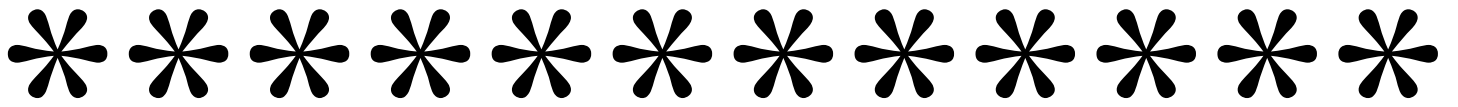


**Ramsey-Washington
Metro Watershed
District**

**April 2018
Board Packet**



Agenda





Regular Board Meeting Agenda

Wednesday, April 4, 2018

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 March 7, 2018
4. **Treasurer’s Report and Bill List**
5. Visitor Presentations
6. Permit Program
 - A. Applications
 - i. **18-06 Phalen Retail Development, St. Paul**
 - ii. **18-07 Wakefield Park Improvements, Maplewood**
 - B. Enforcement Action Report
7. Stewardship Grant Program
 - A. Applications
 - i. **18-04 CS Vesterholt, shoreline restoration**
 - ii. **18-05 CS Lionsgate, rain garden and native habitat restoration**
 - B. Budget Status Update
8. Action Items
 - A. **Change Order No. 6 – Beltline and Battle Creek Tunnel Repair Project**
9. Board Education Presentation: Groundwater 101 – Evan Christensen, Barr Engineering
10. Administrator’s Report
 - A. Meetings Attended
 - B. Upcoming Meetings and Dates
 - C. Watershed Based Clean Water Funding
 - D. Legislative Update

11. Project and Program Status Reports
 - A. Ongoing Project and Program Updates
 - i. Flood Control/Beltline Resiliency Study
 - ii. Snail Lake/ Grass Lake Study
 - iii. Snail, Grass and West Vadnais Lakes Outlet Permitting
 - iv. District Wide Atlas 14 Modeling
 - v. Wakefield Park/Frost Avenue Project
 - vi. BMP Design Assistance
 - vii. Owasso Basin Improvements
 - viii. Beltline/Battle Creek Tunnel
 - ix. CIP Maintenance/Repair 2018
 - x. Frost/Kennard Project
 - xi. Willow Pond CMAC Project
 - xii. Natural Resources Program
 - xiii. 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
March 7, 2018**

The Regular Meeting of March 7, 2018, was held at the District Office Board Room, 2665 Noel Drive, Little Canada, Minnesota, at 6:30 p.m.

PRESENT:

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

ABSENT:

Cliff Aichinger, Vice President

ALSO PRESENT:

Tina Carstens, District Administrator
Amanda Staple, Recording Secretary
Nicole Soderholm, Permit Inspector
Dave Vlasin, Water Quality Technician
Bruce Copley, Crestview Resident

Paige Ahlborg, Project Manager
Brad Lindaman, Barr Engineering
Bill Bartodziej, Natural Resource Specialist
Viet-Hanh Winchell, Attorney for District
Carol Stadler, Snail Lake Resident

1. CALL TO ORDER

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

2. NEW BOARD MEMBER WELCOME AND INTRODUCTIONS

President Ebensteiner introduced the new Board Member, Lawrence Swope. Lawrence noted that he is pleased to be a part of the Board. Viet-Hahn Winchell administered the oath of office to all the Managers.

3. APPROVAL OF AGENDA

Motion: Dr. Pam Skinner moved, Lawrence Swope seconded, to approve the agenda as presented. Motion carried 4-0. (Cliff Aichinger absent)

4. CONSENT AGENDA

A. Approval of Minutes from February 7, 2018

Motion: Dr. Pam Skinner moved, Lawrence Swope seconded, to approve the consent agenda as presented. Motion carried 4-0. (Cliff Aichinger absent)

5. TREASURER'S REPORT AND BILL LIST

Motion: Dr. Pam Skinner moved, Dianne Ward seconded, to approve the March 7, 2018, bill list as submitted. Motion carried 4-0. (Cliff Aichinger absent)

6. VISITOR PRESENTATIONS

Bruce Copley, Crestview resident, stated that he read the minutes from the last meeting regarding the possibility of purchasing a few of the homes in the low-lying area as a possible solution. He stated that there are more homes in the Crestview addition that are impacted and provided a map which identifies the impacted homes, noting that 20 to 30 homes could be impacted. He did not think that purchasing a few homes would be the solution for this problem. He referenced the calculations that are being used by Barr Engineering for the modeling in the possible Grass/Snail lake solutions. He noted that in the 2011-2017 time period we have had four events that experienced over nine inches of rain. He stated that the comparisons being reviewed are long draw down options and if the pattern from 2017 continues, those options would not be feasible solutions. He noted that there are steadily increasing West Vadnais levels, which has the potential to shut down Rice Street, and therefore could bring forward a cost-share option with the Department of Transportation. He stated that the new culvert under the path is lower than the previous culvert, which makes it the lowest outlet from West Vadnais the culvert into Grass Lake, which could have an impact on the groundwater.

Carol Sadler introduced herself noting that she is present in representation of the Snail Lake Improvement District Board.

7. PERMIT PROGRAM

A. Applications

Permit #18-05: 3M North Parking Lot/11th Street – Maplewood

Motion: Dianne Ward moved, Lawrence Swope seconded, to approve Permit #18-05. Motion carried 4-0. (Cliff Aichinger absent)

B. Monthly Enforcement Report

During February zero notices were sent.

8. STEWARDSHIP GRANT PROGRAM

A. Applications

Permit #18-02 BMP: Caulfield – Rain Garden

Paige Alborg noted that this project is on the same street as the Master Water Steward projects that were previously completed.

Motion: Lawrence Swope moved, Dianne Ward seconded, to approve Permit #18-02 BMP. Motion carried 4-0. (Cliff Aichinger absent)

B. Budget Status Update

Paige Alborg stated that the program is slow moving at this time of year and staff has been focused on outreach and attempting to build additional contacts and interest in the program. She reported that residents are interested in the maintenance and there is more interest being generated from the outreach.

9. ACTION ITEMS

None.

10. PROJECT AND PROGRAM STATUS REPORTS

A. West Vadnais to East Vadnais Drainage Feasibility Study

Brad Lindaman stated that a copy of the memorandum on the most recent study was provided to the Board that addresses the option of moving water between West Vadnais to East Vadnais.

He stated that the goals of this study are to look at options to lower the flood level in Grass Lake and reduce the draw down time in Grass Lake. He reviewed items that must be considered in order to meet those goals, noting that in order to move additional water from West Vadnais more quickly, they could consider discharging to East

Vadnais. He reviewed some of the considerations which include comparing existing conditions, how the discharge will occur, how much water will need to be discharged, what water quality conditions would need to be met before discharge and the permitting concerns. He provided data on the existing lake level conditions and how the levels compare between West Vadnais and East Vadnais. He stated that ideally gravity discharge would be preferred, but noted that because of many factors, the more feasible option for discharging would be pumping. He reviewed the Vadnais Lake pumping evaluation (model estimated Grass Lake draw down) and then compared that to the West Vadnais Lake to East Vadnais Lake pumping evaluation (model estimated West Vadnais Lake drawn down). He stated that if this pumping model were going to be used, he would estimate using a 20 to 40 CFS pump and the pumping times would need to be further fine-tuned.

Brad confirmed that all of the options considered as part of the Snail Lake/Grass Lake Optimization Study will be compared for the Board at the May meeting. This will include the emergency response plan option and the value of the homes impacted for consideration. He stated that the challenge in the next few months will be to continue to bring these options to the Board to digest and review. He noted that a comparison will then be done in May so that the Board can review the full choice of options, aware of the costs that would be associated.

B. Owasso Basin Improvements

Brad stated that after the Atlas 14 information was gained and the modeling was completed, one of the areas that stood out the most was the Owasso Basin area. He provided details on the location of this area and provided background information on Owasso Basin, which was constructed in 1990 to alleviate floods in the Phalen Chain. He explained that Atlas 14 modeling worked to reveal that Owasso Basin and its surrounding areas are the most impacted and provided additional details on flooding concerns. He provided data on Owasso Basin surface water elevations during different level storm events. He stated that part of this study reviewed moving the water out of this system further downstream, but noted that may cause flooding concerns. He noted that Gervais Lake has four homes with emergency management plans for flooding concerns and advised that there are additional flooding concerns downstream. Discussion was held on the potential to divert some flow away from Owasso Basin and the amount of land area needed to expand the basin and provide the flood storage necessary to alleviate the flooding concerns.

C. Ongoing Project and Program Updates

- i. Beltline Resiliency Study
- ii. Snail Lake/Grass Lake Study
- iii. West Vadnais Lake Outlet
- iv. Wakefield Park Project
- v. BMP Design Assistance
- vi. Owasso Basin Improvements
- vii. Beltline/Battle Creek Tunnel
- viii. CIP Maintenance/Repairs 2018

Brad Lindaman referenced the change order which was previously approved to extend the time of the contract. He noted that the contractor is working hard to meet the timelines, but may exceed that deadline. He explained that there is a cost to the District, outside of the contract, as there is additional staff and equipment on site, for a total of \$1,500 to \$2,000 per day. Tina Carstens stated that in the past the additional time was granted because of additional work that was added to the project. She noted that if the timeline was exceeded again, the District would provide another analysis to make another determination if an extension is warranted. Manager Ward stated that the deadline would come up on March 15th while the Board does not meet again until April. Brad noted that the contractor would continue to finish the work. He explained that it is common practice for a change order to be considered after the fact, especially for this type of issue. He explained that if the contractor exceeds the deadline, staff would present the information to the Board in April and the Board would then make the determination whether to extend the contract deadline or whether the contractor exceeded the deadline of their own fault and penalty.

ix. Frost/Kennard Project

x. Willow Pond CMAC

xi. Natural Resources Program

Bill Bartodziej provided additional information on recognition that he has received for his work on shallow lakes.

xii. Education Program

11. ADMINISTRATOR'S REPORT

A. Meetings Attended

No comments.

B. Upcoming Meetings and Dates

No comments.

C. Website Update

Tina Carstens reported that the new website has gone live and encouraged the Managers to take an opportunity to explore the new site. Manager Skinner stated that she is still spending time navigating and trying to find certain elements, but is enjoying the different features. Tina provided information on how to find the interactive maps. She stated that if Managers are having problems finding features, she welcomes calls and can help navigate to the desired features.

D. Watershed-Based Clean Water Funding

Tina Carstens noted that information was provided for the Clean Water Fund money that is going through BWSR in this pilot program that distributes the funds countywide. She stated that she has attended meetings in both Ramsey and Washington counties on this topic, noting that municipalities are also eligible entities. She noted there is still a competitive grant program that the District can continue to apply for. She confirmed that the District has projects identified that staff can submit applications for.

12. INFORMATIONAL ITEMS

No comments.

13. REPORTS OF MANAGERS

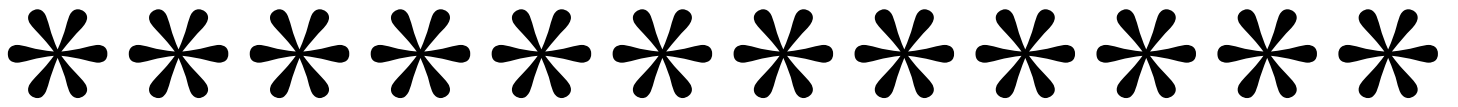
No comments.

14. ADJOURN

Motion: Dr. Pam Skinner moved, Dianne Ward seconded, to adjourn the meeting at 8:47 p.m. Motion carried 4-0. (Cliff Aichinger absent)

