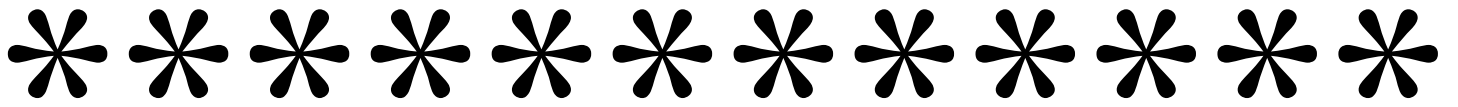


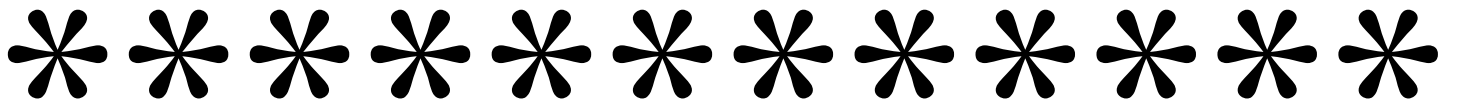


RAMSEY-WASHINGTON
METRO WATERSHED DISTRICT

October 2019 Board Packet



Agenda





Regular Board Meeting Agenda

Wednesday, October 2, 2019

6:30 P.M.

District Office Board Room
2665 Noel Drive, Little Canada, MN

1. Call to Order – 6:30 PM
2. **Approval of Agenda**
3. **Consent Agenda**
 - A. Approval of Minutes September 12, 2019
 - B. Approval of Special Meeting Minutes September 16, 2019
4. **Treasurer’s Report and Bill List**
5. Visitor Comments (limited to 4 minutes each)
6. Permit Program
 - A. Applications
 - i. **19-42 American Indian Magnet School Addition, St. Paul**
 - ii. **19-43 CDI Medical Office, Maplewood**
 - iii. **19-44 5 Star Mobile Estates Soil Correction, Vadnais Heights**
 - iv. **19-45 Villages on McKnight Clubhouse, St. Paul**
 - B. Metro Transit Gold Line Presentation
 - C. Woodbury Suite Living Wetland Discussion
 - D. Enforcement Action Report
7. Stewardship Grant Program
 - A. Applications
 - i. **19-25 CS Cedar Lakeside Apartments, shoreline restoration**
 - ii. **19-26 CS Harding Arena, habitat restoration**
 - B. Budget Status Update
8. Minnesota Research Council Presentation – John Bilotta, U of M Water Resources Center
9. Action Items
 - A. **Watershed Excellence Awards Approval**
10. Administrator’s Report
 - A. Meetings Attended

- B. Upcoming Meetings and Dates
 - C. MAWD Annual Meeting and Resolution Process
 - D. Special Work Session Meeting regarding Beltline Resiliency Study
 - E. CAC Meeting Update
11. Project and Program Status Reports
- A. New Project Scope: Hillcrest Golf Course Study of Existing Conditions
 - B. Ongoing Project and Program Updates
 - i. Twin Lake Emergency Response Management 2019
 - ii. Beltline Resiliency Study
 - iii. FEMA Flood Mapping
 - iv. Snail, Grass and West Vadnais Lakes Outlet Permitting
 - v. 500-Year Atlas 14 Modeling
 - vi. Wetland Restoration
 - vii. Auto Lake Monitoring Systems
 - viii. Maplewood Mall Monitoring
 - ix. Spent-Lime Pond Research Project
 - x. Wakefield Park/Frost Avenue Project
 - xi. Targeted Retrofit Projects
 - xii. Target and Motel 6 Stormwater Retrofit projects
 - xiii. Willow Pond CMAC
 - xiv. Cottage Place Wetland Restoration
 - xv. Aldrich Arena Site Design
 - xvi. CIP Maintenance and Repair 2019 Project
 - xvii. Natural Resources Program
 - xviii. Education Program
12. Informational Items
13. Report of Managers
- 14. Adjourn**

Items in **bold signify that an action needs to be taken by the Board.*



Consent Agenda





**Ramsey-Washington Metro Watershed District
Minutes of Regular Board Meeting
September 12, 2019**

The Regular Meeting of September 12, 2019, was held at the District Office Board Room, 2665 Noel Drive, Little Canada, Minnesota, at 6:30 p.m.

PRESENT:

Marj Ebensteiner, President
Cliff Aichinger, Vice President
Dianne Ward, Treasurer
Dr. Pam Skinner, Secretary
Lawrence Swope, Manager

ABSENT:

ALSO PRESENT:

Tina Carstens, District Administrator
Laurann Kirschner, Attorney for District
Erin Anderson Wenz, Barr Engineering
Paige Ahlborg, Project Manager
Bill Bartodziej, Natural Resource Specialist
Nicole Soderholm, Permit Inspector

Steve LaBerge, Dudley Ave., Shoreview
Terry Telega, Twin Lake Trail, Little Canada
Sean Murphy, Luther Subaru
Clark Wicklund, Alliant Engineering
Shari Ahrens, Westwood P.S.

1. CALL TO ORDER

The meeting was called to order by President Ebensteiner at 6:30 p.m.

2. APPROVAL OF AGENDA

Motion: Lawrence Swope moved, Dianne Ward seconded, to approve the agenda as presented. Motion carried unanimously.

3. CONSENT AGENDA

A. Approval of Minutes from August 7, 2019

Manager Swope noted on page five, the third paragraph, it should state, "...flood control projects have been completed to protect only low-lying homes."

Motion: Lawrence Swope moved, Dianne Ward seconded, to approve the consent agenda as amended. Motion carried unanimously.

4. TREASURER'S REPORT AND BILL LIST

Manager Swope noted that the budget for insurance has been used and asked if the costs were higher than anticipated. Tina Carstens explained that the District simply paid the annual cost for property insurance.

Motion: Lawrence Swope moved, Dr. Pam Skinner seconded, to approve the September 12, 2019, bill list as submitted. Motion carried unanimously.

5. VISITOR PRESENTATIONS

Steve LeBerge stated that in response to the discussion last month regarding Grass Lake, the long-held assumption that groundwater seepage and evaporation from Grass Lake were adequate to meet demands were wrong. He stated that with the recent issues with flooding in the watershed district and the elevated water levels, it would seem irresponsible to increase the flow of water from Owasso and Wabasso into Grass Lake without increasing downstream flows and significantly lowering Grass Lake and West Vadnais Lake levels.

6. PERMIT PROGRAM

A. Applications

Permit #19-37: Contanda Terminal Berm Replacement – St. Paul

Nicole Soderholm noted that this is a retroactive approval as the work was already completed due to the emergency status due to flooding.

Motion: Dr. Pam Skinner moved, Cliff Aichinger seconded, to approve Permit #19-37. Motion carried unanimously.

Permit #19-38: McKnight Road – Anchor Block Commons, North St. Paul

Motion: Dr. Pam Skinner moved, Lawrence Swope seconded, to approve Permit #19-38.

Further discussion: Manager Swope noted that this is located adjacent to another development and asked if the water plans interact with each other. Nicole replied that each development provides its own treatment, owning and maintaining its own infrastructure. She explained that this approval would cover grading, roads and infrastructure with each project that comes forward applying for its own permit.

Motion carried unanimously.

Permit #19-39: Wooddale Flex Building – Woodbury

Motion: Dr. Pam Skinner moved, Dianne Ward seconded, to approve Permit #19-39. Motion carried unanimously.

Permit #19-40: Luther White Bear Lake Subaru Parking – Vadnais Heights

Manager Swope asked what is currently in this area that would be replaced with paving. It was confirmed that the area is currently vacant and composed of trees and grass.

Motion: Dr. Pam Skinner moved, Cliff Aichinger seconded, to approve Permit #19-40.

Further discussion: Manager Swope asked if the paved area would still capture and treat rain in the same manner as the grass. Nicole confirmed that the District rules would still need to be met, treating and capturing the same amount of runoff that is currently provided by the grass.

Motion carried unanimously.

Permit #19-41: Margaret Street Apartments – North St. Paul

Motion: Dr. Pam Skinner moved, Cliff Aichinger seconded, to approve Permit #19-41.

Further discussion: Manager Skinner referenced the underground parking and wanted to ensure that the District is not allowing projects to be built that will be continually flooded. She noted that this area has high groundwater levels and asked if that would cause flooding of the underground structure when it rains. Nicole replied that the District rules deal with surface floodplain. She noted that there are freeboard requirements and advised that there is an impermeable liner proposed for this project. Manager Skinner stated that it would seem that the property owner would be responsible if the underground garage floods. Nicole stated that stormwater is regulated by the District while groundwater is not. Manager Aichinger noted that there will be a sump system installed with the project which would then respond to groundwater seepage. He asked if there is a plan on when construction

would begin. Shari Ahrens, representing the applicant, replied that they are working with the city and would like to start building this fall.

Motion carried unanimously.

B. Monthly Enforcement Report

During August, 15 notices were sent to address: install/maintain inlet protection (2), install/maintain perimeter control (5), install/maintain construction entrance (1), stabilize exposed soils (1), contain/dispose of liquid and solid waste (1), remove discharged sediment (2), implement proper dewatering (2), and protect/maintain permanent BMPs (1).

7. STEWARDSHIP GRANT PROGRAM

A. Applications

Permit #19-23 CS: Hoffman – Rain Gardens and Native Habitat Planting

Motion: Cliff Aichinger moved, Dianne Ward seconded, to approve Permit #19-23 CS. Motion carried unanimously.

B. Discussion Item: Additional Fund Approval Memo

Tina Carstens stated that after the last discussion Paige Ahlborg created this draft.

Manager Ward stated that she appreciates the information and found it helpful. She stated that when an exception is recommended, she would appreciate the link to the applicable justification. Manager Swope agreed that this is exactly what he was looking for as well. He noted that he found it interesting that after the Board increased the allowed amount, there were additional exceptions that came forward. President Ebensteiner noted that once that limit was increased, the opportunity for larger projects came forward. Paige stated that in the past, with the lower limit, people were not as apt to apply because of the low amount allowed and therefore when that limit was increased, it also increased the opportunity for residents to bring forward more projects.

C. Budget Status Update No comments.

8. 2020 PRELIMINARY BUDGET AND LEVY PUBLIC HEARING

President Ebensteiner opened the public hearing at 6:53 p.m.

No comments made.

Motion: Cliff Aichinger moved, Lawrence Swope seconded, to close the public hearing at 6:53 p.m. Motion carried unanimously.

9. ACTION ITEMS

A. Approval of the 2020 Preliminary Budget and Levy Certification to Ramsey and Washington Counties – Resolution 19-02.

Tina Carstens reviewed the proposed budget and levy for 2020, along with comparison information from the approved 2019 budget and levy. She highlighted the budget percentage by program area.

Motion: Lawrence Swope moved, Cliff Aichinger seconded, to approve the draft budget for purposes of the preliminary levy and adopt Resolution #19-02. Motion carried unanimously.

B. Change Order No. 2 – CIP Maintenance and Repair 2019

Tina handed out a revised change order sheet at the board meeting. \$79,708 is the correct total.

Motion: Lawrence Swope moved, Cliff Aichinger seconded, to approve Change Order No. 2. Motion carried unanimously.

10. ADMINISTRATOR’S REPORT

A. Meetings Attended

Tina explained what role we will play in the Hillcrest planning process and how this will play a role in their public planning process. Staff are reviewing Barr’s scope and Board will see that in October.

B. Upcoming Meetings and Dates No comment.

C. Board Brainstorming Meeting – Monday, September 16th

Discussion was had on the upcoming meeting and the topic of discussion.

D. Manager per Diems

Motion: Manager Aichinger moved, Lawrence Swope seconded, to approve raising the regular and special board meeting per Diems to \$125 and \$75 for other meetings.

11. PROJECT AND PROGRAM STATUS REPORTS

A. New Project Scope: Twin Lake Outlet Feasibility Study

Discussion was had on the goals of the project as well as the deliverables and time schedule. The board requested that this study also look at the possible multiple benefits along with the pros and cons of those options.

B. Ongoing Project and Program Updates

- | | |
|---|--|
| i. <u>Twin Lake Emergency Response Management 2019</u> | xi. <u>Iron Aggregate Pond Application Research</u> |
| ii. <u>Owasso County Park</u> | xii. <u>Wakefield Park/Frost Avenue Project</u> |
| iii. <u>Beltline Resiliency Study</u> | xiii. <u>Targeted Retrofit Projects</u> |
| iv. <u>FEMA Flood Mapping</u> | xiv. <u>Targets and Motel 6 Targeted Retrofit Projects</u> |
| v. <u>Snail, Grass and West Vadnais Lakes Outlet Permitting</u> | xv. <u>Willow Pond CMAC</u> |
| vi. <u>500 Year Atlas 14 Modeling</u> | xvi. <u>Cottage Place Wetland Restoration</u> |
| vii. <u>Wetland Restoration</u> | xvii. <u>Aldrich Arena Site Design</u> |
| viii. <u>Auto Lake Monitoring Systems</u> | xviii. <u>CIP Maintenance and Repair 2019 Project</u> |
| ix. <u>Maplewood Mall Monitoring</u> | xix. <u>Natural Resources Program</u> |
| x. <u>Spent Lime Pond Research Project</u> | xx. <u>Education Program</u> |

12. INFORMATIONAL ITEMS

13. REPORTS OF MANAGERS

14. ADJOURN

Motion: Manager Skinner moved, Manager Swope seconded, to adjourn the meeting at 8:29 p.m. Motion carried unanimously.

Respectfully submitted,

Dr. Pam Skinner, Secretary



**Ramsey-Washington Metro Watershed District
Minutes of Special Board Meeting
September 16, 2019**

The Special Meeting of September 16, 2019, was held at the District Office Board Room, 2665 Noel Drive, Little Canada, Minnesota, at 6:00 p.m.

PRESENT:

Marj Ebensteiner, President
Cliff Aichinger, Vice President
Dianne Ward, Treasurer
Dr. Pam Skinner, Secretary
Lawrence Swope, Manager

ALSO PRESENT:

Tina Carstens, District Administrator
Brad Lindaman, Barr Engineering

The Board of Managers met to brainstorm on project and program priorities as it relates to the current watershed management plan. Discussion was also had on potential updates and/or changes needed to the watershed management plan in a future amendment.

The following are the outcomes of the meeting:

- Staff will review the watershed management plan and suggest areas that need updating.
- Staff will give the Board information on the impact of flooding on wetlands.
- Staff will consider scheduling additional special meetings when detailed project or program discussions are desired. For instance, in the next two months, the Board would like to discuss the Beltline Resiliency Study at a special work session meeting.

The meeting concluded at 8:00 pm.



Bill List



RWMWD BUDGET STATUS REPORT
Administrative & Program Budget
Fiscal Year 2019
9/30/2019

Budget Category	Budget Item	Account Number	Original Budget	Budget Transfers	Current Month Expenses	Year-to-Date Expenses	Current Budget Balance	Percent of Budget
Manager	Per diems	4355	\$6,500.00	-	-	4,150.00	\$2,350.00	63.85%
	Manager expenses	4360	3,500.00	-	-	871.40	2,628.60	24.90%
Committees	Committee/Bd Mtg. Exp.	4365	3,500.00	-	-	2,556.11	943.89	73.03%
Employees	Staff salary/taxes/benefits	4010	1,385,000.00	-	111,505.13	985,340.40	399,659.60	71.14%
	Employee expenses	4020	10,000.00	-	612.37	5,978.86	4,021.14	59.79%
	District training & education	4350	25,000.00	-	2,669.04	16,906.57	8,093.43	67.63%
Administration/Office	GIS system maint. & equip.	4170	15,000.00	-	-	2,028.52	12,971.48	13.52%
	Data Base/GIS Maintenance	4171	5,000.00	-	-	2,210.00	2,790.00	44.20%
	Equipment maintenance	4305	3,000.00	-	-	-	3,000.00	0.00%
	Telephone	4310	8,000.00	-	361.48	5,357.58	2,642.42	66.97%
	Office supplies	4320	5,000.00	-	378.07	3,707.61	1,292.39	74.15%
	IT/Internet/Web Site/Software Lic.	4325	45,000.00	-	2,519.69	31,310.25	13,689.75	69.58%
	Postage	4330	10,000.00	-	-	597.39	9,402.61	5.97%
	Printing/copying	4335	8,000.00	-	612.97	4,449.89	3,550.11	55.62%
	Dues & publications	4338	11,000.00	-	-	9,902.00	1,098.00	90.02%
	Janitorial/Trash Service	4341	17,000.00	-	-	5,652.18	11,347.82	33.25%
	Utilities/Bldg.Contracts	4342	20,000.00	-	1,588.99	14,846.98	5,153.02	74.23%
	Bldg/Site Maintenance	4343	300,000.00	-	571.85	71,933.40	228,066.60	23.98%
	Miscellaneous	4390	5,000.00	-	-	500.00	4,500.00	10.00%
	Insurance	4480	35,000.00	-	667.00	36,479.00	(1,479.00)	104.23%
	Office equipment	4703	40,000.00	-	-	29,222.15	10,777.85	73.06%
	Vehicle lease, maintenance	4810-40	43,000.00	-	1,597.97	5,799.08	37,200.92	13.49%
Consultants/Outside Services	Auditor/Accounting	4110	55,000.00	-	-	41,158.96	13,841.04	74.83%
	Engineering-administration	4121	93,000.00	-	2,463.00	50,900.64	42,099.36	54.73%
	Engineering-permit I&E	4122	10,000.00	-	-	3,024.44	6,975.56	30.24%
	Engineering-eng. review	4123	55,000.00	-	1,180.00	35,802.16	19,197.84	65.09%
	Engineering-permit review	4124	55,000.00	-	410.00	26,632.50	28,367.50	48.42%
	Project Feasibility Studies	4129	790,000.00	-	21,485.00	266,442.80	523,557.20	33.73%
	Attorney-permits	4130	10,000.00	-	-	-	10,000.00	0.00%
	Attorney-general	4131	40,000.00	-	-	21,409.50	18,590.50	53.52%
	Outside Consulting Services	4160	40,000.00	-	-	-	40,000.00	0.00%
Programs	Educational programming	4370	60,000.00	-	339,150.00	14,633.36	45,366.64	24.39%
	Communications & Marketing	4371	25,000.00	-	-	5,937.78	19,062.22	23.75%
	Events	4372	50,000.00	-	220.11	34,854.15	15,145.85	69.71%
	Water QM-Engineering	4520-30	300,000.00	-	14,500.14	138,123.53	161,876.47	46.04%
	Project operations	4650	160,000.00	-	1,997.32	26,178.25	133,821.75	16.36%
	SLMP/TMDL Studies	4661	68,000.00	-	110.00	3,744.00	64,256.00	5.51%
	Natural Resources/Keller Creek	4670-72	115,000.00	-	13,479.40	105,608.45	9,391.55	91.83%
	Outside Prog.Support/Weed Mgmt.	4683-84	67,000.00	-	1,405.87	40,416.16	26,583.84	60.32%
	Research Projects	4695	115,000.00	-	1,347.00	44,294.09	70,705.91	38.52%
	Health and Safety Program	4697	3,000.00	-	63.61	1,043.48	1,956.52	34.78%
	NPDES Phase II	4698	10,000.00	-	-	-	10,000.00	0.00%
GENERAL FUND TOTAL			\$4,124,500.00	\$0.00	\$182,085.16	\$2,100,003.62	\$2,024,496.38	50.92%
CIP's	CIP Project Repair & Maintenance	516	1,120,000.00	-	83,134.69	764,296.94	355,703.06	68.24%
	Targeted Retrofit Projects	518	978,760.00	-	5,203.00	215,962.15	762,797.85	22.06%
	District Office Building Solar Energy Retrofit	519	-	-	-	-	-	---
	Flood Damage Reduction Fund	520	2,500,000.00	-	3,389.09	240,698.96	2,259,301.04	9.63%
	Debt Services-96-97 Beltline/MM/Battle Creek	526	399,113.00	-	-	396,907.30	2,205.70	99.45%
	Stewardship Grant Program Fund	528-529	1,250,000.00	-	95,195.12	434,317.87	815,682.13	34.75%
	Impervious Surface Volume Reduction Opportunity	531	1,500,000.00	-	-	-	1,500,000.00	0.00%
	Beltline & Battle Creek Tunnel Repair	549	-	-	-	-	-	---
	Frost/Kennard Enhanced WQ BMP	550	-	-	-	-	-	---
	Markham Pond Dredging & Aeration	551	65,000.00	-	750.00	5,842.48	59,157.52	8.99%
	Wakefield Park Project	553	1,100,000.00	-	2,790.50	58,126.70	1,041,873.30	5.28%
	Willow Pond CMAC	554	300,000.00	-	747.00	11,839.16	288,160.84	3.95%
	District Office Bond Payment	585	194,885.00	-	-	193,453.76	1,431.24	99.27%
CIP BUDGET TOTAL			\$9,407,758.00	\$0.00	\$191,209.40	\$2,321,445.32	\$7,086,312.68	24.68%
TOTAL BUDGET			\$13,532,258.00	\$0.00	\$373,294.56	\$4,421,448.94	\$9,110,809.06	32.67%

Current Fund Balances:

Fund:	Beginning Fund Balance @ 12/31/18	Fund Transfers	Year to date Revenue	Current Month Expenses	Year to Date Expense	Fund Balance @ 09/30/19
101 - General Fund	\$4,464,553.28	-	1,834,659.16	182,085.16	2,100,003.62	4,199,208.82
516 - CIP Project Repair & Maintenance	951,963.00	-	589,276.30	83,134.69	764,296.94	776,942.36
518 - Targeted Retrofit Projects	994,725.00	-	105,227.91	5,203.00	215,962.15	883,990.76
519 - District Office Building Solar Energy Retrofit	32,805.00	-	-	-	-	32,805.00
520 - Flood Damage Reduction Fund	1,823,918.00	-	483,117.41	3,389.09	240,698.96	2,066,336.45
526 - Debt Services-96-97 Beltline/MM/Beltline-Battle Creek Tunnel Repair	381,949.00	-	311,016.62	-	396,907.30	296,058.32
528/529 - Stewardship Grant Program Fund	389,152.00	-	657,674.45	95,195.12	434,317.87	612,508.58
531 - Impervious Surface Volume Reduction Opportunity	1,484,215.00	-	-	-	-	1,484,215.00
549 - Beltline & Battle Creek Tunnel Repair	863,674.00	-	-	-	-	863,674.00
550 - Frost/Kennard Enhanced WQ BMP	70,017.00	-	-	-	-	70,017.00
551 - Markham Pond Dredging & Aeration	110,379.00	-	-	750.00	5,842.48	104,536.52
553 - Wakefield Park Project	1,049,286.00	-	-	2,790.50	58,126.70	991,159.30
554 - Willow Pond CMAC	(44,588.00)	-	-	747.00	11,839.16	(56,427.16)
580 - Contingency Fund	598,985.00	-	-	-	-	598,985.00
585 - Certificates of Participation	131,513.00	-	102,536.71	-	193,453.76	40,595.95
Total District Fund Balance	\$13,302,546.28	-	\$ 4,083,508.56	\$ 373,294.56	\$4,421,448.94	\$12,964,605.90

Ramsey Washington Metro Watershed Dist.
Check Register
For the Period From Sep 1, 2019 to Sep 30, 2019

Check #	Date	Payee ID	Invoice #	Payee	Description	Amount
EFT	08/02/19	del002	Aug 2019	Deluxe for Business	Accounts Payable Checks	\$541.76
EFT	09/01/19	met008	Sep 2019	MetLife	Employee Benefits	1,615.20
EFT	09/11/19	hea002	Oct 2019	HealthPartners	Employee Benefits	10,825.13
EFT	09/13/19	nsp001	Sep 2019	Xcel Energy	Project Operations/Utilities	640.58
71023	09/25/19	ada002	2826188	Adam's Pest Control, Inc.	Utilities/Building Contracts	79.00
71024	09/25/19	att002	X09252019	AT & T Mobility - ROC	Water QM Staff-General	80.45
71025	09/25/19	aws001	S1335957-090119	AWS Service Center	Utilities/Building Contracts	206.28
71026	09/25/19	bar001	8/24-9/6/19	Barr Engineering	8/24-9/6/19 Engineering Expense	59,752.84
71027	09/25/19	bar004	Sep 2019	Deborah Barnes	Employee Reimbursement	70.00
71028	09/25/19	bar009	09/20/19	Seth Bartodziej	Employee Reimbursement	44.08
71029	09/25/19	bli003	19-05 CS	YMCA Maplewood	Stewardship Grant Fund	77,700.50
71030	09/25/19	bre003	Oct 2019	Bremer Bank	Employee Benefits	7,000.00
71031	09/25/19	bro001	13525764-00	Brock White Company LLC	Natural Resources Project	280.52
71032	09/25/19	cad001	Sep 2019	Allstream	Water QM Staff-General	65.49
71033	09/25/19	car007	Sep 2019	Carp Solutions, LLC	Natural Resources Project	10,184.80
71034	09/25/19	cit011	226613	City of Roseville	Telephone/IT/Website/Software	2,728.00
71035	09/25/19	com004	09/16/19	Comcast	Utilities/Building Contracts	61.93
71036	09/25/19	don001	Sep 2019	Matthew Doneux	Employee Reimbursement	108.68
71037	09/25/19	fit002	Sep 2019	Mary Fitzgerald	Employee Reimbursement	55.68
71038	09/25/19	fli001	19-13	Flint Hills Resources	Dev.Escrow-General	88.00
71039	09/25/19	fre001	836	Freshwater Society	Outside Program Support	500.00
71040	09/25/19	gil001	184316	Gilbert Mechanical Contractors, Inc.	Bldg./Site Maintenance	237.00
71041	09/25/19	han007	1	Ben Hanson	Natural Resources Project	200.00
71042	09/25/19	haw001	4578233/4580821	Hawkins, Inc.	Water QM Staff-General	8,946.20
71043	09/25/19	hej001	313418	Hejny Rental	Natural Resources Project	22.89
71044V	---	---	---	VOID	VOID	-
71045	09/25/19	hub002	100	Michael Huber	Natural Resources Project	192.50
71046	09/25/19	inn002	SO-2698378	Innovative Office Solutions LLC	Office Supplies	317.33
71047	09/25/19	int001	W19080505	Office of MN, IT Services	Telephone Expense	57.48
71048	09/25/19	isc001	P020067467	Teledyne Instruments, Inc.	Water QM Staff-General	321.00
71049	09/25/19	kub001	Sep 2019	Kyle W. Kubitza	Employee Reimbursement	17.40
71050	09/25/19	lar002	09/01/19	Andrew S. Larson	Employee Reimbursement	33.06
71051	09/25/19	lea001	09/18/19-WC	League of MN Cities Ins. Trust WC	Insurance Expense	667.00
71052	09/25/19	mel001	Sep 2019	Michelle L. Melser	Employee Reimbursement	281.22
71053	09/25/19	met004	INV1429243	Metro Sales, Inc.	Printing Expense	318.97
71054	09/25/19	mid001	6592805	Quicksilver Express Courier	Employee Benefits	26.62
71055	09/25/19	mid003	Toolbox	Roseville Midway Ford	Vehicle Expense	1,080.00
71056	09/25/19	min008	21563	Minnesota Native Landscapes, Inc.	Stewardship Grant Fund	5,130.00
71057	09/25/19	nar001	IN0118824	Nardini Fire Equipment	Utilities/Building Contracts	327.00
71058	09/25/19	nep001	10/2019	NCPERS Group Life Ins.	Employee Benefits	16.00
71059	09/25/19	nsp001	Sep 2019	Xcel Energy	Project Operations/Utilities	770.77
71060	09/25/19	out001	19-082/19-112/19-105	Outdoor Lab Landscape Design, Inc.	Stewardship/Constr.-Maint. & Rep.	34,381.22
71061	09/25/19	pac001	1912010614-11085	Pace Analytical Services, Inc.	Water QM Staff-General	1,044.00
71062	09/25/19	pas002	Aug-Sep 2019	Sage Passi	Employee Reimbursement	149.98
71063	09/25/19	pro003	Sep 2019	Lyndsey R. Provos	Employee Reimbursement	419.23
71064	09/25/19	qwe001	09/10/19	CenturyLink	Water QM Staff-General	230.61
71065	09/25/19	red003	20190910043028	Red Wing Business Advantage Account	Employee Benefits	322.98
71066	09/25/19	san003	09/03/19	Sandstrom Land Management	Stewardship Grant Fund	715.00
71067	09/25/19	sco003	19-22 CS	Barbara Scott	Stewardship Grant Fund	1,559.56
71068	09/25/19	sod001	Sep 2019	Nicole Soderholm	Employee Reimbursement	54.50
71069	09/25/19	stp005	5584	St. Paul Public Schools	Educational Program	276.65
71070	09/25/19	tro002	19-06	Cathy Troendle	Educational Program	62.50
71071	09/25/19	usb002	Sep 2019	U.S. Bank	August/September Credit Card	4,668.21
71072	09/25/19	usb005	393847371	US Bank Equipment Finance	Printing Expense	294.00
71073	09/25/19	vla001	09/17/19	Dave Vlasin	Employee Reimbursement	388.33
71074	09/25/19	voy001	Sep 2019	US Bank Voyager Fleet Sys.	Vehicle Fuel	517.97
71075	09/25/19	wil007	Sep 2019	Patrick Williamson	Employee Reimbursement	37.12
71076	09/25/19	bro001	Sep 2019	Brock White Company LLC	Natural Resources Project	1,775.43
71077	09/25/19	hof001	8055	Hoffman & McNamara Nursery & Landscape	Construction Imp.-Maint. & Repair	44,038.35
Total				Accounts Payable		<u>\$282,527.00</u>

Ramsey Washington Metro Watershed Dist.
Check Register
For the Period From Sep 1, 2019 to Sep 30, 2019

Check #	Date	Payee ID	Invoice #	Payee	Description	Amount
EFT	08/09/19	myp001	08/09/19	August 9th Payroll Fees	4110-101-000	71.80
EFT	08/23/19	myp001	08/23/19	August 23rd Payroll Fees	4110-101-000	75.50
Dir.Dep.	09/06/19	---	Payroll Expense-Net	September 6th Payroll	4010-101-000	27,586.52
EFT	09/06/19	int002	Internal Rev.Serv.	September 6th Federal Withholding	2001-101-000	9,373.80
EFT	09/06/19	mnd001	MN Revenue	September 6th State Withholding	2003-101-000	1,814.75
EFT	09/06/19	per001	PERA	September 6th PERA	2011-101-000	4,854.59
EFT	09/06/19	emp002	Empower Retirement	Employee Def.Comp. Contributions	2016-101-000	2,425.00
EFT	09/06/19	emp002	Empower Retirement	Employee IRA Contributions	2018-101-000	375.00
Dir.Dep.	09/20/19	---	Payroll Expense-Net	September 20th Payroll	4010-101-000	25,341.66
EFT	09/20/19	int002	Internal Rev.Serv.	September 20th Federal Withholding	2001-101-000	8,651.23
EFT	09/20/19	mnd001	MN Revenue	September 20th State Withholding	2003-101-000	1,672.24
EFT	09/20/19	per001	PERA	September 20th PERA	2011-101-000	4,793.46
EFT	09/20/19	emp002	Empower Retirement	Employee Def.Comp. Contributions	2016-101-000	2,425.00
EFT	09/20/19	emp002	Empower Retirement	Employee IRA Contributions	2018-101-000	375.00
Payroll/Benefits						<u>\$89,835.55</u>
Total						Accounts Payable/Payroll/Benefits: <u>\$372,362.55</u>

Ramsey Washington Metro Watershed Dist.
Cash Disbursements Journal
For the Period From Sep 1, 2019 - Sep 30, 2019

