Natural Shore report titled, "Rotary Nature Preserve Wetland – Plant Community Assessment and Management Recommendations" are listed below. Please refer to page 18 of the report for a summary of restoration tasks. When conducting this project, we will adhere to the Minnesota Department of Labor's prevailing wage schedule and submit all necessary reports.

Methods summary and timeline:

Year	Task #	Plant Community	Restoration Elements
2026	II	RCG	Plant a 4,400 SF area in front of the observation platform with aggressive wetland species, including showy forbs – 1,100 3-4" containers @ 2' spacing.
	II	RCG	Site preparation – high profile RCG segment to the west of the parking lot (see map below) Mow RCG in early summer. Treat in fall. This is in preparation for intensive seeding and planting in 2027.

C**ost: $15,299.00**

If you would like to proceed with the above outlined project, please sign the contract below.

Client name:_____

Signed: _____ **Date** _____

Contractor: ***Natural Shore Technologies, Inc.***

Signed: **Contract Date:** *Contract Date for 30 Day term*

William M. Bartodziej, M.S., Senior Restoration Ecologist

Please return a signed copy of this contract and a check to:

Natural Shore Technologies, Inc.
6275 Pagenkopf Rd.
Maple Plain, MN 55359

45,000 SF – Reed canary grass segment west of the parking lot – fall 2026 treatment area.

Rotary Nature Preserve Wetland - Plant Community Assessment and Management Recommendations

City of White Bear Lake, Ramsey County, Minnesota

Prepared for:

Vadnais Lake Area WMO
800 County Road E East
St. Paul, MN 55127

Prepared by:

Natural Shore Technologies, Inc.
1480 County Road 90
Independence, MN 55359

USING ECOLOGY TO RESTORE LAND AND WATER
NATURAL SHORE

Active versus Passive Ecological Restoration

Active restoration involves direct interventions, such as planting and seeding or implementing engineering solutions to accelerate ecosystem recovery. In contrast, passive restoration relies on natural processes to drive recovery, emphasizing the removal of stressors and the promotion of natural regeneration. For instance, in the Rotary Nature Preserve wetland, it may be reasonable to determine if a viable native seed bank exists in certain locations. Once invasive species are controlled, then native plants may have the opportunity to expand without actively seeding or planting. This approach aligns with the principles of allowing ecosystems to rebound at their own pace without extensive human interference. The choice between these strategies depends on factors such as the level of degradation, available resources, and desired outcomes. While active restoration can yield rapid results, it is more costly. But, it does have the important benefit of establishing vegetation that will quickly occupy space and inhibit weed growth. Passive restoration, although less intrusive, may necessitate more time for recovery but can be more resilient in the long run. A judicious combination of these approaches, informed by site-specific conditions, emerges as a promising strategy for achieving successful and sustainable ecological restoration.

Wetland Plant Species to Consider for Restoration

In certain highly degraded areas (see below) that will be intensively managed for invasive plant species, it is reasonable to employ a host of revegetation techniques that will introduce a diversity of aggressive native wetland species. Below is a species list to be used as a starting point in developing revegetation plans for both sedge meadow and emergent marsh habitats in the Rotary Nature Preserve wetland (Table 2). These species have exhibited long-term resilience in restored wetland systems in the presence of invasive reed canary grass, cattail, and purple loosestrife (Bartodziej and Galatowitsch, in press; Dan Shaw, pers. comm.).

Graminoids	**Scientific name**	**Common name**
	Bolboschoenus fluviatilis	River bulrush
	Calamagrostis canadensis	Canada bluejoint
	Carex atherodes	Slough sedge
	Carex lacustris	Lake sedge
	Carex vulpinoidea	Fox sedge
	Carex stricta	Tussock sedge
	Eleocharis spp.	Spikerush

	Schoenoplectus tabernaemontani	Softstem bulrush
	Scirpus cyperinus	Woolgrass
	Spartina pectinata	Prairie cordgrass
Forbs		
	Acorus americanus	Sweet flag
	Asclepias incarnata	Swamp milkweed
	Eutrochium maculatum	Joe-pye weed
	Iris versicolor	Blue flag iris
	Mimulus ringens	Monkey flower
	Sagittaria latifolia	Arrowhead
	Scutellaria galericulata	Marsh skullcap
	Silphium perfoliatum	Cup plant
	Sparganium americanum	Bur-reed
	Verbena hastata	Blue vervain
Pteridophyta		
	Onoclea sensibilis	Sensitive fern
	Thelypteris palustris	Northern marsh fern

Table 2. Wetland species to consider for restoration.