Respectfully submitted,

Dr. Pam Skinner, Secretary



Bill List



RWMWD BUDGET STATUS REPORT
Administrative & Program Budget
Fiscal Year 2018
3/31/2018

| 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 | - | 300.00 | 1,630.00 | \$4,870.00 | 25.08% |
| | Manager expenses | 4360 | 3,500.00 | - | - | 552.52 | 2,947.48 | 15.79% |
| Committees | Committee/Bd Mtg. Exp. | 4365 | 3,500.00 | - | 422.00 | 791.32 | 2,708.68 | 22.61% |
| Employees | Staff salary/taxes/benefits | 4010 | 1,300,000.00 | - | 93,063.65 | 274,024.70 | 1,025,975.30 | 21.08% |
| | Employee expenses | 4020 | 10,000.00 | - | 168.07 | 404.22 | 9,595.78 | 4.04% |
| | District training & education | 4350 | 25,000.00 | - | 734.01 | 1,379.66 | 23,620.34 | 5.52% |
| Administration/ Office | GIS system maint. & equip. | 4170 | 15,000.00 | - | - | 987.02 | 14,012.98 | 6.58% |
| | Data Base/GIS Maintenance | 4171 | 15,000.00 | - | - | - | 15,000.00 | 0.00% |
| | Equipment maintenance | 4305 | 3,000.00 | - | - | - | 3,000.00 | 0.00% |
| | Telephone | 4310 | 8,000.00 | - | 358.22 | 469.02 | 7,530.98 | 5.86% |
| | Office supplies | 4320 | 5,000.00 | - | 49.67 | 370.43 | 4,629.57 | 7.41% |
| | IT/Internet/Web Site/Software Lic. | 4325 | 42,000.00 | - | 2,442.19 | 8,835.73 | 33,164.27 | 21.04% |
| | Postage | 4330 | 10,000.00 | - | 142.47 | 142.47 | 9,857.53 | 1.42% |
| | Printing/copying | 4335 | 8,000.00 | - | 285.67 | 1,367.92 | 6,632.08 | 17.10% |
| | Dues & publications | 4338 | 11,000.00 | - | - | 7,620.00 | 3,380.00 | 69.27% |
| | Janitorial/Trash Service | 4341 | 17,000.00 | - | 2,365.28 | 3,324.28 | 13,675.72 | 19.55% |
| | Utilities/Bldg.Contracts | 4342 | 18,000.00 | - | 1,643.09 | 5,890.69 | 12,109.31 | 32.73% |
| | Bldg/Site Maintenance | 4343 | 70,000.00 | - | 2,702.08 | 2,990.08 | 67,009.92 | 4.27% |
| | Miscellaneous | 4390 | 5,000.00 | - | - | 305.19 | 4,694.81 | 6.10% |
| | Insurance | 4480 | 35,000.00 | - | - | - | 35,000.00 | 0.00% |
| | Office equipment | 4703 | 40,000.00 | - | 4,682.30 | 5,410.27 | 34,589.73 | 13.53% |
| | Vehicle lease, maintenance | 4810-40 | 43,000.00 | - | 76.94 | 1,453.67 | 41,546.33 | 3.38% |
| Consultants/ Outside Services | Auditor/Accounting | 4110 | 50,000.00 | - | 3,705.36 | 7,238.48 | 42,761.52 | 14.48% |
| | Engineering-administration | 4121 | 93,000.00 | - | 4,554.50 | 16,185.50 | 76,814.50 | 17.40% |
| | Engineering-permit I&E | 4122 | 15,000.00 | - | 1,175.00 | 1,175.00 | 13,825.00 | 7.83% |
| | Engineering-eng. review | 4123 | 55,000.00 | - | 4,275.50 | 12,497.50 | 42,502.50 | 22.72% |
| | Engineering-permit review | 4124 | 50,000.00 | - | 1,680.00 | 4,228.00 | 45,772.00 | 8.46% |
| | Project Feasibility Studies | 4129 | 735,000.00 | - | 22,009.46 | 48,195.18 | 686,804.82 | 6.56% |
| | Attorney-permits | 4130 | 10,000.00 | - | 173.60 | 603.60 | 9,396.40 | 6.04% |
| | Attorney-general | 4131 | 40,000.00 | - | 1,800.00 | 1,800.00 | 38,200.00 | 4.50% |
| | Outside Consulting Services | 4160 | 40,000.00 | - | 525.00 | 3,107.00 | 36,893.00 | 7.77% |
| Programs | Educational programming | 4370 | 60,000.00 | - | 2,471.70 | 6,452.17 | 53,547.83 | 10.75% |
| | Communications & Marketing | 4371 | 25,000.00 | - | 110.00 | 290.00 | 24,710.00 | 1.16% |
| | Events | 4372 | 50,000.00 | - | 370.80 | 3,055.00 | 46,945.00 | 6.11% |
| | Water QM-Engineering | 4520-30 | 513,000.00 | - | 15,762.83 | 20,116.96 | 492,883.04 | 3.92% |
| | Project operations | 4650 | 140,000.00 | - | 1,089.52 | 2,696.29 | 137,303.71 | 1.93% |
| | SLMP/TMDL Studies | 4661 | 115,000.00 | - | 648.00 | 690.00 | 114,310.00 | 0.60% |
| | Natural Resources/Keller Creek | 4670-72 | 100,000.00 | - | 1,852.30 | 5,944.00 | 94,056.00 | 5.94% |
| | Outside Prog.Support/Weed Mgmt. | 4683-84 | 70,000.00 | - | 707.26 | 13,721.61 | 56,278.39 | 19.60% |
| | Research Projects | 4695 | 100,000.00 | - | 42.00 | 978.00 | 99,022.00 | 0.98% |
| | Health and Safety Program | 4697 | 2,000.00 | - | - | - | 2,000.00 | 0.00% |
| | NPDES Phase II | 4698 | 20,000.00 | - | - | 400.00 | 19,600.00 | 2.00% |
| | Atlas 14 Watershed Modeling | 4732 | 0.00 | - | - | - | 0.00 | 0.00% |
| GENERAL FUND TOTAL | | | \$3,976,500.00 | \$0.00 | \$172,388.47 | \$467,323.48 | \$3,509,176.52 | 11.75% |
| CIP's | CIP Project Repair & Maintenance | 516 | 1,000,000.00 | - | 116,523.50 | 170,171.90 | 829,828.10 | 17.02% |
| | Targeted Retrofit Projects | 518 | 800,000.00 | - | 491.00 | 2,325.00 | 797,675.00 | 0.29% |
| | District Office Building Solar Energy Retrofit | 519 | 150,000.00 | - | 490.00 | 1,720.00 | 148,280.00 | 1.15% |
| | Flood Damage Reduction Fund | 520 | 2,000,000.00 | - | 6,734.87 | 31,496.36 | 1,968,503.64 | 1.57% |
| | Debt Services-96-97 Beltline/MM/Battle Creek | 526 | 448,951.00 | - | - | 277,525.09 | 171,425.91 | 61.82% |
| | Stewardship Grant Program Fund | 528-529 | 800,000.00 | - | 10,723.07 | 16,606.07 | 783,393.93 | 2.08% |
| | Impervious Surface Volume Reduction Opportunity | 531 | 1,500,000.00 | - | - | - | 1,500,000.00 | 0.00% |
| | Beltline & Battle Creek Tunnel Repair | 549 | - | - | 415,152.36 | 1,130,854.13 | (1,130,854.13) | --- |
| | Frost/Kennard Enhanced WQ BMP | 550 | 400,000.00 | - | 5,924.51 | 8,185.69 | 391,814.31 | 2.05% |
| | Markham Pond Dredging & Aeration | 551 | 25,000.00 | - | - | - | 25,000.00 | 0.00% |
| | Wakefield Park Project | 553 | 1,100,000.00 | - | 2,137.00 | 4,119.00 | 1,095,881.00 | 0.37% |
| | Willow Pond CMAC | 554 | 400,000.00 | - | 2,572.50 | 17,416.50 | 382,583.50 | 4.35% |
| | District Office Bond Payment | 585 | 194,885.00 | - | - | 195,173.81 | (288.81) | 100.15% |
| CIP BUDGET TOTAL | | | \$8,818,836.00 | - | \$560,748.81 | \$1,855,593.55 | \$6,963,242.45 | 21.04% |
| TOTAL BUDGET | | | \$12,795,336.00 | \$0.00 | \$733,137.28 | \$2,322,917.03 | \$10,472,418.97 | 18.15% |

Current Fund Balances:

| Fund: | Unaudited Beginning Fund Balance @ 12/31/17 | Fund Transfers | Year to date Revenue | Current Month Expenses | Year to Date Expense | Unaudited Fund Balance @ 03/31/18 |
|--|---|----------------|----------------------|------------------------|-----------------------|-----------------------------------|
| 101 - General Fund | \$4,332,486.99 | - | 88,658.01 | 172,388.47 | 467,323.48 | 3,953,821.52 |
| 516 - CIP Project Repair & Maintenance | 565,132.25 | - | 54,412.00 | 116,523.50 | 170,171.90 | 449,372.35 |
| 518 - Targeted Retrofit Projects | 813,825.81 | - | 15,000.00 | 491.00 | 2,325.00 | 826,500.81 |
| 519 - District Office Building Solar Energy Retrofit | 129,623.50 | - | - | 490.00 | 1,720.00 | 127,903.50 |
| 520 - Flood Damage Reduction Fund | 1,146,068.88 | - | 7,858.98 | 6,734.87 | 31,496.36 | 1,122,431.50 |
| 526 - Debt Services-96-97 Beltline/MM/Battle Creek Tunnel Repair | 359,578.26 | - | - | - | 277,525.09 | 82,053.17 |
| 528/529 - Stewardship Grant Program Fund | 596,359.71 | - | 15,000.00 | 10,723.07 | 16,606.07 | 594,753.64 |
| 531 - Impervious Surface Volume Reduction Opportunity | 1,484,215.00 | - | - | - | - | 1,484,215.00 |
| 549 - Beltline & Battle Creek Tunnel Repair | 2,456,490.80 | - | - | 415,152.36 | 1,130,854.13 | 1,325,636.67 |
| 550 - Frost/Kennard Enhanced WQ BMP | 108,640.25 | - | - | 5,924.51 | 8,185.69 | 100,454.56 |
| 551 - Markham Pond Dredging & Aeration | 106,429.71 | - | - | - | - | 106,429.71 |
| 553 - Wakefield Park Project | 351,873.96 | - | - | 2,137.00 | 4,119.00 | 347,756.96 |
| 554 - Willow Pond CMAC | - | - | - | 2,572.50 | 17,416.50 | (17,416.50) |
| 580 - Contingency Fund | 448,781.00 | - | - | - | - | 448,781.00 |
| 585 - Certificates of Participation | 133,637.38 | - | - | - | 195,173.81 | (61,536.43) |
| Total District Fund Balance | \$13,033,143.50 | - | \$ 180,928.99 | \$ 733,137.28 | \$2,322,917.03 | \$10,891,155.46 |

RWMWD BUDGET STATUS REPORT
Administrative & Program Budget
Fiscal Year 2017
12/31/2017 - UPDATED 3/28/18

| 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 | - | - | 3,852.08 | \$2,647.92 | 59.26% |
| | Manager expenses | 4360 | 3,500.00 | - | - | 1,183.27 | 2,316.73 | 33.81% |
| Committees | Committee/Bd Mtg. Exp. | 4365 | 3,500.00 | - | - | 3,919.28 | (419.28) | 111.98% |
| Employees | Staff salary/taxes/benefits | 4010 | 1,250,000.00 | - | - | 1,125,239.96 | 124,760.04 | 90.02% |
| | Employee expenses | 4020 | 10,000.00 | - | - | 9,401.04 | 598.96 | 94.01% |
| | District training & education | 4350 | 25,000.00 | - | - | 15,187.15 | 9,812.85 | 60.75% |
| Administration/Office | GIS system maint. & equip. | 4170 | 15,000.00 | - | - | 3,588.87 | 11,411.13 | 23.93% |
| | Data Base/GIS Maintenance | 4171 | 20,000.00 | - | - | 4,875.00 | 15,125.00 | 24.38% |
| | Equipment maintenance | 4305 | 3,000.00 | - | - | 600.00 | 2,400.00 | 20.00% |
| | Records Management | 4306 | 5,000.00 | - | - | - | 5,000.00 | 0.00% |
| | Telephone | 4310 | 10,000.00 | - | - | 4,414.90 | 5,585.10 | 44.15% |
| | Office supplies | 4320 | 5,000.00 | - | - | 3,935.26 | 1,064.74 | 78.71% |
| | IT/Internet/Web Site/Software Lic. | 4325 | 55,000.00 | - | - | 31,651.49 | 23,348.51 | 57.55% |
| | Postage | 4330 | 5,000.00 | - | - | 4,241.51 | 758.49 | 84.83% |
| | Printing/copying | 4335 | 10,000.00 | - | - | 6,486.55 | 3,513.45 | 64.87% |
| | Dues & publications | 4338 | 9,000.00 | - | - | 6,735.45 | 2,264.55 | 74.84% |
| | Janitorial/Trash Service | 4341 | 17,000.00 | - | - | 10,631.83 | 6,368.17 | 62.54% |
| | Utilities/Bldg.Contracts | 4342 | 23,000.00 | - | - | 10,838.28 | 12,161.72 | 47.12% |
| | Bldg/Site Maintenance | 4343 | 30,000.00 | - | - | 16,888.12 | 13,111.88 | 56.29% |
| | Miscellaneous | 4390 | 5,000.00 | - | - | 1,666.04 | 3,333.96 | 33.32% |
| | Insurance | 4480 | 35,000.00 | - | - | 30,541.64 | 4,458.36 | 87.26% |
| | Office equipment | 4703 | 10,000.00 | - | - | 11,940.94 | (1,940.94) | 119.41% |
| | Vehicle lease, maintenance | 4810-40 | 65,000.00 | - | - | 32,284.62 | 32,715.38 | 49.67% |
| Consultants/Outside Services | Auditor/Accounting | 4110 | 50,000.00 | - | - | 48,761.34 | 1,238.66 | 97.52% |
| | Engineering-administration | 4121 | 89,000.00 | - | - | 67,177.84 | 21,822.16 | 75.48% |
| | Engineering-permit I&E | 4122 | 15,000.00 | - | - | 1,644.50 | 13,355.50 | 10.96% |
| | Engineering-eng. review | 4123 | 50,000.00 | - | - | 41,721.20 | 8,278.80 | 83.44% |
| | Engineering-permit review | 4124 | 50,000.00 | - | - | 52,641.02 | (2,641.02) | 105.28% |
| | Project Feasibility Studies | 4129 | 300,000.00 | - | - | 89,524.70 | 210,475.30 | 29.84% |
| | Attorney-permits | 4130 | 10,000.00 | - | - | - | 10,000.00 | 0.00% |
| | Attorney-general | 4131 | 40,000.00 | - | - | 33,172.13 | 6,827.87 | 82.93% |
| | Outside Consulting Services | 4160 | 40,000.00 | - | - | 32,559.75 | 7,440.25 | 81.40% |
| Programs | Educational programming | 4370 | 60,000.00 | - | - | 41,246.58 | 18,753.42 | 68.74% |
| | Events | 4372 | 40,000.00 | - | - | 40,080.36 | (80.36) | 100.20% |
| | Water QM-Engineering | 4520-30 | 133,000.00 | 43,000.00 | - | 182,367.34 | (6,367.34) | 103.62% |
| | Project operations | 4650 | 140,000.00 | - | - | 79,144.15 | 60,855.85 | 56.53% |
| | SLMP/TMDL Studies | 4661 | 125,000.00 | - | - | 4,133.50 | 120,866.50 | 3.31% |
| | Water Management Plan/Updates | 4662 | 20,000.00 | - | - | 20,357.22 | (357.22) | 101.79% |
| | Natural Resources/Keller Creek | 4670-72 | 90,000.00 | 15,000.00 | - | 119,977.07 | (19,977.07) | 114.26% |
| | Outside Prog.Support/Weed Mgmt. | 4683-84 | 110,000.00 | - | - | 43,652.74 | 66,347.26 | 39.68% |
| | Research Projects | 4695 | 235,000.00 | - | - | 111,176.94 | 123,823.06 | 47.31% |
| | Health and Safety Program | 4697 | 2,000.00 | - | - | 1,965.40 | 34.60 | 98.27% |
| | NPDES Phase II | 4698 | 20,000.00 | - | - | 4,850.74 | 15,149.26 | 24.25% |
| | Atlas 14 Watershed Modeling | 4732 | 0.00 | - | - | 223.59 | (223.59) | 0.00% |
| GENERAL FUND TOTAL | | | \$3,239,500.00 | \$58,000.00 | \$0.00 | \$2,356,481.39 | \$941,018.61 | 71.46% |
| CIP's | CIP Project Repair & Maintenance | 516 | 700,000.00 | - | - | 665,110.44 | 34,889.56 | 95.02% |
| | Targeted Retrofit Projects | 518 | 850,000.00 | - | - | 304,546.64 | 545,453.36 | 35.83% |
| | District Office Building Solar Energy Retrofit | 519 | 150,000.00 | - | - | 16,995.50 | 133,004.50 | 11.33% |
| | Flood Damage Reduction Fund | 520 | 1,600,000.00 | - | - | 509,878.54 | 1,090,121.46 | 31.87% |
| | Debt Services-96-97 Beltline/MM/Battle Creek | 526 | 238,977.00 | - | - | 181,474.85 | 57,502.15 | 75.94% |
| | BMP Incentive Fund | 528-529 | 950,000.00 | - | - | 574,480.32 | 375,519.68 | 60.47% |
| | Impervious Surface Volume Reduction Opportunity | 531 | 1,500,000.00 | - | - | - | 1,500,000.00 | 0.00% |
| | Beltline & Battle Creek Tunnel Repair | 549 | - | - | - | 2,065,506.20 | (2,065,506.20) | --- |
| | Frost/Kennard Enhanced WQ BMP | 550 | 375,000.00 | - | - | 13,591.50 | 361,408.50 | 3.62% |
| | Markham Pond Dredging & Aeration | 551 | 618,750.00 | - | - | 386,813.08 | 231,936.92 | 62.52% |
| | Wakefield Park Project | 553 | 353,000.00 | - | - | - | 353,000.00 | 0.00% |
| | District Office Bond Payment | 585 | 194,885.00 | - | - | 194,863.95 | 21.05 | 99.99% |
| CIP BUDGET TOTAL | | | \$7,530,612.00 | - | \$0.00 | \$4,913,261.02 | \$2,617,350.98 | 65.24% |
| TOTAL BUDGET | | | \$10,770,112.00 | \$58,000.00 | \$0.00 | \$7,269,742.41 | \$3,558,369.59 | 67.50% |