Date	Check #	Vendor ID	Name	Account ID	Account Description	Amount	Check Detail
08/02/19	EFT	del002	Deluxe for Business	4320-101-000	Office Supplies-General	\$541.76	
09/01/19	EFT	met003	MetLife-Group Benefits			1,615.20	
				4040-101-000	Employee Benefits-General		1,398.12
				2015-101-000	Employee Health-General		217.08
09/11/19	EFT	hea002	HealthPartners			10,825.13	
				4040-101-000	Employee Benefits-General		9,186.12
				2015-101-000	Employee Health-General		1,639.01
09/13/19	EFT	nsp001	Xcel Energy			640.58	
				4650-101-000	Project Operations-General		374.82
				4342-101-000	Utilities/Bldg. Contracts		265.76
09/25/19	71023	ada002	Adam's Pest Control	4342-101-000	Utilities/Bldg. Contracts	79.00	
09/25/19	71024	att002	AT & T Mobility - ROC	4530-101-000	Water QM Staff-General	80.45	
09/25/19	71025	aws001	AWS Service Center	4342-101-000	Utilities/Bldg. Contracts	206.28	
09/25/19	71026	bar001	Barr Engineering			59,752.84	
				4121-101-000	Engineering Admin-General Fund		2,463.00
				4123-101-000	Engineering-Review-General		1,180.00
				4129-101-000	Project Feasability-General		219.50
				4129-101-000	Project Feasability-General		9,153.00
				4129-101-000	Project Feasability-General		1,161.00
				4129-101-000	Project Feasability-General		2,235.50
				4129-101-000	Project Feasability-General		6,174.00
				4129-101-000	Project Feasability-General		532.50
				4129-101-000	Project Feasability-General		1,978.00
				4520-101-000	Water QM-Engineering		119.18
				4520-101-000	Water QM-Engineering		625.00
				4520-101-000	Water QM-Engineering		64.50
				4520-101-000	Water QM-Engineering		982.00
				4520-101-000	Water QM-Engineering		1,883.00
				4122-101-000	Engineering Permit Review-Genera Fund		31.50
				4124-101-000	Engineering-Flood Damage		410.00
				4661-101-000	SLMP/TMDL Studies		110.00
				4128-520-000	Engineering-Flood Damage		3,389.09
				4695-101-000	Research Projects-General		50.00
				4695-101-000	Research Projects-General		17.00
				4650-101-000	Project Operations-General		1,500.75
				4128-553-000	Engineering-Wakefield		2,790.50
				4128-518-000	Engineering-School/Commer Retrofit		3,120.50
				4682-529-000	Stewardship Grant Fund		1,112.50
				4128-518-000	Engineering-School/Commer Retrofit		2,082.50

Ramsey Washington Metro Watershed Dist.
Cash Disbursements Journal
For the Period From Sep 1, 2019 - Sep 30, 2019

Date	Check #	Vendor ID	Name	Account ID	Account Description	Amount	Check Detail
				4128-551-000	Engineering-Markham		750.00
				4682-529-000	Stewardship Grant Fund		3,644.56
				4128-554-000	Engineering-Willow Pond		747.00
				4695-101-000	Engineering-Research Projects		1,280.00
				4128-516-000	Engineering-Maint. & Repair		7,904.26
				4128-516-000	Engineering-Maint. & Repair		2,042.50
09/25/19	71027	bar004	Deborah Barnes	4040-101-000	Employee Benefits-General	70.00	
09/25/19	71028	bar009	Seth Bartodziej	4020-101-000	Employee Expenses-General	44.08	
09/25/19	71029	bli003	YMCA Maplewood	4682-529-000	Stewardship Grant Fund	77,700.50	
09/25/19	71030	bre003	Bremer Bank	4040-101-000	Employee Benefits-General	7,000.00	
09/25/19	71031	bro001	Brock White Company, LLC	4670-101-000	Natural Resources Project-General	280.52	
09/25/19	71032	cad001	Allstream	4530-101-000	Water QM Staff-General	65.49	
09/25/19	71033	car007	Carp Solutions, LLC	4670-101-000	Natural Resources Project-General	10,184.80	
09/25/19	71034	cit011	City of Roseville			2,728.00	
				4310-101-000	Telephone-General		304.00
				4325-101-000	IT/Website/Software		2,424.00
09/25/19	71035	com004	Comcast	4342-101-000	Utilities/Bldg. Contracts	61.93	
09/25/19	71036	don001	Matthew Doneux			108.68	
				4040-101-000	Employee Benefits-General		40.00
				4020-101-000	Employee Expenses-General		12.76
				4670-101-000	Natural Resources Project-General		55.92
09/25/19	71037	fit002	Mary Fitzgerald	4020-101-000	Employee Expenses-General	55.68	
09/25/19	71038	fli001	Flint Hills Resources	2024-101-000	Dev Escrow-General Fund	88.00	
09/25/19	71039	fre001	Freshwater Society	4683-101-000	Outside Program Support	500.00	
09/25/19	71040	gil001	Gilbert Mechanical Contractors, Inc.	4343-101-000	Bldg./Site Maintenance	237.00	
09/25/19	71041	han007	Ben Hanson	4670-101-000	Natural Resources Project-General	200.00	
09/25/19	71042	haw001	Hawkin's, Inc.	4530-101-000	Water QM Staff-General	8,946.20	
09/25/19	71043	hej001	Hejny Rental	4670-101-000	Natural Resources Project-General	22.89	
09/25/19	71044V	---	VOID	---	VOID	-	
09/25/19	71045	hub002	Michael Huber	4670-101-000	Natural Resources Project-General	192.50	
09/25/19	71046	inn002	Innovative Office Solutions, LLC	4320-101-000	Office Supplies-General	317.33	
09/25/19	71047	int001	Office of MN, IT Services	4310-101-000	Telephone-General	57.48	
09/25/19	71048	isc001	Teledyne Instruments, Inc.	4530-101-000	Water QM Staff-General	321.00	
09/25/19	71049	kib001	Kyle W. Kubitz	4020-101-000	Employee Expenses-General	17.40	
09/25/19	71050	lar002	Andrew S. Larson	4020-101-000	Employee Expenses-General	33.06	
09/25/19	71051	lea001	League of MN Cities Trust WC	4480-101-000	Insurance-General	667.00	
09/25/19	71052	mel001	Michelle L. Melser			281.22	
				4020-101-000	Employee Expenses-General		71.22
				4040-101-000	Employee Benefits-General		210.00
09/25/19	71053	met004	Metro Sales, Inc.	4335-101-000	Printing-General	318.97	

Ramsey Washington Metro Watershed Dist.
Cash Disbursements Journal
For the Period From Sep 1, 2019 - Sep 30, 2019

Date	Check #	Vendor ID	Name	Account ID	Account Description	Amount	Check Detail
09/25/19	71054	mid001	Quicksilver Express Courier	4040-101-000	Employee Benefits-General	26.62	
09/25/19	71055	mid003	Roseville Midway Ford	4840-101-000	Vehicle Misc.-General	1,080.00	
09/25/19	71056	min008	Minnesota Native Landscapes, Inc.	4682-529-000	Stewardship Grant Fund	5,130.00	
09/25/19	71057	nar001	Nardini Fire Equipment	4342-101-000	Utilities/Bldg. Contracts	327.00	
09/25/19	71058	ncp001	NCPERS Group Life Insurance	2015-101-000	Employee Health-General	16.00	
09/25/19	71059	nsp001	Xcel Energy			770.77	
				4650-101-000	Project Operations-General		121.75
				4342-101-000	Utilities/Bldg. Contracts		649.02
09/25/19	71060	out001	Outdoor Lab Landscape Design, Inc.			34,381.22	
				4682-529-000	Stewardship Grant Fund		5,333.00
				4630-516-000	Construction Imp.-Maint. & Repair		3,285.72
				4630-516-000	Construction Imp.-Maint. & Repair		25,762.50
09/25/19	71061	pac001	Pace Analytical Services, Inc.	4530-101-000	Water QM Staff-General	1,044.00	
09/25/19	71062	pas002	Sage Passi			149.98	
				4040-101-000	Employee Benefits-General		99.50
				4020-101-000	Employee Expenses-General		50.48
09/25/19	71063	pro003	Lyndsey R. Provos			419.23	
				4020-101-000	Employee Expenses-General		168.19
				4040-101-000	Employee Benefits-General		200.00
				4697-101-000	Health & Safety Program		18.23
				4350-101-000	Training & Education-General		32.81
09/25/19	71064	qwe001	CenturyLink	4530-101-000	Water QM Staff-General	230.61	
09/25/19	71065	red003	Red Wing Business Advantage Account	4040-101-000	Employee Benefits-General	322.98	
09/25/19	71066	san003	Sandstrom Land Management	4682-529-000	Stewardship Grant Fund	715.00	
09/25/19	71067	sco003	Barbara Scott	4682-529-000	Stewardship Grant Fund	1,559.56	
09/25/19	71068	sod001	Nichole Soderholm			54.50	
				4040-101-000	Employee Benefits-General		40.00
				4020-101-000	Employee Expenses-General		14.50
09/25/19	71069	stp005	St. Paul Public Schools	4370-101-000	Educational Program-General	276.65	
09/25/19	71070	tro002	Cathy Troendle	4370-101-000	Educational Program-General	62.50	
09/25/19	71071	usb002	U.S. Bancorp			4,668.21	
				4530-101-000	Water QM Staff-General		7.40
				4670-101-000	Natural Resources Project-General		142.02
				4325-101-000	IT/Website/Software		95.69
				4320-101-000	Office Supplies-General		27.81
				4670-101-000	Natural Resources Project-General		203.51
				4670-101-000	Natural Resources Project-General		57.98
				4530-101-000	Water QM Staff-General		21.40
				4670-101-000	Natural Resources Project-General		216.00
				4320-101-000	Office Supplies-General		14.97
				4350-101-000	Training & Education-General		155.00
				4040-101-000	Employee Benefits-General		267.80
				4670-101-000	Natural Resources Project-General		89.32

Ramsey Washington Metro Watershed Dist.
Cash Disbursements Journal
For the Period From Sep 1, 2019 - Sep 30, 2019

Date	Check #	Vendor ID	Name	Account ID	Account Description	Amount	Check Detail
				4530-101-000	Water QM Staff-General		93.50
				4697-101-000	Health & Safety Program		45.38
				4650-516-000	Project Operations-General		101.36
				4530-101-000	Water QM Staff-General		16.41
				4350-101-000	Training & Education-General		200.00
				4320-101-000	Office Supplies-General		17.96
				4670-101-000	Natural Resources Project-General		16.51
				4350-101-000	Training & Education-General		275.00
				4343-101-000	Bldg./Site Maintenance		334.85
				4670-101-000	Natural Resources Project-General		42.00
				4350-101-000	Training & Education-General		550.00
				4350-101-000	Training & Education-General		275.00
				4350-101-000	Training & Education-General		275.00
				4350-101-000	Training & Education-General		275.00
				4350-101-000	Training & Education-General		275.00
				4372-101-000	Events		220.11
				4350-101-000	Training & Education-General		156.23
				4350-101-000	Training & Education-General		200.00
09/26/19	71072	usb005	US Bank Equipment Finance	4335-101-000	Printing-General	294.00	
09/25/19	71073	vla001	Nichole Soderholm			388.33	
				4040-101-000	Employee Benefits-General		280.45
				4020-101-000	Employee Expenses-General		107.88
09/25/19	71074	voy001	US Bank Voyager Fleet Sys.	4830-101-000	Vehicle Fuel-General	517.97	
09/25/19	71075	wil007	Patrick Williamson	4020-101-000	Employee Expenses-General	37.12	
09/25/19	71076	bro001	Brock White Company, LLC	4670-101-000	Natural Resources Project-General	1,775.43	
09/25/19	71077	hof001	Hoffman & McNamara Nursery & Landscape	4630-516-000	Construction Imp.-Maint. & Repair	44,038.35	
Accounts Payable Total:						\$282,527.00	
EFT	08/09/19	myp001	Payroll Fees	4110-101-000	August 9th Payroll Fee	71.80	
EFT	08/23/19	myp001	Payroll Fees	4110-101-000	August 23rd Payroll Fee	75.50	
Dir.Dep.	09/06/19	---	Payroll Expense-Net	4010-101-000	September 6th Payroll	27,586.52	
EFT	09/06/19	int002	Internal Revenue Service	2001-101-000	September 6th Federal Withholding	9,373.80	
EFT	09/06/19	mnd001	MN Revenue	2003-101-000	September 6th State Withholding	1,814.75	
EFT	09/06/19	per001	PERA	2011-101-000	September 6th PERA	4,854.59	
EFT	09/06/19	emp002	Empower Retirement	2016-101-000	Employee Def.Comp. Contributions	2,425.00	
EFT	09/06/19	emp002	Empower Retirement	2018-101-000	Employee IRA Contributions	375.00	
Dir.Dep.	09/20/19	---	Payroll Expense-Net	4010-101-000	September 20th Payroll	25,341.66	
EFT	09/20/19	int002	Internal Revenue Service	2001-101-000	September 20th Federal Withholding	8,651.23	
EFT	09/20/19	mnd001	MN Revenue	2003-101-000	September 20th State Withholding	1,672.24	
EFT	09/20/19	per001	PERA	2011-101-000	September 20th PERA	4,793.46	
EFT	09/20/19	emp002	Empower Retirement	2016-101-000	Employee Def.Comp. Contributions	2,425.00	
EFT	09/20/19	emp002	Empower Retirement	2018-101-000	Employee IRA Contributions	375.00	
Payroll/Benefits						\$89,835.55	
TOTAL:						\$372,362.55	



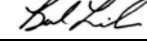
**Summary of Professional Engineering Services During the Period
August 24, 2019 through September 6, 2019**

	Total Engineering Budget (2019)	Total Fees to Date (2019)	Budget Balance (2019)	Fees During Period	District Accounting Code	Plan Implementation Task Number
Engineering Administration						
General Engineering Administration	\$76,000.00	\$56,324.14	\$19,675.86	\$2,463.00	4121-101	DW-13
RWMWD Health and Safety/ERTK Program	\$2,000.00	\$759.00	\$1,241.00		4697-101	DW-13
Educational Program/Educational Forum Assistance	\$20,000.00	\$15,759.10	\$4,240.90		4129-101	DW-11
Engineering Review						
Engineering Review	\$55,000.00	\$44,388.16	\$10,611.84	\$1,180.00	4123-101	DW-13
Project Feasibility Studies						
Owasso County Park Stormwater Master Plan and Detailed Design: Phase 1 and Phase 2	\$50,000.00	\$6,594.70	\$43,405.30	\$219.50	4129-101	DW-6
Beltline Resiliency and Phalen Chain Water Level Management Study	\$217,000.00	\$99,873.12	\$117,126.88	\$9,153.00	4129-101	BELT-3
Interim emergency response plan funds for top priority District Flooding areas (such as Owasso Basin, Willow Creek, PCU Pond, etc)	\$50,000.00	\$648.00	\$49,352.00		4129-101	DW-19
FEMA Flood Mapping Update	\$90,000.00	\$51,888.50	\$38,111.50	\$1,161.00	4129-101	DW-9
Snail, Grass, and West Vadnais outlet permitting with the MndNR	\$100,000.00	\$40,426.76	\$59,573.24	\$2,235.50	4129-101	DW-9
Modeling of 500-year event Atlas 14 District-wide (Climate Change Scenario) and Generation of Flood Maps for Future Outreach Efforts	\$70,000.00	\$33,946.00	\$36,054.00	\$6,174.00	4129-101	DW-9
Climate Adaption Workshops with Member Cities	\$100,000.00	\$255.00	\$99,745.00		4129-101	DW-9
Hillcrest Golf Course (multi-use)	\$25,000.00	\$532.50	\$24,467.50	\$532.50	4129-101	DW-6
Wetland Restoration site search. BWSR criteria needed to help guide this idea.	\$25,000.00	\$17,629.00	\$7,371.00	\$1,978.00	4129-101	DW-1, DW-8
Gold BRT planning	\$20,000.00	\$0.00	\$20,000.00		4129-101	DW-6
Priority Pond Assessment (WQ Monitor/Dredge/Treat/Leave As-Is)	\$20,000.00	\$275.50	\$19,724.50		4129-101	DW-5
Contingency*	\$20,000.00	\$3,233.00	\$16,767.00		4129-101	
GIS Maintenance						
GIS Maintenance	\$5,000.00	\$341.50	\$4,658.50		4170-101	DW-13
Monitoring Water Quality/Project Monitoring						
Lake Water Quality Monitoring (Misc QA/QC)	\$10,000.00	\$2,923.68	\$7,076.32	\$119.18	4520-101	DW-2
Auto lake monitoring system for Grass Lake	\$20,000.00	\$1,625.00	\$18,375.00	\$625.00	4520-101	DW-18
Auto lake monitoring system for Owasso Lake	\$20,000.00	\$5,611.04	\$14,388.96	\$64.50	4520-101	DW-18
Auto lake monitoring system for Phalen Lake	\$20,000.00	\$4,799.50	\$15,200.50		4520-101	DW-18
Auto lake monitoring system for Snail Lake	\$20,000.00	\$1,982.00	\$18,018.00	\$982.00	4520-101	DW-18
Auto lake monitoring system for Wabasso Lake	\$20,000.00	\$4,818.50	\$15,181.50		4520-101	DW-18
Special Project BMP Monitoring (Maplewood Mall, Frost Kennard Spent Lime Filter, Willow Pond CMAC)	\$25,000.00	\$22,110.07	\$2,889.93	\$1,883.00	4520-101	DW-12
Permit Processing, Inspection and Enforcement						
Permit Application Inspection and Enforcement	\$10,000.00	\$3,055.94	\$6,944.06	\$31.50	4122-101	DW-7
Permit Application Review	\$55,000.00	\$31,533.50	\$23,466.50	\$410.00	4124-101	DW-7
Lake Studies/WRPPs/TMDL Reports						
2019 Grant Applications	\$30,000.00	\$144.00	\$29,856.00		4661-101	--
Tanners Flood Response Tool Model Update	\$3,000.00	\$1,545.00	\$1,455.00		4661-101	TaL-1
Internal Load Management Discussions	\$10,000.00	\$2,336.00	\$7,664.00	\$110.00	4661-101	KL-2, GC-2, WL-3, BL-3, BCL-2, LE-4, Bel-3, LO-5
Twin Lake Public Meeting	\$20,000.00	\$14,522.12	\$5,477.88		4129-101	DW-19
Twin Lake Emergency Response Management 2019		\$59,549.27	-\$59,549.27	\$3,389.09	4128-520	
Contingency for Lake Studies	\$5,000.00	\$0.00	\$5,000.00		4661-101	
Research Projects						
New Technology Mini Case Studies (average 6 per year)	\$12,000.00	\$11,848.00	\$152.00	\$50.00	4695-101	DW-12
Kohlman Permeable Weir Test System - Implement Monitoring Plan	\$15,000.00	\$10,327.10	\$4,672.90		4695-101	DW-12
Iron aggregate pond application research project	\$20,000.00	\$470.07	\$19,529.93	\$17.00	4695-101	DW-12
Project Operations						
2018 Tanners Alum Facility Monitoring	\$15,000.00	\$13,658.75	\$1,341.25	\$1,500.75	4650-101	TaL-3
Capital Improvements						
Wakefield Park/Frost Avenue Stormwater Project	\$175,000.00	\$69,099.70	\$105,900.30	\$2,790.50	4128-553	WL-1
Commercial Sites Retrofit Projects 2018 (Targeted Retrofits)	\$55,000.00	\$14,290.70	\$40,709.30	\$3,120.50	4128-518	DW-6
School Sites Retrofit Projects 2018 (Targeted Retrofits)	\$55,000.00	\$19,924.50	\$35,075.50		4128-518	DW-6
Church Sites Retrofit Projects 2018 (Targeted Retrofit)	\$55,000.00	\$12,883.50	\$42,116.50		4128-518	DW-6
Roseville High School Campus Stormwater Retrofit (Bennett Lake Subwatershed)	\$125,000.00	\$23,026.52	\$101,973.48		4128-518	Bel-4
BMP Incentive Fund: Gen'l BMP Design Assistance and Review (cases where Dist is approached by landowner, or landowner is not commercial, school, church).	\$50,000.00	\$43,107.76	\$6,892.24	\$1,112.50	4682-529	DW-6
Lowering West Vadnais Lake Outlet	\$50,000.00	\$0.00	\$50,000.00		4128-520	DW-9
Cottage Place Wetland Restoration	\$100,000.00	\$61,591.80	\$38,408.20	\$2,082.50	4128-518	DW-1, DW-8
Markham Pond Aeration Project and Grant Reporting	\$1,000.00	\$6,002.48	-\$5,002.48	\$750.00	4128-551	KC-1
Aldrich Arena Plans and Specifications	\$125,000.00	\$143,643.26	-\$18,643.26	\$3,644.56	4682-529	DW-6
Willow Pond CMAC Implementation	\$100,000.00	\$130,063.11	-\$30,063.11	\$747.00	4128-554	Bel-4
CIP Project Repair & Maintenance						
Kohlman Lake Macrophyte Mgmt	\$5,000.00	\$5,312.00	-\$312.00	\$1,280.00	4695-101	KL-3
Routine CIP Inspection and Unplanned Maintenance Identification	\$75,000.00	\$78,129.41	-\$3,129.41	\$7,904.26	4128-516	DW-5
2019 CIP Maintenance and Repairs	\$150,000.00	\$93,084.85	\$56,915.15	\$2,042.50	4128-516	DW-5
2020 CIP Maintenance and Repairs	\$150,000.00	\$0.00	\$150,000.00		4128-516	DW-5

*Final edits to Beaver, Owasso and Battle Creek Lakes Subwatershed Feasibility Studies per Board comments at the 1/2/19 meeting.

Subtotal \$59,752.84
TOTAL PAYABLE FOR PERIOD 08/24/2019 - 09/06/2019 **\$59,752.84**

Barr declares under the penalties of Law that this Account, Claim, or Demand is just and that no part has been paid.


 Bradley J. Lindaman, Vice President

2019 STORMWATER BMP SELECTIVE TREE REPLACEMENT
RAMSEY-WASHINGTON METRO WATERSHED DISTRICT
Progress Payment Application No. 1

1. Completed to Date:	\$ 46,351.00	
2. Less Previously Billed:	\$ -	
3. Amount Completed This Period:		\$ 46,351.00
4. Amount Previously Retained:		\$ -
5. Amount Retained This Period (See Note 1):		\$ (2,312.65)
6. Total Amount Retained (See Note 2):	\$ 2,312.65	
7. Retainage Released Through This Period:		
8. Less Total Retainage Remaining:	\$ 2,312.65	
9. Amount Due This Period:		\$ 44,038.35

Note 1: At rate of 10% until Completed to Date equals 50% of current Contract Price and a rate of 0% thereafter.
Note 2: Maximum amount is 5% of current Contract Price (Contract Price is \$46,253.00)

SUBMITTED BY:

Name: Mike McNamara Date: 9/24/2019
Title: President
Contractor: Hoffman & McNamara Nursery and Landscape

Signature:

RECOMMENDED BY:

Name: Andrea Wedul Date: 9/24/2019
Title: Project Manager
Engineer: Barr Engineering Company

Signature:

APPROVED BY:

Name: Marj Ebensteiner Date:
Title: President
Owner: Ramsey-Washington Metro Watershed District

Signature:



Ramsey-Washington Metro Watershed District (RWMWD)				BID TOTAL		INVOICE #1			
Maplewood Mall 2019 Stormwater BMP Selective Tree Replacement Construction Contract Amount for Progress Payment						TOTAL COMPLETED THROUGH THIS PERIOD			
Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Extended Cost	Unit Price	Actual Quantity	Extended Cost	
A	General conditions, mobilization/demobilization, Contractor O&P, etc. (P)	LS	1	\$ 4,500.00	\$ 4,500.00	\$ 4,500.00	1	\$ 4,500.00	
B	Selective tree removal and disposal - all above and below-ground material (all planting areas) (P)	EA	71	\$ 245.00	\$ 17,395.00	\$ 245.00	73	\$ 17,885.00	
C	Planting soil with mycorrhizal additive (P)	CY	10	\$ 65.00	\$ 650.00	\$ 65.00	8	\$ 520.00	
D	Rock mulch [Type A mulch] (2" depth) (P) Furnish & install	CY	14	\$ 167.00	\$ 2,338.00	\$ 167.00	8	\$ 1,336.00	
E	Double-shredded hardwood mulch [Type B mulch] Furnish & install (3" depth) (P)	CY	0.5	\$ 140.00	\$ 70.00	\$ 140.00	1.5	\$ 210.00	
F	Deciduous tree, cont. or gravel-bed grown (P) Furnish & install	EA	71	\$ 300.00	\$ 21,300.00	\$ 300.00	73	\$ 21,900.00	
					TOTAL BID AMOUNT	\$ 46,253.00	TOTAL (PAY APPLICATION #1)	\$ 46,351.00	

JP

* * * * *

Permit Program

* * * * *

Permit Application Coversheet

Date October 02, 2019

Project Name American Indian Magnet School Addition Project Number 19-42

Applicant Name Angela Selb-Sack, Saint Paul Public Schools

Type of Development Institutional

Property Description

This project is located at the existing American Indian Magnet School located at 1075 3rd Street East in the City of St. Paul. The applicant is proposing to build an addition to the school along with other improvements including staff and bus parking lots, sidewalks, and playground. The total project area is 5.41 acres. Stormwater treatment requirements will be met with construction of an underground infiltration system. Pretreatment will include sumped manholes and hooded inlets to capture sediment and floatables.

Watershed District Policies or Standards Involved:

- | | |
|--|---|
| <input type="checkbox"/> <i>Wetlands</i> | <input checked="" type="checkbox"/> <i>Erosion and Sediment Control</i> |
| <input checked="" type="checkbox"/> <i>Stormwater Management</i> | <input type="checkbox"/> <i>Floodplain</i> |

Water Quantity Considerations

The proposed stormwater management plan is sufficient to handle the runoff from the site.

Water Quality Considerations

Short Term

The proposed erosion and sediment control plan is sufficient to protect downstream water resources during construction.

Long Term

The proposed stormwater management plan is sufficient to protect the long term quality of downstream water resources.

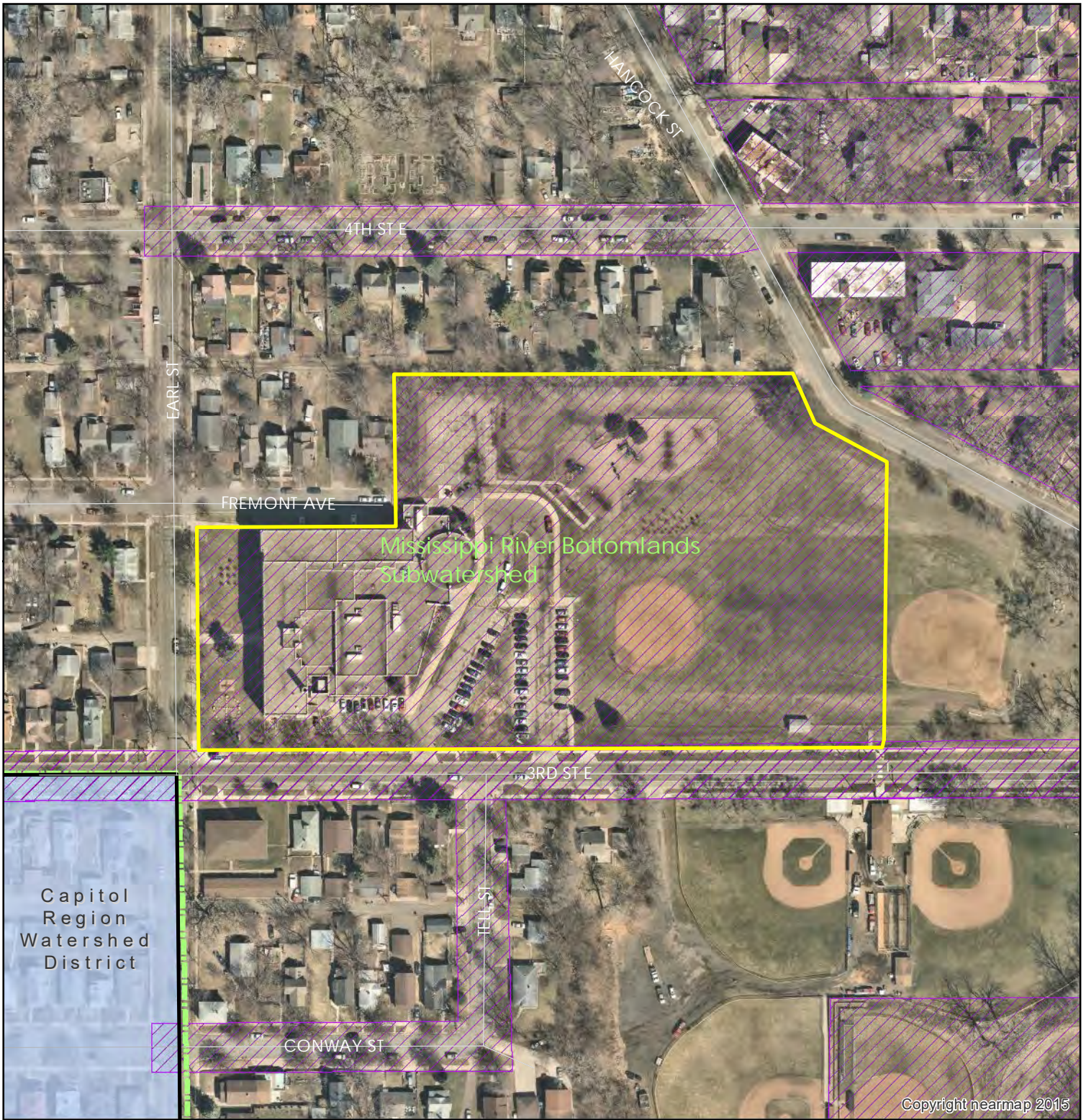
Staff Recommendation

Staff recommends approval of this permit with the special provisions.

Attachments:

- Project Location Map
- Project Grading Plan

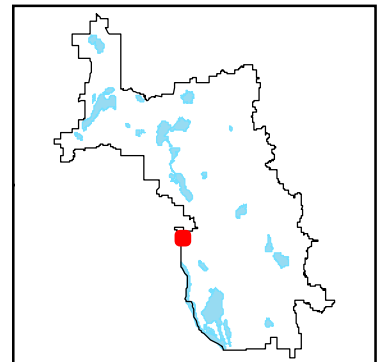
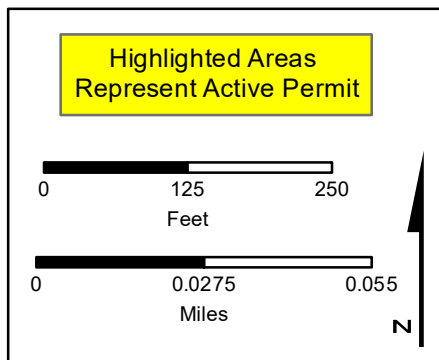
#19-42 American Indian Magnet School



Note: Shaded area is outside RWMWD

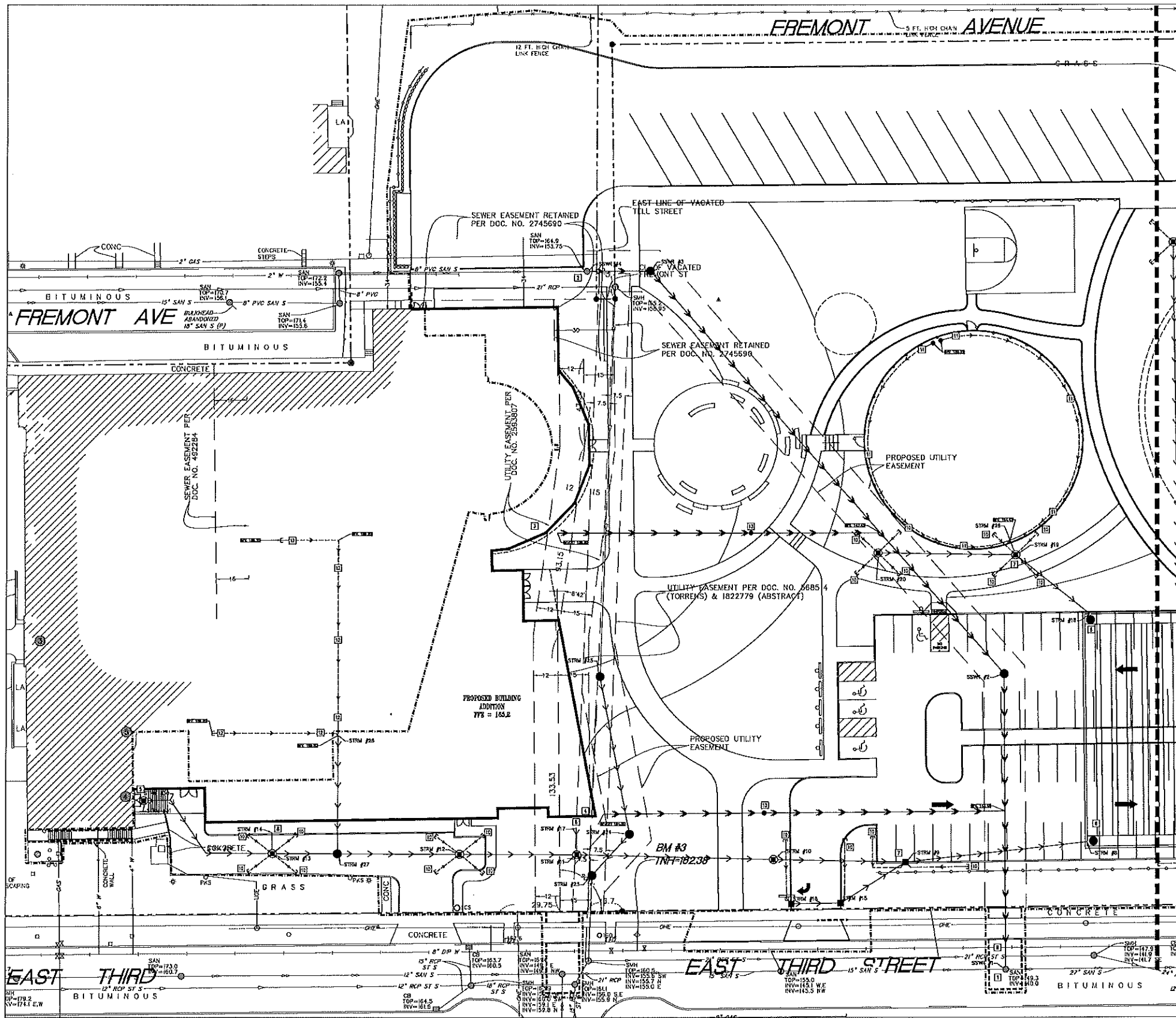
Wetlands	
■	Manage A
■	Manage B
■	Manage C
■	Lake
■	Sediment Pond
■	Not Assessed

	RWMWD Boundary
	Flow Arrows
	Major Flow Arrows
	Subwatersheds
	Creeks
	Permits



Special Provisions

1. The applicant shall submit the final, signed set of construction plans.
2. The applicant shall submit an executed stormwater maintenance agreement for the proposed stormwater facilities.
3. The applicant shall submit contact information for the trained erosion control coordinator responsible for implementing the Stormwater Pollution Prevention Plan (SWPPP).
4. The applicant shall submit a copy of the approved Minnesota Pollution Control Agency's NPDES Construction Permit coverage for the project.