Restoration and Management Prioritization

For the Rotary Nature Preserve wetland, we recommend implementing a restoration prioritization scheme that takes into account: 1) the preservation and expansion of remnant patches of native vegetation, 2) the distribution and abundance of invasive weed species cover, 3) the ease and potential effectiveness of management, and 4) the logistics related to public engagement opportunities. Below, we outline a broad approach that optimizes the use of limited resources, maximizes the overall impact of restoration activities, and fosters the sustained functionality of this wetland system. This is a starting point for developing a long-term management plan. Additionally, we believe that the viability of a management plan, in part, is determined by integrating education and public outreach into the prioritization scheme. This

ensures that restoration efforts actively engage and educate local communities, creating a more informed and committed constituency for ongoing conservation efforts.

1) **Control Outlier Weeds within High Quality Wetland Areas**
    a) Goal: minimize the expansion of invasive weed species within stands
    b) Target WMn82b and MRn93 stands
    c) Spot mow (weed whip) early in the growing season to reduce seed production
    d) Cut small patches of invasive cattail below the water
    e) Wick individual plants with herbicide in late summer-early fall when treatment is most effective

2) **Treat the Perimeter of High Quality Wet Meadow Areas**
    a) Goal: Expand the coverage of native wet meadow areas
    b) Target RCG/PL and RCG/PL/CT areas around WMn82b stands
    c) Treat adjoining outer bands of invasive weeds with glyphosate type herbicide
    d) This approach has proven to be successful in wetland areas on the MN Arboretum Campus (Julia Bohnen, pers. comm.)
    e) Closely monitor treated areas to determine if native species recolonize these bands without seeding or planting (passive restoration)
    f) If native plant establishment does not take place, develop and implement a revegetation plan for the treated areas (active restoration)

3) **Restore and Manage Emergent Marsh and Wet Meadow by the Boardwalk**
    a) Goal: Reduce invasive weed cover and increase native plant diversity
    b) Target both MRn93 and WMn82b1 areas
    c) Spot treat cattail and RCG with a glyphosate type herbicide
    d) Intensively plant area with aggressive wetland and emergent plant species listed above
    e) Explore the opportunity for public involvement - interpretive signage and perhaps volunteer planting just off the boardwalk

4) **Investigate Purple Loosestrife Beetle Rearing**
    a) Goal: Reduce purple loosestrife cover sitewide
    b) Determine if leaf-eating beetle populations are low
    c) If so, research the possibility of beetle rearing and release with volunteers
    d) This is another excellent opportunity for public involvement

5) **Treat RCG Areas Adjacent to Buffer Restoration Areas**
    a) Goal: Restore highly visible RCG wetland areas on the east side of the wetland, by the walking paths and adjoining newly installed upland buffer areas
    b) Broadcast spray highly degraded RCG areas on the east side of the wetland
    c) Closely monitor response - multiple treatments will likely be required

d) Actively restore these areas with a combination of seeding and planting - introduce aggressive native wetland species
e) Due to the proximity to the pathway, this would be an excellent planting opportunity for volunteers
f) Research the possibility of interpretive signage

6) Set up a Series of Test Plots in the RCG/PL and RCG/PL/CT Meadows

a) Goal: To determine if there is a viable native seed bank in the highly degraded wet meadow areas
b) Treat test plots in northwest portion of the wetland, targeting RCG/PL areas - late summer/fall application
c) Closely monitor to assess plant response over time
d) Because this area is relatively large (10 ac), it would be extremely beneficial to determine if a passive restoration approach could be successful in improving this wet meadow area