Current Fund Balances:

| Fund: | Beginning Fund Balance @ 12/31/16 | Fund Transfers | Year to date Revenue | Current Month Expenses | Year to Date Expense | Unaudited Fund Balance @ 12/31/17 |
|---|-----------------------------------|----------------|------------------------|------------------------|-----------------------|-----------------------------------|
| 101 - General Fund | \$3,420,560.56 | - | 3,268,407.82 | - | 2,356,481.39 | 4,332,486.99 |
| 516 - CIP Project Repair & Maintenance | 464,998.00 | - | 765,244.69 | - | 665,110.44 | 565,132.25 |
| 518 - Targeted Retrofit Projects | 362,074.00 | - | 756,298.45 | - | 304,546.64 | 813,825.81 |
| 519 - District Office Building Solar Energy Retrofit | 146,619.00 | - | - | - | 16,995.50 | 129,623.50 |
| 520 - Flood Damage Reduction Fund | 841,148.00 | - | 814,799.42 | - | 509,878.54 | 1,146,068.88 |
| 526 - Debt Services-96-97 Beltline/MM/Beltline-Battle Creek Tunnel Repair | 114,726.00 | 245,431.00 | 180,896.11 | - | 181,474.85 | 359,578.26 |
| 527 - Casey Lake Watershed Infiltration Retrofit | 210,980.00 | (210,980.00) | - | - | - | - |
| 528/529 - BMP Incentive Fund | 709,116.00 | - | 461,724.03 | - | 574,480.32 | 596,359.71 |
| 531 - Impervious Surface Volume Reduction Opportunity | 1,484,215.00 | - | - | - | - | 1,484,215.00 |
| 549 - Beltline & Battle Creek Tunnel Repair | 4,521,997.00 | - | - | - | 2,065,506.20 | 2,456,490.80 |
| 550 - Frost/Kennard Enhanced WQ BMP | 47,471.00 | - | 74,760.75 | - | 13,591.50 | 108,640.25 |
| 551 - Markham Pond Dredging & Aeration | 202,622.00 | - | 290,620.79 | - | 386,813.08 | 106,429.71 |
| 553 - Wakefield Park Project | - | - | 351,873.96 | - | - | 351,873.96 |
| 580 - Contingency Fund | 483,232.00 | (34,451.00) | - | - | - | 448,781.00 |
| 585 - Certificates of Participation | 134,238.00 | - | 194,263.33 | - | 194,863.95 | 133,637.38 |
| Total District Fund Balance | \$13,143,996.56 | - | \$ 7,158,889.35 | \$ - | \$7,269,742.41 | \$13,033,143.50 |

Ramsey Washington Metro Watershed Dist.
Check Register
For the Period From Mar 1, 2018 to Mar 31, 2018

| Check # | Date | Payee ID | Payee | Description | Amount |
|--------------|----------|----------|---|------------------------------|---------------------|
| EFT | 03/01/18 | met008 | MetLife-Group Benefits | Employee Benefits | \$830.56 |
| EFT | 03/12/18 | hea002 | HealthPartners | Employee Benefits | 9,203.67 |
| 69812 | 03/14/18 | ada002 | Adam's Pest Control, Inc. | Utilities/Bldg. Contracts | 79.00 |
| 69813 | 03/14/18 | aws001 | AWS Service Center | Janitorial/Trash Service | 177.50 |
| 69814 | 03/14/18 | bfg001 | BFG Supply Co. | Educational Program | 50.46 |
| 69815 | 03/14/18 | cad003 | Cady Building Maintenance, Inc. | Janitorial/Trash Service | 537.78 |
| 69816 | 03/14/18 | del001 | Dell Marketing, L.P. | Office Equipment | 2,300.00 |
| 69817 | 03/14/18 | gil001 | Gilbert Mechanical Contractors, Inc. | Bldg./Site Maintenance | 2,662.00 |
| 69818 | 03/14/18 | gla001 | Glacial Ridge Drilling, Inc. | BMP Cost Share Program | 900.00 |
| 69819 | 03/14/18 | inn002 | Innovative Office Solutions LLC | Events | 6.45 |
| 69820 | 03/14/18 | ncp001 | NCPERS Minnesota | Employee Benefits | 16.00 |
| 69821 | 03/14/18 | pit002 | Pitney Bowes, Inc. | Postage | 142.47 |
| 69822 | 03/28/18 | ahl001 | Paige Ahlborg | Employee Reimbursement | 348.44 |
| 69823 | 03/28/18 | all004 | allstream | Project Operations | 64.86 |
| 69824 | 03/28/18 | att002 | AT & T Mobility - ROC | IT/Website/Software | 111.23 |
| 69825 | 03/28/18 | bar001 | Barr Engineering | February/March Engineering | 94,001.70 |
| 69826 | 03/28/18 | bar004 | Deborah Barnes | Employee Reimbursement | 25.45 |
| 69827 | 03/28/18 | bfg001 | BFG Supply Co. | Educational Program | 92.59 |
| 69828 | 03/28/18 | bre003 | Bremer Bank | Employee Benefits | 6,468.75 |
| 69829 | 03/28/18 | cad003 | Cady Building Maintenance, Inc. | Janitorial/Trash Service | 605.00 |
| 69830 | 03/28/18 | car007 | Carp Solutions, LLC | Natural Resources Project | 1,439.16 |
| 69831 | 03/28/18 | cit011 | City of Roseville | Phone/IT/Website/Software | 2,513.82 |
| 69832 | 03/28/18 | fit001 | Fitzgerald Excavating & Trucking, Inc. | Construction-Maint. & Rep. | 103,519.00 |
| 69833 | 03/28/18 | gal001 | Galowitz Olson, PLLC | March Legal Fees | 2,240.00 |
| 69834 | 03/28/18 | hew001 | HP, Inc. | Office Equipment | 2,382.30 |
| 69835 | 03/28/18 | inn002 | Innovative Office Solutions LLC | Office Supplies | 12.80 |
| 69836 | 03/28/18 | inn003 | Innovational Concepts, Inc. | Utilities/Bldg. Contracts | 206.75 |
| 69837 | 03/28/18 | int001 | Office of MN, IT Services | Telephone Expense | 55.40 |
| 69838 | 03/28/18 | kor001 | Eric Korte | Employee Reimbursement | 107.87 |
| 69839 | 03/28/18 | lea003 | L. Tracy Leavenworth | Educational Program | 2,305.48 |
| 69840 | 03/28/18 | mel002 | Jacob Melquist | Janitorial/Trash Service | 1,045.00 |
| 69841 | 03/28/18 | min008 | Minnesota Native Landscapes, Inc. | Constructin/BMP/Natural Res. | 10,534.82 |
| 69842 | 03/28/18 | nsp001 | Xcel Energy | Utilities/Project Operations | 1,834.83 |
| 69843 | 03/28/18 | obr001 | Christopher O'Brien | Employee Reimbursement | 239.00 |
| 69844 | 03/28/18 | pac001 | Pace Analytical Services, Inc. | Water QM Staff | 35.00 |
| 69845 | 03/28/18 | pci001 | PCi Roads, LLC | Payment #12 | 386,543.50 |
| 69846 | 03/28/18 | pra001 | Prairie Moon Nursery, Inc. | Events | 323.13 |
| 69847 | 03/28/18 | pro003 | Lyndsey R. Provos | Employee Reimbursement | 125.98 |
| 69848 | 03/28/18 | qwe001 | CenturyLink | Project Operations | 223.17 |
| 69849 | 03/28/18 | red002 | Redpath & Company, Ltd | February Accounting | 3,705.36 |
| 69850 | 03/28/18 | red003 | Redwing Shoe Store | Employee Benefits | 169.99 |
| 69851 | 03/28/18 | sod001 | Nicole Soderholm | Employee Reimbursement | 62.35 |
| 69852 | 03/28/18 | stu001 | Studio Lola | BMP Cost Share Program | 465.75 |
| 69853 | 03/28/18 | tec001 | Tech Sales Co. | Water QM Staff | 12,925.50 |
| 69854 | 03/28/18 | tim002 | Timesaver Off-Site Secretarial, Inc. | Committee/Board Meeting Exp. | 422.00 |
| 69855 | 03/28/18 | usb002 | U.S. Bancorp | Monthly Credit Card Expense | 1,430.53 |
| 69856 | 03/28/18 | usb005 | US Bank Equipment Finance | Printing Expense | 285.67 |
| 69857 | 03/28/18 | vla001 | Dave Vlasin | Employee Reimbursement | 187.84 |
| 69858 | 03/28/18 | voy001 | US Bank Voyager Fleet Sys. | Vehicle Expense | 76.94 |
| 69859 | 03/28/18 | wat002 | Water Environment Federation Membership | Training & Education | 64.00 |
| 69860 | 03/28/18 | win002 | Windmill Design Incorporated | Outside Consulting Services | 525.00 |
| Total | | | | | \$654,631.85 |