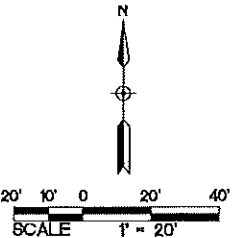


PROPOSED PLAN SYMBOLS

CONSTRUCTION LIMITS	---
PROPERTY LINE	---
SAWCUT LINE (APPROX)	- - - -
SANITARY SEWER	—●—
STORM SEWER	—○—
RETAINING WALL	▨
CATCH BASIN	□
MANHOLE	●
CLEARCUT	▭
SEWER INVERT ELEVATION	—

ABBREVIATIONS

BLDG	Building
CB	Catch Basin
CONC	Concrete
DP	Ductile Iron Pipe
ELEV	Elevation
EX	Existing
FFD	Finished Floor Elevation
HW	Header
MAX	Maximum
MH	Manhole
MIN	Minimum
PVC	Polyvinyl Chloride
RCP	Rigid Concrete Pipe
RD	Roof Drain



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KEYED NOTES

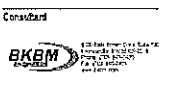
- KEYED NOTES ARE DENOTED BY [] ON PLAN.
- DO NOT DRILL EXISTING MANHOLE FOR PROPOSED PIPE CONNECTION. REFER TO SANITARY SEWER TABLE FOR INVERT, GROUT SEAL, AROUND OPENING, FOLLOW ALL CITY OF ST. PAUL STANDARDS AND SPECIFICATIONS.
 - DO NOT DRILL EXISTING MANHOLE FOR PROPOSED PIPE CONNECTION. REFER TO SANITARY SEWER TABLE FOR INVERT, GROUT SEAL, AROUND OPENING, FOLLOW ALL CITY OF ST. PAUL STANDARDS AND SPECIFICATIONS.
 - INSTALL 157'-FEET OF 8-INCH SDR 35 PVC PIPE AT 2.0% TO RAVIN TO WITHIN 5'-FEET OF PROPOSED BUILDING. COORDINATE EXACT LOCATION AND INVERT ELEVATION WITH MECHANICAL CONTRACTOR PRIOR TO THE START OF CONSTRUCTION.
 - INSTALL 195'-FEET OF 8-INCH SDR 35 PVC PIPE AT 2.0% TO RAVIN TO WITHIN 5'-FEET OF PROPOSED BUILDING. COORDINATE EXACT LOCATION AND INVERT ELEVATION WITH MECHANICAL CONTRACTOR PRIOR TO THE START OF CONSTRUCTION.
 - INSTALL 8-INCH ZURN Z300 DRAIN. REFER TO DETAIL 11/C300.
 - INSTALL INFILTRATION SYSTEM PER DETAIL 3/C300. INFILTRATION SYSTEM SHALL HAVE AN INFILTRATION VOLUME OF 18.327 CUBIC FEET A TONN VOLUME OF 62.822 CUBIC FEET, AND MEET THE RATE CONTROL REQUIREMENTS INDICATED ON SHEET C300. ANY ALTERNATE DESIGNS MUST BE APPROVED BY CIVIL ENGINEER PRIOR TO CONSTRUCTION.
 - INSTALL SLUMP CATCH BASIN. REFER TO DETAIL 4/C300.
 - LOCATION OF PROPOSED ROOF DRAIN LEAD. REFER TO STORM SEWER TABLE FOR INVERT ELEVATION AND PIPE SIZE. COORDINATE EXACT LOCATION AND INVERT ELEVATION WITH MECHANICAL CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE TO DETERMINE EXISTING 8-INCH DIP WATER PIPES TO THE START OF CONSTRUCTION. NOTIFY ENGINEER WITH FINDINGS. REFER TO LOCATE PROPOSED 8-INCH SANITARY SEWER ABOVE OR BELOW EXISTING 8-INCH DIP WATER, DEPENDING ON DEPTH.
 - INSTALL DRAIN TILE AT LOW POINT CATCH BASIN. REFER TO DETAIL 8/301.
 - INSTALL 4-INCH DIAMETER DRAIN TILE ON THE INSIDE PORTION OF PLAYGROUND CONTAINER. REFER TO DETAILS 9/C300, 10/C300. PIPE EXTENSION TO CATCH BASIN #3 SHALL BE 4-INCH DIAMETER SOLID WALL SCHEDULE 40 PVC.
 - INSTALL 4-INCH PVC DRAIN TILE ALONG EXPOSED CYANURASUM FOUNDATION WALL. DRAIN TILE SHALL BE INSTALLED LOWER THAN CYANURASUM FLOOR. CONNECTION FROM STRM #27 TO STRM #28 SHALL BE SOLID WALL SCHEDULE 40 PVC.
 - INSTALL CLEAN OUT. REFER TO DETAIL 8/C300.

SANITARY SEWER TABLE

STRUCTURE ID	STRUCTURE DIMENSION (INCHES)	INVERT ELEVATION	PIPE LENGTH, DIAMETER, SLOPE & NEXT UPSTREAM STRUCTURE
SSW #1	EX	EX	148.32 N = 148.86 144 L.F. OF 8" PVC @ 1.00% SSW #2
SSW #2	48" MH	R-1878-A	157.06 N = 144.86 N = 144.86 261 L.F. OF 8" PVC @ 3.00% SSW #3
SSW #3	48" MH	R-1878-A	152.81 SE = 152.85 W = 152.72 31 L.F. OF 8" PVC @ 3.00% SSW #4
SSW #4	EX	EX	144.80 E = 153.85

STORM SEWER TABLE

STRUCTURE ID	STRUCTURE DIMENSION (INCHES)	INVERT ELEVATION	PIPE LENGTH, DIAMETER, SLOPE & NEXT UPSTREAM STRUCTURE
STRM #1	48" MH	R-1733	154.72 S = 144.55 N = 142.50 8 L.F. OF 24" RCP @ 0.00% STRM #2
STRM #2	TANK CONNECTION	NA	S = 147.00
STRM #3	TANK CONNECTION	NA	E = 151.16 11 L.F. OF 18" RCP @ 1.00% STRM #4
STRM #4	48" SLUMP MH	R-3067	154.77 W = 151.27
STRM #5	TANK CONNECTION	NA	N = 147.00 191 L.F. OF 18" RCP @ 0.47% STRM #6
STRM #6	50" SLUMP MH	R-2535	153.70 S = 148.35 NE = 150.00 E = 148.35 130 L.F. OF 12" RCP @ 1.00% STRM #7
STRM #7	48" MH	R-3067	152.11 SW = 150.39
STRM #8	TANK CONNECTION	NA	W = 148.50 89 L.F. OF 24" RCP @ 0.49% STRM #9
STRM #9	48" SLUMP MH	R-3067	157.00 E = 148.94 W = 148.94 37 L.F. OF 12" RCP @ 1.00% STRM #10
STRM #10	48" MH	R-2535	154.74 E = 151.85 W = 152.19 98 L.F. OF 18" RCP @ 2.00% STRM #11
STRM #11	48" MH	R-2535	164.30 E = 154.10 W = 154.10 13 L.F. OF 12" RCP @ 1.00% STRM #12
STRM #12	48" MH	R-2535	154.06 E = 154.87 W = 154.87 60 L.F. OF 18" RCP @ 1.00% STRM #27
STRM #13	48" MH	R-2535	163.50 E = 155.56 W = 157.00 W = 155.56 10 L.F. OF 12" RCP @ 1.00% STRM #14
STRM #14	ROOF CONNECTION	NA	S = 157.61
STRM #15	48" MH	R-3067	154.06 NE = 149.32 W = 150.52 24 L.F. OF 12" RCP @ 2.00% STRM #16
STRM #16	24" 30" CS	R-2535	153.07 E = 151.00
STRM #17	ROOF CONNECTION	NA	S = 154.13
STRM #18	48" SLUMP MH	R-2535	SE = 151.45 NE = 151.45 N = 153.05 87 L.F. OF 12" RCP @ 1.00% STRM #20
STRM #19	27" CB	R-2535	154.18 E = 152.12
STRM #20	TANK CONNECTION	NA	S = 150.67 8 L.F. OF 12" RCP @ 0.81% STRM #22
STRM #21	45" SLUMP MH	R-3067	N = 150.73
STRM #22	48" MH	R-1733	152.65 S = 154.12 NE = 154.12 27 L.F. OF 21" RCP @ 0.81% STRM #24
STRM #24	48" MH	R-1733	154.26 SW = 154.36 N = 154.36 79 L.F. OF 21" RCP @ 0.81% STRM #25
STRM #23	48" MH	R-1733	163.87 S = 157.05
STRM #25	PLAYGROUND DRAIN TILE CONNECTION	NA	S = 154.42
STRM #27	48" MH	R-1733	164.14 E = 156.27 W = 156.27 N = 156.30 31 L.F. OF 15" RCP @ 1.00% STRM #13
STRM #28	07M DRAIN TILE CONNECTION	NA	S = 159.20
STRM #29	6" 45" BEND	NA	E = 153.90 N = 153.90 31 L.F. OF 8" PVC @ 1.00% STRM #30
STRM #30	8" 45" BEND	NA	SE = 154.22 W = 154.22 13 L.F. OF 8" PVC @ 1.00% STRM #31
STRM #31	8" ZURN Z300 DRAIN	NA	150.00 E = 156.34
STRM #32	12" FEES	NA	W = 149.00



Revisions
Date Description
06/30/19 DD
06/19/19 Withdrawn
06/19/19 Withdrawn/Resubmitted

SITE PLAN APPLICATION
9/13/19

Document Phase: SITE PLAN APPLICATION
Date: 9/13/19
PK/AM: JAC
Drawn By: JSP
Checked By: KMM
BKM/Project Mgr: JMM
Project Title: American Indian Magnet

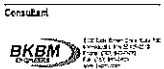
Sheet Title
UTILITY PLAN

Sheet Number

C300



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Revisions
No. Date Description
05/30/19 DD
08/11/19 Waterhead
08/19/19 Watershed Reassessment

SITE PLAN APPLICATION
9/13/19

Document: SITE PLAN APPLICATION
Date: 9/13/19
Prepared: T.C.
Designed: S.R.
Checked By: J.M.
BKBM Project No.: 1906
Project Title:
American Indian Magnet

Sheet Title
UTILITY PLAN

Sheet Number

C301

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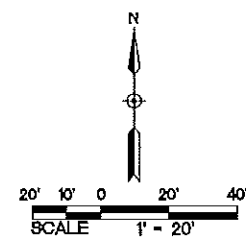
- UTILITY NOTES:**
- COORDINATE SERVICE CONNECTION LOCATIONS AT THE BUILDING WITH THE MECHANICAL CONTRACTOR PRIOR TO CONSTRUCTION. NO ADDITIONAL CONSIDERATION WILL BE ALLOWED FOR UNCOORDINATED WORK.
 - COORDINATE UTILITY INSTALLATION WITH STRUCTURAL PRIOR TO START OF CONSTRUCTION. UTILITIES SHALL NOT BE INSTALLED WITHIN THE ZONE OF INFLUENCE OF ANY STRUCTURAL ELEMENTS. NO ADDITIONAL CONSIDERATION WILL BE PROVIDED FOR UNCOORDINATED WORK.
 - ALL SEWER SERVICE CONNECTIONS WITH LESS THAN 8 FEET OF COVER OVER THE TOP OF PIPE SHALL BE INSULATED. INSULATION SHALL BE INSTALLED FROM THE CONNECTION OF THE SERVICE AT THE BUILDING TO THE POINT WHERE THE SERVICE ATTAINS 8 FEET OF COVER. CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION FROM ARCHITECT OR ENGINEER PRIOR TO INSTALLATION OF INSULATION.
 - PROTECT ALL EXISTING STRUCTURES AND UTILITIES WHICH ARE NOT DESIGNATED TO BE REMOVED.
 - ALL WATER AND WATER SERVICES SHALL HAVE A MINIMUM VERTICAL SEPARATION OF 1.5 FEET AND HORIZONTAL SEPARATION OF 10 FEET. FOLLOW ALL HEALTH DEPARTMENT AND CITY OF SAINT PAUL AND RAMSEY COUNTY STANDARDS.
 - ALL WATER MAINS SHALL BE DUCTILE IRON PIPE, CLASS 52, UNLESS NOTED OTHERWISE.
 - ALL WATER MAINS SHALL HAVE A MINIMUM DEPTH OF COVER OF 7.5 FEET OVER TOP OF WATER MAIN.
 - PROVIDE INHIBIT BLENDING ON ALL WATER MAIN PER CITY OF SAINT PAUL. PROVIDE MECHANICAL JOINT RESTRAINTS ON ALL BONGS, VALVES, TEES, ELBOWS AND INHIBIT LEAKS.
 - SANITARY SEWER PIPING SHALL BE 30" PVC UNLESS NOTED OTHERWISE. ALL SANITARY SEWER PIPE THAT EXTENDS TO THE BUILDING SHALL BE SCHEDULE 40 PVC.
 - STORM SEWER PIPING SHALL BE REINFORCED CONCRETE PIPE (RCP), UNLESS NOTED OTHERWISE. ALL 18-INCH THROUGH 36-INCH RCP STORM SEWER PIPE SHALL BE CLASS 5. RCP PIPE LARGER THAN 18-INCH SHALL BE CLASS 3 UNLESS NOTED OTHERWISE. ALL STORM SEWER PIPE THAT IS EXTENDED TO THE BUILDING FOR ROOF DRAIN SERVICES SHALL BE SCHEDULE 40 PVC.
 - CONTRACTORS SHALL COORDINATE ALL WORK WITH GAS, ELECTRIC, TELEVISION AND TELEPHONE COMPANIES PRIOR TO START OF CONSTRUCTION.
 - WHERE PROPOSED GRADE OVER EXISTING SHALL UTILITIES IS PROPOSED TO BE LOWERED, CONTRACTOR SHALL COORDINATE WITH UTILITY OWNER FOR THE LOWERING OF THE EXISTING UTILITY TO PROVIDE THE MINIMUM COVER REQUIRED.
 - ALL PORTIONS OF THE STORM SEWER SYSTEM LOCATED WITHIN 10'-FEET OF THE BUILDING OR WATER SERVICE LINE SHALL BE TESTED IN ACCORDANCE WITH MN PLUMBING CODE.
 - ALL JOISTS AND CONNECTIONS IN THE STORM SEWER SYSTEM SHALL BE CAS TIGHT OR WATER TIGHT IN ACCORDANCE TO MN PLUMBING CODE. APPROVED RESILIENT RUBBER JOINTS MUST BE USED TO MAKE WATER TIGHT CONNECTIONS TO MANHOLES, CATCH BASINS, AND OTHER STRUCTURES. RESILIENT WATER-STOP CREATING JOINTS ARE AN ACCEPTABLE ALTERNATIVE. GEMENT JOINTS ARE PERMITTED ONLY FOR REMOVAL AND CONNECTIONS OF EXISTING LINES CONSTRUCTED WITH SUCH JOINTS.

PROPOSED PLAN SYMBOLS

CONSTRUCTION LIMITS	---
PROPERTY LINE	---
SAWCUT LINE (APPROX)	---
SANITARY SEWER	---
STORM SEWER	---
DRAIN TILE	---
CATCH BASIN	⊙
MANHOLE	⊙
SEWER INVERT ELEVATION	⊙

ABBREVIATIONS

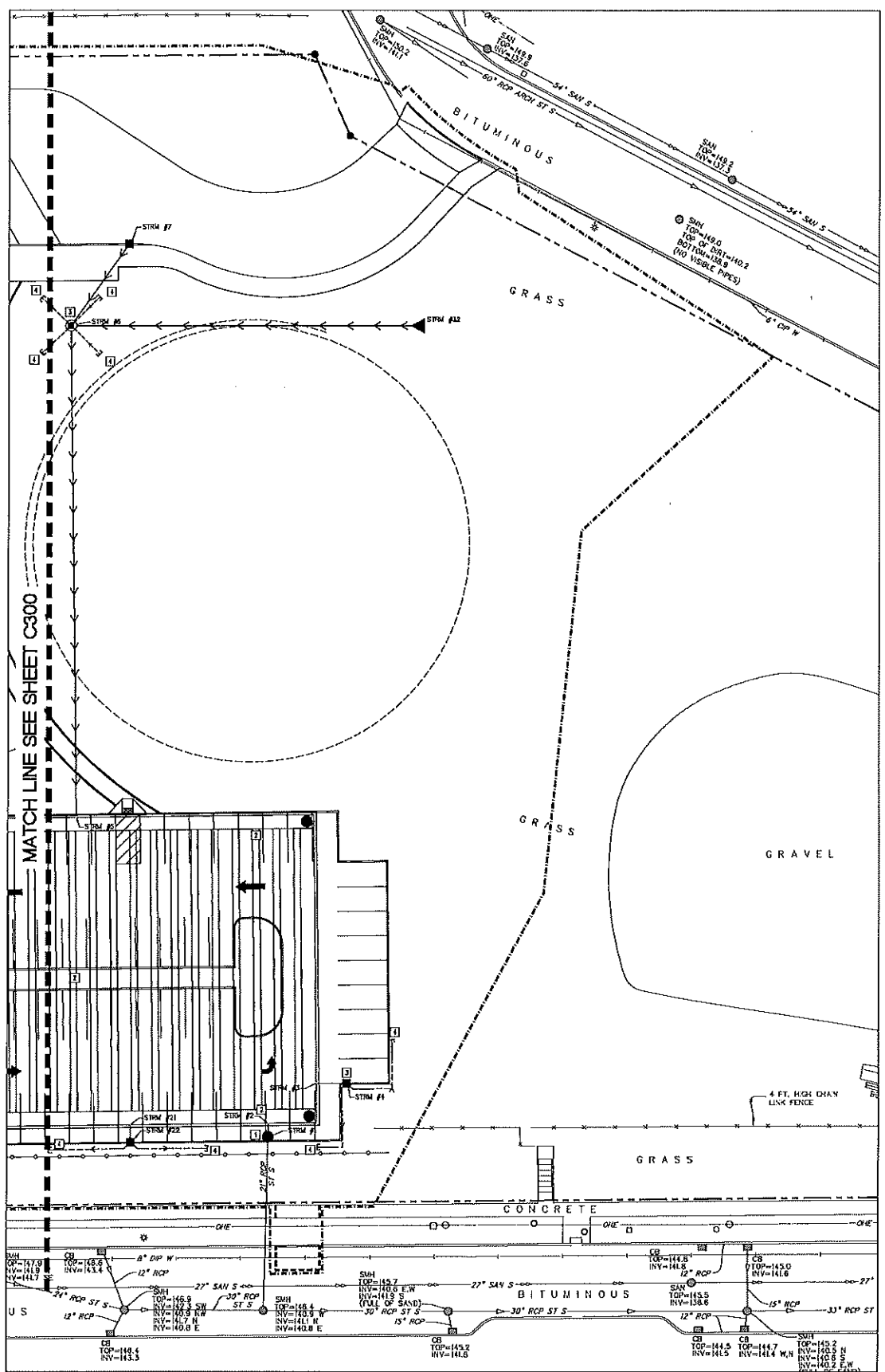
BEWD	Bench Mark
BM	Bench Mark
CB	Catch Basin
CG	Centerline
DDP	Ductile Iron Pipe
EX	Excavation
ELEV	Elevation
FL	Finish
FTE	Finished Floor Elevation
HW	High Water
MAX	Maximum
MW	Minimum
PC	Proprietary
PVC	Polyvinyl Chloride
RCP	Reinforced Concrete Pipe
RD	Right of Way



- KEYED NOTES**
- KEYED NOTES ARE DENOTED BY [] ON PLAN.
- CONSTRUCT MANHOLE WITH 20" RCP OVER EXISTING 21" RCP STORM SEWER. REFER TO DETAIL 7/2001.
 - INSTALL INFILTRATION SYSTEM PER DETAIL 3/2001. INFILTRATION SYSTEM SHALL HAVE AN INFILTRATION VOLUME OF 16,322 GALLONS PER HOUR AND MEET THE RATE CONTROL REQUIREMENTS INDICATED ON SHEET 3000. ANY ALTERNATE DESIGN MUST BE APPROVED BY C.E. ENGINEER PRIOR TO CONSTRUCTION.
 - INSTALL SWAMP CATCH BASIN.
 - INSTALL DRAIN TILE AT LOW POINT CATCH BASIN. REFER TO DETAIL 8/501.

- ST. PAUL'S NOTES:**
- INSPECTION CONTACT: THE DEVELOPER SHALL CONTACT THE RIGHT OF WAY INSPECTOR CLINT HERRON (651) 485-0418 (ONE WEEK PRIOR TO BEGINNING WORK) TO DISCUSS TRAFFIC CONTROL, PEDESTRIAN SAFETY AND COORDINATION OF ALL WORK IN THE PUBLIC RIGHT OF WAY. NOTE: IF A ONE WEEK NOTICE IS NOT PROVIDED TO THE CITY, ANY RESULTING DELAYS SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
 - SAFE WORK SITE REQUIREMENTS: THE CONTRACTOR SHALL PROVIDE A CONTINUOUS, ACCESSIBLE AND SAFE PEDESTRIAN WALKWAY THAT MEETS ADA AND MN WORKS STANDARDS IF WORKING IN A SIDEWALK AREA, AND TRAFFIC CONTROL PER MN UTILITY REQUIREMENTS FOR WORK IN THE PUBLIC RIGHT OF WAY.
 - NO PRIVATE FACILITIES IN THE PUBLIC RIGHT OF WAY: THE DEVELOPER IS STRICTLY PROHIBITED FROM INSTALLING PRIVATE ELECTRICAL WIRING, CONDUIT, RECEPTACLES AND/OR LIGHTING IN THE PUBLIC RIGHT OF WAY. THIS INCLUDES STUBS, CONDUIT OR CABLE INTO THE PUBLIC RIGHT OF WAY TO ACCOMMODATE UTILITY FEEDS TO THE SITE. COORDINATE WITH EACH UTILITY PRIOR TO CONSTRUCTION TO DETERMINE FEED POINTS INTO THE PROPERTY. UTILITIES ARE RESPONSIBLE FOR ISSUING EXCAVATION PERMITS TO RUN THEIR SERVICE INTO A SITE, AND (WHERE REQUIRED) SUBMITTING PLANS FOR REVIEW BY THE PUBLIC WORKS UTILITY REVIEW COMMITTEE.
 - CITY OF ST. PAUL PERMIT REQUIREMENTS:
 - ORDERED OBSTRUCTION AND EXCAVATION PERMITS CONTACT PUBLIC WORKS DEPT OF MAY SERVICE DESK AT (651) 266-6151. IT IS STRONGLY RECOMMENDED THAT CONTRACTOR CALL FOR COST ESTIMATE PRIOR TO OBTAINING ANY OTHER PERMITS.
 - OBSTRUCTION PERMITS: THE CONTRACTOR MUST OBTAIN AN OBSTRUCTION PERMIT IF CONSTRUCTION (INCLUDING SELF FENCED) WILL BLOCK CITY STREETS, SIDEWALKS OR ALLEYS, OR IF DRIVING OVER DUMPS.
 - EXCAVATION PERMITS: ALL WORKING IN THE PUBLIC RIGHT OF WAY REQUIRES AN EXCAVATION PERMIT. IF THE PROPOSED BUILDING IS CLOSE TO THE RIGHT OF WAY, AND EXCAVATING INTO THE RIGHT OF WAY IS NECESSARY TO FACILITATE CONSTRUCTION, CONTACT THE UTILITY INSPECTOR.
 - FAILURE TO SECURE PERMITS: FAILURE TO SECURE OBSTRUCTION PERMITS OR EXCAVATION PERMITS WILL RESULT IN A DOUBLE-PERMIT FEE AND OTHER FEES RECOVERED UNDER CITY OF ST. PAUL, UNLAWFUL CODES.
 - REQUIREMENTS TO WORK IN THE PUBLIC RIGHT OF WAY: ALL UTILITIES AND CONTRACTORS WORKING IN THE PUBLIC RIGHT OF WAY MUST BE REGISTERED, INSURED AND BONDED, AS RECOGNIZED BY THE PUBLIC WORKS SERVICE DESK. (651-266-6151).
 - ALL WORK ON CURBS, DRIVEWAYS, AND SIDEWALKS WITHIN THE PUBLIC RIGHT OF WAY MUST BE DONE BY A LICENSED AND BONDED CONTRACTOR UNDER A PERMIT FROM PUBLIC WORKS SERVICE SECTION (651-266-6151). SIDEWALK GRADINGS MUST BE CARRIED ACCROSS DRIVEWAYS.
 - RESTORATION OF ASPHALT AND CONCRETE PAVEMENTS ARE PERFORMED BY THE PUBLIC WORKS STREET MAINTENANCE DIVISION. THE CONTRACTOR IS RESPONSIBLE FOR PAYMENT TO THE CITY FOR THE COST OF THESE RESTORATIONS. THE CONTRACTOR SHALL CONTACT PUBLIC WORKS STREET MAINTENANCE TO SET UP A WORK ORDER PRIOR TO BEGINNING ANY REPAIRS IN THE STREET AT 651-266-6151. PROCEDURES AND UNIT COSTS ARE FOUND IN STREET MAINTENANCE'S "GENERAL REQUIREMENTS - ALL RESTORATIONS" AND ARE AVAILABLE AT THE PERMIT OFFICE.
 - SOME REGULATING PARKING AND/OR TRAFFIC ON PRIVATE PROPERTY SHALL BE INSTALLED BY THE PROPERTY OWNER OR CONTRACTOR OUTSIDE OF THE PUBLIC RIGHT-OF-WAY. SOME APPROVED BY PUBLIC WORKS TRAFFIC ENGINEERING REGULARLY PARKING AND/OR TRAFFIC IN THE PUBLIC RIGHT-OF-WAY FOR THIS DEVELOPMENT SHALL BE INSTALLED BY CITY FORCES AT THE EXPENSE OF THE DEVELOPMENT. CONTACT TRAFFIC ENGINEERING 651-266-6200 FOR WORKS IN ADVANCE OF NEEDED SPANS.
 - ABANDONING EXISTING SEWER SERVICE OR MAKING NEW CONNECTIONS TO CITY SEWER MUST BE DONE TO CITY STANDARDS BY A LICENSED HOUSE DRAIN CONTRACTOR UNDER A PERMIT FROM PUBLIC WORKS SERVICE SECTION (651-266-6234).
 - ALL WATER MAIN AND SERVICES TO BE INSTALLED ACCORDING TO "SPRINGS STANDARDS FOR INSTALLATION OF WATER MAINS," AND "SPRINGS WATER CODE".
 - ALL EXISTING WATER SERVICES NOT BEING REUSED MUST BE CUT-OFF AND ABANDONED PER SPRINGS WATER CODE.
 - THE CONTRACTOR SHALL CONTACT JOHN MOHAMMAD, GENERAL FOREMAN, LIGHTING - SIGNAL MAINTENANCE, (651-266-9786), IF REMOVAL OR RELOCATION OF EXISTING FACILITIES IS REQUIRED OR IN THE EVENT OF DAMAGE TO THE LIGHTING OR SIGNAL UTILITIES. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY (AND RELATED COSTS) FOR ANY DAMAGE OR RELOCATIONS.
 - 11.1. THE INSTALLATION OF PRIVATE ELECTRICAL WIRING, CONDUIT, RECEPTACLES AND/OR LIGHTING IS STRICTLY PROHIBITED IN THE CITY'S RIGHT OF WAY.
 - CONTRACTOR IS TO CONTACT ZACH JOHNSON, CITY FORESTER (651-632-2437) PRIOR TO IMPACTING ANY BOULEVARD TREES.
 - BUSINESS SIGNS WILL REQUIRE A SEPARATE REVIEW AND SIGN PERMIT FROM THE DEPARTMENT OF SAFETY AND INSPECTIONS. SITE PLAN APPROVAL DOES NOT CONSTITUTE APPROVAL OF BUSINESS SIGNS SHOWN ON THE SITE PLAN. CONTACT XAVIER DIAZ OF DSU (651-266-9200) IF YOU HAVE ANY QUESTIONS ABOUT SIGNS.
 - CARE MUST BE TAKEN DURING CONSTRUCTION AND EXCAVATION TO PROTECT ANY SURVEY MONUMENTS AND/OR PROPERTY CORNERS. CALL SAU GREGG OF PUBLIC WORKS SURVEYING (651-266-6073) IF YOU HAVE ANY QUESTIONS.
 - AS PER THE CITY'S STANDARDS SPECIFICATION FOR STREET OPENINGS' POLICY, RESTORATION ON ROADWAY SERVICES LESS THAN 5 YEARS OLD WILL REQUIRE FULL WIDTH MILL AND OVERLAY OR ADDITIONAL DEGRADATION FEES. PAVEMENT RESTORATION SHALL BE COMPLETED BY THE ST. PAUL PUBLIC WORKS STREET MAINTENANCE DIVISION. ALL RELATED COSTS ARE THE RESPONSIBILITY OF THE DEVELOPER/CONTRACTOR. CONTACT KEVIN NELSON AT 651-266-9700 FOR ESTIMATE OF COSTS FOR PAVEMENT RESTORATION.
 - PIPE MUST BE MECHANICAL JOINT UNDERNEATH THE BUILDING FOOTPRINT AND UP TO TEN FEET OUTSIDE OF THE BUILDING FOOTPRINT.
 - WATER SERVICES TO BE INSTALLED ACCORDING TO SPRINGS STANDARDS FOR THE INSTALLATION OF WATER MAINS.
 - A FOUR-SIDED TRENCH BOX IS REQUIRED ON ALL EXCAVATIONS DEEPER THAN 5 FEET WHERE UNDERGROUND WORK OR INSPECTION IS TO BE PERFORMED BY SPRINGS. LADDERS ARE REQUIRED AND MUST EXTEND 3 FEET ABOVE THE SURFACE OF THE TRENCH. SIDEWALKS, PAVEMENTS, GRASS AND APPROPRIATE STRUCTURE SHALL NOT BE UNDERMINED UNLESS A SUPPORT SYSTEM OR ANOTHER METHOD OF PROTECTION IS PROVIDED. TRENCHES IN EXCESS OF 20 FEET IN DEPTH MUST BE SIGNED OFF BY A REGISTERED PROFESSIONAL ENGINEER. EXCAVATED MATERIAL MUST BE KEPT A MINIMUM OF 2 FEET FROM THE EDGE OF THE TRENCH.
 - MAINTAIN 8 FEET OF COVER OVER ALL WATER MAINS AND SERVICES.
 - PIPE MATERIAL FOR 6" DUCTILE IRON PIPE MUST BE CLASS 52. PIPE MATERIAL FOR 8" AND 4" DUCTILE IRON PIPE MUST BE CLASS 53.
 - MAINTAIN 3 FEET VERTICAL SEPARATION BETWEEN WATER AND SEWER PIPES OR A 12-INCH SEPARATION WITH HIGH DENSITY INSULATION PER SPRINGS STANDARD FLAK 4-10 FOR TYPICAL WATER MAIN DETAILS.
 - REFER TO SPRINGS STANDARDS FOR THE INSTALLATION OF WATER MAINS' STANDARD FLAK D-11 FOR RESTRAINED PIPE REQUIREMENT.
 - ALL WATER SERVICE VALVE BOXES WITHIN CONSTRUCTION AREA MUST BE EXPOSED AND BROUGHT TO GRADE UPON COMPLETION OF CONSTRUCTION.
 - ALL PIPE WORK INSIDE OF PROPERTY TO BE PERFORMED BY A PLUMBER LICENSED BY THE STATE OF MINNESOTA AND CERTIFIED BY THE CITY OF SAINT PAUL.

- INFILTRATION TANK NOTES:**
- THE UNDERGROUND INFILTRATION SYSTEM SHOULD BE FREE OF COMPACTED SOILS, KEPT OPEN, AND PROTECTED FROM SEDIMENT UNTIL CONTROLLING AREAS ARE PERMANENTLY RESTORED.
 - CONTRACTOR MAY HAVE TO OVER-EXCAVATE TO FIND SOILS SUITABLE FOR INFILTRATION.
 - NOTIFY MOBILE SPOORHOLM, RAMSEY-WASHINGTON METRO WATERSHED DISTRICT, AT 651-792-7275 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION OF THE UNDERGROUND INFILTRATION SYSTEM.



1
C301
UTILITY PLAN
1-20

Permit Application Coversheet

Date October 02, 2019

Project Name CDI Medical Office

Project Number 19-43

Applicant Name Dan Regan, Launch Properties

Type of Development Office

Property Description

This project is located at the southeast corner of Southlawn Drive North and Beam Avenue East in the City of Maplewood. The applicant is proposing to construct a medical office building with associated parking. The total project area is 2.55 acres. Stormwater treatment requirements will be met with construction of a filtration basin. Filtration is being proposed due to poor soils. Pretreatment will include sumped inlets.

Watershed District Policies or Standards Involved:

- | | |
|--|---|
| <input type="checkbox"/> <i>Wetlands</i> | <input checked="" type="checkbox"/> <i>Erosion and Sediment Control</i> |
| <input checked="" type="checkbox"/> <i>Stormwater Management</i> | <input type="checkbox"/> <i>Floodplain</i> |

Water Quantity Considerations

The proposed stormwater management plan is sufficient to handle the runoff from the site.

Water Quality Considerations

Short Term

The proposed erosion and sediment control plan is sufficient to protect downstream water resources during construction.

Long Term

The proposed stormwater management plan is sufficient to protect the long term quality of downstream water resources.

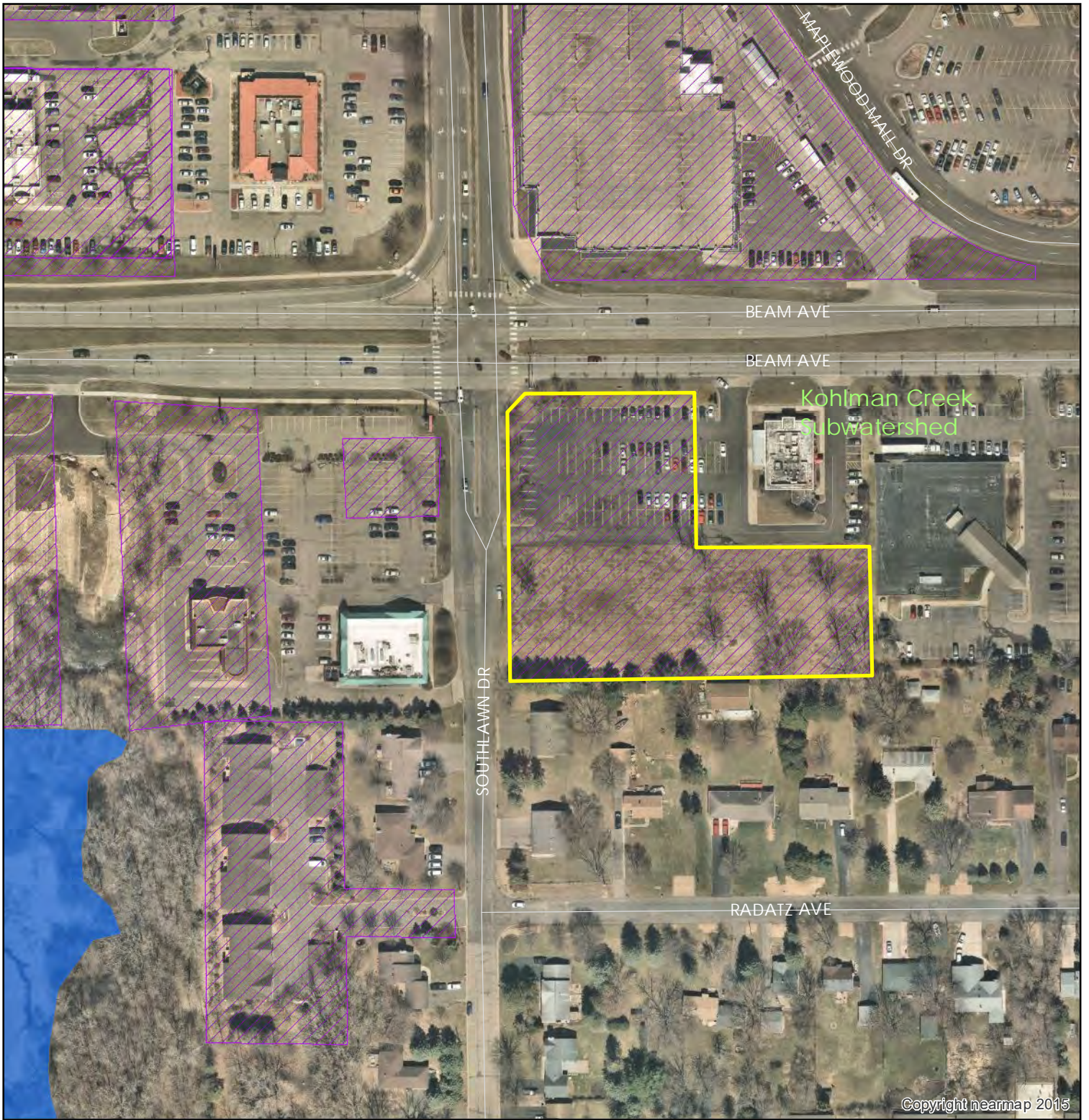
Staff Recommendation

Staff recommends approval of this permit with the special provisions.

Attachments:

- Project Location Map
- Project Grading Plan

#19-43 CDI Medical Office



Wetlands

- Manage A
- Manage B
- Manage C
- Lake
- Sediment Pond
- Not Assessed

- RWMWD Boundary
- Flow Arrows
- Major Flow Arrows
- Subwatersheds
- Creeks
- Permits

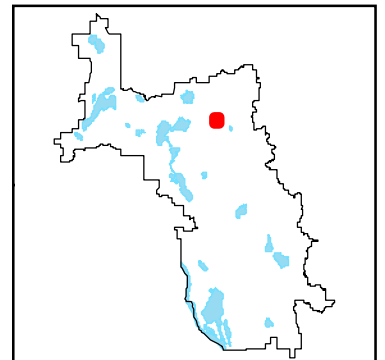
**Highlighted Areas
Represent Active Permit**

0 125 250

Feet

0 0.025 0.05

Miles

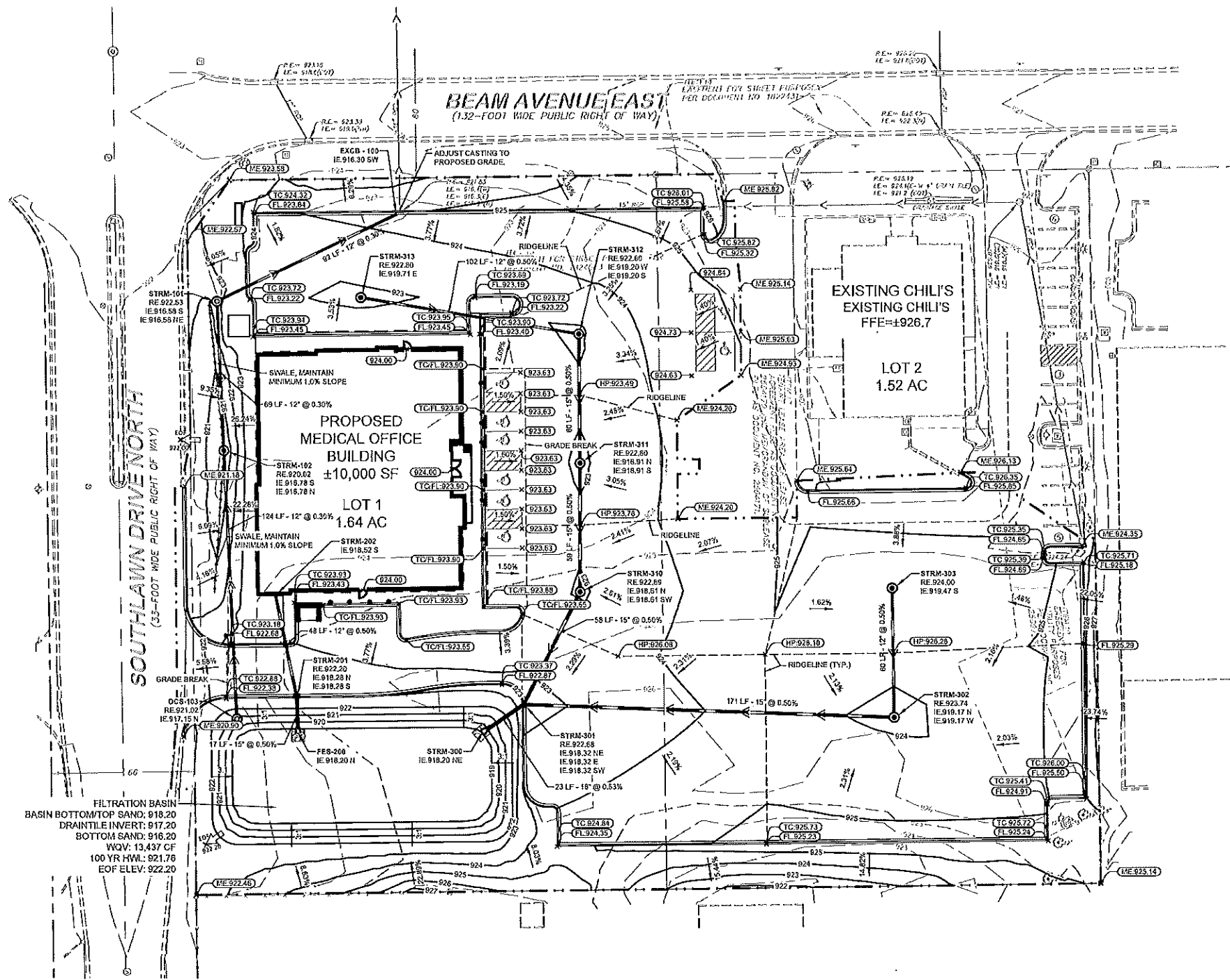


19-43

Special Provisions

1. The applicant shall submit an executed joint stormwater maintenance agreement with the City of Maplewood.

K:\TWC_L\DEVL\launch_properties\maplewood\cd3\Design\CAD\plansheets\CS-GRADING PLAN.dwg September 11, 2019 - 8:47am
This document, together with the concepts and designs presented herein, is an instrument of service, as an instrument of service, is transmitted only for the specific purpose and client for which it was prepared. Release of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



LEGEND

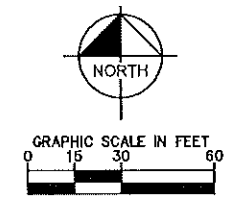
	PROPERTY LINE
	EXISTING CONTOUR
	PROPOSED CONTOUR
	PROPOSED STORM MANHOLE (SOLID CASTING)
	PROPOSED STORM MANHOLE CATCH BASIN (CURB INLET CASTING)
	PROPOSED FLARED END SECTION
	PROPOSED RIPRAP
	EXISTING STORM SEWER
	PROPOSED STORM SEWER
	PROPOSED SPOT ELEVATION
	PROPOSED GUTTER ELEVATION
	PROPOSED TOP OF CURB ELEVATION
	PROPOSED FLUSH PAVEMENT ELEVATION
	MATCH EXISTING ELEVATION
	PROPOSED DRAINAGE DIRECTION
	LIMITS OF DISTURBANCE

- ### GRADING PLAN NOTES
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF MAPLEWOOD SPECIFICATIONS AND BUILDING PERMIT REQUIREMENTS.
 - CONTRACTOR TO CALL Gopher State Call One @ (616) 222-1165 AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATION/CONSTRUCTION FOR UTILITY LOCATIONS.
 - STORM SEWER PIPE SHALL BE AS FOLLOWS:
RCP PER ASTM C-76
HOPE: 0' - 10' PER ASTM M-252
HOPE: 12' OR GREATER PER ASTM F-2306
PVC SCH. 40 PER ASTM D-3034
STORM SEWER FITTINGS SHALL BE AS FOLLOWS:
RCP PER ASTM C-76, JOINTS PER ASTM C-361, C-990, AND C-443
HDPE PER ASTM 3212
PVC PER ASTM D-3034, JOINTS PER ASTM D-3212
 - CONTRACTOR TO FIELD VERIFY THE LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES AND TOPOGRAPHIC FEATURES PRIOR TO THE START OF SITE GRADING. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE PROJECT ENGINEER OF ANY DISCREPANCIES OR VARIATIONS.
 - SUBGRADE EXCAVATION SHALL BE BACKFILLED IMMEDIATELY AFTER EXCAVATION TO HELP OFFER TAY STABILITY PROBLEMS DUE TO WATER SEEPAGE OR STEEP SLOPES. WHEN PLACING NEW SURFACE MATERIAL ADJACENT TO EXISTING PAVEMENT, THE EXCAVATION SHALL BE BACKFILLED PROMPTLY TO AVOID UNDERMINING OF EXISTING PAVEMENT.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR ALL HORIZONTAL AND VERTICAL CONTROL.
 - CONTRACTOR SHALL EXCAVATE DRAINAGE TRENCHES TO FOLLOW PROPOSED STORM SEWER ALIGNMENTS.
 - GRADES SHOWN ARE FINISHED GRADES. CONTRACTOR SHALL ROUGH GRADE TO SUBGRADE ELEVATION AND LEAVE STREET READY FOR SUBBASE.
 - ALL EXCESS MATERIAL, BITUMINOUS SURFACING, CONCRETE ITEMS, ANY ABANDONED UTILITY ITEMS, AND OTHER UNSTABLE MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFF THE CONSTRUCTION SITE.
 - REFER TO THE UTILITY PLAN FOR SANITARY SEWER MAIN, WATER MAIN SERVICE LAYOUT AND ELEVATIONS AND CASTING / STRUCTURE NOTATION.
 - CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION OF PAVEMENTS AND CURB AND GUTTER WITH SMOOTH UNIFORM SLOPES TO PROVIDE POSITIVE DRAINAGE.
 - INSTALL A MINIMUM OF 4" CLASS 5+ AGGREGATE BASE UNDER CURB AND GUTTER AND CONCRETE SIDEWALKS.
 - UPON COMPLETION OF EXCAVATION AND FILLING, CONTRACTOR SHALL RESTORE ALL STREETS AND DISTURBED AREAS ON SITE. ALL DISTURBED AREAS SHALL BE RE-VEGETATED WITH A MINIMUM OF 4" OF TOPSOIL.
 - ALL SPOT ELEVATIONS/CONTOURS ARE TO GUTTER / FLOW LINE UNLESS OTHERWISE NOTED.
 - GRADING FOR ALL SIDEWALKS AND ACCESSIBLE ROUTES INCLUDING CROSSING DRIVEWAYS SHALL CONFORM TO CURRENT ADA STATE/NATIONAL STANDARDS. IN NO CASE SHALL ACCESSIBLE RAMP SLOPES EXCEED 1% VERTICAL TO 12% HORIZONTAL. IN NO CASE SHALL SIDEWALK GROSS SLOPES EXCEED 2%. IN NO CASE SHALL LONGITUDINAL SIDEWALK SLOPES EXCEED 5%. IN NO CASE SHALL ACCESSIBLE PARKING STALLS OR AISLES EXCEED 2% (1.5% TARGET) IN ALL DIRECTIONS. SIDEWALK ACCESS TO EXTERNAL BUILDING DOORS AND GATES SHALL BE ADA COMPLIANT. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF ADA CRITERIA CANNOT BE MET IN ANY LOCATION PRIOR TO PAVING. NO CONTRACTOR CHANGE ORDERS WILL BE ACCEPTED FOR A.D.A COMPLIANCE ISSUES.
 - MAINTAIN A MINIMUM OF 0.5% GUTTER SLOPE TOWARDS LOW POINTS.
 - CONTRACTOR TO PROVIDE 3" INSULATION BY 6" WIDE CENTERED ON STORM PIPE IF LESS THAN 4" OF COVER IN PAVEMENT AREAS AND LESS THAN 3" OF COVER IN LANDSCAPE AREAS.
 - ROOF DRAIN INVERT CONNECTIONS AT THE BUILDING SHALL BE AT ELEVATION 918.52 OR LOWER UNLESS NOTED OTHERWISE. REFERENCE MEP PLANS FOR ROOF DRAIN CONNECTION.
 - ALL STORM SEWER CONNECTIONS SHALL BE GASKETED AND WATER TIGHT INCLUDING MANHOLE CONNECTIONS.
 - ALL STORM SEWER PIPE SHALL BE AIR TESTED IN ACCORDANCE WITH THE CURRENT PLUMBING CODE.
 - MAINTAIN A MINIMUM OF 1.25% SLOPE IN BITUMINOUS PAVEMENT AREAS, 0.5% SLOPE IN CONCRETE PAVEMENT AREAS.

NOTE TO CONTRACTOR:
CONTRACTOR IS RESPONSIBLE FOR PHASING CONSTRUCTION TO MAINTAIN ACCESS AND OPERATIONS OF EXISTING CHILI'S RESTAURANT THROUGHOUT THE DURATION OF CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR COORDINATING CONSTRUCTION ACTIVITY WITH RESTAURANT MANAGEMENT.

STORMWATER MANAGEMENT NOTES

- GRADING OF THE FILTRATION BASINS SHALL BE ACCOMPLISHED USING LOW IMPACT, EARTHWORKING EQUIPMENT TO PREVENT COMPACTION OF THE UNDERLYING SOILS. A BACKHOE WITH TOOTHED BUCKET SHALL BE USED FOR EXCAVATION OF FILTRATION BASINS TO PREVENT COMPACTION OR SMEARING OF SOILS. THE CONTRACTOR SHALL SCARIFY THE UNDERLYING SOILS TO A MINIMUM 18" DEPTH TO REMOVE COMPACTION. THE FIRST LIFT OF ENGINEERED SOIL SHALL BE MIXED WITH THE UNDERLYING SOILS. LEVELING AND FINAL GRADING WITHIN THE CELL MUST BE DONE BY HAND.
- FILTRATION BASINS EXCAVATION SHALL BE HELD 1' ABOVE THE BOTTOM OF THE BASIN UNTIL THE CONTRIBUTING DRAINAGE AREAS WITH EXPOSED SOILS HAVE BEEN FULLY STABILIZED AND BITUMINOUS BASE COURSE INSTALLED ON THE CONTRIBUTING AREAS.
- DIVERT UPLAND DRAINAGE AREAS TO PREVENT RUNOFF FROM ENTERING THE EXCAVATED CELL OR INTO THE WORK AREA.
- CARE MUST BE TAKEN TO AVOID CONTAMINATION OF ENGINEERED SOILS WITH SEWAGE, IN-SITU, OR TOPSOIL DURING AND AFTER INSTALLATION. MATERIALS MUST BE SEGREGATED.
- INSTALLATION WITH DRY SOIL CONDITIONS IS CRITICAL TO PREVENT SMEARING AND COMPACTION. SCHEDULE WORK FOR PERIODS OF DRY WEATHER.
- DO NOT LEAVE FILTRATION AREAS AND/OR PERIMETER SLOPE EXPOSED OVERNIGHT. SECURE THE AREA FROM RISK OF PRECIPITATION DAMAGES AT THE END OF EVERY WORK DAY. IN THE EVENT OF RAIN, TAKE ACTION TO DIVERT STORMWATER AWAY FROM WORK AREA AND TEMPORARILY COVER ALL EXPOSED SOILS WITH FILTER FABRIC OR IMPERMEABLE SHEETING.
- IN THE EVENT THAT THE SEDIMENT IS INTRODUCED INTO THE BVP DURING OR IMMEDIATELY FOLLOWING EXCAVATION, REMOVE SEDIMENT PRIOR TO INITIATING THE NEXT STEP IN THE FILTRATION BASIN CONSTRUCTION PROCESS.
- EXCAVATE SEDIMENT BUILT UP DURING CONSTRUCTION AFTER STABILIZATION OF UPSTREAM AREAS AND BEFORE PLACEMENT OF HYDRAULIC SOIL STABILIZER TYPE SPECIAL.
- STOCKPILING OF MATERIAL SHALL NOT BE ALLOWED IN PROPOSED FILTRATION BASINS.
- NO CONSTRUCTION EQUIPMENT SHALL BE ALLOWED IN THE FILTRATION AREA BEFORE OR AFTER IT IS CONSTRUCTED. ONLY SPECIFIED EQUIPMENT WILL BE ALLOWED INSIDE OF ORANGE CONSTRUCTION FENCE FOR THE SOLE PURPOSE OF CONSTRUCTION OF THE FILTRATION BASIN.
- ALL FILTRATION BASIN CONSTRUCTION ACTIVITIES SHALL BE COMPLETED DURING DRY SOIL CONDITIONS.
- ALL FILTRATION AREAS SHALL BE PROTECTED DURING CONSTRUCTION OPERATIONS.
- NOTIFY NICOLE SODERHOLM, RAMSEY-WASHINGTON METRO WATERSHED DISTRICT, AT 651-792-7076 AT LEAST 48 HOURS PRIOR TO THE CONSTRUCTION OF ANY VOLUME REDUCTION BMPs.



PERMIT SET - NOT FOR CONSTRUCTION

CDI MEDICAL OFFICE
PREPARED FOR
LAUNCH PROPERTIES
MINNESOTA
MAPLEWOOD

GRADING PLAN

SHEET NUMBER
C400

REVISIONS

NO.	DATE	BY

© 2018 KIMLEY-HORN AND ASSOCIATES, INC.
767 EUSTIS STREET, SUITE 100, ST. PAUL, MN 55114
PHONE: 651-945-4197
WWW.KIMLEY-HORN.COM

PROJECT NO.	160734029
DATE	08/11/2019
SCALE	AS SHOWN
DESIGNED BY	ACL
DRAWN BY	ACL
CHECKED BY	BRW
DATE	08/12/2019
SCALE	AS SHOWN
DATE	08/12/2019
SCALE	AS SHOWN

Permit Application Coversheet

Date October 02, 2019

Project Name 5 Star Mobile Estates Soil Correction

Project Number 19-44

Applicant Name Austin Blum, Frattalone Companies, Inc.

Type of Development Grading

Property Description

This project is located at 5 Star Mobile Estates at 200 Mayfair Road in the City of Vadnais Heights. The applicant is proposing to remove contaminated soil around a delineated wetland area (#19-11 WCA). The contaminated soil will be removed offsite and replaced with clean soil prior to final restoration. The applicant is also proposing to remove an existing playground and basketball court from the floodplain. The total site area is 1.2 acres. No impervious area is proposed, so District Rule C does not apply. The applicant has submitted a survey and grading plan with cut/fill quantities to confirm there is no net loss of floodplain storage. Excavation must take place prior to placement of fill to ensure no adverse impacts to the floodplain throughout the duration of the project. The applicant has submitted a variance request for temporary disturbance in the wetland buffer. The buffer will be restored to pre-project conditions. The applicant has applied for a DNR permit for construction dewatering. Due to soil and potential groundwater contamination, water will be pumped to the sanitary sewer.

Watershed District Policies or Standards Involved:

- | | |
|---|---|
| <input checked="" type="checkbox"/> <i>Wetlands</i> | <input checked="" type="checkbox"/> <i>Erosion and Sediment Control</i> |
| <input type="checkbox"/> <i>Stormwater Management</i> | <input checked="" type="checkbox"/> <i>Floodplain</i> |

Water Quantity Considerations

The proposed grading plan is sufficient to prevent adverse impacts to the floodplain.

Water Quality Considerations

Short Term

The proposed erosion and sediment control plan is sufficient to protect downstream water resources during construction.

Long Term

There are no long term water quality considerations.

Staff Recommendation

Staff recommends approval of the permit with the special provisions and variance request.

Attachments:

- Project Location Map
- Project Grading Plan

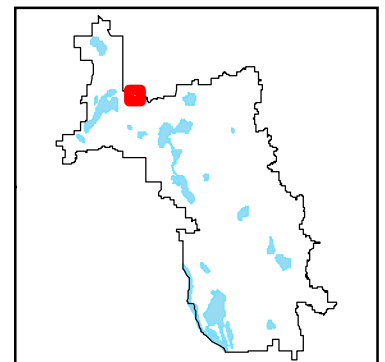
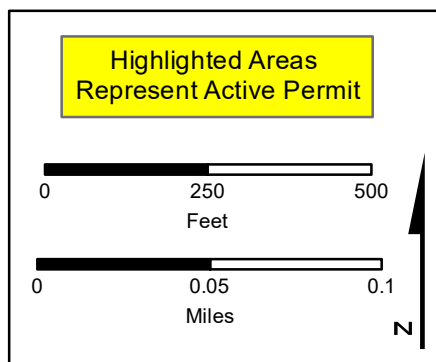
#19-44 5 Star Mobile Estates Soil Correction



Note: Shaded area is outside RWMWD

Wetlands	
■	Manage A
■	Manage B
■	Manage C
■	Lake
■	Sediment Pond
■	Not Assessed

	RWMWD Boundary
	Flow Arrows
➔	Major Flow Arrows
	Subwatersheds
	Creeks
	Permits



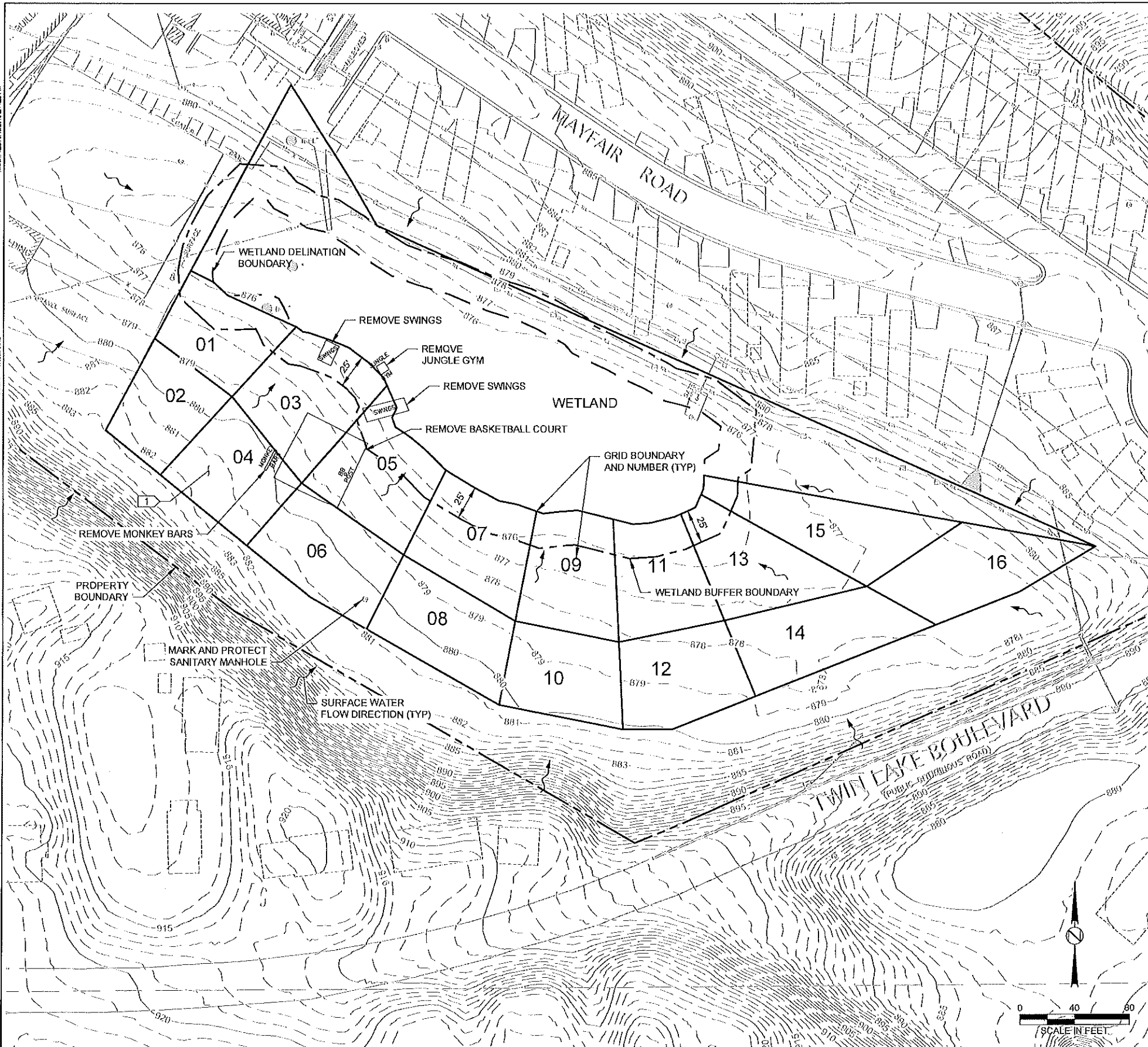
Special Provisions

1. The applicant shall submit the escrow fee of \$2,400.
2. The applicant shall submit the final, signed set of construction plans including the Stormwater Pollution Prevention Plan (SWPPP).
3. The applicant shall submit contact information for the trained erosion control coordinator responsible for implementing the SWPPP.
4. The applicant shall submit a copy of the approved Minnesota Pollution Control Agency's NPDES Construction Permit coverage for the project.

PLOTTED: 8/10/2019 2:47:20 PM
 MODIFIED: 8/10/2019 2:42:33 PM

USER: TROMANO

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GENERAL NOTES:

1. EXISTING GRADE CONTOURS SHOWN WERE GENERATED FROM MNTOPD DATA. CONTOURS REPRESENT EXISTING AND FINAL GRADES.
2. MARK AND PROTECT WETLAND. VEHICLES AND EQUIPMENT SHALL NOT CROSS WETLAND BOUNDARY.
3. NOTIFY NICOLE SODERHOLM, RAMSEY-WASHINGTON METRO WATERSHED DISTRICT, AT 651-792-7976 PRIOR TO BEGINNING ANY AND ALL CONSTRUCTION ACTIVITY FOR AN INITIAL SWPPP INSPECTION.
4. SPECIFIED EROSION/SEDIMENT CONTROL PRACTICES ARE THE MINIMUM. ADDITIONAL PRACTICES MAY BE REQUIRED DURING THE COURSE OF CONSTRUCTION.

KEYNOTES:

1. REMOVE AND DISPOSE OF SOIL IN THE 0' - 2' RANGE.
2. REMOVE AND DISPOSE OF SOIL IN THE 2' - 4' RANGE.
3. REMOVE AND DISPOSE OF SOIL IN THE 0' - 0.5' RANGE.