Ramsey Washington Metro Watershed Dist.
Cash Disbursements Journal
For the Period From March 1, 2018 - March 31, 2018

| Date | Check # | Vendor ID | Name | Account ID | Account Description | Amount | Check Detail |
|-------------|----------------|------------------|--------------------------------------|-------------------|--------------------------------|---------------|---------------------|
| 03/01/18 | EFT | met008 | MetLife-Group Benefits | | | \$830.56 | |
| | | | | 4040-101-000 | Employee Benefits-General | | 622.49 |
| | | | | 2015-101-000 | Employee Health-General | | 208.07 |
| 03/12/18 | EFT | hea002 | HealthPartners | | | 9,203.67 | |
| | | | | 4040-101-000 | Employee Benefits-General | | 7,486.10 |
| | | | | 2015-101-000 | Employee Health-General | | 1,717.57 |
| 03/14/18 | 69812 | ada002 | Adam's Pest Control, Inc. | 4342-101-000 | Utilities/Bldg. Contracts | 79.00 | |
| 03/14/18 | 69813 | aws001 | AWS Service Center | 4341-101-000 | Janitorial/Trash Service | 177.50 | |
| 03/14/18 | 69814 | bfg001 | BFG Supply Co. | 4370-101-000 | Educational Program-General | 50.46 | |
| 03/14/18 | 69815 | cad003 | Cady Building Maintenance, Inc. | 4341-101-000 | Janitorial/Trash Service | 537.78 | |
| 03/14/18 | 69816 | del001 | Dell Marketing, L.P. | 4703-101-000 | Office Equipment-General | 2,300.00 | |
| 03/14/18 | 69817 | gil001 | Gilbert Mechanical Contractors, Inc. | 4343-101-000 | Bldg./Site Maintenance | 2,662.00 | |
| 03/14/18 | 69818 | gla001 | Glacial Ridge Drilling, Inc. | 4682-529-000 | BMP Cost Share Program | 900.00 | |
| 03/14/18 | 69819 | inn002 | Innovative Office Solutions, LLC | 4372-101-000 | Events | 6.45 | |
| 03/14/18 | 69820 | ncp001 | NCPERS Minnesota | 2015-101-000 | Employee Health-General | 16.00 | |
| 03/14/18 | 69821 | pit002 | Pitney Bowes | 4330-101-000 | Postage-General | 142.47 | |
| 03/28/18 | 69822 | ahl001 | Paige Ahlborg | | | 348.44 | |
| | | | | 4040-101-000 | Employee Benefits-General | | 278.59 |
| | | | | 4020-101-000 | Employee Expense-General | | 69.85 |
| 03/28/18 | 69823 | all004 | allstream | 4650-101-000 | Project Operations-General | 64.86 | |
| 03/28/18 | 69824 | att002 | AT & T Mobility - ROC | 4325-101-000 | IT/Website/Software | 111.23 | |
| 03/28/18 | 69825 | bar001 | Barr Engineering | | | 94,001.70 | |
| | | | | 4121-101-000 | Engineering Admin-General Fund | | 4,554.50 |
| | | | | 4123-101-000 | Engineering-Review | | 4,275.50 |
| | | | | 4129-101-000 | Project Feasability-General | | 180.00 |
| | | | | 4129-101-000 | Project Feasability-General | | 1,214.50 |
| | | | | 4129-101-000 | Project Feasability-General | | 1,394.50 |
| | | | | 4129-101-000 | Project Feasability-General | | 1,376.00 |
| | | | | 4129-101-000 | Project Feasability-General | | 1,057.66 |
| | | | | 4129-101-000 | Project Feasability-General | | 12,894.80 |
| | | | | 4129-101-000 | Project Feasability-General | | 2,146.50 |
| | | | | 4129-101-000 | Project Feasability-General | | 1,745.50 |
| | | | | 4520-101-000 | Water QM-Engineering | | 646.50 |
| | | | | 4122-101-000 | Engineering-Permit I & E | | 1,175.00 |
| | | | | 4124-101-000 | Engineering-Permit Review | | 1,680.00 |
| | | | | 4661-101-000 | SLMP/TMDL Studies | | 648.00 |
| | | | | 4695-101-000 | Research Projects-General | | 42.00 |

Ramsey Washington Metro Watershed Dist.
Cash Disbursements Journal
For the Period From March 1, 2018 - March 31, 2018

| Date | Check # | Vendor ID | Name | Account ID | Account Description | Amount | Check Detail |
|----------|---------|-----------|--|--------------|--------------------------------------|------------|--------------|
| | | | | 4650-101-000 | Project Operations-General | | 324.00 |
| | | | | 4128-553-000 | Engineering-Wakefield | | 2,137.00 |
| | | | | 4128-550-000 | Engineering-Frost/Kennard | | 5,924.51 |
| | | | | 4128-518-000 | Engineering-School/Commer Retrofit | | 407.00 |
| | | | | 4128-518-000 | Engineering-School/Commer Retrofit | | 84.00 |
| | | | | 4682-529-000 | Stewardship Grant Program | | 4,123.50 |
| | | | | 4128-554-000 | Engineering-Willow Pond | | 2,572.50 |
| | | | | 4128-520-000 | Engineering-Flood Damage | | 4,695.87 |
| | | | | 4128-520-000 | Engineering-Flood Damage | | 1,599.00 |
| | | | | 4128-519-000 | Engineering-Office Solar Energy | | 490.00 |
| | | | | 4128-549-000 | Engineering-Beltline/Battle Creek | | 28,608.86 |
| | | | | 4128-516-000 | Engineering-Projects Maint. & Repair | | 1,148.50 |
| | | | | 4128-516-000 | Engineering-Projects Maint. & Repair | | 6,856.00 |
| 03/28/18 | 69826 | bar004 | Deborah Barnes | | | 25.45 | |
| | | | | 4040-101-000 | Employee Benefits-General | | 20.00 |
| | | | | 4020-101-000 | Employee Expense-General | | 5.45 |
| 03/28/18 | 69827 | bfg001 | BFG Supply Co. | 4370-101-000 | Educational Program-General | 92.59 | |
| 03/28/18 | 69828 | bre003 | Bremer Bank | 4040-101-000 | Employee Benefits-General | 6,468.75 | |
| 03/28/18 | 69829 | cad003 | Cady Building Maintenance, Inc. | 4341-101-000 | Janitorial/Trash Service | 605.00 | |
| 03/28/18 | 69830 | car007 | Carp Solutions, LLC | 4670-101-000 | Natural Resources Project-General | 1,439.16 | |
| 03/28/18 | 69831 | cit011 | City of Roseville | | | 2,513.82 | |
| | | | | 4325-101-000 | IT/Website/Software | | 2,211.00 |
| | | | | 4310-101-000 | Telephone-General | | 302.82 |
| 03/28/18 | 69832 | fit001 | Fitzgerald Excavating & Trucking, Inc. | 4630-516-000 | Construction-Maint. & Rep. | 103,519.00 | |
| 03/28/18 | 69833 | gal001 | Galowitz Olson, PLLC | | | 2,240.00 | |
| | | | | 4131-101-000 | Atty.Gen.-General Fund | | 1,800.00 |
| | | | | 4131-520-000 | Atty Gen.-Flood Damage | | 440.00 |
| 03/28/18 | 69834 | hew001 | HP, Inc. | 4703-101-000 | Office Equipment-General | 2,382.30 | |
| 03/28/18 | 69835 | inn002 | Innovative Office Solutions, LLC | 4320-101-000 | Office Supplies-General | 12.80 | |
| 03/28/18 | 69836 | inn003 | Innovational Concepts, Inc. | 4342-101-000 | Utilities/Bldg. Contracts | 206.75 | |
| 03/28/18 | 69837 | int001 | Office of MN, IT Services | 4310-101-000 | Telephone-General | 55.40 | |
| 03/28/18 | 69838 | kor001 | Eric Korte | | | 107.87 | |
| | | | | 4040-101-000 | Employee Benefits-General | | 87.05 |
| | | | | 4020-101-000 | Employee Expense-General | | 20.82 |
| 03/28/18 | 69839 | lea003 | L. Tracy Leavenworth | 4370-101-000 | Educational Program-General | 2,305.48 | |
| 03/28/18 | 69840 | mel002 | Jacob Melquist | 4341-101-000 | Janitorial/Trash Service | 1,045.00 | |
| 03/28/18 | 69841 | min008 | Minnesota Native Landscapes, Inc. | | | 10,534.82 | |
| | | | | 4630-516-000 | Construction-Maint. & Rep. | | 5,000.00 |
| | | | | 4682-529-000 | BMP Cost Share Program | | 5,233.82 |
| | | | | 4670-101-000 | Natural Resources Project-General | | 301.00 |
| 03/28/18 | 69842 | nsp001 | Xcel Energy | | | 1,834.83 | |
| | | | | 4342-101-000 | Utilities/Bldg. Contracts | | 1,357.34 |
| | | | | 4650-101-000 | Project Operations-General | | 477.49 |
| 03/28/18 | 69843 | obr001 | Christopher O'Brien | | | 239.00 | |
| | | | | 4040-101-000 | Employee Benefits-General | | 209.00 |
| | | | | 4371-101-000 | Communications & Marketing | | 30.00 |
| 03/28/18 | 69844 | pac001 | Pace Analytical Services, Inc. | 4530-101-000 | Water QM Staff-General | 35.00 | |

Ramsey Washington Metro Watershed Dist.
Cash Disbursements Journal
For the Period From March 1, 2018 - March 31, 2018

| Date | Check # | Vendor ID | Name | Account ID | Account Description | Amount | Check Detail |
|-------------|----------------|------------------|---|-------------------|-----------------------------------|---------------------|---------------------|
| 03/28/18 | 69845 | pci001 | Pci Roads, LLC | 4630-549-000 | Construction-Beltline/Battle | 386,543.50 | |
| 03/28/18 | 69846 | pra001 | Prairie Moon Nursery, Inc. | 4372-101-000 | Events | 323.13 | |
| 03/28/18 | 69847 | pro003 | Lyndsey R. Provos | | | 125.98 | |
| | | | | 4040-101-000 | Employee Benefits-General | | 119.98 |
| | | | | 4020-101-000 | Employee Expense-General | | 6.00 |
| 03/28/18 | 69848 | qwe001 | CenturyLink | 4650-101-000 | Project Operations-General | 223.17 | |
| 03/28/18 | 69849 | red002 | Redpath & Company, Ltd | 4110-101-000 | Auditor/Accounting | 3,705.36 | |
| 03/28/18 | 69850 | red003 | Redwing Shoe Store | 4040-101-000 | Employee Benefits-General | 169.99 | |
| 03/28/18 | 69851 | sod001 | Nichole Soderholm | | | 62.35 | |
| | | | | 4040-101-000 | Employee Benefits-General | | 40.00 |
| | | | | 4020-101-000 | Employee Expense-General | | 22.35 |
| 03/28/18 | 69852 | stu001 | Studio Lola | 4682-529-000 | BMP Cost Share Program | 465.75 | |
| 03/28/18 | 69853 | tec001 | Tech Sales Co. | 4530-101-000 | Water QM Staff-General | 12,925.50 | |
| 03/28/18 | 69854 | tim002 | Timesaver Off-Site Secretarial, Inc. | 4365-101-000 | Committee/Board Meeting Expense | 422.00 | |
| 03/28/18 | 69855 | usb002 | U.S. Bancorp | | | 1,430.53 | |
| | | | | 4320-101-000 | Office Supplies-General | | 11.59 |
| | | | | 4370-101-000 | Educational Program-General | | 23.17 |
| | | | | 4343-101-000 | Bldg./Site Maintenance | | 40.08 |
| | | | | 4320-101-000 | Office Supplies-General | | 17.53 |
| | | | | 4325-101-000 | IT/Website/Software | | 29.00 |
| | | | | 4325-101-000 | IT/Website/Software | | 90.96 |
| | | | | 4350-101-000 | Training & Education-General | | 160.00 |
| | | | | 4350-101-000 | Training & Education-General | | 125.00 |
| | | | | 4530-101-000 | Water QM Staff-General | | 29.83 |
| | | | | 4320-101-000 | Office Supplies-General | | 3.48 |
| | | | | 4670-101-000 | Natural Resources Project-General | | 56.28 |
| | | | | 4372-101-000 | Events | | 41.22 |
| | | | | 4670-101-000 | Natural Resources Project-General | | 55.86 |
| | | | | 4350-101-000 | Training & Education-General | | 12.57 |
| | | | | 4350-101-000 | Training & Education-General | | 102.44 |
| | | | | 4320-101-000 | Office Supplies-General | | 4.27 |
| | | | | 4530-101-000 | Water QM Staff-General | | 276.00 |
| | | | | 4040-101-000 | Employee Benefits-General | | 1.25 |
| | | | | 4350-101-000 | Training & Education-General | | 270.00 |
| | | | | 4371-101-000 | Communications & Marketing | | 80.00 |
| 03/28/18 | 69856 | usb005 | US Bank Equipment Finance | 4335-101-000 | Printing-General | 285.67 | |
| 03/28/18 | 69857 | vla001 | Dave Vlasin | | | 187.84 | |
| | | | | 4020-101-000 | Employee Expense-General | | 43.60 |
| | | | | 4040-101-000 | Employee Benefits-General | | 144.24 |
| 03/28/18 | 69858 | voy001 | US Bank Voyager Fleet Sys. | 4830-101-000 | Vehicle Fuel-General | 76.94 | |
| 03/28/18 | 69859 | wat002 | Water Environment Federation Membership | 4350-101-000 | Training & Education-General | 64.00 | |
| 03/28/18 | 69860 | win002 | Windmill Design Incorporated | 4160-101-000 | Outside Consulting Services | 525.00 | |
| | | | | | | \$654,631.85 | |