EARTHWORK QUANTITIES:

GRID 01 - GRID 16 AND EXTERIOR GRADING EARTHWORK VOLUME	CUT 3894 CY	FILL 3894 CY	NET 0.00 CY
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TABLE 1 - GRID EARTHWORK

GRID NUMBER	CUT (FT)*	FILL (FT)*	
1	01	2.0	0.0
2	02	4.0	0.0
2	03	4.0	0.0
3	04	0.5	0.0
	05	0.0	0.0
2	06	4.0	0.0
	07	0.0	0.0
2	08	4.0	0.0
	09	0.0	0.0
1	10	2.0	0.0
	11	0.0	0.0
1	12	2.0	0.0
	13	0.0	0.0
	14	0.0	0.0
1	15	2.0	0.0
	16	0.0	0.0

* DEPTHS REQUIRED ACROSS FULL GRID AREA

NO	DATE	BY	REVISIONS
	05/18/2019	DRH	ISSUED FOR PERMITTING APPLICATION
	05/22/2019	DRH	ISSUED FOR CONSTRUCTION
	05/24/2019	DRH	ISSUED FOR BIDDING

DESIGNED	CHECKED	PLANS PREPARED BY:
BRH	DRH	3535 VADNAIS CENTER DRIVE ST. PAUL, MINNESOTA 55110 PHONE: 1.800.325.2055 www.sehinc.com
BRH	TTR	
	AHS	

PLANS PREPARED FOR:
FIVE STAR MOBILE ESTATES VADNAIS HEIGHTS, MINNESOTA

PROJECT CONTRACT NO.
5-STAR
REPRODUCTION NO.
INPRO 130353
FILE NAME
IN130353C01

FINAL GRADING PLAN
FIVE STAR MOBILE ESTATES RESPONSE ACTION PLAN VADNAIS HEIGHTS, MINNESOTA



September 20, 2019

Nicole Soderholm
Ramsey-Washington Metro Watershed District
2665 Noel Drive
Little Canada, MN 55117

Re: Five Star Mobile Estates RAP
Project Narrative

Nicole,

This letter will serve as a variance request for the Five Star Mobile Estates project located at 200 Mayfair Rd, St. Paul, MN 55127. The plans are calling for work within the wetland buffer as outlined on the plans. The reason for disturbance is to excavate the contaminated material and replace with clean fill for a future playground for the residents. The overall disturbance duration of a single grid would be minimal (at most half a work day), as we would be backfilling in the same operation that we are excavating. The project duration is estimated to be 2-4 weeks. After the project is substantially complete, we would then import a 6" topsoil layer and would stabilize the site per the NPDES permit requirements. Along with this letter, I will submit the project plans which show the buffer and the disturbance area.

Please contact me at (651) 484-0448 if you have questions or require more information.

Sincerely,
FRATTALONE COMPANIES, INC.

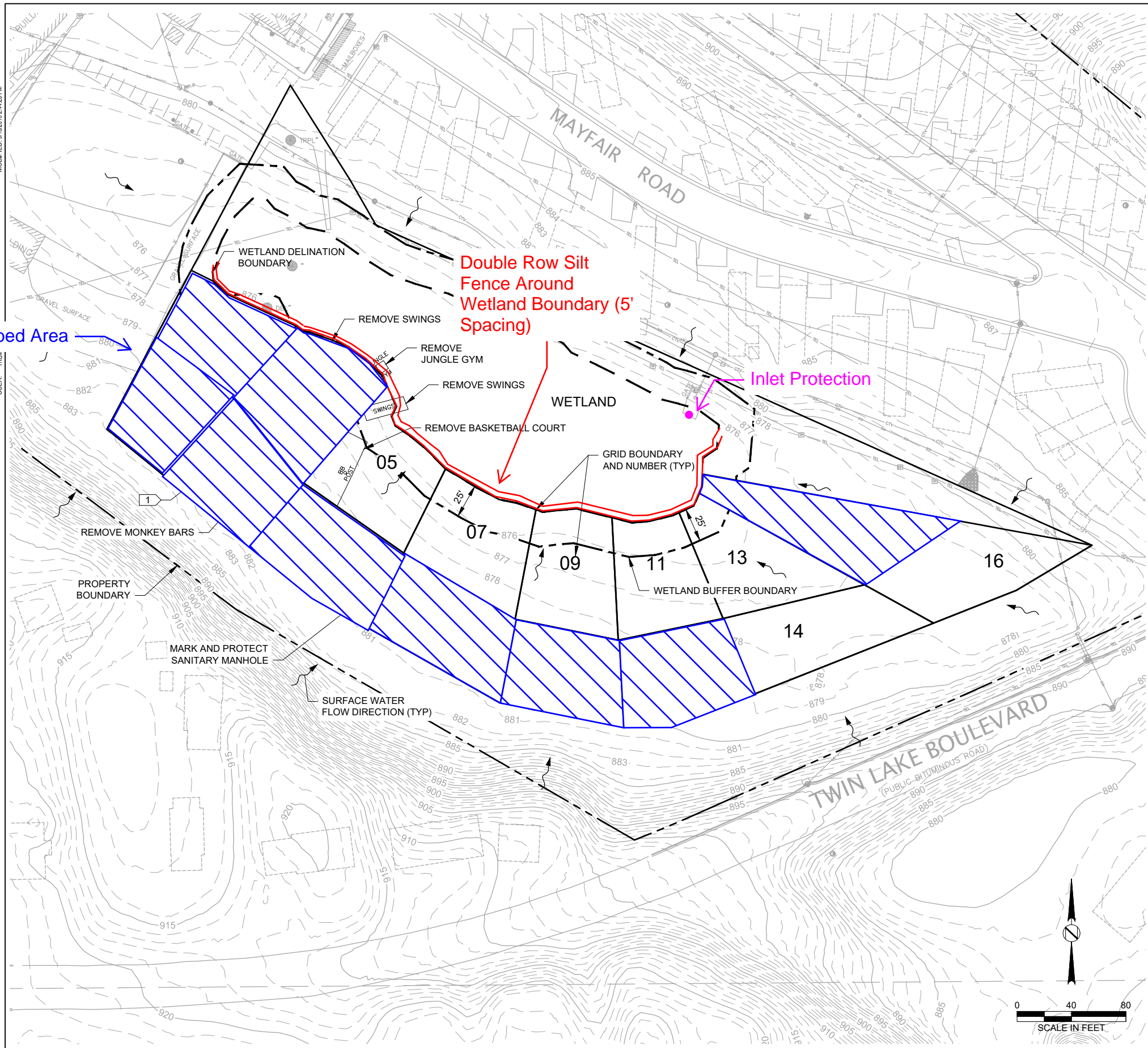
A handwritten signature in blue ink that reads "Austin Blum".

Austin Blum
Project Manager
651-484-0448
austinb@frattaloneco.com

PLOTTED: 9/18/2019 2:47:20 PM
 MODIFIED: 9/18/2019 2:43:23 PM

USER: TROM

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GENERAL NOTES:

- EXISTING GRADE CONTOURS SHOWN WERE GENERATED FROM MNTPO DATA. CONTOURS REPRESENT EXISTING AND FINAL GRADES.
- MARK AND PROTECT WETLAND. VEHICLES AND EQUIPMENT SHALL NOT CROSS WETLAND BOUNDARY.
- NOTIFY NICOLE SODERHOLM, RAMSEY-WASHINGTON METRO WATERSHED DISTRICT, AT 651-792-7976 PRIOR TO BEGINNING ANY AND ALL CONSTRUCTION ACTIVITY FOR AN INITIAL SWPPP INSPECTION.
- SPECIFIED EROSION/SEDIMENT CONTROL PRACTICES ARE THE MINIMUM. ADDITIONAL PRACTICES MAY BE REQUIRED DURING THE COURSE OF CONSTRUCTION.

KEYNOTES:

- REMOVE AND DISPOSE OF SOIL IN THE 0' - 2' RANGE.
- REMOVE AND DISPOSE OF SOIL IN THE 2' - 4' RANGE.
- REMOVE AND DISPOSE OF SOIL IN THE 0' - 0.5' RANGE.

EARTHWORK QUANTITIES:

GRID 01 - GRID 16 AND EXTERIOR GRADING
 EARTHWORK VOLUME CUT FILL NET
 3894 CY 3894 CY 0.00 CY

TABLE 1 - GRID EARTHWORK			
GRID NUMBER	CUT (FT)*	FILL (FT)*	
1	01	2.0	0.0
2	02	4.0	0.0
2	03	4.0	0.0
3	04	0.5	0.0
	05	0.0	0.0
2	06	4.0	0.0
	07	0.0	0.0
2	08	4.0	0.0
	09	0.0	0.0
1	10	2.0	0.0
	11	0.0	0.0
1	12	2.0	0.0
	13	0.0	0.0
	14	0.0	0.0
1	15	2.0	0.0
	16	0.0	0.0

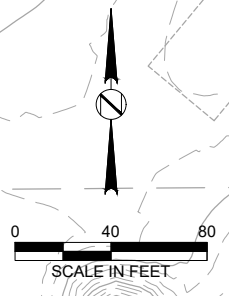
* DEPTHS REQUIRED ACROSS FULL GRID AREA

No elevation change. The site will balance; meaning whatever quantity is excavated is also being back filled to the existing elevations.

Legend

Description

- Disturbed Area
- Inlet Protection
- Silt Fence



NO	DATE	BY	REVISIONS	REMARKS	NO	DATE	BY	REVISIONS	REMARKS
	09/18/2019	DRH	ISSUED FOR PERMITTING APPLICATION						
	08/22/2019	DRH	ISSUED FOR CONSTRUCTION						
	05/01/2019	DRH	ISSUED FOR BIDDING						

DESIGNED: BRH CHECKED: DRH
 DRAWN: BRH CHECKED: TTR
 DATE: 05/01/2019 APPROVED: AHS

PLANS PREPARED BY:
 3535 VADNAIS CENTER DRIVE
 ST. PAUL, MINNESOTA 55110
 PHONE: 1.800.325.2055
 www.sehinc.com

PLANS PREPARED FOR:
 FIVE STAR MOBILE ESTATES
 VADNAIS HEIGHTS, MINNESOTA

PROJECT/CONTRACT NO:
5-STAR

SEH PROJECT NO:
INPRO 130353

FILE NAME:
IN130353C01

FIVE STAR MOBILE ESTATES
 RESPONSE ACTION PLAN
 VADNAIS HEIGHTS, MINNESOTA

FINAL GRADING PLAN

Permit Application Coversheet

Date October 02, 2019

Project Name Villages on McKnight Clubhouse Project Number 19-45

Applicant Name Steve Law, Bigos Management

Type of Development Residential

Property Description

This project is located at the existing Villages on McKnight apartment complex in the City of St. Paul. The applicant is proposing to construct a new clubhouse and pool with associated utilities and landscaping. The total project area is 1.7 acres. Stormwater treatment requirements will be met with the construction of an infiltration basin. Pretreatment will include sumped inlets.

Watershed District Policies or Standards Involved:

- | | |
|--|---|
| <input type="checkbox"/> <i>Wetlands</i> | <input checked="" type="checkbox"/> <i>Erosion and Sediment Control</i> |
| <input checked="" type="checkbox"/> <i>Stormwater Management</i> | <input type="checkbox"/> <i>Floodplain</i> |

Water Quantity Considerations

The proposed stormwater management plan is sufficient to handle the runoff from the site.

Water Quality Considerations

Short Term

The proposed erosion and sediment control plan is sufficient to protect downstream water resources during construction.

Long Term

The proposed stormwater management plan is sufficient to protect the long term quality of downstream water resources.

Staff Recommendation

Staff recommends approval of the permit with the special provisions.

Attachments:

- Project Location Map
- Project Grading Plan

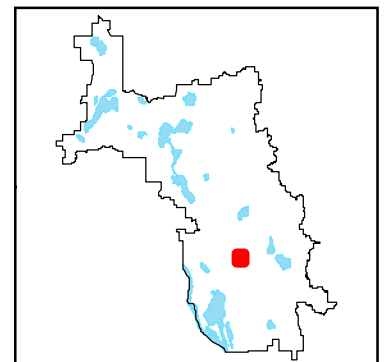
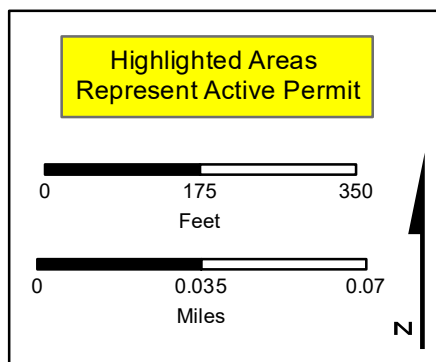
#19-45 Villages on McKnight Clubhouse



Wetlands

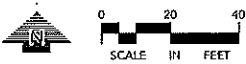
■	Manage A
■	Manage B
■	Manage C
■	Lake
■	Sediment Pond
■	Not Assessed

	RWMWD Boundary
	Flow Arrows
	Major Flow Arrows
	Subwatersheds
	Creeks
	Permits



Special Provisions

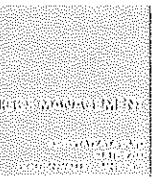
1. The applicant shall submit the final, signed set of construction plans.
2. The applicant shall submit an executed stormwater maintenance agreement.
3. The applicant shall submit a draft, site-specific Best Management Practice (BMP) Operations & Maintenance Plan.
4. The applicant shall submit contact information for the trained erosion control coordinator responsible for implementing the Stormwater Pollution Prevention Plan (SWPPP).
5. The applicant shall submit a copy of the approved Minnesota Pollution Control Agency's NPDES Construction Permit coverage for the project.



MCKNIGHT CLUBHOUSE RENOVATION
172 MCKNIGHT ROAD NORTH
MCPHYS, MISSISSIPPI

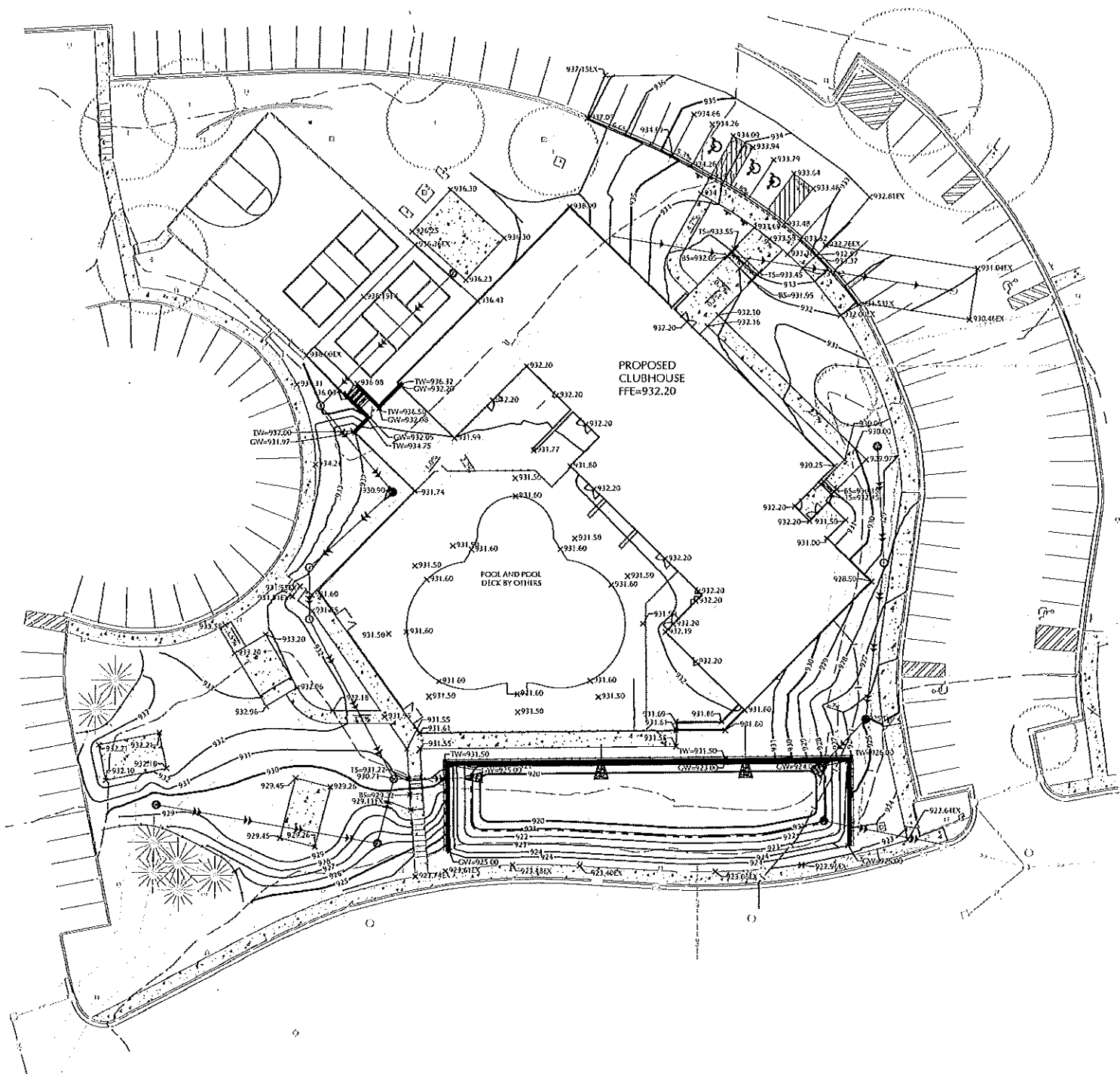
CIVIL LEGEND

EXISTING	PROPOSED



LOUCKS
PLANNING
CIVIL ENGINEERING
LAND SURVEYING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL

7200 Herlock Lane, Suite 200
Maple Grove, MN 55309
763.424.5505
www.loucks.com



GRADING, DRAINAGE & EROSION CONTROL NOTES

- SPOT ELEVATIONS REPRESENT FINISHED SURFACE GRADES. CUTTER/FLOW LINE, FACE OF BUILDING, OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
- CATCH BASINS AND AMH-HOLES IN PAVED AREAS SHALL BE SUMPED 0.04 FEET. ALL CATCH BASINS IN GUTTERS SHALL BE SUMPED 0.16 FEET. RIM ELEVATIONS SHOWN ON PLANS DO NOT REFLECT SUMPED ELEVATIONS.
- ALL DISTURBED UNPAVED AREAS ARE TO RECEIVE MINIMUM OF 4 INCHES OF TOP SOIL AND SEED/MULCH OR SOIL. THESE AREAS SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL VEGETATION IS ESTABLISHED.
- FOR SITE RETAINING WALLS 1/2" EQUALS SURFACE GRADE AT TOP FACE OF WALL (NOT TOP OF WALL) AND 1/4" EQUALS SURFACE GRADE AT BOTTOM FACE OF WALL (NOT BOTTOM OF BURIED WALL COURSE).
- RETAINING WALLS OVER 4 FEET IN HEIGHT WILL REQUIRE A BUILDING PERMIT. CONTRACTOR TO SUBMIT A SHOP DRAWING SIGNED BY A PROFESSIONAL ENGINEER FOR ALL WALLS OVER 18 INCHES FOR APPROVAL PRIOR TO CONSTRUCTION.
- FOR SITE STAIR ELEVATIONS 1/2" EQUALS SURFACE GRADE AT TOP STAIR, AND 1/4" EQUALS SURFACE GRADE AT BOTTOM STAIR.
- STREETS MUST BE CLEANED AND SWEEPED WHATEVER TRACKING OF SEDIMENTS OCCURS AND BEFORE SITES ARE LEFT IDLE FOR WEEKENDS AND HOLIDAYS. A REGULAR SWEEPING SCHEDULE MUST BE ESTABLISHED.
- DUST MUST BE ADEQUATELY CONTROLLED.
- SEE SWPPP FOR ADDITIONAL EROSION CONTROL NOTES AND REQUIREMENTS.
- SEE UTILITY PLANS FOR WATER, STORM AND SANITARY SEWER INFORMATION.
- SEE SITE PLAN FOR CURB AND BURNISHED TAPE LOCATIONS.
- A POST CONSTRUCTION TEST ON THE INFILTRATION BASIN WILL BE CONDUCTED BY FILLING THE BASIN TO A MINIMUM DEPTH OF 6 INCHES WITH WATER AND MONITOR THE TIME NECESSARY TO DRAIN. THE CODED CREEK WATERSHED DISTRICT SHALL BE NOTIFIED PRIOR TO THE TEST TO WITNESS THE RESULTS.
- KEEP INFILTRATION BASIN OFF-LINE AND PROTECTED FROM CONSTRUCTION ACTIVITY AND CLOSING BY SEDIMENT UNTIL ALL CONTRIBUTING AREAS ARE PERMANENTLY RESTORED.
- NOTIFY NICOLE SODERHOLM, RAINFALL WASHINGTON METRO WATERSHED DISTRICT, AT 651-792-7976 PRIOR TO BEGINNING ANY AND ALL CONSTRUCTION ACTIVITY FOR AN INITIAL SWPPP INSPECTION.
- KEEP INFILTRATION BASIN OFF-LINE AND PROTECTED FROM CONSTRUCTION ACTIVITY AND CLOSING BY SEDIMENT UNTIL ALL CONTRIBUTING AREAS ARE PERMANENTLY RESTORED.
- NOTIFY NICOLE SODERHOLM, RAINFALL WASHINGTON METRO WATERSHED DISTRICT, AT 651-792-7976 AT LEAST 48 HOURS PRIOR TO THE CONSTRUCTION OF THE INFILTRATION BASINS.
- THE SPECIFIED EROSION AND SEDIMENT CONTROL PRACTICES SHOWN ON C3-2 & C3-3 ARE THE MINIMUM. ADDITIONAL PRACTICES MAY BE REQUIRED DURING THE COURSE OF CONSTRUCTION.

CADD QUALIFICATION

AutoCAD 2019
Civil 3D 2019
Surveying
Landscape Architecture
Environmental

SUBMITTALS/REVISIONS

Date	Description
03/02/19	City/ watershed 5. Initial
03/22/19	City Submittal
02/20/19	Water shed

PROFESSIONAL SIGNATURE

Project: MCPHYS
Scale: 1"=40'
Date: 03/22/19

License No. 49233
Date: 03/22/19

QUALITY CONTROL
Drawn By: DJL
Checked By: PJD
Review Date: 09/24/19

SHEET INDEX

C1-1	EXISTING CONDITIONS
C1-2	DEMOLITION PLAN
C2-1	SITE PLAN
C3-1	GRADING & DRAINAGE PLAN
C3-2	SWPPP
C3-3	SWPPP NOTES
C4-1	UTILITY PLAN
C8-1	CIVIL DETAILS
L1-1	LANDSCAPE PLAN

CALL BEFORE YOU DIG
Gopher State One Call
TWIN CITY AREA: 855-464-0022
TOLL FREE: 1-800-332-1109

WARNING:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COORDINATE WITH ALL UTILITY COMPANIES IN ADVANCING THEIR SERVICE AND/OR RECORDING OF LINES.
THE CONTRACTOR SHALL CONTACT Gopher State One Call AT 855-464-0022 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WATER, GAS, CABLE, CONDUITS, FIBER, MANHOLES, TRENCHES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ALIEN WHEN UNOCCUPIED DURING CONSTRUCTION AT NO COST TO THE OWNER.

GRADING AND DRAINAGE PLAN
C3-1



RAMSEY-WASHINGTON

METRO WATERSHED DISTRICT

MEMORANDUM

Date: October 2, 2019
To: Board of Managers and Staff
From: Nicole Soderholm, Permit Coordinator
Subject: September Enforcement Action Report

During September 2019:

Number of Violations:	19
Install/Maintain Inlet Protection	3
Install/Maintain Perimeter Control	5
Install/Maintain Construction Entrance	1
Sweep Streets	2
Stabilize Exposed Soils	1
Contain/Dispose of Liquid and Solid Waste	2
Remove Discharged Sediment	2
Implement Proper Dewatering	1
Maintain Temporary Sediment Basin	1
Maintain Proper Records	1

Activities:

Permitting assistance to private developers and public entities, permit review with Barr Engineering, miscellaneous inquiries, ongoing ESC site inspections and reporting, WCA administration/procedures, BWSR BSA 7 stakeholder meeting, pre-application planning meetings, permit BMP maintenance inspections, permit close-out inspections, enforcement, Construction Site Management recertification training, 35/36/CR B flood coordination meeting, preconstruction meetings

Project Updates:

Permit #14-20 Roseville Garden Station

City and watershed staff continue efforts to get the contractor and developer to repair and complete the constructed infiltration areas. The city also has a detailed punchlist of

additional items before permits can be closed. The city has extended the deadline to October 11th for the work to be completed. If this final deadline is not met, the city will look to complete the work and pull from the project escrow. The city may request cooperation from RWMWD on this item as the District also has a stormwater escrow that is being withheld until final completion. It has been difficult working with this contractor and developer, and residents have been frustrated with the slow progress.

Permit #19-24 Woodbury Middle School

Work is substantially complete at Woodbury Middle School. The contractor has installed a porous paver system in the parking lot with filtration storage underneath to meet stormwater treatment requirements. Staff completed a final inspection of the site on Sep 23rd and confirmed the site meets permit closure requirements. A final close-out checklist was sent to the applicant on Sep 25th. Items requested include as-built plans, final BMP O&M plan, and contact information for the person(s) responsible for BMP maintenance.

Permit #18-18 I-694 & Rice Street Interchange

Work continues at the 694/Rice Street Interchange. This month the new bridge was completed, and restoration is occurring on portions near the bridge west of Rice. Permanent restoration has taken place on the southwest off-ramp to Rice. In addition, the filtration basin in the northwest section is being excavated. Infiltration tests were completed at the bottom elevation of the basin on Sep 26th. District staff observed a portion of the test and completed an erosion control inspection with Ramsey County. Staff observed deficient inlet protection and construction entrances. Other items noted relating to perimeter control and street sweeping were considered routine maintenance items.

Permit #19-27 Shoreview Commons

Work continues on the Shoreview Commons project at the community center. Staff inspected the site on Sep 11th and Sep 24th. Routine items were noted including perimeter control around stockpiles and temporary soil stabilization where feasible.

Permit #19-31 3108 W Owasso Blvd, Roseville

Staff completed a final inspection of the shoreline project at 3108 W Owasso Blvd. The applicant applied for a permit to grade within the floodplain in order to replace an old timber sea wall that was failing with riprap. At the direction of the board, staff reached out to the homeowner to inform them of the District's native shoreline restoration grant and upland native planting opportunities. To date, a cost-share grant has not been applied for.

Permits Closed in September 2019:

18-14 365 S Owasso Blvd, Roseville
19-13 FHR Storage Facility, St. Paul



MEMORANDUM

Date: October 2, 2019
To: RWMWD Board of Managers
From: Nicole Soderholm, Permit Coordinator
Subject: Metro Transit Gold Line BRT project introduction

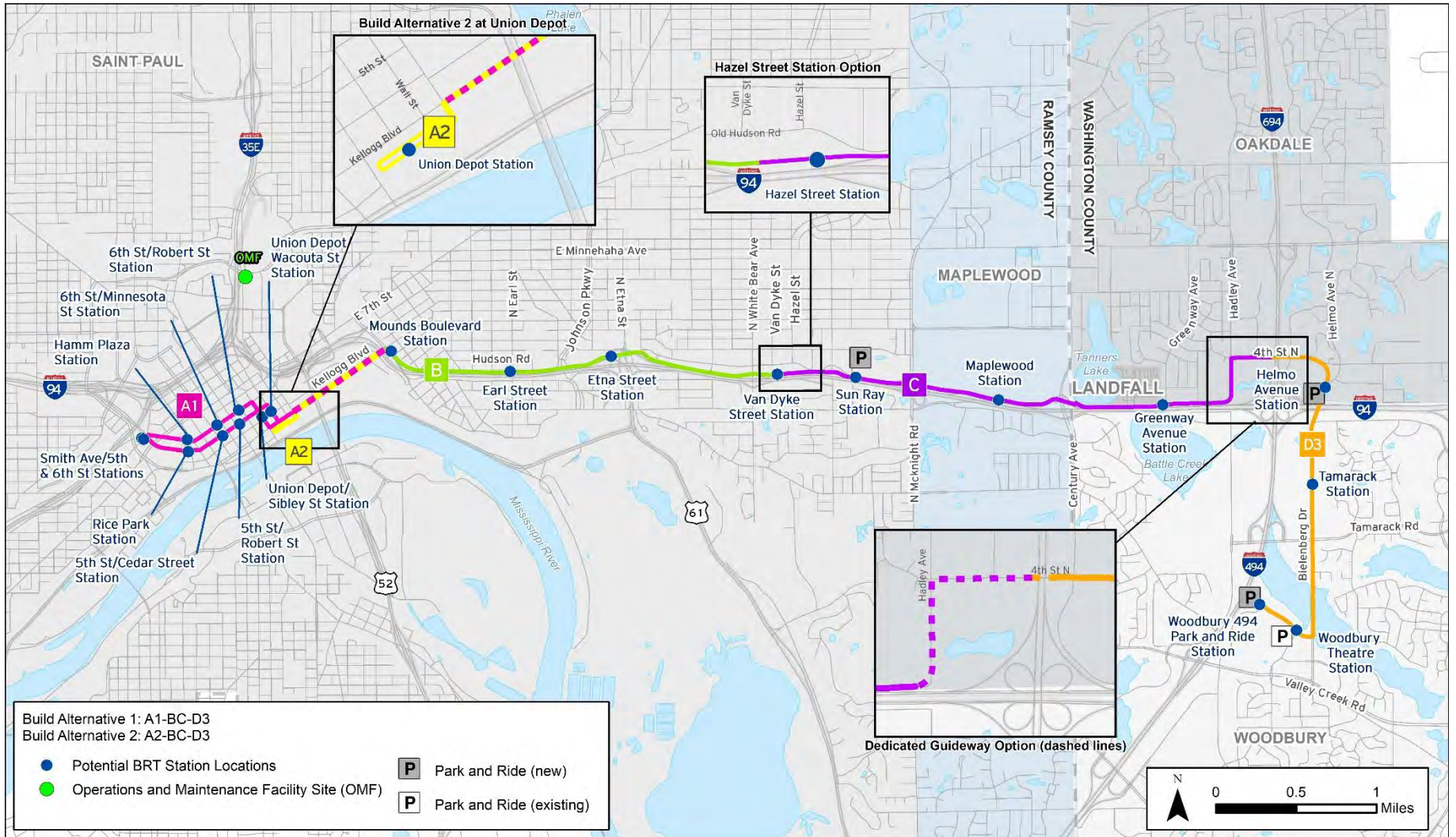
Metro Transit is in the design and permitting stage for the proposed Gold Line Bus Rapid Transit (BRT). Tonight with their consultants, Metro Transit would like to give the Board of Managers an introduction to the project including an overview of the proposed urban transportation corridor and summary of coordination and planning leading up to this point.

Water resource management will be an important element of the project including stormwater treatment, floodplain mitigation, wetland mitigation, and erosion and sediment control. Following the presentation, Metro Transit will welcome any comments the Board may have on the design to date.

A Wetland Conservation Act (WCA) joint application and RWMWD grading permit application will be submitted formally for board approval at a later time.



FIGURE 2.2-1: PROJECT BUILD ALTERNATIVES EVALUATED IN THE ENVIRONMENTAL ASSESSMENT



Memorandum

TO: Board of Managers
Ramsey-Washington Metro Watershed District
2665 Noel Drive
Little Canada, MN 55117

FROM: Joey Diederichs
Civil Site Group

DATE: September 25, 2019

RE: Suite Living Woodbury – Informal Discussion after Board Meeting

Dear Board of Managers,

Below is a narrative and brief sequencing that has occurred in relation to the mitigation of the existing wetland on site at 1901 Century Avenue in Woodbury. Please review and let me know if there is any additional information you would want provided by me at this point.

Joey Diederichs
Civil Site Group
jdiederichs@civilsitegroup.com
612-719-1781

Narrative:

This wetland was first visited & discovered in the field during wetter than normal conditions, June/July 2019, is of low-quality, and is right in the center of the site. Due to site stormwater requirements, the proposed site would have greater storage volume and water quality benefit than the existing conditions.

Project Purpose:

This project is proposing to build a 32-unit senior living facility for the aging population of the Twin Cities Metro area. City of Woodbury staff, Planning Commission and City Council along with neighboring property owners are in favor of the proposed project. The intent of the City of Woodbury is to have an urban residency project in this location.

Avoidance/Minimization:

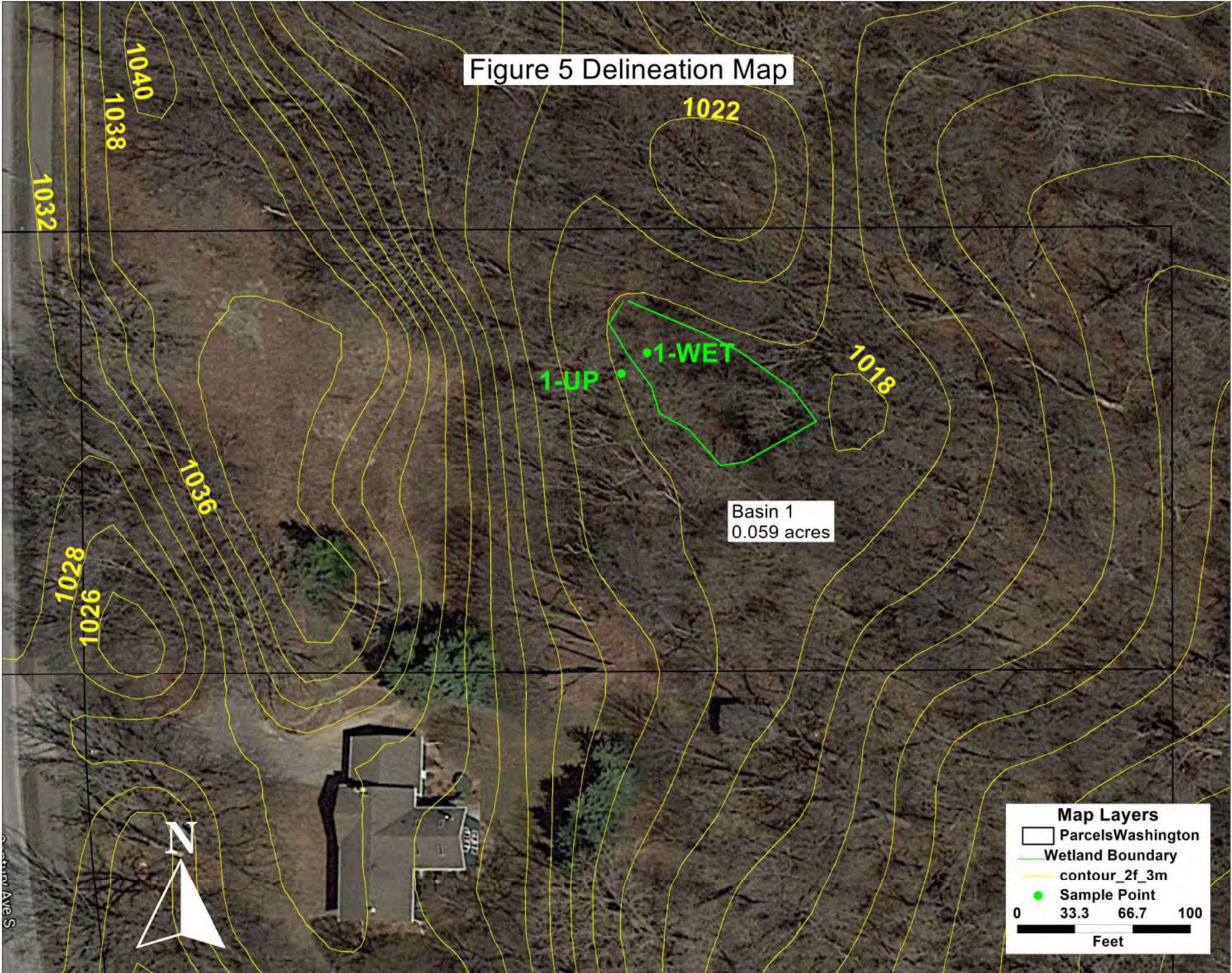
The existing wetland is in the middle of the site and under 2,500sf. Avoiding this location is not feasible with a project other than a single-family home, which is a major underutilization of the urban residency zoned property. If any part of the wetland is filled, the entirety of the wetland would be filled.

Alternatives we are proposing:

We are proposing:


- A) Mitigate off-site at a ratio of 2.5:1 within Washington County (Rule E:2:iv)
 - a. Mississippi Metro WMO
 - b. Middle St. Croix WMO

Figure 5 Delineation Map



Minnesota State Climatology Office

State Climatology Office - DNR Division of Ecological and Water Resources University of Minnesota

[home](#) | [current conditions](#) | [journal](#) | [past data](#) | [summaries](#) | [agriculture](#) | [other sites](#) | [about us](#) 

Precipitation Worksheet Using Gridded Database

Precipitation data for target wetland location:

county: **Washington** township number: **28N**
township name: **unnamed** range number: **21W**
nearest community: **Woodbury** section number: **7**

Aerial photograph or site visit date:

Thursday, June 13, 2019

Score using 1981-2010 normal period

values are in inches A 'R' following a monthly total indicates a provisional value derived from radar-based estimates .	first prior month: May 2019	second prior month: April 2019	third prior month: March 2019
estimated precipitation total for this location:	6.65	4.25R	2.07R
there is a 30% chance this location will have less than:	3.07	2.39	1.38
there is a 30% chance this location will have more than:	4.23	3.49	2.29
type of month: dry normal wet	wet	wet	normal
monthly score	3 * 3 = 9	2 * 3 = 6	1 * 2 = 2
multi-month score: 6 to 9 (dry) 10 to 14 (normal) 15 to 18 (wet)	17 (wet)		

Other Resources:

- [retrieve daily precipitation data](#)
- [view radar-based precipitation estimates](#)
- [view weekly precipitation maps](#)
- [Evaluating Antecedent Precipitation Conditions](#) (BWSR)

Appendix C



1-UP



1-WET



1-Representative

**PRELIMINARY:
NOT FOR
CONSTRUCTION**

PROJECT
1901 CENTURY AVES
WOODBURY, MINNESOTA 55125
SUITE LIVINGHAMPTON COMPANIES LLC
VADNAIS HEIGHTS, MN 55109.

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

Matthew R. Favek
Matthew R. Favek
DATE 09/11/19 LICENSE NO. 44263

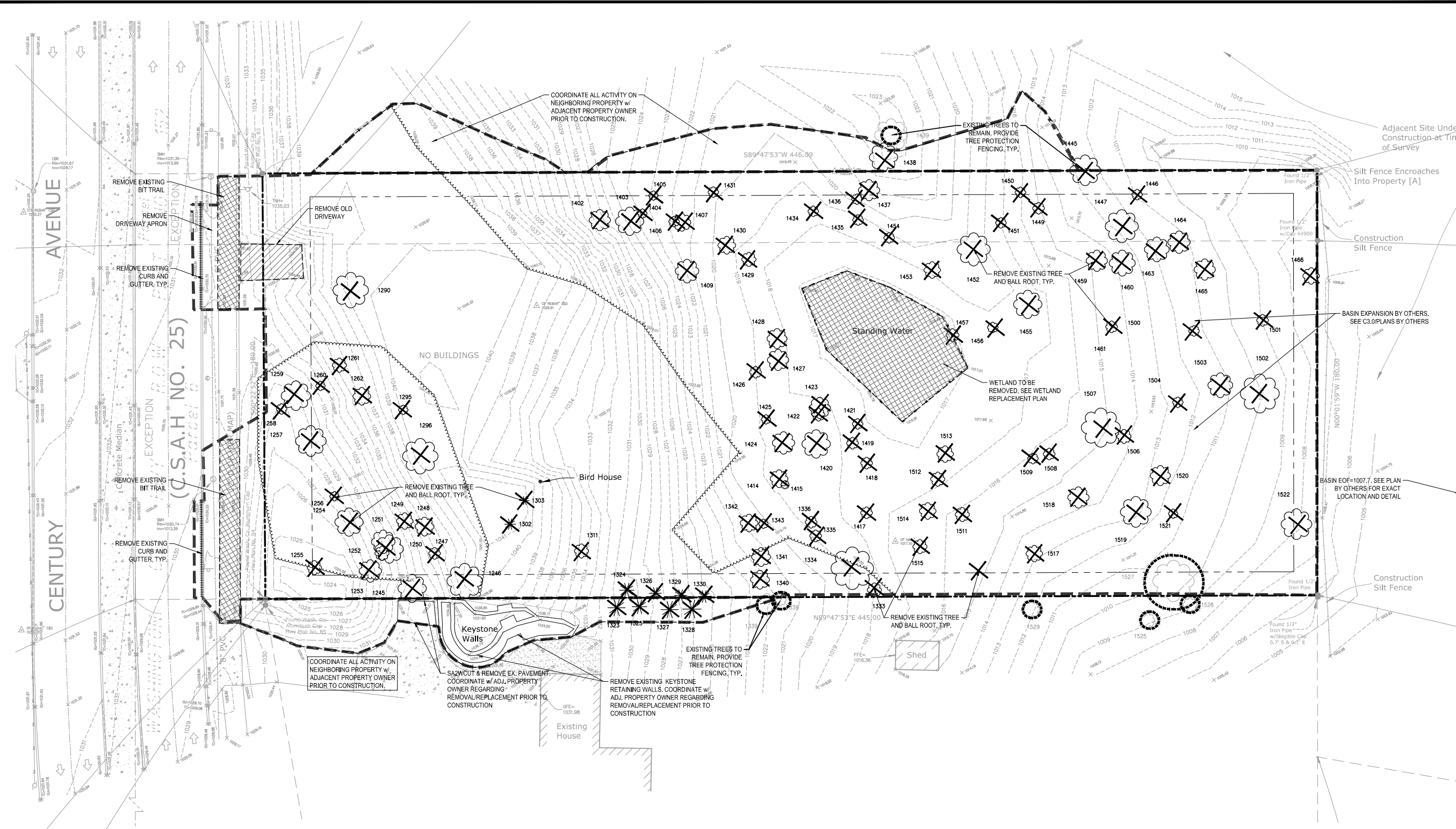
ISSUE/SUBMITTAL SUMMARY	
DATE	DESCRIPTION
06/03/19	CLIENT REVIEW SET
09/11/19	CITY SUBMITTAL
07/17/19	DESIGN PLAN REVISIONS
09/23/19	CITY RESUBMITTAL
09/11/19	CITY RESUBMITTAL

REVISION SUMMARY	
DATE	DESCRIPTION

DRAWN BY: KW REVIEWED BY: MP
PROJECT NUMBER: 19059

REMOVALS PLAN

C1.0



REMOVAL NOTES:

- SEE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) PLAN FOR CONSTRUCTION STORM WATER MANAGEMENT PLAN.
- REMOVAL OF MATERIALS NOTED ON THE DRAWINGS SHALL BE IN ACCORDANCE WITH MNDOT, STATE AND LOCAL REGULATIONS.
- REMOVAL OF PRIVATE UTILITIES SHALL BE COORDINATED WITH UTILITY OWNER PRIOR TO CONSTRUCTION ACTIVITIES.
- EXISTING PAVEMENTS SHALL BE SAWCUT IN LOCATIONS AS SHOWN ON THE DRAWINGS OR THE NEAREST JOINT FOR PROPOSED PAVEMENT CONNECTIONS.
- REMOVED MATERIALS SHALL BE DISPOSED OF TO A LEGAL OFF-SITE LOCATION AND IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS.
- ABANDON, REMOVAL, CONNECTION, AND PROTECTION NOTES SHOWN ON THE DRAWINGS ARE APPROXIMATE, COORDINATE WITH PROPOSED PLANS.
- EXISTING ON-SITE FEATURES NOT NOTED FOR REMOVAL SHALL BE PROTECTED THROUGHOUT THE DURATION OF THE CONTRACT.
- PROPERTY LINES SHALL BE CONSIDERED GENERAL CONSTRUCTION LIMITS

- UNLESS OTHERWISE NOTED ON THE DRAWINGS, WORK WITHIN THE GENERAL CONSTRUCTION LIMITS SHALL INCLUDE STAGING, DEMOLITION AND CLEAN-UP OPERATIONS AS WELL AS CONSTRUCTION SHOWN ON THE DRAWINGS.
- MINOR WORK OUTSIDE OF THE GENERAL CONSTRUCTION LIMITS SHALL BE ALLOWED AS SHOWN ON THE PLAN AND PER CITY REQUIREMENTS.
- DAMAGE BEYOND THE PROPERTY LIMITS CAUSED BY CONSTRUCTION ACTIVITY SHALL BE REPAIRED IN A MANNER APPROVED BY THE ENGINEER/LANDSCAPE ARCHITECT OR IN ACCORDANCE WITH THE CITY.
- PROPOSED WORK (BUILDING AND CIVIL) SHALL NOT DISTURB EXISTING UTILITIES UNLESS OTHERWISE SHOWN ON THE DRAWINGS AND APPROVED BY THE CITY PRIOR TO CONSTRUCTION.
- SITE SECURITY MAY BE NECESSARY AND PROVIDED IN A MANNER TO PROHIBIT VANDALISM, AND THEFT, DURING AND AFTER NORMAL WORK HOURS, THROUGHOUT THE DURATION OF THE CONTRACT, SECURITY MATERIALS SHALL BE IN ACCORDANCE WITH THE CITY.
- VEHICULAR ACCESS TO THE SITE SHALL BE MAINTAINED FOR DELIVERY AND INSPECTION ACCESS DURING NORMAL OPERATING HOURS, AT NO POINT

- THROUGHOUT THE DURATION OF THE CONTRACT SHALL CIRCULATION OF ADJACENT STREETS BE BLOCKED WITHOUT APPROVAL BY THE CITY PRIOR TO CONSTRUCTION ACTIVITIES.
- ALL TRAFFIC CONTROLS SHALL BE PROVIDED AND ESTABLISHED PER THE REQUIREMENTS OF THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD) AND THE CITY, THIS SHALL INCLUDE, BUT NOT BE LIMITED TO, SIGNAGE, BARRICADES, FLASHERS, AND FLAGGERS AS NEEDED. ALL PUBLIC STREETS SHALL REMAIN OPEN TO TRAFFIC AT ALL TIMES, NO ROAD CLOSURES SHALL BE PERMITTED WITHOUT APPROVAL BY THE CITY.
- SHORING FOR BUILDING EXCAVATION MAY BE USED AT THE DISCRETION OF THE CONTRACTOR AND AS APPROVED BY THE OWNERS REPRESENTATIVE AND THE CITY PRIOR TO CONSTRUCTION ACTIVITIES.
- STAGING, DEMOLITION, AND CLEAN-UP AREAS SHALL BE WITHIN THE PROPERTY LIMITS AS SHOWN ON THE DRAWINGS AND MAINTAINED IN A MANNER AS REQUIRED BY THE CITY.

CITY OF WOODBURY REMOVAL NOTES:

- ALL LATERAL UTILITY AND STREET IMPROVEMENTS REQUIRED WITHIN THE DEVELOPMENT AREA AND/OR PERIMETER ROADWAYS SHALL BE IMPROVED AT 100% DEVELOPER COST. THESE IMPROVEMENTS INCLUDE BUT SHALL NOT BE LIMITED TO: ON-SITE UTILITIES, ACCESS IMPROVEMENTS, TRAIL AND SIDEWALK IMPROVEMENTS, SIGNAGE AND STRIPING MODIFICATIONS, AND DRAINAGE AND UTILITY IMPROVEMENTS. LATERAL BENEFIT CHARGES SHALL BE BASED ON THE RATES IN EFFECT FOR THE YEAR THE DEVELOPERS AGREEMENT IS EXECUTED.
- THE DEVELOPER SHALL BE FINANCIALLY RESPONSIBLE FOR ANY COST INCURRED FOR REMOVAL AND/OR RELOCATION OF EXISTING SMALL UTILITIES, UTILITY POLES, UNDERGROUND EXISTING OVERHEAD ELECTRIC UTILITIES AND OTHER ASSOCIATED PRIVATE UTILITIES ADJACENT TO AND WITHIN THE DEVELOPMENT AN/OR RELATED TO THE PUBLIC IMPROVEMENTS NEEDED TO SERVICE THE DEVELOPMENT.

EROSION CONTROL NOTES:
SEE SWPPP ON SHEETS SW1.0-SW1.5

REMOVALS LEGEND:

- EX. 1' CONTOUR ELEVATION INTERVAL
- REMOVAL OF PAVEMENT AND ALL BASE MATERIAL, INCLUDING BIT., CONC., AND GRAVEL/PVMTS.
- REMOVAL OF STRUCTURE INCLUDING ALL FOOTINGS AND FOUNDATIONS.
- REMOVE CURB AND GUTTER, IF IN RIGHT-OF-WAY, COORDINATE WITH LOCAL GOVERNING UNIT.
- TREE PROTECTION
- TREE REMOVAL - INCLUDING ROOTS AND STUMPS



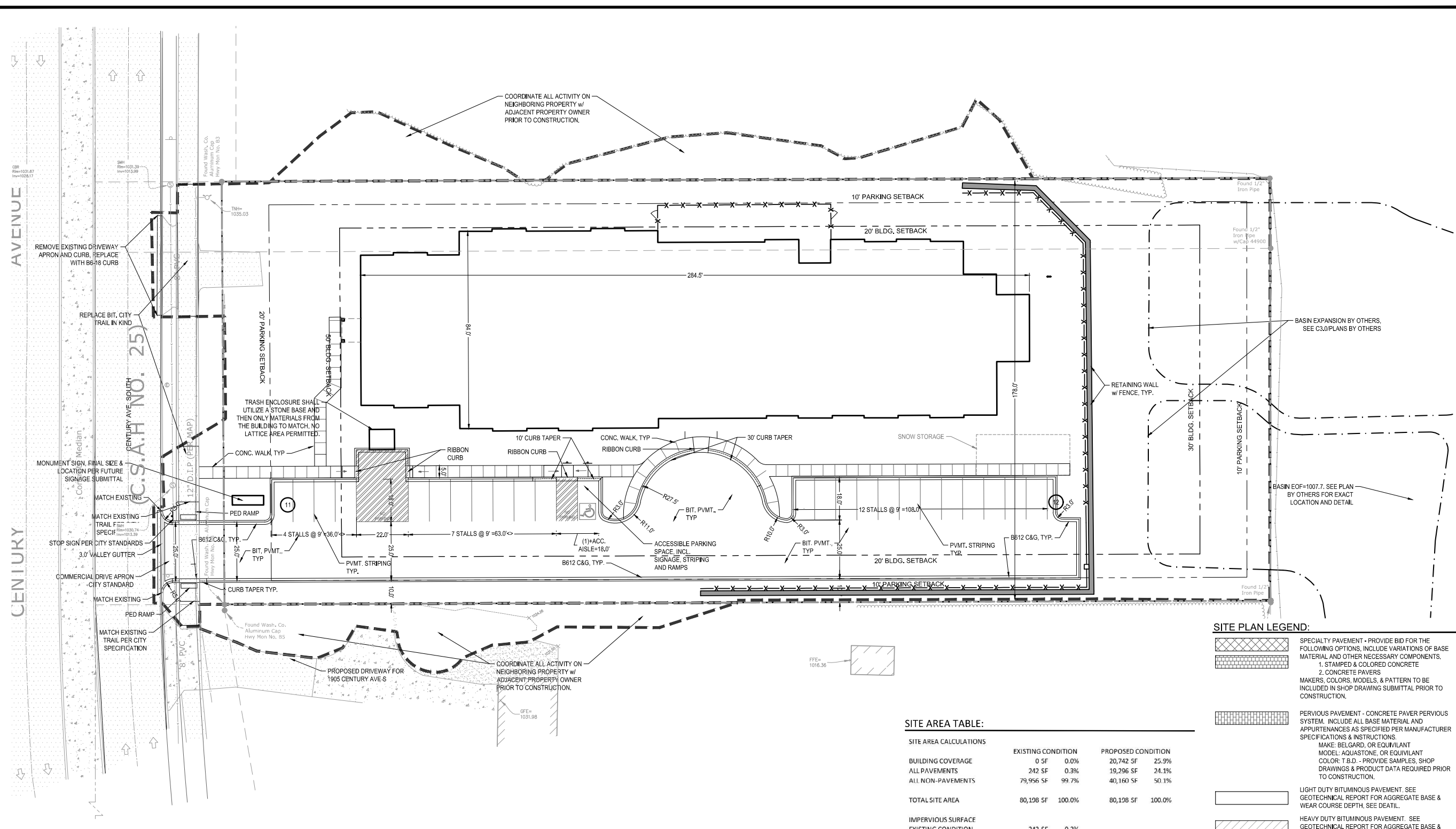
Know what's below.
Call before you dig.



1" = 20'-0"
10'-0" 0 20'-0"

**PRELIMINARY:
NOT FOR
CONSTRUCTION**

PROJECT
1901 CENTURY AVES
WOODBURY, MINNESOTA 55125
SUITE LIVINGHAMPTON COMPANIES LLC
VADNAIS HEIGHTS, MN 55109.



- SITE LAYOUT NOTES:**
- CONTRACTOR SHALL VERIFY LOCATIONS AND LAYOUT OF ALL SITE ELEMENTS PRIOR TO BEGINNING CONSTRUCTION, INCLUDING BUT NOT LIMITED TO, LOCATIONS OF EXISTING AND PROPOSED PROPERTY LINES, EASEMENTS, SETBACKS, UTILITIES, BUILDINGS AND PAVEMENTS. CONTRACTOR IS RESPONSIBLE FOR FINAL LOCATIONS OF ALL ELEMENTS FOR THE SITE. ANY REVISIONS REQUIRED AFTER COMMENCEMENT OF CONSTRUCTION, DUE TO LOCAL ADJUSTMENTS SHALL BE CORRECTED AT NO ADDITIONAL COST TO OWNER. ADJUSTMENTS TO THE LAYOUT SHALL BE APPROVED BY THE ENGINEER/LANDSCAPE ARCHITECT PRIOR TO INSTALLATION OF MATERIALS. STAKE LAYOUT FOR APPROVAL.
 - THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION, INCLUDING A RIGHT-OF-WAY AND STREET OPENING PERMIT.
 - THE CONTRACTOR SHALL VERIFY RECOMMENDATIONS NOTED IN THE GEO TECHNICAL REPORT PRIOR TO INSTALLATION OF SITE IMPROVEMENT MATERIALS.
 - CONTRACTOR SHALL FIELD VERIFY COORDINATES AND LOCATION DIMENSIONS OF THE BUILDING AND STAKE FOR REVIEW AND APPROVAL BY THE OWNERS REPRESENTATIVE PRIOR TO INSTALLATION OF FOOTING MATERIALS.
 - LOCATIONS OF STRUCTURES, ROADWAY PAVEMENTS, CURBS AND GUTTERS, BOLLARDS, AND WALKS ARE APPROXIMATE AND SHALL BE STAKED IN THE FIELD, PRIOR TO INSTALLATION, FOR REVIEW AND APPROVAL BY THE ENGINEER/LANDSCAPE ARCHITECT.
 - CURB DIMENSIONS SHOWN ARE TO FACE OF CURB, BUILDING DIMENSIONS ARE TO FACE OF CONCRETE FOUNDATION, LOCATION OF BUILDING IS TO BUILDING FOUNDATION AND SHALL BE AS SHOWN ON THE DRAWINGS.
 - THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OR SAMPLES AS SPECIFIED FOR REVIEW AND APPROVAL BY THE ENGINEER/LANDSCAPE ARCHITECT PRIOR TO FABRICATION FOR ALL PREFABRICATED SITE IMPROVEMENT MATERIALS SUCH AS, BUT NOT

- LIMITED TO THE FOLLOWING, FURNISHINGS, PAVEMENTS, WALLS, RAILINGS, BENCHES, FLAGPOLES, LANDING PADS FOR CURB RAMPS, AND LIGHT AND POLES. THE OWNER RESERVES THE RIGHT TO REJECT INSTALLED MATERIALS NOT PREVIOUSLY APPROVED.
- PEDESTRIAN CURB RAMPS SHALL BE CONSTRUCTED WITH TRUNCATED DOME LANDING AREAS IN ACCORDANCE WITH A.D.A. REQUIREMENTS-SEE DETAIL.
 - CROSSWALK STRIPING SHALL BE 24" WIDE WHITE PAINTED LINE, SPACED 48" ON CENTER PERPENDICULAR TO THE FLOW OF TRAFFIC. WIDTH OF CROSSWALK SHALL BE 5' WIDE. ALL OTHER PAVEMENT MARKINGS SHALL BE WHITE IN COLOR UNLESS OTHERWISE NOTED OR REQUIRED BY ADA OR LOCAL GOVERNING BODIES.
 - SEE SITE PLAN FOR CURB AND GUTTER TYPE, TAPER BETWEEN CURB TYPES-SEE DETAIL.
 - ALL CURB RADII ARE MINIMUM 3' UNLESS OTHERWISE NOTED.
 - CONTRACTOR SHALL REFER TO FINAL PLAT FOR LOT BOUNDARIES, NUMBERS, AREAS AND DIMENSIONS PRIOR TO SITE IMPROVEMENTS.
 - FIELD VERIFY ALL EXISTING SITE CONDITIONS, DIMENSIONS.
 - PARKING IS TO BE SET PARALLEL OR PERPENDICULAR TO EXISTING BUILDING UNLESS NOTED OTHERWISE.
 - ALL PARKING LOT PAINT STRIPPING TO BE WHITE, 4" WIDE TYP.
 - BITUMINOUS PAVING TO BE "LIGHT DUTY" UNLESS OTHERWISE NOTED, SEE DETAIL SHEETS FOR PAVEMENT SECTIONS.
 - ALL TREES THAT ARE TO REMAIN ARE TO BE PROTECTED FROM DAMAGE WITH A CONSTRUCTION FENCE AT THE DRIP LINE. SEE LANDSCAPE DOCUMENTS.

SITE AREA TABLE:

SITE AREA CALCULATIONS	EXISTING CONDITION		PROPOSED CONDITION	
	AREA (SF)	PERCENT (%)	AREA (SF)	PERCENT (%)
BUILDING COVERAGE	0 SF	0.0%	20,742 SF	25.9%
ALL PAVEMENTS	242 SF	0.3%	19,296 SF	24.1%
ALL NON-PAVEMENTS	79,956 SF	99.7%	40,160 SF	50.1%
TOTAL SITE AREA	80,198 SF	100.0%	80,198 SF	100.0%
IMPERVIOUS SURFACE				
EXISTING CONDITION	242 SF	0.3%		
PROPOSED CONDITION	40,038 SF	49.9%		
DIFFERENCE (EX. VS PROP.)	39,796 SF	49.6%		

- CITY OF WOODBURY REMOVAL NOTES:**
- ALL LATERAL UTILITY AND STREET IMPROVEMENTS REQUIRED WITHIN THE DEVELOPMENT AREA AND/OR PERIMETER ROADWAYS SHALL BE IMPROVED AT 100% DEVELOPER COST. THESE IMPROVEMENTS INCLUDE BUT SHALL NOT BE LIMITED TO: ONSITE UTILITIES, ACCESS IMPROVEMENTS, TRAIL AND SIDEWALK IMPROVEMENTS, SIGNAGE AND STRIPING MODIFICATIONS, AND DRAINAGE AND UTILITY IMPROVEMENTS. LATERAL BENEFIT CHARGES SHALL BE BASED ON THE RATES IN EFFECT FOR THE YEAR THE DEVELOPERS AGREEMENT IS EXECUTED.
 - RIGHT-OF-WAY PERMITS SHALL BE REQUIRED BY THE CITY AND RAMSEY COUNTY FOR WORK WITHIN CENTURY AVE SOUTH.

SITE PLAN LEGEND:

- SPECIALTY PAVEMENT - PROVIDE BID FOR THE FOLLOWING OPTIONS, INCLUDE VARIATIONS OF BASE MATERIAL AND OTHER NECESSARY COMPONENTS.
 - STAMPED & COLORED CONCRETE
 - CONCRETE PAVERS
 MAKERS, COLORS, MODELS, & PATTERN TO BE INCLUDED IN SHOP DRAWING SUBMITTAL PRIOR TO CONSTRUCTION.
- PERVIOUS PAVEMENT - CONCRETE PAVER PERVIOUS SYSTEM. INCLUDE ALL BASE MATERIAL AND APPURTENANCES AS SPECIFIED PER MANUFACTURER SPECIFICATIONS & INSTRUCTIONS.
 - MAKE: BELGARD, OR EQUIVALENT
 - MODEL: AQUASTONE, OR EQUIVALENT
 - COLOR: T.B.D. - PROVIDE SAMPLES, SHOP DRAWINGS & PRODUCT DATA REQUIRED PRIOR TO CONSTRUCTION.
- LIGHT DUTY BITUMINOUS PAVEMENT. SEE GEOTECHNICAL REPORT FOR AGGREGATE BASE & WEAR COURSE DEPTH. SEE DETAIL.
- HEAVY DUTY BITUMINOUS PAVEMENT. SEE GEOTECHNICAL REPORT FOR AGGREGATE BASE & WEAR COURSE DEPTH. SEE DETAIL.
- CONCRETE PAVEMENT AS SPECIFIED (PAD OR WALK) SEE GEOTECHNICAL REPORT FOR AGGREGATE BASE & CONCRETE DEPTHS. SEE DETAIL.
- PROPERTY LINE
- CONSTRUCTION LIMITS
- CURB AND GUTTER-SEE NOTES (T.O.) TIP OUT GUTTER WHERE APPLICABLE-SEE PLAN
- TRAFFIC DIRECTIONAL ARROW PAVEMENT MARKINGS
- SIGN AND POST ASSEMBLY. SHOP DRAWINGS REQUIRED.
 - HC = ACCESSIBLE SIGN
 - NP = NO PARKING FIRE LANE
 - ST = STOP
 - CP = COMPACT CAR PARKING ONLY

ISSUE/SUBMITTAL SUMMARY

DATE	DESCRIPTION
06/03/19	CLIENT REVIEW SET
06/17/19	CITY SUBMITTAL
07/17/19	ISSUES PLAT REVISIONS
08/27/19	CITY RESUBMITTAL
09/11/19	CITY RESUBMITTAL

DRAWN BY: JKW REVIEWED BY: MP
PROJECT NUMBER: 19059

REVISION SUMMARY

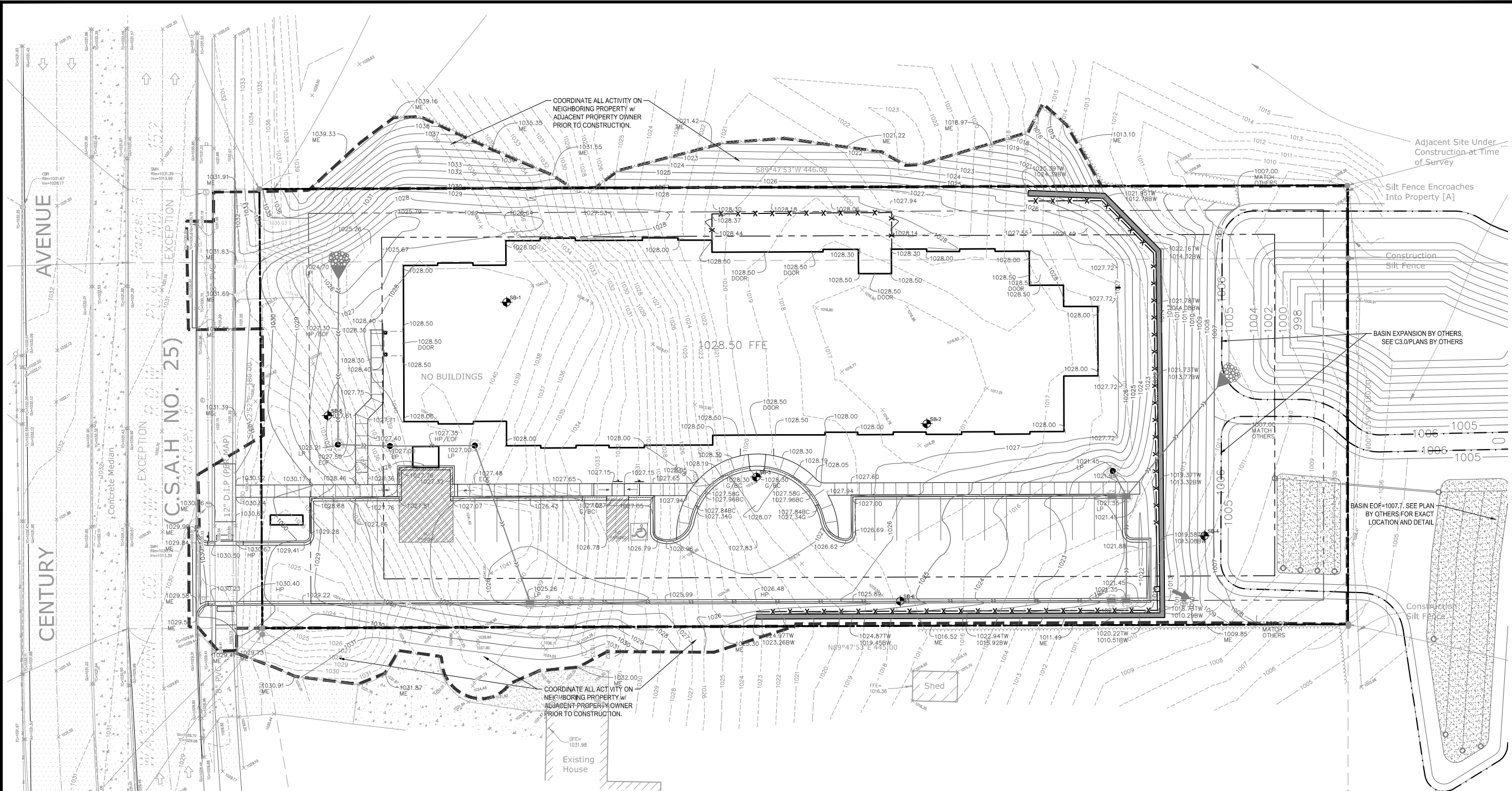
DATE	DESCRIPTION

SITE PLAN
C2.0

1" = 20'-0"
10'-0" 0 20'-0"

811
Know what's below.
Call before you dig.

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**PRELIMINARY:
NOT FOR
CONSTRUCTION**

PROJECT
1901 CENTURY AVE S
WOODBURY, MINNESOTA 55125
SUITE LIVINGHAMPTON COMPANIES LLC
VADNAIS HEIGHTS, MN 55109

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

Matthew R. Favek
Matthew R. Favek
DATE 09/11/19 LICENSE NO. 44263

ISSUE/SUBMITTAL SUMMARY	
DATE	DESCRIPTION
06/03/19	CLIENT REVIEW SET
09/11/19	CITY SUBMITTAL
07/17/19	DESIGN PLAN REVISIONS
09/23/19	CITY RESUBMITTAL
09/11/19	CITY RESUBMITTAL

REVISION SUMMARY	
DATE	DESCRIPTION

REVISION SUMMARY	
DATE	DESCRIPTION

GRADING PLAN
C3.0
© COPYRIGHT 2019 CIVIL SITE GROUP INC.