**Summary of Professional Engineering Services During the Period
February 17, 2018 through March 16, 2018**

| | Total Budget* (2018) | Total Fees to Date (2018) | Budget Balance (2018) | Fees During Period | District Accounting Code | Plan Imple- mentation Task Number |
|---|-------------------------|---------------------------------|--------------------------|-----------------------|--------------------------------|---|
| Engineering Administration | | | | | | |
| General Engineering Administration | \$76,000.00 | \$16,185.50 | \$59,814.50 | \$4,554.50 | 4121-101 | DW-13 |
| RWMWD Health and Safety/ERTK Program | \$2,000.00 | \$0.00 | \$2,000.00 | | 4697-101 | DW-13 |
| Educational Program/Educational Forum Assistance | \$20,000.00 | \$0.00 | \$20,000.00 | | 4698-101 | DW-11 |
| Engineering Review | | | | | | |
| Engineering Review | \$55,000.00 | \$12,497.50 | \$42,502.50 | \$4,275.50 | 4123-101 | DW-13 |
| Project Feasibility Studies | | | | | | |
| Aquifer Recharge Site Search and Feasibility Study | \$15,000.00 | \$0.00 | \$15,000.00 | | 4129-101 | DW-10 |
| Owasso County Park Stormwater Master Plan and Detailed Design: Phase 1 and Phase 2 | \$75,000.00 | \$450.00 | \$74,550.00 | \$180.00 | 4129-101 | DW-5 |
| Beltline Resiliency and Phalen Chain Water Level Management Study | \$250,000.00 | \$2,252.00 | \$247,748.00 | \$1,214.50 | 4129-101 | BELT-3 |
| Beaver Lake Subwatershed Feasibility Study | \$15,000.00 | \$1,519.00 | \$13,481.00 | \$1,394.50 | 4129-101 | BL-1 |
| Owasso Lake Subwatershed Feasibility Study | \$15,000.00 | \$1,500.50 | \$13,499.50 | \$1,376.00 | 4129-101 | LO-3 |
| Battle Creek Lake Subwatershed Feasibility Study | \$15,000.00 | \$1,537.88 | \$13,462.12 | \$1,057.66 | 4129-101 | BCL-3 |
| Create an Emergency Reponse Plan for Lake Owasso | \$5,000.00 | \$3,132.00 | \$1,868.00 | | 4129-101 | LO-2 |
| FEMA Flood Mapping Update | \$100,000.00 | \$0.00 | \$100,000.00 | | 4129-101 | DW-9 |
| West Vadnais Lake to East Vadnais Lake Water Quality Treatment | \$24,400.00 | \$19,182.80 | \$5,217.20 | \$12,894.80 | 4129-101 | DW-9 |
| Snail Lake to Sucker Lake Reverse Pumping Evaluation | \$9,100.00 | \$9,715.50 | -\$615.50 | | 4129-101 | DW-9 |
| Snail, Grass, and West Vadnais outlet permitting with the MnDNR | \$10,000.00 | \$6,627.00 | \$3,373.00 | \$2,146.50 | 4129-101 | DW-9 |
| Modeling of 95% Confidence Limit Atlas 14 District-wide (Climate Change Scenario); Flood Map Generation for Future Outreach Efforts | \$129,500.00 | \$2,278.50 | \$127,221.50 | \$1,745.50 | 4129-101 | DW-9 |
| GIS Maintenance | | | | | | |
| GIS Maintenance | \$5,000.00 | \$0.00 | \$5,000.00 | | 4170-101 | DW-13 |
| Monitoring Water Quality/Project Monitoring | | | | | | |
| Lake Water Quality Monitoring (Misc QA/QC) | \$10,000.00 | \$63.00 | \$9,937.00 | | 4520-101 | DW-2 |
| Grass Lake WOMP station | \$10,000.00 | \$0.00 | \$10,000.00 | | 4520-101 | DW-3 |
| Battle Creek longitudinal monitoring of TSS | \$15,000.00 | \$801.00 | \$14,199.00 | | 4520-101 | BC-3 |
| Auto Lake monitoring systems (5) | \$50,000.00 | \$2,762.42 | \$47,237.58 | \$646.50 | 4520-101 | DW-18 |
| Maplewood Mall Monitoring | \$10,000.00 | \$713.00 | \$9,287.00 | | 4520-101 | DW-12 |
| Permit Processing, Inspection and Enforcement | | | | | | |
| Permit Application Inspection and Enforcement | \$15,000.00 | \$1,175.00 | \$13,825.00 | \$1,175.00 | 4122-101 | DW-7 |
| Permit Application Review | \$50,000.00 | \$4,228.00 | \$45,772.00 | \$1,680.00 | 4124-101 | DW-7 |
| Lake Studies/WRPPs/TMDL Reports | | | | | | |
| 2018 Grant Applications | \$30,000.00 | \$0.00 | \$30,000.00 | | 4661-101 | -- |
| Tanners Flood Response Tool Model Update | \$3,000.00 | \$690.00 | \$2,310.00 | \$648.00 | 4661-101 | TaL-1 |
| Evaluate water quality benefit of removing accumulated sediment from south end of Wakefield Lake to improve Lake Phalen water quality | \$10,000.00 | \$0.00 | \$10,000.00 | | 4661-101 | WL-5 |
| Research Projects | | | | | | |
| New Technology Mini Case Studies (average 6 per year) | \$12,000.00 | \$978.00 | \$11,022.00 | \$42.00 | 4695-101 | DW-12 |
| Kohlman Permeable Weir Test System - Implement Monitoring Plan | \$15,000.00 | \$0.00 | \$15,000.00 | | 4695-101 | DW-12 |
| Project Operations | | | | | | |
| 2018 Tanners Alum Facility Monitoring | \$15,000.00 | \$391.50 | \$14,608.50 | \$324.00 | 4650-101 | TaL-3 |
| Capital Improvements | | | | | | |
| Wakefield Park/Frost Avenue Stormwater Project | \$25,000.00 | \$4,119.00 | \$20,881.00 | \$2,137.00 | 4128-553 | WL-1 |
| Frost Kennard Spent Lime BMP | \$24,000.00 | \$8,185.69 | \$15,814.31 | \$5,924.51 | 4128-550 | WL-1 |
| Commercial Sites Retrofit Projects 2018 | \$55,000.00 | \$0.00 | \$55,000.00 | | 4128-518 | DW-6 |
| School Sites Retrofit Projects 2018 | \$55,000.00 | \$1,507.00 | \$53,493.00 | \$407.00 | 4128-518 | DW-6 |
| Church Sites Retrofit Projects 2018 | \$55,000.00 | \$818.00 | \$54,182.00 | \$84.00 | 4128-518 | DW-6 |
| BMP Incentive Fund: General BMP Design Assistance and Review | \$30,000.00 | \$9,088.50 | \$20,911.50 | \$4,123.50 | 4682-529 | DW-6 |
| BMP Incentive Fund: Faith-Based Organizations | \$20,000.00 | \$918.00 | \$19,082.00 | | 4128-528 | DW-6 |
| Willow Pond CMAC Implementation | \$100,000.00 | \$17,416.50 | \$82,583.50 | \$2,572.50 | 4128-554 | BeL-4 |
| Grass Lake Berm Construction Administration | \$75,000.00 | \$19,029.44 | \$55,970.56 | \$4,695.87 | 4128-520 | GrL-1 |
| Phase 1 implementation from Owasso Basin Improvements Feasibility Study | \$75,000.00 | \$3,015.00 | \$71,985.00 | \$1,599.00 | 4128-520 | GC-3 |
| District Office Solar Energy Retrofit | \$20,000.00 | \$10,057.00 | \$9,943.00 | \$490.00 | 4128-519 | DW-13 |
| CIP Project Repair & Maintenance | | | | | | |
| 2017-2018 Beltline Repairs Construction Services | \$360,000.00 | \$387,206.11 | -\$27,206.11 | \$28,608.86 | 4128-549 | BELT-2 |
| Routine CIP Inspection and Unplanned Maintenance Identification | \$75,000.00 | \$2,994.50 | \$72,005.50 | \$1,148.50 | 4128-516 | DW-5 |
| 2018 CIP Maintenance and Repairs | \$90,000.00 | \$59,636.90 | \$30,363.10 | \$6,856.00 | 4128-516 | DW-5 |
| 2019 CIP Maintenance and Repairs | \$150,000.00 | \$0.00 | \$150,000.00 | | 4128-516 | DW-5 |

*For projects carried over from previous years, the total budget reflects the total project budget, and not just the 2018 portion.

Subtotal **\$94,001.70**

TOTAL PAYABLE FOR PERIOD 2/17/2018 - 3/16/2018 **\$94,001.70**

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

Application for Payment No. 12
Beltline and Battle Creek Repairs
Ramsey-Washington Metro Watershed District

Owner: Ramsey-Washington Metro Watershed District

Contractor: PCi Roads, LLC

Engineer: Barr Engineering, Co.

For work accomplished through the date of March 15, 2018

| | | |
|------|---|-----------------------|
| 1.0 | Completed to Date: | <u>\$2,937,852.03</u> |
| 2.0 | Less Previously Billed: | <u>\$2,551,308.53</u> |
| 3.0 | Amount Completed This Period: | <u>\$386,543.50</u> |
| 4.0 | Amount Previously Retained: | <u>\$166,145.80</u> |
| 5.0 | Amount Retained This Period (See Note 1): | <u>\$0.00</u> |
| 6.0 | Total Amount Retained: | <u>\$166,145.80</u> |
| 7.0 | Retainage Released Through This Period: | <u>\$0.00</u> |
| 8.0 | Less Total Retainage Remaining: | <u>\$166,145.80</u> |
| 9.0 | Less Amounts Previously Paid: | <u>\$2,385,162.73</u> |
| 10.0 | Amount Due This Estimate: | <u>\$386,543.50</u> |

Note 1: The specifications require 10% to be retained up to 50% of the project costs.

CONTRACTOR's Certification

The undersigned CONTRACTOR certifies that: (1) all previous progress payments received from OWNER on account of Work done under the Contract referred to above have been applied to discharge in full all obligations of CONTRACTOR incurred in connection with Work covered by prior Applications for Payment numbered 1 through 11 inclusive; (2) title to all Work, materials and equipment incorporated in said Work or otherwise listed in or covered by this Application for Payment will pass to OWNER at time of payment free and clear of all liens, claims, security interest and encumbrances (except such as are covered by Bond acceptable to OWNER indemnifying OWNER against any such lien, claim, security interest or encumbrance); and (3) all Work covered by this Application for Payment is in accordance with the Contract Documents and not defective as that term is defined in the Contract Documents.

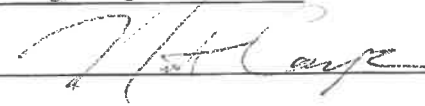
SUBMITTED BY:

Name: Leo Flynn **Date:** 3/20/18
Title: Project Coordinator
Contractor: PCi Roads, LLC

Signature: 

RECOMMENDED BY:

Name: Nathan Campeau **Date:** 3/21/18
Title: Project Engineer
Engineer: Barr Engineering Co.

Signature: 

APPROVED BY:

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

Signature: _____

Beltline and Battle Creek Repairs
Ramsey-Washington Metro Watershed District
Summary of Work Completed Through March 15, 2018 for Progress Payment No. 12