GENERAL GRADING NOTES:

- SEE SITE PLAN FOR HORIZONTAL LAYOUT & GENERAL GRADING NOTES.
- THE CONTRACTOR SHALL COMPLETE THE SITE GRADING CONSTRUCTION (INCLUDING BUT NOT LIMITED TO SITE PREPARATION, SOIL CORRECTION, EXCAVATION, EMBANKMENT, ETC.) IN ACCORDANCE WITH THE REQUIREMENTS OF THE OWNER'S SOILS ENGINEER. ALL SOIL TESTING SHALL BE COMPLETED BY THE OWNER'S SOILS ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED SOIL TESTS AND INSPECTIONS WITH THE SOILS ENGINEER.
- GRADING AND EXCAVATION ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT REQUIREMENTS & PERMIT REQUIREMENTS OF THE CITY.
- PROPOSED SPOT GRADES ARE FLOW-LINE FINISHED GRADE ELEVATIONS, UNLESS OTHERWISE NOTED.
- GRADES OF WALKS SHALL BE INSTALLED WITH 5% MAX. LONGITUDINAL SLOPE AND 1% MIN. AND 2% MAX. CROSS SLOPE, UNLESS OTHERWISE NOTED.
- PROPOSED SLOPES SHALL NOT EXCEED 3:1 UNLESS INDICATED OTHERWISE ON THE DRAWINGS. MAXIMUM SLOPES IN MAINTAINED AREAS IS 4:1
- PROPOSED RETAINING WALLS, FREESTANDING WALLS, OR COMBINATION OF WALL TYPES GREATER THAN 4' IN HEIGHT SHALL BE DESIGNED AND ENGINEERED BY A REGISTERED RETAINING WALL ENGINEER. DESIGN DRAWINGS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF GRADE STAKES THROUGHOUT THE DURATION OF CONSTRUCTION TO ESTABLISH PROPER GRADES. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR A FINAL FIELD CHECK OF FINISHED GRADES ACCEPTABLE TO THE ENGINEER/LANDSCAPE ARCHITECT PRIOR TO TOPSOIL AND SODDING ACTIVITIES.
- IF EXCESS OR SHORTAGE OF SOIL MATERIAL EXISTS, THE CONTRACTOR SHALL TRANSPORT ALL EXCESS SOIL MATERIAL OFF THE SITE TO AN AREA SELECTED BY THE CONTRACTOR, OR IMPORT SUITABLE MATERIAL TO THE SITE.
- EXCAVATE TOPSOIL FROM AREAS TO BE FURTHER EXCAVATED OR REGRADED AND STOCKPILE IN AREAS DESIGNATED ON THE SITE. THE CONTRACTOR SHALL SALVAGE ENOUGH TOPSOIL FOR RESPREADING ON THE SITE AS SPECIFIED. EXCESS TOPSOIL SHALL BE PLACED IN EMBANKMENT AREAS, OUTSIDE OF BUILDING PADS, ROADWAYS AND PARKING AREAS. THE CONTRACTOR SHALL SUBCUT CUT AREAS, WHERE TURF IS TO BE ESTABLISHED, TO A DEPTH OF 6 INCHES. RESPREAD TOPSOIL IN AREAS WHERE TURF IS TO BE ESTABLISHED TO A MINIMUM DEPTH OF 6 INCHES.

- FINISHED GRADING SHALL BE COMPLETED. THE CONTRACTOR SHALL UNIFORMLY GRADE AREAS WITHIN LIMITS OF GRADING, INCLUDING ADJACENT TRANSITION AREAS. PROVIDE A SMOOTH FINISHED GRADE WITHIN SPECIFIED TOLERANCES, WITH UNIFORM LEVELS OR SLOPES BETWEEN POINTS WHERE ELEVATIONS ARE SHOWN, OR BETWEEN SUCH POINTS AND EXISTING GRADES. AREAS THAT HAVE BEEN FINISH GRADED SHALL BE PROTECTED FROM SUBSEQUENT CONSTRUCTION OPERATIONS, TRAFFIC AND EROSION. REPAIR ALL AREAS THAT HAVE BECOME RUTTED BY TRAFFIC OR ERODED BY WATER OR HAS SETTLED BELOW THE CORRECT GRADE. ALL AREAS DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED TO EQUAL OR BETTER THAN ORIGINAL CONDITION OR TO THE REQUIREMENTS OF THE NEW WORK.
- PRIOR TO PLACEMENT OF THE AGGREGATE BASE, A TEST ROLL WILL BE REQUIRED ON THE STREET AND/OR PARKING AREA SUBGRADE. THE CONTRACTOR SHALL PROVIDE A LOADED TANDEM AXLE TRUCK WITH A GROSS WEIGHT OF 25 TONS. THE TEST ROLLING SHALL BE AT THE DIRECTION OF THE SOILS ENGINEER AND SHALL BE COMPLETED IN AREAS AS DIRECTED BY THE SOILS ENGINEER. THE SOILS ENGINEER SHALL DETERMINE WHICH SECTIONS OF THE STREET OR PARKING AREA ARE UNSTABLE, CORRECTION OF THE SUBGRADE SOILS SHALL BE COMPLETED IN ACCORDANCE WITH THE REQUIREMENTS OF THE SOILS ENGINEER. NO TEST ROLL SHALL OCCUR WITHIN 10' OF ANY UNDERGROUND STORM RETENTION/DETENTION SYSTEMS.
- TOLERANCES
 - THE BUILDING SUBGRADE FINISHED SURFACE ELEVATION SHALL NOT VARY BY MORE THAN 0.30 FOOT ABOVE, OR 0.30 FOOT BELOW, THE PRESCRIBED ELEVATION AT ANY POINT WHERE MEASUREMENT IS MADE.
 - THE STREET OR PARKING AREA SUBGRADE FINISHED SURFACE ELEVATION SHALL NOT VARY BY MORE THAN 0.05 FOOT ABOVE, OR 0.10 FOOT BELOW, THE PRESCRIBED ELEVATION OF ANY POINT WHERE MEASUREMENT IS MADE.
 - AREAS WHICH ARE TO RECEIVE TOPSOIL SHALL BE GRADED TO WITHIN 0.30 FOOT ABOVE OR BELOW THE REQUIRED ELEVATION, UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
 - TOPSOIL SHALL BE GRADED TO PLUS OR MINUS 1/2 INCH OF THE SPECIFIED THICKNESS.
- MAINTENANCE
 - THE CONTRACTOR SHALL PROTECT NEWLY GRADED AREAS FROM TRAFFIC AND EROSION, AND KEEP AREA FREE OF TRASH AND DEBRIS.
 - CONTRACTOR SHALL REPAIR AND REESTABLISH GRADES IN SETTLED, ERODED AND RUTTED AREAS TO SPECIFIED TOLERANCES, DURING THE CONSTRUCTION, IF REQUIRED, AND DURING THE WARRANTY PERIOD, ERODED AREAS WHERE TURF IS TO BE ESTABLISHED SHALL BE RESEED AND MULCHED.
 - WHERE COMPLETED COMPACTED AREAS ARE DISTURBED BY SUBSEQUENT CONSTRUCTION OPERATIONS OR ADVERSE WEATHER, CONTRACTOR SHALL SCARIFY, SURFACE, RESHAPE, AND COMPACT TO REQUIRED DENSITY PRIOR TO FURTHER CONSTRUCTION.

EROSION CONTROL NOTES:

SEE SWPPP ON SHEETS SW1.0-SW1.5

GROUNDWATER INFORMATION:

PER GEOTECHNICAL REPORT BY HAUGO GEOTECHNICAL SERVICES, LLC., DATED 04-15-2019 GROUNDWATER WAS OBSERVED AT ELEVATIONS RANGING FROM 995 TO 1008.5

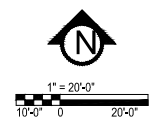
THE BORINGS & GROUNDWATER ARE AS FOLLOWS:
 B-1 NO GROUND WATER
 B-2 NO GROUND WATER
 B-3 NO GROUND WATER
 B-4 995
 B-5 NO GROUND WATER
 B-6 NO GROUND WATER
 B-7 1008.5

CITY OF WOODBURY GRADING NOTES:

- ALL PERMANENT AND TEMPORARY EASEMENTS NECESSARY FOR THE SITE GRADING OPERATIONS ON ALL ADJACENT PROPERTIES SHALL BE RECEIVED PRIOR TO STARTING ANY SITE GRADING ACTIVITIES. A COPY OF THE EASEMENT DOCUMENTS SHALL BE PROVIDED TO THE CITY FOR VERIFICATION.
- PER CITY STANDARDS 4 INCHES OF TOPSOIL WILL BE USED ON NEW DEVELOPMENTS.

GRADING PLAN LEGEND:

--- 1125 ---	EX: 1' CONTOUR ELEVATION INTERVAL
--- 1137 ---	1/2' CONTOUR ELEVATION INTERVAL
41.26	SPOT GRADE ELEVATION (GUTTER/FLOW LINE UNLESS OTHERWISE NOTED)
891.00 G	SPOT GRADE ELEVATION GUTTER
891.00 TC	SPOT GRADE ELEVATION TOP OF CURB
891.00 BS/TS	SPOT GRADE ELEVATION BOTTOM OF STAIRS/TOP OF STAIRS
891.00 ME	SPOT GRADE ELEVATION MATCH EXISTING
⊕	GRADE BREAK - HIGH POINTS
--- 10 ---	CURB AND GUTTER (T.O = TIP OUT)
→	EMERGENCY OVERFLOW
EOFF=1135.52	



* * * * *

Stewardship Grant Program

* * * * *

Stewardship Grant Application Summary

Project Name: Cedars Lakeside Apartments

Application Number 19-25 CS

Board Meeting Date: 10/2/2019

Applicant Name: Bonnie Kjos

Residential

Commercial/Government

Project Overview:

This project is located behind the Cedars Lakeside Apartment building on Round Lake in Little Canada. The applicant has cleared the grounds of buckthorn and other invasive plants. They would like to revegetate the shoreline with native plants to help prevent erosion. This work is eligible for 100% coverage up to \$100,000. They are also proposing to install a native fescue along a new trail and on the slopes behind the building. This portion will be considered a native habitat restoration and is eligible for 50% coverage up to \$15,000.

BMP type(s):

Shoreline Restoration(1)

Grant Request:

\$40,000.00

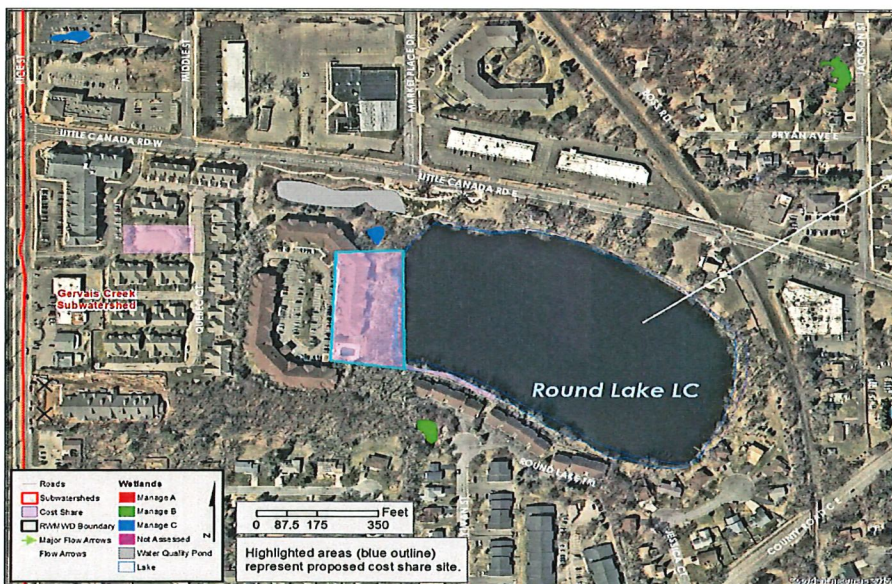
Recommendation:

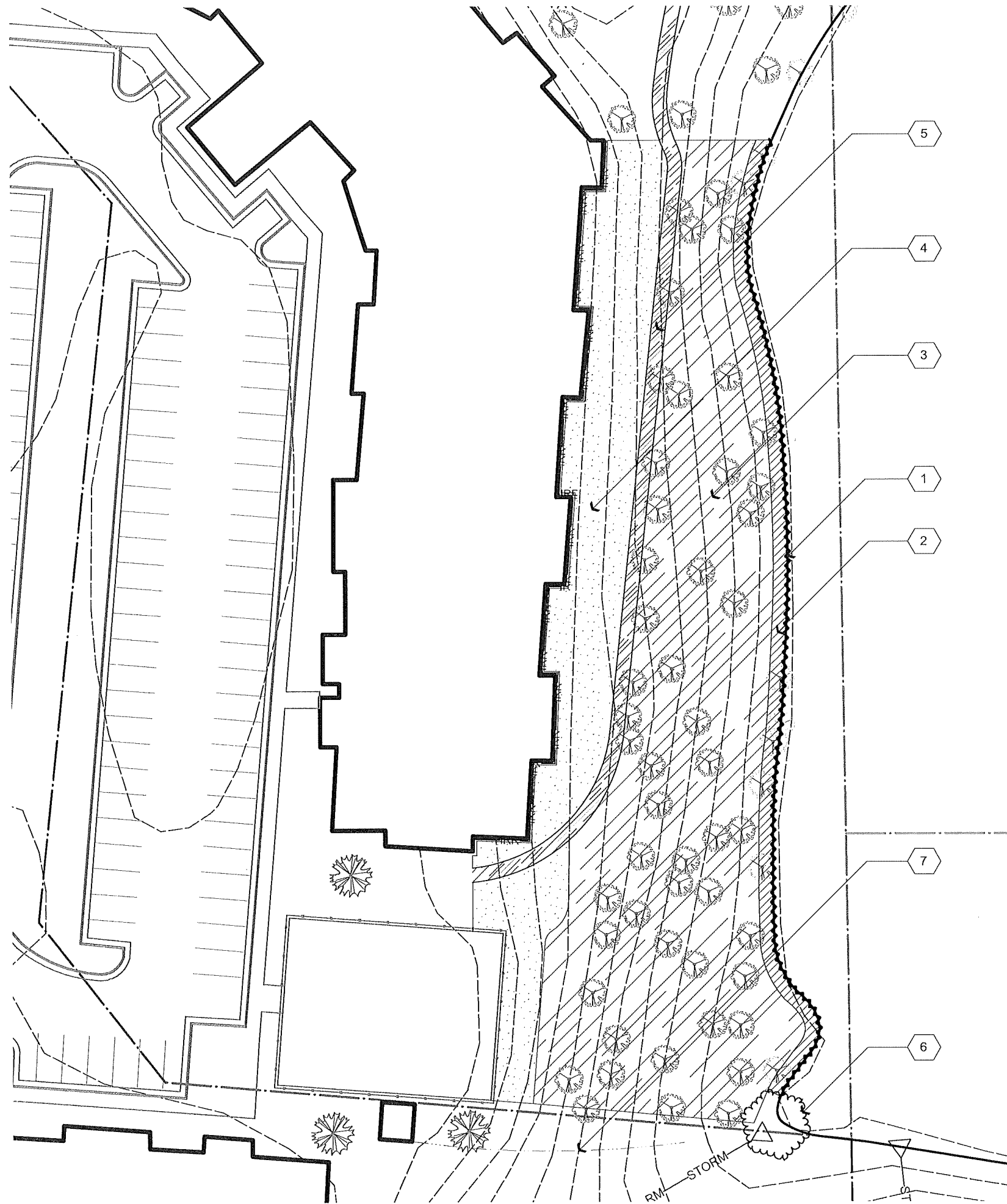
Staff recommends approval of this application.

Subwatershed:

Gervais Creek

Location Maps:





PROJECT LEGEND

ID	ITEM	DESCRIPTION	QTY	UNIT
1	COIR LOG	16" DIA / 9LB DENSITY; SECURED WITH STAKES AND ROPE; KEYED INTO SLOPE TO STABILIZE SHORELINE TOE	350	LF
2	SHORELINE NATIVE PLANTING ZONE	BROADCAST PERMANENT NATIVE SEED MIX (INCLUDE COVER CROP); INSTALL LIVE PLANT MATERIAL; SECURE WITH SC-150BN EROSION CONTROL BLANKET (LAP BLANKET UNDERNEATH COIR LOG; INSTALL ON THE CONTOUR)	200	SY
3	UPLAND NATIVE PLANTING ZONE	BROADCAST PERMANENT NATIVE SEED MIX (INCLUDE COVER CROP); INSTALL LIVE PLANT MATERIAL; SECURE WITH SC-150BN EROSION CONTROL BLANKET (BLANKET INSTALLED ON THE CONTOUR)	1934	SY
4	LOW-GROW FESCUE	BROADCAST LOW-GROW FESCUE SEED MIX; SECURE WITH S-75BN EROSION CONTROL BLANKET	812	SY
5	MULCHED PATH ALIGNMENT	5' WIDE PEDESTRIAN CIRCULATION PATH; INSTALL NON-WOVEN GEOTEXTILE FABRIC BETWEEN MULCH AND SOIL; 3" DEEP TWICE SHREDDED HARDWOOD MULCH; EXTEND NORTH TO PROPERTY BOUNDARY	245	SY
6	OUTFALL STABILIZATION	INSTALL RIP RAP TO STABILIZE OUTFALL; 6"-15" TRAP ROCK RIP RAP	15	TON
7	GULLY STABILIZATION CENTERLINE	INSTALL RIP RAP TO STABILIZE PUMP HOUSE/POOL DRAIN OUTFALL; 6"-15" TRAP ROCK RIP RAP; GULLY EROSION CENTERLINE +/- 90 LF; INSTALL NON-WOVEN GEOTEXTILE BETWEEN RIP RAP AND SOIL	12	TON

SITE LAYOUT



L200

Stewardship Grant Application Summary

Project Name: Harding Arena

Application Number 19-26 CS

Board Meeting Date: 10/2/2019

Applicant Name: Be Vang

Residential

Commercial/Government

Project Overview:

This project is located at the Harding Ice Arena at Harding High School in St. Paul. This project would convert almost 1/4 acre of turf grass into native short grass prairie to provide pollinator habitat and an outdoor educational experience for students. The applicant is receiving match dollars from Ramsey County Parks and Recreation to complete this project. The planting will be a combination of native seeds and plugs.

BMP type(s):

Native Habitat Restoration(1)

Grant Request:

\$5,500.00

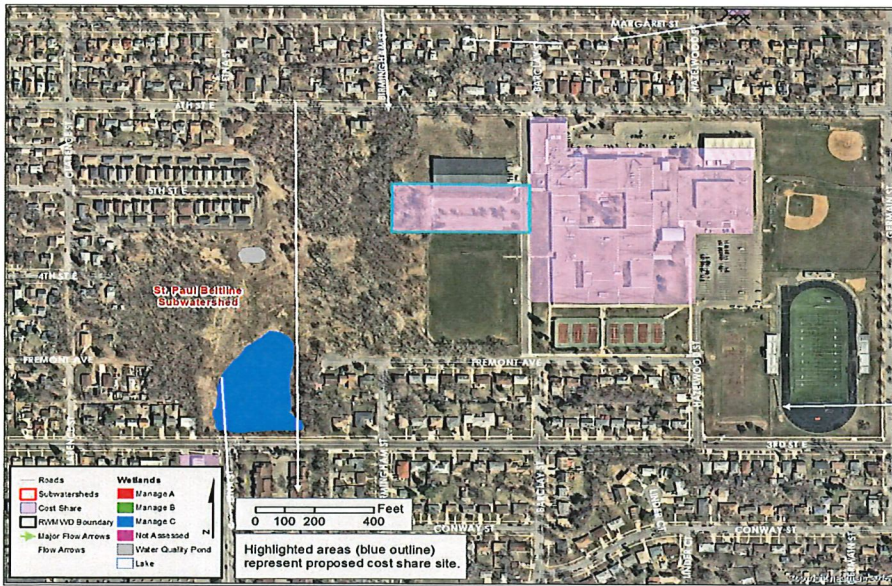
Recommendation:

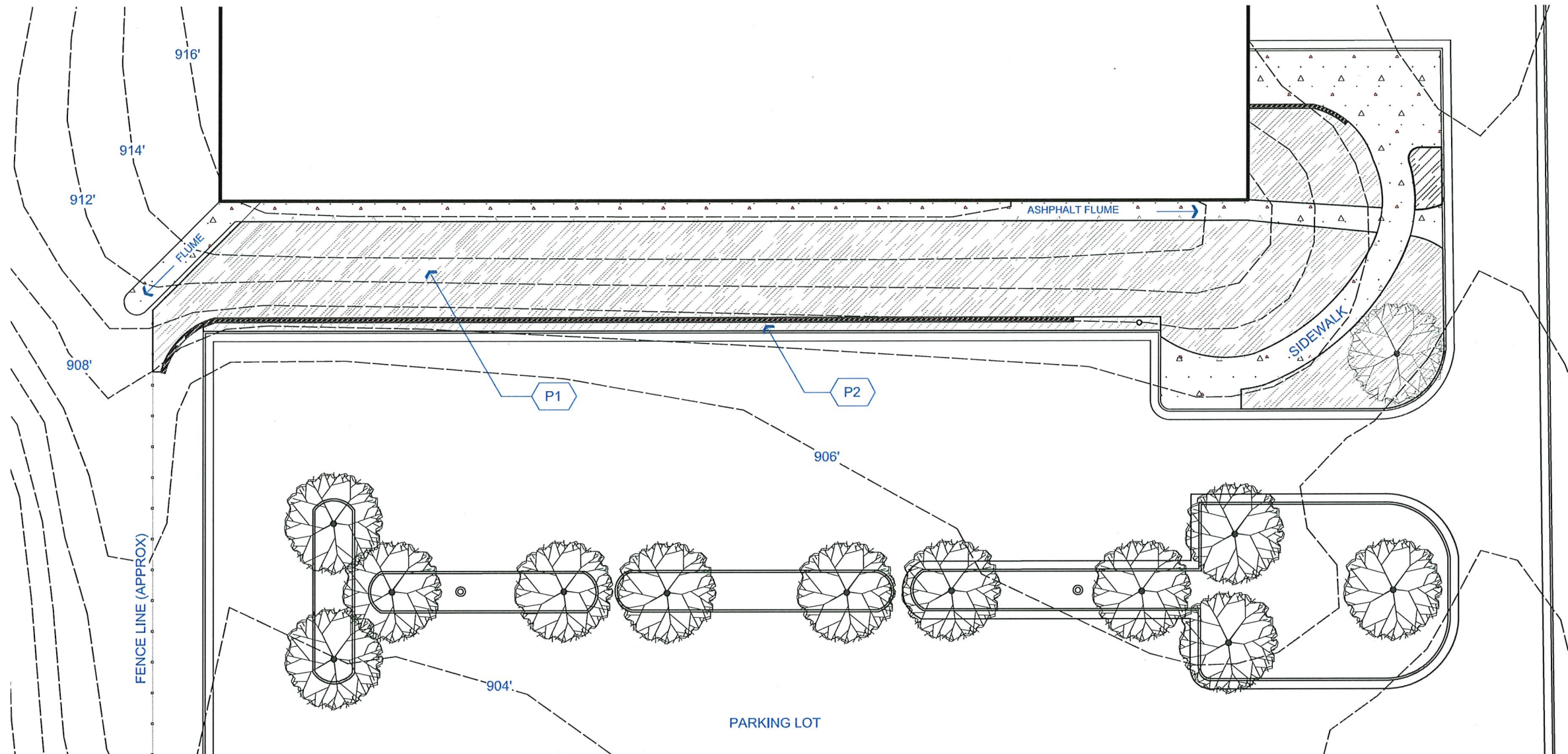
Staff recommends approval of this application.

Subwatershed:

St. Paul Beltline

Location Maps:





P1 PLANTING SCHEDULE			
QTY	COMMON NAME	SCIENTIFIC NAME	SIZE
36	PRAIRIE ONION	ALLIUM STELLATUM	2" PLUG
36	BUTTERFLY MILKWEED	ASCLEPIAS TUBEROSA	2" PLUG
36	WHITE PRAIRIE CLOVER	DALEA CANDIDA	2" PLUG
36	PURPLE PRAIRIE CLOVER	DALEA PURPUREUM	2" PLUG
36	NARROW-LEAVED CONEFLOWER	ECHINACEA ANGUSTIFOLIA	2" PLUG
36	PURPLE CONEFLOWER	ECHINACEA PURPUREA	2" PLUG
36	ROUGH BLAZINGSTAR	LIATRIS ASPERA	2" PLUG
36	MEADOW BLAZINGSTAR	LIATRIS LIGULISTYLIS	2" PLUG
36	SHOWY PENSTEMON	PENSTEMON GRANDIFLORUS	2" PLUG
36	MOUNTAIN MINT	PYCANthemum VIRGINIANUM	2" PLUG
36	BLACK EYED SUSAN	RUDBECKIA HIRTA	2" PLUG
36	PRAIRIE SPIDERWORT	TRADESCANTIA BRACTEATA	2" PLUG
36	HOARY VERVAIN	VERBENA STRICTA	2" PLUG
468	TOTAL		

*NOTES: CONTRACTOR TO INSTALL PERENNIAL PLANTS 12"-24" ON CENTER IN RANDOM GROUPS (12-36 PER GROUP); SAME SPECIES PER GROUP

P1 SEEDING SCHEDULE				
COMMON NAME	SCIENTIFIC NAME	% OF MIX	SEEDS/SQ-FT	TOTAL
SIDEOATS GRAMA	BOUTELOUA CURTIPENDULA	36.00%	7.90	0.72 PLS LB
BLUE GRAMA	BOUTELOUA GRACILIS	15.00%	22.00	0.30 PLS LB
PRAIRIE BROME	BROMUS KALMII	5.00%	1.40	0.10 PLS LB
JUNE GRASS	KOELERIA CRISTATA	3.00%	22.00	0.06 PLS LB
LITTLE BLUESTEM	SCHIZACHYRIUM SCOPARIUM	36.00%	19.80	0.72 PLS LB
PRAIRIE DROPSEED	SPOROBOLUS HETEROLEPIS	5.00%	2.90	0.10 PLS LB

P2 PLANTING SCHEDULE			
QTY	COMMON NAME	SCIENTIFIC NAME	SIZE
65	SIDEOATS GRAMA	BOUTELOUA CURTIPENDULA	4" POT
65	PRAIRIE DROPSEED	SPOROBOLUS HETEROLEPIS	4" POT
130	TOTAL		

*NOTES: CONTRACTOR TO INSTALL PERENNIAL PLANTS 24" ON CENTER IN RANDOM GROUPS (18-36 PER GROUP); SAME SPECIES PER GROUP



Stewardship Grant Program Budget Status Update

October 2, 2019

Homeowner	Coverage	Number of Projects	Funds Allocated
Habitat Restoration and rain garden w/o hard surface drainage	50% Cost Share \$15,000 Max	6	\$9,564.65
Rain garden w/hard surface drainage, pervious pavement, green roof	75% Cost Share \$15,000 Max	6	\$54,926.25
Master Water Steward Project	100% Cost Share \$15,000 Max	1	\$7,500
Shoreland Restoration	100% Cost Share \$15,000 Max	1	\$12,000

Commercial, School, Government, Church, Associations, etc.	Coverage	Number of Projects	Funds Allocated
Habitat Restoration	50% Cost Share \$15,000 Max	4	\$20,400
Shoreland Restoration (below 100-year flood elevation w/actively eroding banks)	100% Cost Share \$100,000 Max	1	\$200,000
Priority Area Projects	100% Cost Share \$100,000 Max	3	\$341,000
Non-Priority Area Projects	75% Cost Share \$50,000 Max	0	\$0
Public Art	50% Cost Share	1	\$6,000
Aquatic Veg Harvest/LVMP Development	50% Cost Share \$15,000 Max	2	\$15,000
Maintenance	50% Cost Share \$5,000 Max for 5 Years	23	\$19,200
Consultant Fees			\$237,400
Total Allocated			\$922,990.90

2019 Stewardship Grant Program Budget	
Budget	\$1,250,000
Total Funds Allocated	\$922,990.90
Total Available Funds	\$327,009.10

* * * * *

Action Items

* * * * *

Request for Board Action

Board Meeting Date: October 2, 2019

Agenda Item No.: 9A

Preparer: Tina Carstens, Administrator

Item Description: Watershed Excellence Awards Approval

Background:

Annually, the District seeks out nominations for the Watershed Excellence Awards. This year's awards will be held on Thursday, November 14, at Keller Golf Course Clubhouse.

Nominations were received by staff and then were reviewed by the awards subcommittee of the citizen advisory committee (CAC). The subcommittee asked the CAC to accept the awardees at their September 24th meeting and to make a recommendation to the RWMWD Board of Managers to approve the nominees as this year's award winners.

The suggested award winners will be given at the October Board meeting for discussion and approval.

Applicable District Goal and Action Item:

Goal: Inform and empower communities – The District will inform and empower communities to become partners in improving and protecting the watershed through their own efforts.

Action Items: Hold events to celebrate community connections and participation, showcase partner accomplishments, and educate youth, families, and residents about clean water.

Staff Recommendation:

Staff recommends approval of the proposed Watershed Excellence Award winners.

Financial Implications:

The Watershed Excellence Awards event is included in this year's budget under education events. There are funds available for this event.

Board Action Requested:

Recommend and approve the proposed Watershed Excellence Award winners.

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Administrator's Report

* * * * *

MEMO

TO: Board of Managers and Staff
FROM: Tina Carstens, Administrator
SUBJECT: October Administrator's Report
DATE: September 27, 2019

A. Meetings Attended

Tuesday, September 10	10:00 AM	Conference call with Mae Davenport
Wednesday, September 11	2:00 PM	Meet re: 2020 audit
Thursday, September 12	ALL DAY	MAWD Governance 101
	6:30 PM	Board Meeting
Friday, September 13	ALL DAY	MAWD Governance 101
Monday, September 16	9:30 AM	MCES Battle Creek call
	1:00 PM	Snail Lake Beach Discussion
	6:00 PM	Board Brainstorming Special Meeting
Tuesday, September 17	9:00 AM	MPCA Stormwater Manual Meeting
Monday, September 23	8:00 AM	MWMO Interview Panel
Tuesday, September 24	1:30 PM	Gold Line BRT call
Wednesday, September 25	8:00 AM	MWMO Interview Panel
	2:30 PM	Meet with Managers Swope and Ward
Thursday, September 26	8:00 AM	MWMO Interview Panel
Friday, September 27	8:00 AM	MWMO Interview Panel
	11:30 AM	Metro Inet Meeting

B. Upcoming Meetings and Dates

November Board Meeting	Wednesday, November 6, 2019
Watershed Excellence Awards	Thursday, November 14, 2019
MAWD Annual Meeting	December 5 – 7, 2019
December Board Meeting	Wednesday, December 11, 20019

C. MAWD Annual Meeting and Resolution Process

Information on the MAWD annual meeting including the registration information is now posted on the MAWD website here: <https://www.mnwatershed.org/annual-conference-trade-show>. Please let me know by the end of October if you are interested in attending this year's meeting.

At the meeting next week, I will bring a draft resolution for discussion as directed by the Board at the last meeting. The resolution will focus on requesting that MAWD prioritize legislatively, state assistance for urban flood control projects. I am talking with the MAWD executive director as well as other metro watersheds for input on this proposed MAWD resolution.

B. Special Work Session Meeting Regarding Beltline Resiliency Study

At the last meeting, the Board requested that we schedule a special meeting to allow more time for questions and discussion on this study. I will send the Board a doodle poll to help schedule this meeting, probably in the last half of November or early December.

C. CAC Meeting Summary – Carrie Magnuson

The Citizen Advisory Commission met on September 24, 2019. The group included staff liaison Carrie Magnuson, and Board liaison, Cliff Aichinger. The following initiatives were discussed and further developed:

1. Watershed Excellence Awards – Selection of awardees and program planning: The CAC reviewed eight nominations and selected six awardees for the Board to review. Following Board approval of candidates, a formal letter will go out to each individual.