| Item | ITEM DESCRIPTION | UNIT | ESTIMATED QUANTITY | PCi Roads, LLC | | (1) Total Completed This Period | | (2) Total Completed Previous Periods | | (3) Total Completed To Date | |
|-----------------------|--------------------------------------|------|--------------------|----------------|------------------------|---------------------------------|--------------|--------------------------------------|--------------|-----------------------------|--------------|
| | | | | UNIT COST | EXTENSION | Quantity | | Quantity | | Quantity | |
| A | Mobilization | LS | 1 | \$ 280,000.00 | \$ 280,000.00 | 0.053571429 | \$15,000.00 | 0.928571 | \$260,000.00 | 0.982143 | \$275,000.00 |
| B | Water Management | LS | 1 | \$ 5,000.00 | \$ 5,000.00 | 0.05 | \$250.00 | 0.9 | \$4,500.00 | 0.95 | \$4,750.00 |
| C | Erosion Control | LS | 1 | \$ 35,000.00 | \$ 35,000.00 | 0.05 | \$1,750.00 | 0.9 | \$31,500.00 | 0.95 | \$33,250.00 |
| D | Traffic Control | LS | 1 | \$ 25,000.00 | \$ 25,000.00 | 0.05 | \$1,250.00 | 0.9 | \$22,500.00 | 0.95 | \$23,750.00 |
| E | Cold Joint Orientation Core Hole | EA | 90 | \$ 440.00 | \$ 39,600.00 | 0 | \$0.00 | 0 | \$0.00 | 0 | \$0.00 |
| F | Crack Repair - Hydrophobic | LF | 12500 | \$ 65.00 | \$ 812,500.00 | 2874.25 | \$186,826.25 | 10298.4 | \$669,396.00 | 13172.65 | \$856,222.25 |
| F | Crack Repair - Hydrophilic | LF | 5000 | \$ 65.00 | \$ 325,000.00 | 0 | \$0.00 | 3448.25 | \$224,136.25 | 3448.25 | \$224,136.25 |
| G | Chemical Grout – Hydrophobic | GAL | 3000 | \$ 50.00 | \$ 150,000.00 | 175 | \$8,750.00 | 1852 | \$92,600.00 | 2027 | \$101,350.00 |
| G | Chemical Grout – Hydrophilic | GAL | 1200 | \$ 50.00 | \$ 60,000.00 | 0 | \$0.00 | 638 | \$31,900.00 | 638 | \$31,900.00 |
| H | Concrete Surface Repair* | SF | 13000 | \$ 63.00 | \$ 819,000.00 | 1890.75 | \$119,117.25 | 5847.75 | \$368,408.25 | 7738.5 | \$487,525.50 |
| I | Cementitious Mortar Patch | EA | 20 | \$ 1,000.00 | \$ 20,000.00 | 0 | \$0.00 | 14 | \$14,000.00 | 14 | \$14,000.00 |
| J | Manhole Steps | EA | 391 | \$ 84.00 | \$ 32,844.00 | 25 | \$2,100.00 | 287 | \$24,108.00 | 312 | \$26,208.00 |
| K | Root Removal | LS | 1 | \$ 5,000.00 | \$ 5,000.00 | 0 | \$0.00 | 0 | \$0.00 | 0 | \$0.00 |
| L | Encrustation Demolition and Disposal | LS | 1 | \$ 35,000.00 | \$ 35,000.00 | 0 | \$0.00 | 1 | \$35,000.00 | 1 | \$35,000.00 |
| M | Precast Joint Repairs | LF | 200 | \$ 56.00 | \$ 11,200.00 | 0 | \$0.00 | 440.3 | \$24,656.80 | 440.3 | \$24,656.80 |
| N | Rubble Removal (Station 14+94) | LS | 1 | \$ 5,000.00 | \$ 5,000.00 | 1 | \$5,000.00 | 0 | \$0.00 | 1 | \$5,000.00 |
| N | Rubble Removal (Station 15+87) | LS | 1 | \$ 2,000.00 | \$ 2,000.00 | 0 | \$0.00 | 1 | \$2,000.00 | 1 | \$2,000.00 |
| N | Rubble Removal (Station 89+76) | LS | 1 | \$ 2,000.00 | \$ 2,000.00 | 0 | \$0.00 | 0 | \$0.00 | 0 | \$0.00 |
| N | Rubble Removal (Station 454+65) | LS | 1 | \$ 2,000.00 | \$ 2,000.00 | 0 | \$0.00 | 1 | \$2,000.00 | 1 | \$2,000.00 |
| N | Rubble Removal (Station 454+94) | LS | 1 | \$ 2,000.00 | \$ 2,000.00 | 0 | \$0.00 | 1 | \$2,000.00 | 1 | \$2,000.00 |
| O | Point Repair | EA | 27 | \$ 900.00 | \$ 24,300.00 | 0 | \$0.00 | 18 | \$16,200.00 | 18 | \$16,200.00 |
| O | Point Repair (Station 50+61) | EA | 1 | \$ 1,585.00 | \$ 1,585.00 | 0 | \$0.00 | 1 | \$1,585.00 | 1 | \$1,585.00 |
| O | Point Repair (Station 79+65) | EA | 1 | \$ 1,585.00 | \$ 1,585.00 | 0 | \$0.00 | 1 | \$1,585.00 | 1 | \$1,585.00 |
| O | Point Repair (Station 446+15) | EA | 1 | \$ 1,585.00 | \$ 1,585.00 | 0 | \$0.00 | 1 | \$1,585.00 | 1 | \$1,585.00 |
| O | Point Repair (Station 449+12) | EA | 1 | \$ 1,585.00 | \$ 1,585.00 | 0 | \$0.00 | 1 | \$1,585.00 | 1 | \$1,585.00 |
| O | Point Repair (Station 44+97) | EA | 1 | \$ 1,585.00 | \$ 1,585.00 | 0 | \$0.00 | 0 | \$0.00 | 0 | \$0.00 |
| P | Invert Repair (Station 63+92) | SF | 15 | \$ 1,000.00 | \$ 15,000.00 | 15 | \$15,000.00 | 0 | \$0.00 | 15 | \$15,000.00 |
| P | Invert Repair (Station 450+94) | SF | 64 | \$ 500.00 | \$ 32,000.00 | 0 | \$0.00 | 78 | \$39,000.00 | 78 | \$39,000.00 |
| Q | Uncover Manhole | EA | 4 | \$ 1,800.00 | \$ 7,200.00 | 0 | \$0.00 | 4 | \$7,200.00 | 4 | \$7,200.00 |
| R | Adjust Manhole Height | EA | 4 | \$ 1,800.00 | \$ 7,200.00 | 0 | \$0.00 | 0 | \$0.00 | 0 | \$0.00 |
| S | CCTV Inspection | LS | 1 | \$ 35,000.00 | \$ 35,000.00 | 0.9 | \$31,500.00 | 0 | \$0.00 | 0.9 | \$31,500.00 |
| BASE BID TOTAL | | | | | \$ 2,796,769.00 | \$386,543.50 | | \$1,877,445.30 | | \$2,263,988.80 | |

Beltline and Battle Creek Repairs
Ramsey-Washington Metro Watershed District
Summary of Work Completed Through March 15, 2018 for Progress Payment No. 12

| | | | | PCi Roads, LLC | | (1) Total Completed This Period | | (2) Total Completed Previous Periods | | (3) Total Completed To Date | |
|---|--|------|--------------------|----------------|------------------------|---------------------------------|---------------------|--------------------------------------|-----------------------|-----------------------------|-----------------------|
| Item | ITEM DESCRIPTION | UNIT | ESTIMATED QUANTITY | UNIT COST | EXTENSION | Quantity | | Quantity | | Quantity | |
| BID ALTERNATE #1: REINFORCEMENT STEEL | | | | | | | | | | | |
| Item | ITEM DESCRIPTION | UNIT | ESTIMATED QUANTITY | UNIT COST | EXTENSION | | | | | | |
| T | Reinforcement Seal - 6 in. | EA | 264 | \$ 12.00 | \$ 3,168.00 | 0 | \$0.00 | 1674 | \$20,088.00 | 1674 | \$20,088.00 |
| T | Reinforcement Seal - 12 in. | EA | 2197 | \$ 24.00 | \$ 52,728.00 | 0 | \$0.00 | 1738 | \$41,712.00 | 1738 | \$41,712.00 |
| T | Reinforcement Seal - 24 in. | EA | 882 | \$ 48.00 | \$ 42,336.00 | 0 | \$0.00 | 991 | \$47,568.00 | 991 | \$47,568.00 |
| T | Reinforcement Seal - 36 in. | EA | 252 | \$ 70.00 | \$ 17,640.00 | 0 | \$0.00 | 536 | \$37,520.00 | 536 | \$37,520.00 |
| BID ALTERNATE #1 | | | | | \$ 115,872.00 | | \$0.00 | | \$146,888.00 | | \$146,888.00 |
| TOTAL BASE BID PLUS BID ALTERNATE #1 | | | | | \$ 2,912,641.00 | | \$386,543.50 | | \$2,024,333.30 | | \$2,410,876.80 |
| CHANGE ORDER - ADDITIONAL ITEMS | | | | | | | | | | | |
| 1-2 | Deep Concrete Surface Repair* | SF | 3,000 | \$ 87.00 | \$ 261,000.00 | 0 | \$0.00 | 3000 | \$261,000.00 | 3000 | \$261,000.00 |
| 2-2 | Beaver Lake Branch Deep Concrete Surface Repair Exceeding 3,000 SF | SF | 0 | \$ 63.00 | \$ - | 0 | \$0.00 | 1831.75 | \$115,400.25 | 1831.75 | \$115,400.25 |
| 2-3 | Repair a Void at Station 440+95 | LS | 1 | \$ 14,600.00 | \$ 14,600.00 | 0 | \$0.00 | 1 | \$14,600.00 | 1 | \$14,600.00 |
| 3-1 | Beaver Lake Branch Crack Sealing | LS | 1 | \$ 119,724.98 | \$ 119,724.98 | 0 | \$0.00 | 1 | \$119,724.98 | 1 | \$119,724.98 |
| 4-2 | Additional Battle Creek Point Repairs | EA | 23 | \$ 650.00 | \$ 14,950.00 | 0 | \$0.00 | 25 | \$16,250.00 | 25 | \$16,250.00 |
| SUBTOTAL CHANGE ORDERS | | | | | \$ 410,274.98 | | \$0.00 | | \$526,975.23 | | \$526,975.23 |
| TOTAL BASE BID PLUS BID ALTERNATE #1, PLUS CHANGE ORDERS | | | | | \$ 3,322,915.98 | | \$386,543.50 | | \$2,551,308.53 | | \$2,937,852.03 |
| RETAINAGE (10% Retainage, up to 50% of Work Completion) | | | | | \$ 166,145.80 | | \$0.00 | | \$166,145.80 | | \$166,145.80 |
| TOTAL AMOUNT DUE: | | | | | | | \$386,543.50 | | \$2,385,162.73 | | \$2,771,706.23 |

*Change Order 1-2 results in an estimated reduction of Item H of 3,000 SF, for an estimated reduction of \$189,000. This results in an estimated net increase of \$72,000.

**Capital Improvement Project Maintenance/Repairs 2018
Progress Payment Number 2**

| | | | |
|------|---|---------------------|---------------------|
| 1.0 | Total Completed Through This Period: | <u>\$149,810.00</u> | |
| 2.0 | Total Completed Previously Completed: | | <u>\$36,000.00</u> |
| 3.0 | Total Completed This Period: | | <u>\$113,810.00</u> |
| 4.0 | Amount Previously Retained: | | <u>\$3,600.00</u> |
| 5.0 | Amount Retained This Period (See Note 1): | | <u>\$10,291.00</u> |
| 6.0 | Total Amount Retained (See Note 2): | | <u>\$13,891.00</u> |
| 7.0 | Retainage Released Through This Period: | | <u>\$0.00</u> |
| 8.0 | Total Retainage Remaining: | | <u>\$13,891.00</u> |
| 9.0 | Amounts Previously Paid: | <u>\$32,400.00</u> | |
| 10.0 | Amount Due This Estimate: | | <u>\$103,519.00</u> |

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 (\$277,822.00)

SUBMITTED BY:

Name: Jason Fitzgerald Date: 3/22/18

Title: President

Contractor: Fitzgerald Excavating & Trucking, Inc.

Signature:  _____

RECOMMENDED BY:

Name: Brad Lindaman Date: _____

Title: District Engineer

Engineer: Barr Engineering Company

Signature: _____

APPROVED BY:

Name: Marj Ebensteiner Date: _____

Title: President

Owner: Ramsey-Washington Metro Watershed District

Signature: _____

Capital Improvement Project Maintenance/Repairs 2018
Ramsey-Washington Metro Watershed District
Summary of Work Completed Through March 20, 2018 for Progress Payment Number 2

| 1.04 Item | Description | Unit | Estimated Quantity | Unit Price | Extension | (1) Total Completed Through This Period | | (2) Total Completed Previous Period | | (3) Total Completed This Period | |
|--|---|------|--------------------|------------|-----------|---|-------------|-------------------------------------|--------|---------------------------------|-------------|
| | | | | | | Quantity | Amount | Quantity | Amount | Quantity | Amount |
| A | Mobilization/Demobilization | L.S. | 1 | 20,000.00 | 20,000.00 | 0.6 | \$12,000.00 | 0 | \$0.00 | 0.6 | \$12,000.00 |
| Site 1 – Lower Afton Road, St. Paul | | | | | | | | | | | |
| B | Sediment/Muck Cleanout of Drainageway (Landfill Disposal) | L.S. | 1 | 4,000.00 | 4,000.00 | 1 | \$4,000.00 | 0 | \$0.00 | 1 | \$4,000.00 |
| B | Site Restoration (Seeding and Erosion Control Blanket) | S.Y. | 220 | 4.00 | 880.00 | 0 | \$0.00 | 0 | \$0.00 | 0 | \$0.00 |
| Site 2 – Tanners Boat Ramp, Oakdale | | | | | | | | | | | |
| B | Sediment/Muck Cleanout from Pond (Landfill Disposal) | L.S. | 1 | 8,000.00 | 8,000.00 | 1 | \$8,000.00 | 0 | \$0.00 | 1 | \$8,000.00 |
| D | Construction of Sedimentation Barrier (Mn/DOT Super Duty Silt Fence 3886.1) | L.F. | 80 | 15.00 | 1,200.00 | | \$0.00 | 0 | \$0.00 | 0 | \$0.00 |
| C | Site Restoration (Seeding and Erosion Control Blanket) | S.Y. | 150 | 4.00 | 600.00 | | \$0.00 | 0 | \$0.00 | 0 | \$0.00 |
| Site 3 – Tanners Wetland Weir Maintenance, Oakdale | | | | | | | | | | | |
| E | Permeable Weir Maintenance (Reopening Drainage Slots and Remove all Brush and Debris) | L.F. | 580 | 10.00 | 5,800.00 | 580 | \$5,800.00 | 0 | \$0.00 | 580 | \$5,800.00 |
| Site 4 – 5TH Street Wetland, Oakdale | | | | | | | | | | | |
| F | Excavation/Dredging and Removal of Sediment from Treatment Basin (Disposal on Site) | L.S. | 1 | 20,000.00 | 20,000.00 | 1 | \$20,000.00 | 0 | \$0.00 | 1 | \$20,000.00 |
| E | Permeable Weir Maintenance (Reopening Drainage Slots and Remove all Brush and Debris) | L.F. | 65 | 10.00 | 650.00 | 65 | \$650.00 | 0 | \$0.00 | 65 | \$650.00 |
| C | Site Restoration (Seeding and Erosion Control Blanket) | S.Y. | 210 | 4.00 | 840.00 | 500 | \$2,000.00 | 0 | \$0.00 | 500 | \$2,000.00 |
| Site 5 – Hills & Dales/County Road B, Maplewood | | | | | | | | | | | |
| G | Pipe and Structures Cleanout Sediment/Muck Removal (Disposal at Landfill) | L.S. | 1 | 4,000.00 | 4,000.00 | | \$0.00 | 0 | \$0.00 | 0 | \$0.00 |
| C | Site Access Restoration (Seeding and Erosion Control Blanket, Repair Wood Chip Path) | S.Y. | 50 | 4.00 | 200.00 | | \$0.00 | 0 | \$0.00 | 0 | \$0.00 |
| Site 6 – Tamarac Swamp PFS Basins Paver Cleaning and Sweeping, Woodbury | | | | | | | | | | | |
| H | Sediment Log (6-Inch Diameter) | L.F. | 60 | 4.00 | 240.00 | | \$0.00 | 0 | \$0.00 | 0 | \$0.00 |
| B | Sediment/Muck Cleanout (Tier 2 & 3 Landfill Disposal) | L.S. | 1 | 2,000.00 | 2,000.00 | | \$0.00 | 0 | \$0.00 | 0 | \$0.00 |
| I | Paver Sweeping | S.Y. | 1400 | 2.00 | 2,800.00 | | \$0.00 | 0 | \$0.00 | 0 | \$0.00 |
| C | Site Restoration (Native Seeding and Erosion Control Blanket) | S.Y. | 100 | 4.00 | 400.00 | | \$0.00 | 0 | \$0.00 | 0 | \$0.00 |
| Site 7 – Gervais Creek, Little Canada | | | | | | | | | | | |
| J | Removal of Trees, Brush, Deadfalls, and Debris (Disposal Off Site) | L.S. | 1 | 5,000.00 | 5,000.00 | 1 | \$5,000.00 | 0 | \$0.00 | 1 | \$5,000.00 |
| B | Sediment/Muck Cleanout (Disposal at Landfill) | L.S. | 1 | 5,000.00 | 5,000.00 | | \$0.00 | 0 | \$0.00 | 0 | \$0.00 |
| C | Site and Access Restoration (Seeding and Erosion Control Blanket) | S.Y. | 650 | 4.00 | 2,600.00 | | \$0.00 | 0 | \$0.00 | 0 | \$0.00 |
| Site 8 – Owasso Basin, Little Canada | | | | | | | | | | | |
| B | Sediment/Muck Cleanout (Disposal at Landfill) | L.S. | 1 | 6,000.00 | 6,000.00 | 1 | \$6,000.00 | 0 | \$0.00 | 1 | \$6,000.00 |
| L | Excavate and Regrade Channel Inlet Basin (Landfill Disposal) | L.S. | 1 | 8,000.00 | 8,000.00 | | \$0.00 | 0 | \$0.00 | 0 | \$0.00 |
| M | Riprap Channel Basin and Inlet Pipe, MnDOT Class 4 | Ton | 14 | 50.00 | 700.00 | | \$0.00 | 0 | \$0.00 | 0 | \$0.00 |
| C | Site and Access Restoration (Seeding and Erosion Control Blanket) | S.Y. | 300 | 4.00 | 1,200.00 | | \$0.00 | 0 | \$0.00 | 0 | \$0.00 |
| Site 9 – Johnson Pond, Maplewood | | | | | | | | | | | |
| N | Remove and Replace Existing Guardrail for Access | L.S. | 1 | 500.00 | 500.00 | 0 | \$0.00 | 0 | \$0.00 | 0 | \$0.00 |
| H | Cleanout Debris, Sediment/Muck From Structures and Pipe (Disposal at Landfill) | L.S. | 1 | 4,000.00 | 4,000.00 | | \$0.00 | 0 | \$0.00 | 0 | \$0.00 |
| C | Site Access Restoration (Seeding and Erosion Control Blanket) | S.Y. | 244 | 4.00 | 976.00 | | \$0.00 | 0 | \$0.00 | 0 | \$0.00 |
| Site 10 – Maplewood Mall, Maplewood | | | | | | | | | | | |
| O | Repair Catch Basin and Sinkhole | L.S. | 1 | 2,000.00 | 2,000.00 | | \$0.00 | 0 | \$0.00 | 0 | \$0.00 |

**Capital Improvement Project Maintenance/Repairs 2018
 Ramsey-Washington Metro Watershed District
 Summary of Work Completed Through March 20, 2018 for Progress Payment Number 2**

| 1.04 Item | Description | Unit | Estimated Quantity | Unit Price | Extension | (1) Total Completed Through This Period | | (2) Total Completed Previous Period | | (3) Total Completed This Period | |
|---|--|------|--------------------|------------|-----------|---|-------------|-------------------------------------|-------------|---------------------------------|-------------|
| | | | | | | Quantity | Amount | Quantity | Amount | Quantity | Amount |
| Site 11 – Battle Creek Lower Ravine Park, St. Paul | | | | | | | | | | | |
| H | Cleanout/Remove Debris from Pipe and Structures | L.S. | 1 | 6,000.00 | 6,000.00 | | \$0.00 | 0 | \$0.00 | 0 | \$0.00 |
| P | Televise and Inspect Storm Sewer Pipe (12", 15", 18" RCP) | L.F. | 768 | 2.00 | 1,536.00 | | \$0.00 | 0 | \$0.00 | 0 | \$0.00 |
| Q | Repair Manhole and Pipe with Cured-In-Place Pipe Liner | L.S. | 1 | 4,000.00 | 4,000.00 | | \$0.00 | 0 | \$0.00 | 0 | \$0.00 |
| R | Remove and Replace One (1) Trash Rack and Install Fasteners on The New Trash Rack and Two (2) Existing Trash Racks | L.S. | 1 | 3,000.00 | 3,000.00 | | \$0.00 | 0 | \$0.00 | 0 | \$0.00 |
| S | MnDOT Common Borrow 2105.1A.6 "Select Grading Material" | Ton | 140 | 15.00 | 2,100.00 | | \$0.00 | 0 | \$0.00 | 0 | \$0.00 |
| T | MnDOT 3149.2H Coarse Filter Aggregate | Ton | 140 | 50.00 | 7,000.00 | | \$0.00 | 0 | \$0.00 | 0 | \$0.00 |
| U | Topsoil Borrow | C.Y. | 50 | 15.00 | 750.00 | | \$0.00 | 0 | \$0.00 | 0 | \$0.00 |
| V | Futerra R45 HP Turf Reinforcement Mat | S.Y. | 422 | 10.00 | 4,220.00 | | \$0.00 | 0 | \$0.00 | 0 | \$0.00 |
| K | Site Restoration (Seeding and HP-FGM Hydro Mulch) | S.Y. | 1125 | 4.00 | 4,500.00 | | \$0.00 | 0 | \$0.00 | 0 | \$0.00 |
| Site 12 – Grass Lake, Shoreview | | | | | | | | | | | |
| B | (Site 12A) – Sediment/Muck and Vegetation Cleanout, Grass Lake Area (Unregulated Fill) | L.S. | 1 | 18,000.00 | 18,000.00 | 1 | \$18,000.00 | 1 | \$18,000.00 | 0 | \$0.00 |
| B | (Site 12B) - Sediment/Muck and Vegetation Cleanout, Wetland Triangle Area (Unregulated) | L.S. | 1 | 18,000.00 | 18,000.00 | 1 | \$18,000.00 | 1 | \$18,000.00 | 0 | \$0.00 |
| B | (Site 12C) - Sediment/Muck and Vegetation Cleanout, West Vadnais Lake Channel | L.S. | 1 | 18,000.00 | 18,000.00 | | \$0.00 | 0 | \$0.00 | 0 | \$0.00 |
| X | Remove and Replace Bituminous Trail | S.Y. | 26 | 50.00 | 1,300.00 | | \$0.00 | 0 | \$0.00 | 0 | \$0.00 |
| X | Remove and Replace Bituminous Roadway | S.Y. | 80 | 88.00 | 7,040.00 | | \$0.00 | 0 | \$0.00 | 0 | \$0.00 |
| Y | Remove Existing 12" CPEP | L.F. | 60 | 15.00 | 900.00 | | \$0.00 | 0 | \$0.00 | 0 | \$0.00 |
| Y | Remove existing 15" RC Pipe Apron | Each | 1 | 200.00 | 200.00 | | \$0.00 | 0 | \$0.00 | 0 | \$0.00 |
| Z | RC Transition Pipe Reducer | Each | 2 | 1,500.00 | 3,000.00 | | \$0.00 | 0 | \$0.00 | 0 | \$0.00 |
| AA | 24" RC Pipe Apron and Trash Rack | Each | 1 | 3,500.00 | 3,500.00 | | \$0.00 | 0 | \$0.00 | 0 | \$0.00 |
| AB | 44" Span RC Pipe Arch | L.F. | 312 | 90.00 | 28,080.00 | 144 | \$12,960.00 | 0 | \$0.00 | 144 | \$12,960.00 |
| AC | 44" Span RC Pipe Arch Apron | Each | 6 | 2,000.00 | 12,000.00 | 4 | \$8,000.00 | 0 | \$0.00 | 4 | \$8,000.00 |
| M | Random Riprap Class III Fieldstone with Type 4 Filter Fabric | Ton | 159 | 90.00 | 14,310.00 | | \$0.00 | 0 | \$0.00 | 0 | \$0.00 |
| C | Site restoration (Seeding and Erosion Control Blanket) | S.Y. | 3200 | 4.00 | 12,800.00 | 7350 | \$29,400.00 | 0 | \$0.00 | 7350 | \$29,400.00 |
| Site 12 - Sylvan Pond Sediment Cleanout | | | | | | | | | | | |

Total of Extensions = \$ 277,822.00 \$149,810.00 \$36,000.00 \$113,810.00

Faith Based Sites BMP Retrofits
Progress Payment Number 3
FINAL INVOICE

| | | | |
|---|-------------|--------------|------------|
| 1 Completed to Date: | \$77,905.40 | | |
| 2 Less Previously Billed: | | \$103,139.40 | |
| 3 Amount Completed This Period: | | | \$0.00 |
| 4 Amount Previously Retained: | | \$5,233.82 | |
| 5 Amount Retained This Period (See Note 1): | | \$0.00 | |
| 6 Total Amount Retained (See Note 2): | | \$5,233.82 | |
| 7 Retainage Released Through This Period: | | | \$5,233.82 |
| 8 Less Total Retainage Remaining: | | | |
| 9 Less Amounts Previously Paid: | \$97,905.58 | | |
| 10 Amount Due This Estimate: | | | \$5,233.82 |

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

SUBMITTED BY:

Name: Amy Schaffer Date:
Title: President
Contractor: Minnesota Native Landscapes

Signature:

RECOMMENDED BY:

Name: Matt Kumka Date:
Title: Project Manager
Engineer: Barr Engineering Company

Signature:

APPROVED BY:

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

Signature:

**CHRIST UNITED METHODIST
Maplewood, MN
Contract Amount**

| Base Bid Items | | | | Total Completed Through this Period | | | Total Completed Through this Period | | | Total Completed Through this Period | | |
|-----------------|---|------|--------------------|-------------------------------------|--------------------|--------------------|-------------------------------------|-------------------|-------------------|-------------------------------------|-----------------|---------------|
| | | | | Invoice #1 | | | Invoice #2 | | | Invoice #3 FINAL | | |
| Item | Description | Unit | Estimated Quantity | Unit Price | Actual Quantity | Extension | Unit Price | Actual Quantity | Extension | Unit Price | Actual Quantity | Extension |
| A | Mobilization/Demobilization/Traffic Control/Erosion Control | L.S. | 1 | \$2,000.00 | 0.75 | \$1,500.00 | \$2,000.00 | 0.25 | \$500.00 | \$2,000.00 | 0.00 | \$0.00 |
| B | 6" Sediment Control Log | L.F. | 160 | \$4.80 | 160 | \$768.00 | \$4.80 | 0.00 | \$0.00 | \$4.80 | 0.00 | \$0.00 |
| H | Sod Removal | S.Y. | 228 | \$3.00 | 228 | \$684.00 | \$3.00 | 0.00 | \$0.00 | \$3.00 | 0.00 | \$0.00 |
| I | Disposal of Excavated Materials Off-Site | C.Y. | 266 | \$27.00 | 266 | \$7,182.00 | \$27.00 | 0.00 | \$0.00 | \$27.00 | 0.00 | \$0.00 |
| J | Grading | Each | 1 | \$1,900.00 | 1 | \$1,900.00 | \$1,900.00 | 0.00 | \$0.00 | \$1,900.00 | 0.00 | \$0.00 |
| K | Soil Loosening | S.Y. | 188 | \$5.00 | 188 | \$940.00 | \$5.00 | 0.00 | \$0.00 | \$5.00 | 0.00 | \$0.00 |
| S | Planting Soil (12" depth- 75% Sand, 25% Leaf compost- MnDOT Grade II) | C.Y. | 63 | \$60.00 | 63 | \$3,780.00 | \$60.00 | 0.00 | \$0.00 | \$60.00 | 0.00 | \$0.00 |
| T | Twice-Shredded Hardwood Mulch (3" depth) | C.Y. | 16 | \$66.00 | 16 | \$1,056.00 | \$66.00 | 0.00 | \$0.00 | \$66.00 | 0.00 | \$0.00 |
| U | 4" Black Powder Coated Landscape Edging | L.F. | 215 | \$11.00 | 215 | \$2,365.00 | \$11.00 | 0.00 | \$0.00 | \$11.00 | 0.00 | \$0.00 |
| V | Sod | S.Y. | 38 | \$8.00 | 37 | \$296.00 | \$8.00 | 0.00 | \$0.00 | \$8.00 | 0.00 | \$0.00 |
| W | #2 Cont. Shrub | Each | 12 | \$30.00 | 0.00 | \$0.00 | \$30.00 | 12.00 | \$360.00 | \$30.00 | 0.00 | \$0.00 |
| X | #1 Cont. Perennial or Shrub | Each | 313 | \$14.50 | 0.00 | \$0.00 | \$14.50 | 313.00 | \$4,538.50 | \$14.50 | 0.00 | \$0.00 |
| Y | Inlet Protection | Each | 0 | | 0.00 | \$0.00 | | 0.00 | \$0.00 | | 0.00 | \$0.00 |
| | 1.5" B&B Tree (F&I) | Each | 2 | \$550.00 | 0.00 | \$0.00 | \$550.00 | 2.00 | \$1,100.00 | \$550.00 | 0.00 | \$0.00 |
| SUBTOTAL | | | | TOTAL | \$20,471.00 | \$20,471.00 | TOTAL | \$6,498.50 | \$6,498.50 | TOTAL | \$0.00 | \$0.00 |