The group also discussed the logistics of the Recognition Dinner including award presenters, commissioning the physical award, and managing time effectively during the event.

2. Ames Lake Sculpture Project & Partnership - Fostering public art and student artists of color: CAC member, Randee Edmundson updated the group on the work she is doing with two youth (a senior and a freshman) who are part of The Boys and Girls Club Youth Leadership Keystone Program. The two sculpture forms have been built. The foundry is planning for fall/winter to pour. Installation in the Ames Lake area is slated for spring 2020. This project is partially funded by RWMWDs Stewardship Grant Program.
3. Planting event with CAC and the LEAP teams: The CAC and LEAP teams came together on September 5th to plant approximately 800 plants at the Snail Lake Wetland on terrain that was decidedly too difficult for student groups to manage.

The CAC also reviewed major projects being done by RWMWD staff and partners.

Future meetings: October 22nd, December 10th.

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Project and Program Status Reports

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Project Work Plan

Original Date: September 11, 2019

Updated: September 11, 2019

Project: Hillcrest Golf Course Evaluation of Existing Conditions

Project team

District staff: Project manager: Paige Ahlborg

Barr staff: Principal in charge: Erin Anderson Wenz

Project manager: Erin Anderson Wenz

Project team: Karen Wold, Josh Vosjepka, Michael McKinney, Tyler Olsen, Erin Feehily, Evan Christianson, Brandon Barnes, Fred Rozumalski

Project #: 23621200.19 003

Scope of work

The former Hillcrest Golf Course site (now owned by the St. Paul Port Authority) is slated for redevelopment. Beginning late 2019 and extending through 2021, the City of St. Paul's (City's) Department of Planning and Economic Development is leading a public planning process to guide the site's development.

According to the City's webpage for the Hillcrest Golf Course Master Plan...

The Hillcrest Master Plan will determine future land uses and a new street network for the 112-acre former golf course on Saint Paul's East Side. In July, the Saint Paul City Council approved bonds for the Saint Paul Port Authority to purchase the site.

The Department of Planning and Economic Development (PED) will lead the master plan process, in collaboration with community members, consultants, and the Port Authority. Community engagement throughout the process will outline how to build opportunity and community wealth on the redeveloped Hillcrest site – bringing more housing, jobs and public amenities.

Presently, industrial and single-family housing are the most likely ultimate land uses for the site. Other likely features include community gathering spaces, screening for nearby homeowners, trails and open space. Graphics and deliverables will be a big part of the planning process deliverable, as the City has found them to be highly useful in similar past projects.

RWMWD will play an important role in supporting the City's planning process. Specifically, in 2019, RWMWD and Barr will provide a memo and figures identifying and describing the existing land, water and stormwater conditions throughout the study area.

RWMWD's contribution will include the following tasks:

Task 1: Site visit by project team (all)

The Barr team will perform a site walk through with District staff.

Task 2: Characterization of existing stormwater flows (Michael McKinney/Tyler Olsen/Josh Vosjepka)

Through previous modeling efforts performed for RWMWD, we know that the site drains in two directions: towards Beaver Lake and towards the Beltline Storm Sewer Interceptor. Essentially, this task will provide information and greater detail on where stormwater travels through and away from the site. Barr staff will characterize existing stormwater flows, including drainage divides (higher resolution than currently delineated), inter-community flows and key pathways, capacity constraints and locations with excess capacity. In some cases, this task may involve subdividing parts of the drainage areas to better reflect existing conditions for the site. Models, reports and as-built drawings will be leveraged as needed to describe the capacity of RWMWD storm sewer infrastructure downstream of the site as well as surrounding municipal/county storm sewer systems. The RWMWD's existing stormwater and water quality models for the area will be leveraged for this task. This does not include detailed modeling of the City's or Ramsey County's infrastructure as this modeling will be performed by the City's selected consultant during the master planning process.

Task 3: Wetland and natural resources inventory (Karen Wold)

This task involves characterizing wetland locations and classifications throughout the site (not delineations) including restoration (both wetland and upland) opportunities across the site. In addition, this task includes evaluation of the current quality of landscape habitat and potential endangered species on the site and adjacent areas, including a description of pre-golf course conditions, leveraging historical photos.

Task 4: Ecological Context Assessment and Tree inventory (Fred Rozumalski)

This task involves examining the larger ecological context of the site in relation to the Mississippi River corridor and other local natural areas. An assessment of ecological significance of the site will involve the examination of on-site features via GIS such as soils, topography, hydrology and native plant communities, along with an examination of how this site could possibly contribute to improve greater ecological systems. This task also involves creating an inventory of significant tree stands throughout the site, as well as other native plant communities. The site is not currently within a tree preservation overlay. This task does not include a full tree survey.

Task 5: Groundwater inventory (Evan Christianson)

This task involves generally characterizing the site's groundwater features including well locations, both sealed and unsealed.

Task 6: Suggested sizing and placement of on-site stormwater treatment facilities (Michael McKinney, Tyler Olsen, Erin Feehily)

This task involves some preliminary sizing and placement of on-site stormwater treatment facilities, and provision of precedent examples and graphics. The City has cited the Green Line (light rail) strategic stormwater deliverables and the early Allianz Soccer Field site concept plans as examples. Future land use concepts are not expected until May, 2020, so these preliminary examples will use the St. Paul Port Authority’s draft plan as a starting point. This task does not include any conceptual design. The deliverable will be a GIS map that shows approximate sizing and location of potential stormwater facilities.

Task 7: Discussion of relevant regulatory processes during redevelopment (Brandon Barnes)

For this task, Barr staff will write a summary of relevant regulatory/permitting considerations that the City/Port Authority should expect in redeveloping this site.

Task 8. Compile summary memo

This task involves compiling all of the information gathered and created in Tasks 1 through 7 into a summary memo that the City and RWMWD can use during the planning process.

Task 9. Scope next phase of RWMWD support for the project. (Erin Anderson Wenz and District staff)

We expect that the RWMWD’s involvement will extend into 2020, once the planning process has officially begun. Barr and District staff will evaluate additional scope in early 2020 at the conclusion of this scope.

Budget, Schedule, and Milestone Tracking

The budget approved in 2019 for this work is \$25,000, though this budget was approved before the scope was known. Staff will be in close communication with District staff as it appears that more budget will likely be needed for the work.

Work Task	Description	Estimated Amount	Anticipated Completion	Actual Completion
Task 1	Site visit by project team	\$3,000	September, 2019	
Task 2	Characterization of existing stormwater flows	\$10,000	October, 2019	
Task 3	Wetland and natural resources inventory	\$8,000	October, 2019	
Task 4	Tree inventory	\$5,000	October, 2019	
Task 5	Groundwater Inventory	\$3,000	November 2019	
Task 6	Suggested sizing and placement of on-site stormwater treatment facilities	\$10,000	December, 2019	
Task 7	Discussion of relevant regulatory processes	\$2,000	December, 2019	
Task 8	Compile summary memo	\$5,000	December 20, 2019	
Task 9	Scope next phase of RWMWD support for the project.	\$1,000	January, 2020	
TOTAL		\$47,000	January, 2020	

Memorandum

To: Board of Managers and Staff
From: Tina Carstens and Brad Lindaman
Subject: Project and Program Status Report – October 2019
Date: October 2, 2019

Twin Lake emergency response management 2019: (Barr project managers: Brad Lindaman and Erin Anderson Wenz; RWMWD project manager: Tina Carstens)

The purpose of this project is to provide engineering assistance and technical guidance to help cities in and around Twin Lake and West Vadnais Lake determine emergency flood response options for implementation.

Early in September, the water level in Twin Lake was lowered below the rim of sanitary manholes near the lake through the City of Little Canada's pumping efforts. The city then raised the rim elevations of sanitary manholes and stopped pumping in early September. On September 11, the city council decided to leave the pump in place until RWMWD installed the temporary bypass for overflow from West Vadnais Lake or water levels in West Vadnais Lake begin to steadily recede.

In September, Barr also helped the RWMWD obtain a Minnesota Department of Transportation (MnDOT) drainage permit that allows a temporary bypass pumping of overflows from West Vadnais Lake, around Twin Lake, during flooding events. These overflows will be collected near the inlet to a 24-inch pipe, west of Five Star Estates, and pumped to the Stymie Pond outlet structure under the conditions of the permit. In addition, Barr and RWMWD staff have been working with pumping subcontractors, and coordinating with Five Star Estates, Saint Paul Regional Water Services, and Cities of Little Canada and Vadnais Heights in preparation for the temporary bypass pumping, if the water level in West Vadnais Lake rises above the overflow elevation and we believe it will stay above that elevation for an extended period of time.

Finally, Barr staff began the study to evaluate if there are feasible permanent outlet options for Twin Lake. As a part of this month's work, staff reviewed design criteria and began discussions with MnDOT.

Project feasibility studies

System-wide evaluation of flood control options/Beltline resiliency study (Barr project manager: Brandon Barnes; RWMWD project manager: Tina Carstens)

The purpose of this study is to evaluate system-level flood damage reduction options, including real-time mechanical alteration of Lake Phalen and Keller Lake channel outlet structures, as well as other critical system infrastructure, to actively manage stormwater runoff from flood-prone areas tributary to the Beltline storm sewer in an effort to reduce flood levels that would otherwise impact homes. The evaluation will use the RWMWD stormwater model to simulate system-level modifications to evaluate

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how adjustments to outlet structures during a flood event may be able to optimize the existing system performance to reduce flooding impacts to homes adjacent to RWMWD-managed water bodies.

During the August Board Meeting, Barr Engineering provided an overview of preliminary findings for the Beltline Resiliency Study. The purpose of the Beltline Resiliency Study is to evaluate system-level modifications to reduce flood-risk to habitable structures in flood-prone areas tributary to the Beltline storm sewer. System modifications are intended to demonstrate one option for mitigating flood-risk that does not include purchasing flood-prone property. There may be other options that will be considered, and prior to implementation additional feasibility studies will, therefore, likely be necessary, to further evaluate system modifications included in the study to verify that the cost effective and optimal modification has been identified.

During the August meeting, there was discussion about sequencing of system modifications included in the Beltline Resiliency Study. As a point of clarification to that discussion, in general, system modifications in the downstream portion of the watershed were assumed to be implemented prior to upstream modifications. For example, with respect to consideration in the study that evaluated changing the conveyance capacity of the Lake Owasso outlet, all the downstream modifications that were presented at the August board meeting were assumed to be in place. Those downstream modifications included updates to all downstream outlets including Lake Wabasso, Grass Lake, West Vadnais, Gervais Creek Crossing, and control structures on the Phalen Chain were assumed as part of the study that looked at the Lake Owasso outlet modification. This approach of implementing downstream modifications, first and foremost, is necessary to prevent adverse downstream impacts. At no time was there a suggestion that increasing the outlet capacity from Lake Owasso should take place without downstream modifications to the drainage system to accept this increased flow and convey it downstream. As the Board continues to consider the information offered in the study, please assume that all downstream modifications are in place and the details of those modifications will still likely require specific feasibility studies to guide design elements and understand permitting requirements.

This past month Barr continued to develop documentation for the system modifications included in the resiliency study. Documentation included developing report figures for existing conditions, summarizing model results, documenting sequencing of system modifications, and continued to develop planning-level cost estimates for the system modifications mentioned in the study. A draft of the documentation will be provided for RWMWD staff to review later this year.

Feasibility studies for the Owasso Basin bypass concept, the Willow Creek flood reduction concept, and the Ames Lake area concept are included in the draft 2020 engineering budget.

Federal Emergency Management Agency (FEMA) flood mapping updates (Barr project manager: Brandon Barnes; RWMWD project manager: Tina Carstens)

The purpose of this project is to apply Minnesota Department of Natural Resources (DNR) grant funding to use the RWMWD's updated stormwater model to develop information required to update the FEMA floodplain maps.

Barr provided responses to DNR comments and updated models to the DNR on August 29. The resubmittal included updates to supporting documentation to address DNR comments, minor updates to the models, and plans or survey information for inundation areas shown on the FEMA floodplain

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maps. In addition, we submitted preliminary floodway models for Kohlman Creek and the Lake Wabasso outlet. We anticipate receiving comments from the DNR on this submittal in September or early October and will respond to comments and submit preliminary floodplain maps for DNR review. As a result of the extended time for the DNR to provide comments, the process for providing the DNR information to update the floodplain maps was extended by the DNR and will now continue through the winter of 2020

Snail, Grass, and West Vadnais lakes outlet permitting with the DNR (Barr project manager: Erin Anderson Wenz; RWMWD project manager: Tina Carstens)

The purpose of this project is to prepare and facilitate DNR permitting for the proposed lowering of the West Vadnais Lake outlet.

The environmental assessment worksheet (EAW) that evaluates the impact of lowering the 15-inch outlet from West Vadnais Lake by 0.8 feet to provide additional live storage was submitted to the Environmental Quality Board (EQB) in early September. A notice of document availability was published in the *EQB Monitor* on September 9, 2019. The notice stated that comments on the EAW can be submitted to VLAWMO, the responsible government unit (RGU), by October 9, 2019.

As the RGU for the EAW, VLAWMO must make a decision on whether impacts were adequately addressed in the EAW or if preparation of an environmental impact statement is required. According to procedures established by the EQB, VLAWMO must make this decision by November 9, 2019. The record of decision will include a summary of VLAWMO's responses to all comments received on the draft EAW and will be submitted for publication in the *EQB Monitor*.

Modeling of 500-year Atlas 14 district-wide (climate change scenario): flood map generation for future outreach efforts (Barr project manager: Brandon Barnes; RWMWD project manager: Tina Carstens)

The purpose of this project is to use measured water-surface elevations to verify and fine-tune water surface elevations calculated by the RWMWD stormwater model. Following validation, the model will be used to simulate larger rainfall events, including the 500-year rainfall depth. The confidence limit (or uncertainty) associated with the 500-year flood elevation will be used to develop inundation maps that will allow for evaluation of how future climate change may affect flood inundation areas within the RWMWD and will be used for discussion with stakeholders when evaluating future flood-risk reduction projects.

Draft figures are still under review by district staff. Once their review is complete, Barr will finalize soon thereafter. These maps can will be used in community outreach activities with the cities and other entities within the RWMWD.

Wetland restoration site search (Barr project manager: Karen Wold; RWMWD project manager: Paige Ahlborg)

The purpose of this project is to conduct a desktop review to identify potential wetland restoration sites throughout the RWMWD. This project was initiated because the Minnesota Wetland Conservation Act rules and statute are changing their focus to allow wetland replacement in areas outside of the RWMWD, there are no wetland banks within the RWMWD, and the RWMWD has a "no net loss" policy for wetlands within its boundaries.

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Last month, the RWMWD managers asked to see where the potential wetland restoration sites are located. A *.kmz file and *.pdf that show the 143 potential restoration sites that we have been evaluating as a part of the Wetland Restoration Site Search Study are being emailed to the managers for review in preparation for a board meeting discussion. Google Earth is necessary to open and view the *.kmz file. In both the *.kmz and *.pdf files, the potential restoration sites evaluated in the study so far are shown outlined in yellow. Existing RWMWD wetlands are shown in blue on the *.kmz and in purple on the *.pdf.

As described in last month's Board packet, our desktop analysis looked for sites that:

- are undeveloped (open space or farmed)
- have hydric soil
- the National Wetland Inventory (NWI) describes as having been ditched, drained, or partially drained
- are hydric soil areas that are not identified as wetland in the Minnesota Routine Assessment Method for Evaluating Wetland Function or the NWI
- are hydric soil areas adjacent to existing wetlands
- are Restorable Wetland Inventory areas identified by the Natural Resources Research Institute

Note that Pigs Eye, Grass Lake and Wetland A do not fit within these criteria as they have not been "ditched, drained, or partially drained" to the extent there is restoration potential. There are some sites adjacent to, or near these areas that have restoration potential, however. Per the scope of this effort, this phase of the study is focused on identifying areas where more water could be brought to a previously drained area to restore a historic wetland. This is a more traditional approach to wetland restoration planning. As discussed at the September 16 board workshop, wetlands that are experiencing extended flooding may or may not be impacted in a negative way, according to standard wetland assessment methods, and an evaluation method for looking at their restoration potential would need to be developed, should the board choose to expand the scope of this effort and head in that direction. The flooding of the wetland may merely be changing the type of the wetland, and possibly be determined through standard assessment methods to be, in some cases, an improvement. Therefore, not resulting in any restoration potential. This may be a discussion point for the board as they consider this study.

Using the guidelines above, Barr found 143 potential wetland restoration sites across the district. Most sites are quite small, with 43 being less than one acre in size, and only six sites larger than 20 acres. The next step (to be presented at the October Board meeting) is to develop a prioritization methodology to help RWMWD staff and the board decide which areas to pursue (and why). Some examples of typical prioritization considerations in wetland restoration projects are:

- potential credits for wetland bank sites
- potential for upland buffer areas
- ease of restoration
- land ownership
- restoration (increasing hydrology) that does not pose additional flood risk to neighbors or existing infrastructure
- educational opportunity

The following additional prioritization considerations are recommended for this project:

- willing partnerships
- habitat restoration and opportunities for increased habitat connectivity corridors
- flood storage potential
- water quality benefits
- projected land use (where future changes to land use might make a restoration project more viable)
- connectivity with or between important natural resources
- proximity to other protected lands, parks, trails, natural resources and other special features (such as high biodiversity significance areas, resource-sensitive areas, and the Mississippi River)
- proximity to schools and churches or other institutions where an educational component may be valuable
- equity areas

Currently, changes from the 2003-2005 wetland assessment are not a part of the prioritization - this phase of the project was planned to be only a desktop assessment looking at historic wetlands that have been drained. However, future phases of the project could include evaluation of wetland changes that have occurred.

Monitoring water quality/project monitoring

Automated lake-monitoring systems (Barr project manager: Chris Bonick; RWMWD project manager: Eric Korte)

The purpose of this project is to install an automated system to monitor lake levels throughout the RWMWD and allow real-time transfer of data to the RWMWD's website for public consumption.

Formal approval has been obtained from the Board of Water Commissioners of the City of St. Paul to build a lake level monitoring station at the southeast end of West Vadnais Lake. This location was chosen instead of Grass Lake, because it offers more stable conditions, better access, and will allow for an easier and more cost effective installation. RWMWD staff has begun working with Peterson Co. to schedule installation of a shelter, conduit, and electrical power.

At the Lake Owasso site, Peterson Co. continues to work on installation of the concrete pad and shelter, but has been delayed by recent wet weather. At the Lake Phalen site, Kilmer Electric/Peterson Co., continue to work with Xcel Energy to determine the best point from which to bring in power to the station. All agreements have now been signed for the Lake Wabasso site and equipment installation can proceed.

We are still waiting for approval for the Snail Lake station by Ramsey County Parks and Rec. We anticipate that this station will be approved for installation. These monitoring stations will be used in conjunction with the emergency response plans to help guide cities in plan implementation to protect homes during floods.

Maplewood Mall monitoring (Barr project manager: Matt Kumka; RWMWD project manager: Paige Ahlborg)

The purpose of this project is to assess functionality of the Maplewood Mall stormwater retrofit project as it enters its fifth year of total completion. Features that will be inspected include all stormwater infrastructure, plantings, and tree growth. The findings, including site improvement and maintenance recommendations, will be summarized and presented to the board.

Planting of the replacement trees at Maplewood Mall is now complete. Planting occurred the first week of September and was completed within four days. Nature has provided adequate water to the trees since planting. They are expected to establish well. A payment request will likely be submitted in October.

Spent-lime pond application research project (Barr project manager: Greg Wilson; RWMWD project manager: Eric Korte)

This project is a partnership between Barr (funded through the Minnesota Stormwater Research Council [MSRC]), RWMWD, cities of Maplewood and White Bear Lake, St. Paul Regional Water Services, and VLAWMO. The project will consist of a pond application of spent lime to control internal phosphorus loading in Wakefield Pond, the small stormwater pond immediately south of Wakefield Lake and north of Larpenteur Avenue.

As mentioned last month, to accommodate a schedule that includes a summer effectiveness-monitoring period, Barr was granted an extension to the overall project schedule. As a result, we are currently preparing an updated work plan that will extend the schedule through October 2020, and will be submitted for approval by Minnesota Stormwater Research Council in the coming weeks.

Capital improvements

Wakefield Park/Frost Avenue stormwater project (Barr project managers: Michelle Kimble; RWMWD project manager: Paige Ahlborg)

The purpose of this project is to work with the City of Maplewood and its consultants to develop a site plan that involves stormwater management features with associated educational elements for the northern portion of Wakefield Park.

Construction is underway, and weekly construction meetings are taking place. Barr and the RWMWD have attended several of the meetings. The first phase of the road reconstruction project is complete. Veit is beginning the second half of the project and has started excavating the east basin. There appears to be good sand at basin subgrade elevation on the south end of the basin.

School, commercial, and faith-based sites BMP retrofit projects (Barr project manager: Matt Kumka; RWMWD project manager: Paige Ahlborg)

The purpose of this project is to design, provide bid assistance for, and oversee construction of BMP retrofits on previously identified commercial, school, and faith-based properties throughout the RWMWD.

Construction continues at Redeemer Lutheran Church in White Bear Lake. This project includes two rain gardens, a shoreline buffer installation, and an erosion control repair at the church school's play yard. In addition, construction activities have begun at Cornerstone Montessori School in St. Paul. This project

includes a rain garden and shoreline buffer installation. Work on both projects is expected to be complete before winter.

Targets and Motel 6 stormwater retrofit projects (Barr project manager: Leslie DellAngelo; RWMWD project manager: Paige Ahlborg)

The purpose of this project is to design, provide bid assistance for, and oversee construction of BMP retrofits at two Target retail stores and a Motel 6.

A survey firm was selected for the design survey at the three sites. The survey is expected to be complete by mid-October and will collect the required information for final design at the three sites. Conceptual design work at the two Target retail store sites will take place concurrently with the survey work, since the base information from the original site plans is available.

Willow Pond Continuous monitoring and adaptive control (CMAC) spent lime filter (Barr project manager: Erin Anderson Wenz; RWMWD project manager: Paige Ahlborg)

The purpose of this project is to design, provide bid assistance for, and oversee construction of a spent lime filter that takes intermittent flow from Willow Pond in Roseville through the use of CMAC technology. The completed project will remove dissolved and particulate phosphorus to benefit Bennett Lake.

Barr met onsite in early September to run a sampling event over a three-hour duration. Water quality samples, depth measurements, and pH were taken at the inlet and outlet locations of the spent lime basin at predetermined intervals. Increases in pH were noted between the inlet and outlet. Staff are still awaiting water quality sample results as of September 25, 2019. In addition, Barr met in September to discuss options to address water accumulation in the area of the valve manhole. Some drainage work will likely be necessary to mitigate this minor issue. The project will be complete and ready for project closeout after a plant establishment inspection in October.

As a final matter, staff are proceeding with the installation of a cedar split-rail fence to reduce foot and bike traffic in the filtration area. The City of Roseville approved the proposed fence design. Fence installation will likely be completed outside of this project's scope by Minnesota Native Landscapes, as part of the maintenance contract.

Cottage Place wetland restoration (Barr project manager: Fred Rozumalski; RWMWD project manager: Paige Ahlborg)

The purpose of this project is to evaluate options for restoring the wetland south of the St. Odelia Church property and west of the Cottage Place cul-de-sac in Shoreview. A restored wetland could be used to offset wetland loss in other parts of the RWMWD.

Barr has developed a conceptual wetland restoration plan for the project area. The plan includes grading to expand the existing wetland, relocation of the concrete and bituminous debris on the site, design of trails and boardwalks, and native plant community restoration. The concept will be presented to the RWMWD staff soon for feedback and direction.

Aldrich Arena stormwater retrofit (Barr project manager: Matt Metzger; RWMWD project manager: Paige Ahlborg)

The purpose of this project is to incorporate green-infrastructure stormwater management into the Aldrich Arena campus renovations. The parking lot will be full-depth reclaimed by Ramsey County, which itself would not trigger the need for a RWMWD permit. The partnership between the RWMWD and Ramsey County will achieve treatment of runoff from the parking lots where none currently exists. A formalized joint powers agreement outlining the partnership cost-sharing, roles, and responsibilities was crafted between the RWMWD and Ramsey County.

Rainwater garden grading, repair and reconstruction work is ongoing. Barr and RWMWD staff are frequently on site to perform construction observation as needed. This project, led by the county's design-build contract (Loeffler) has multiple stakeholders. As such, the project has required careful and continuous correspondence from Barr and RWMWD staff.

CIP project repair and maintenance

Kohlman Lake Macrophyte Management (Barr project manager: Keith Pilgrim; RWMWD project manager: Bill Bartodziej)

The purpose of this project is to develop a calibrated model that can be used to evaluate the effect of aquatic plant growth and aquatic plant harvesting on Kohlman Lake water quality.

The intended outcomes of this project are: (1) develop a working, calibrated model that can be used for Kohlman Lake and other RWMWD lakes to better understand the effect of aquatic plants and aquatic plant harvesting on lake water quality, and (2) publish these results of this study for Kohlman Lake and potentially other RWMWD lakes. This study is ongoing and should be complete by the end of 2019.

CIP maintenance/repairs 2019 project (Barr project manager: Greg Nelson; RWMWD project manager: Dave Vlasin)

The purpose of this project is to maintain the existing systems and infrastructure owned and operated by the RWMWD and to assist and facilitate stormwater pond cleanouts to allow other public entities to meet their municipal separate storm-sewer system (MS4) requirements.

At the September meeting, a change order was approved for the contractor to perform the site grading and restoration work in the area caused by high water in the Grass Lake area this spring and summer. Final completion and contract closeout is expected by the end of October 2019, after this work is complete.

In October, we will be preparing a preliminary design and draft bidding documents for the 2020 maintenance and repairs project. Staff will present these preliminary plans and associated budget implications at the November board meeting.

Natural Resources Update – Bill Bartodziej and Simba Blood

Wetland-A Ecological Restoration

A few weeks ago, we had the opportunity to conduct a shoreline planting with our Citizen Advisory Committee. We focused our efforts on the northwest side of the wetland. Fortunately, the weather was perfect. In a two hour period, we were able to plant over 500 wetland plants along a 1,000 stretch of shore. The planting was very efficient, and the volunteers started to build a connection with the restoration. The plants originated from the Ramsey County Corrections Greenhouse facility.



Dana Larsen-Ramsay and Cindy Johnson worked together to plant blue flag iris and bottlebrush sedge. (This area was completely devoid of wetland plants prior to the planting.)



One of our budding volunteers took a break to inspect an amphibian.



Green frogs were hopping around during the planting and were fun to observe.



Flocks of monarchs found flowering meadow Meadow blazing star in the upland buffer.

Heading into fall, the restoration is right on track. In the upland buffers, we have very solid plant establishment in areas that were planted by student volunteers. We are also getting good plant establishment in areas that were seeded with the prairie seed drill. In the wetland transitional zone (along the water), we have a good diversity of plant species that are tolerating the current water level fluctuations. Prior to the restoration, we did not have any appreciable wetland plant community along the shore edge of Wetland-A. NR staff are actively hand pulling invasive cattail and other weedy species along the shore edge. Having dedicated NR maintenance staff is really key in keeping on top of this activity. This is one of the reasons why the District can boast of such high quality ecological restorations over the long-term.



Although the water level bumped up after planting, the wetland sedges (red arrows) are now flourishing. The black arrow is pointing to a buckthorn stump. Most of the woody debris in the water is buckthorn.

Public Involvement and Education Program – Sage Passi

Master Water Stewards Cross the Finish Line and Complete Capstone Projects



Left: Logan Stapleton sorts plants for the restoration at Lake Phalen. Right: Bill Cranford, a Master Water Steward (foreground) installs upland and wet meadow plants on the “Point” along with a team of other volunteers.

When Logan Stapleton first joined the Master Water Steward training program, he was asked what he expected to gain from his participation in the program. His response was, “I’d love to learn enough about our urban water systems to be able to teach others about Lake Phalen and its role within our ecosystem.”

Logan grew up on the east side of Lake Phalen and, from the moment he entered the program last fall, he set his capstone project sights on finishing off the restoration efforts that began on Lake Phalen back in 2001. There was a small section of the east shoreline, known as the “Point” in his childhood neighborhood that had not yet been restored. He met with Natural Resources staff Bill and Simba in the spring and began making plans to restore a 125 feet long section of the shoreline that was characterized by a mix of invasive trees, shrubs and reed canary grass. This restoration project required permission from the city. Once that was secured, St. Paul Parks and Recreation assisted by removing the larger trees along the shoreline and watershed staff helped in the preparation of the site.

Logan drew on his own networks and invited his friends on Facebook as well as family members to help out on the day of the planting. Logan is also a Master Gardener so he recruited some help from that connection as well as several other Master Water Stewards. On a beautiful, mild, sunny Saturday in mid-September, he and his team of volunteers gathered on the shoreline and set to work restoring the edge of the lake with a mix of native wetland and upland plants. His brother, a middle school science teacher, also donned waders and went into the lake to retrieve garbage coming from a nearby large outfall site.

The timing for this event was synergistic and could not have turned out better. The project had a built in audience on that was comprised of hundreds of walkers participating in a fund-raising walk sponsored by the ALS Association who passed by the site on their way around Lake Phalen. An enthusiastic atmosphere and fanfare of excitement and cheering was pervasive throughout the morning as the restoration project was being completed. To culminate the project, Logan’s mother who had been helping with the restoration, stepped away from the site and returned with a hearty picnic lunch for the volunteers. A canoe was carried down to the shoreline and the project was book-ended with a refreshing paddle around the lake to celebrate the completion of this project.

Bobbie Scott's Capstone Project Demonstrates Water and Pollinator Friendly Practices



When Bobbie Scott, who lives on the East Side of St. Paul, east of White Bear Avenue stepped into the role of being a Master Water Steward-in training last fall she said, "I want to become an advocate for sustainable landscape practices. I would like to use my property to illustrate good practices and I would like to be a resource for others. I used to live in sandy Sherburne County where people wanted sod lawns and irrigation and it bothered me tremendously."

Throughout the winter and spring, as she went through the course, she also attended several Blue Thumb workshops and consulted with Master Gardener, Linda Neilson, Michael Schumann from Ramsey Conservation District, Metro Blooms staff and District educator, Sage Passi before she came up with a plan. Bobbie explained her demonstration capstone project plan that she developed for her boulevard.

"The grass on my boulevards sits a couple inches above the sidewalk. I have trouble with erosion after rainstorms and water pooling and freezing on the sidewalk in the spring. The project is meant to correct that problem and improve water infiltration as well as provide habitat for pollinators." In September the sod was removed from her boulevards and she brought the surface level down 3-4 inches below the sidewalk. About an inch of compost was tilled into the soil and then she planted a variety of native plants including about 8 species of sun-loving plants and 6 shade loving species because the boulevard sections have different light conditions. The project is located at 2004 Fremont Avenue East in St. Paul.

School Investigations Prompt Curiosity about Native Plants, Bees and How Water Moves

Fall provides a short window of time for the Watershed to lead classes outside with hands-on activities for students like these St. Peter School fourth graders who studied the native plants and pollinator interactions that were abundant in their school garden in late September. They also roamed their campus in a scavenger hunt to “see with new eyes” a storm drain in their parking lot, pervious and impervious pavement, scuppers from the roof, rock inlets and swales in an effort to discover how water is transported around their site.



Similar activities are scheduled for four Farnsworth third grade classes for the last week in September. Several field trips to Beaver Lake, Gervais Millpond and Snail Lake/Grass Lake Regional Park are planned for October for classes from L’Etoile du Nord, St. John of Little Canada and Lionsgate Academy.

Recruitment for Master Gardener Program in 2020

We are excited about the prospect of having three new Master Water Stewards for the next round of the program. We have received applications from and have interviewed three Roseville residents who have expressed strong interest in participating in the program. The graduation and showcase for this year’s six Master Water Stewards and others around the metro area will be held on October 8. Classes for new Stewards begin on October 15.

Upgrades in MS4 Toolkit Are In Process

At the September Watershed Partners meeting, Chakong Thao and Samantha Connolly from the MPCA provided an overview of some of the new and updated elements in the MS4 tool kit that are being developed. One of the goals of this upgrade is to improve education programs by including diverse audiences through the translation of some of the new materials. Washington Conservation District has been working with a graphic designer and two videographers to create new materials for the toolkit, which will be ready by the end of 2019. New materials will be available in English, Spanish, Hmong and Somali and will include videos on lawn care, planting for clean water, illicit discharge, groundwater; print materials on common impairments, a flow chart of water governance, storm sewers and pipes, waste disposal, small scale erosion control and short videos for municipal staff on required topics. The Stormwater Manual will be accessible on Wiki and available to anyone. See this link [MPCA Stormwater Wiki](#)