**Parkview United Church of Christ
White Bear Lake, MN
Contract Amount**

| | | | | Total Completed Through this Period | | | Total Completed Through this Period | | | Total Completed Through this Period | | |
|-----------------|---|------|----------|-------------------------------------|--------------------|------------|-------------------------------------|--------------------|------------|-------------------------------------|-----------------|-----------|
| Base Bid Items | | | | Invoice #1 | | | Invoice #2 | | | Invoice #3 FINAL | | |
| Item | Description | Unit | Quantity | Unit Price | Actual Quantity | Extension | Unit Price | Actual Quantity | Extension | Unit Price | Actual Quantity | Extension |
| A | Mobilization/Demobilization/Traffic Control/Erosion Control | L.S. | 1 | \$2,000.00 | 0.75 | \$1,500.00 | \$2,000.00 | 0.25 | \$500.00 | \$2,000.00 | 0.00 | \$0.00 |
| B | 6" Sediment Control Log | L.F. | 246 | \$4.80 | 246 | \$1,180.80 | \$4.80 | 0.00 | \$0.00 | \$4.80 | 0.00 | \$0.00 |
| G | Cast-in-Place Concrete Curb Cut | Each | 2 | \$1,800.00 | 2 | \$3,600.00 | \$1,800.00 | 0.00 | \$0.00 | \$1,800.00 | 0.00 | \$0.00 |
| H | Sod Removal | S.Y. | 768 | \$3.00 | 768 | \$2,304.00 | \$3.00 | 0.00 | \$0.00 | \$3.00 | 0.00 | \$0.00 |
| I | Disposal of Excavated Materials Off-Site | C.Y. | 195 | \$27.00 | 195 | \$5,265.00 | \$27.00 | 0.00 | \$0.00 | \$27.00 | 0.00 | \$0.00 |
| J | Grading | Each | 2 | \$1,900.00 | 2 | \$3,800.00 | \$1,900.00 | 0.00 | \$0.00 | \$1,900.00 | 0.00 | \$0.00 |
| K | Soil Loosening | S.Y. | 110 | \$5.00 | 110 | \$550.00 | \$5.00 | 0.00 | \$0.00 | \$5.00 | 0.00 | \$0.00 |
| L | Concrete Paver Splash Block Assembly | Each | 2 | \$2,100.00 | 2 | \$4,200.00 | \$2,100.00 | 0.00 | \$0.00 | \$2,100.00 | 0.00 | \$0.00 |
| M | Clean Sand (Sand Trench) | C.Y. | 28 | | | \$0.00 | | 0.00 | \$0.00 | | 0.00 | \$0.00 |
| O | 4" Perforated (CPEP) Drantile w/o sock (Underdrain) | L.F. | 58 | | | \$0.00 | | 0.00 | \$0.00 | | 0.00 | \$0.00 |
| P | 4" Solid (CPEP) Drantile w/o sock (Underdrain) | L.F. | 153 | | | \$0.00 | | 0.00 | \$0.00 | | 0.00 | \$0.00 |
| R | 4" Drantile Catch Basin Connection | Each | 1 | | | \$0.00 | | 0.00 | \$0.00 | | 0.00 | \$0.00 |
| S | Planting Soil (12" depth- 75% Sand, 25% Leaf compost- MnDOT Grade II) | C.Y. | 77 | \$60.00 | 77 | \$4,620.00 | \$60.00 | 0.00 | \$0.00 | \$60.00 | 0.00 | \$0.00 |
| T | Twice-Shredded Hardwood Mulch (3" depth) | C.Y. | 26 | \$66.00 | 26 | \$1,716.00 | \$66.00 | 0.00 | \$0.00 | \$66.00 | 0.00 | \$0.00 |
| U | 4" Black Powder Coated Landscape Edging | L.F. | 210 | \$11.00 | 210 | \$2,310.00 | \$11.00 | 0.00 | \$0.00 | \$11.00 | 0.00 | \$0.00 |
| V | Sod | S.Y. | 469 | \$5.00 | 469 | \$2,345.00 | \$5.00 | 0.00 | \$0.00 | \$5.00 | 0.00 | \$0.00 |
| X | #1 Cont. Perennial or Shrub | Each | 631 | \$14.50 | 0 | \$0.00 | \$14.50 | 631.00 | \$9,149.50 | \$14.50 | 0.00 | \$0.00 |
| Y | Inlet Protection | Each | 2 | \$250.00 | 2 | \$500.00 | \$250.00 | 0.00 | \$0.00 | \$250.00 | 0.00 | \$0.00 |
| II | Cast-in-Place Concrete Curb & Gutter | L.F. | 18 | \$100.00 | 18 | \$1,800.00 | \$100.00 | 0.00 | \$0.00 | \$100.00 | 0.00 | \$0.00 |
| | South Garden Drainage Swale Work | L.S. | 1 | \$2,500.00 | 0 | \$0.00 | \$2,500.00 | 1.00 | \$2,500.00 | \$2,500.00 | 0.00 | \$0.00 |
| | South Garden Berm Grading | L.S. | 1 | \$800.00 | 0 | \$0.00 | \$800.00 | 1.00 | \$800.00 | \$800.00 | 0.00 | \$0.00 |
| SUBTOTAL | | | | | | | | | | | | |
| | | | | TOTAL | \$35,690.80 | | TOTAL | \$12,949.50 | | TOTAL | \$0.00 | |

**St Stephen Lutheran Church
White Bear Lake, MN
Contract Amount**

| Base Bid Items | | | | Total Completed Through This Period | | | Total Completed Through This Period | | | Total Completed Through This Period | | |
|-----------------|---|------|----------|-------------------------------------|--------------------|--------------|-------------------------------------|-----------------|---------------|-------------------------------------|-----------------|---------------|
| | | | | Invoice #1 | | | Invoice #2 | | | Invoice #3 FINAL | | |
| Item | Description | Unit | Quantity | Unit Price | Actual Quantity | Extension | Unit Price | Actual Quantity | Extension | Unit Price | Actual Quantity | Extension |
| A | Mobilization/Demobilization/Traffic Control/Erosion Control | L.S. | 1 | \$2,000.00 | 1 | \$1,500.00 | \$2,000.00 | 0 | \$500.00 | \$2,000.00 | 0 | \$0.00 |
| B | 6" Sediment Control Log | L.F. | 172 | \$4.80 | 172 | \$825.60 | \$4.80 | 0 | \$0.00 | \$4.80 | 0 | \$0.00 |
| G | Cast-in-Place Concrete Curb Cut | Each | 1 | \$1,800.00 | 1 | \$1,800.00 | \$1,800.00 | 0 | \$0.00 | \$1,800.00 | 0 | \$0.00 |
| H | Sod Removal | S.Y. | 512 | \$3.00 | 512 | \$1,536.00 | \$3.00 | 0 | \$0.00 | \$3.00 | 0 | \$0.00 |
| I | Disposal of Excavated Materials Off-Site | C.Y. | 56 | \$27.00 | 56 | \$1,512.00 | \$27.00 | 0 | \$0.00 | \$27.00 | 0 | \$0.00 |
| J | Grading | Each | 1 | \$1,900.00 | 1 | \$1,900.00 | \$1,900.00 | 0 | \$0.00 | \$1,900.00 | 0 | \$0.00 |
| K | Soil Loosening | S.Y. | 84 | \$5.00 | 84 | \$420.00 | \$5.00 | 0 | \$0.00 | \$5.00 | 0 | \$0.00 |
| L | Concrete Paver Splash Block Assembly | Each | 1 | \$2,100.00 | 1 | \$2,100.00 | \$2,100.00 | 0 | \$0.00 | \$2,100.00 | 0 | \$0.00 |
| M | Clean Sand (Sand Trench) | C.Y. | 11 | \$72.00 | 11 | \$792.00 | \$72.00 | 0 | \$0.00 | \$72.00 | 0 | \$0.00 |
| O | 4" Perforated (CPEP) DrainTile w/o sock (Underdrain) | L.F. | 34 | \$11.00 | 34 | \$374.00 | \$11.00 | 0 | \$0.00 | \$11.00 | 0 | \$0.00 |
| P | 4" Solid (CPEP) DrainTile w/o sock (Underdrain) | L.F. | 106 | \$11.00 | 106 | \$1,166.00 | \$11.00 | 0 | \$0.00 | \$11.00 | 0 | \$0.00 |
| R | 4" DrainTile Catch Basin Connection | Each | 1 | \$500.00 | 1 | \$500.00 | \$500.00 | 0 | \$0.00 | \$500.00 | 0 | \$0.00 |
| S | Planting Soil (12" depth- 75% Sand, 25% Leaf compost- MnDOT Grade II) | C.Y. | 46 | \$60.00 | 46 | \$2,760.00 | \$60.00 | 0 | \$0.00 | \$60.00 | 0 | \$0.00 |
| T | Twice-Shredded Hardwood Mulch (3" depth) | C.Y. | 16 | \$66.00 | 16 | \$1,056.00 | \$66.00 | 0 | \$0.00 | \$66.00 | 0 | \$0.00 |
| U | 4" Black Powder Coated Landscape Edging | L.F. | 147 | \$11.00 | 147 | \$1,617.00 | \$11.00 | 0 | \$0.00 | \$11.00 | 0 | \$0.00 |
| V | Sod | S.Y. | 327 | \$5.00 | 327 | \$1,635.00 | \$5.00 | 0 | \$0.00 | \$5.00 | 0 | \$0.00 |
| W | #2 Cont. Shrub | Each | 9 | \$30.00 | 0 | \$0.00 | \$30.00 | 9 | \$270.00 | \$30.00 | 0 | \$0.00 |
| X | #1 Cont. Perennial or Shrub | Each | 308 | \$14.50 | 0 | \$0.00 | \$14.50 | 308 | \$4,466.00 | \$14.50 | 0 | \$0.00 |
| Y | Inlet Protection | Each | 1 | \$250.00 | 1 | \$250.00 | \$250.00 | 0 | \$0.00 | \$250.00 | 0 | \$0.00 |
| Z | 1.5" B&B Deciduous tree | Each | 1 | | 0 | \$0.00 | \$550.00 | 1 | \$550.00 | \$550.00 | 0 | \$0.00 |
| SUBTOTAL | | | | TOTAL | \$21,743.60 | TOTAL | \$5,786.00 | TOTAL | \$0.00 | TOTAL | \$0.00 | \$0.00 |

Galowitz Olson, PLLC
10390 39th Street North
Lake Elmo, Minnesota 55042
Office: (651) 777-6960
Fax: (651) 777-8937

Ramsey-Washington Metro Watershed District
C/O Tina Carstens
2665 Noel Drive
Little Canada MN 55117

Page: 1
March 22, 2018
File No: 9M

| | Balance |
|------------------------------|-------------------|
| General Account | \$1,800.00 |
| Grass Lake Emergency Project | \$440.00 |
| | <u>\$2,240.00</u> |

* * * * *

Permit Program

* * * * *

A R

a A
_____ & _____ S

A w x & &

a M

a
M & & L M
&

A
&

a t

e **R**

o

R

R

:

A

:
 p

#18-06 Phalen Retail Development

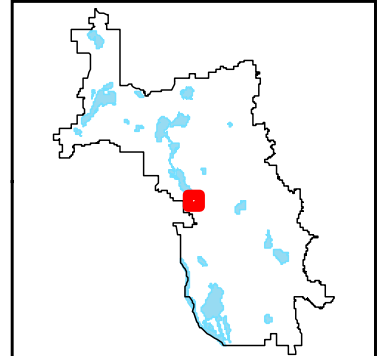
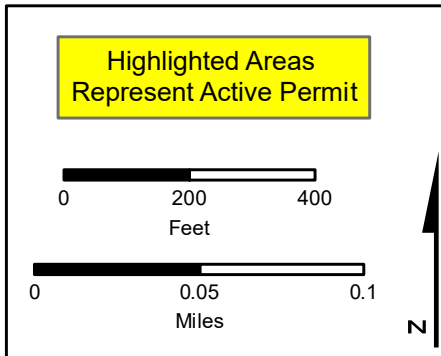


Copyright neamap 2015

Wetlands

| | |
|------------|---------------|
| Red | Manage A |
| Green | Manage B |
| Blue | Manage C |
| Light Blue | Lake |
| Grey | Sediment Pond |
| Purple | Not Assessed |

| | |
|----------------------|-------------------|
| Black outline | RWMWD Boundary |
| White arrow | Flow Arrows |
| Green arrow | Major Flow Arrows |
| Green outline | Subwatersheds |
| Blue line | Creeks |
| Purple hatched | Permits |
| Orange outline | Ramsey Co Parcels |
| Dashed white outline | City Boundaries |



&

&

&&&

&

M

A

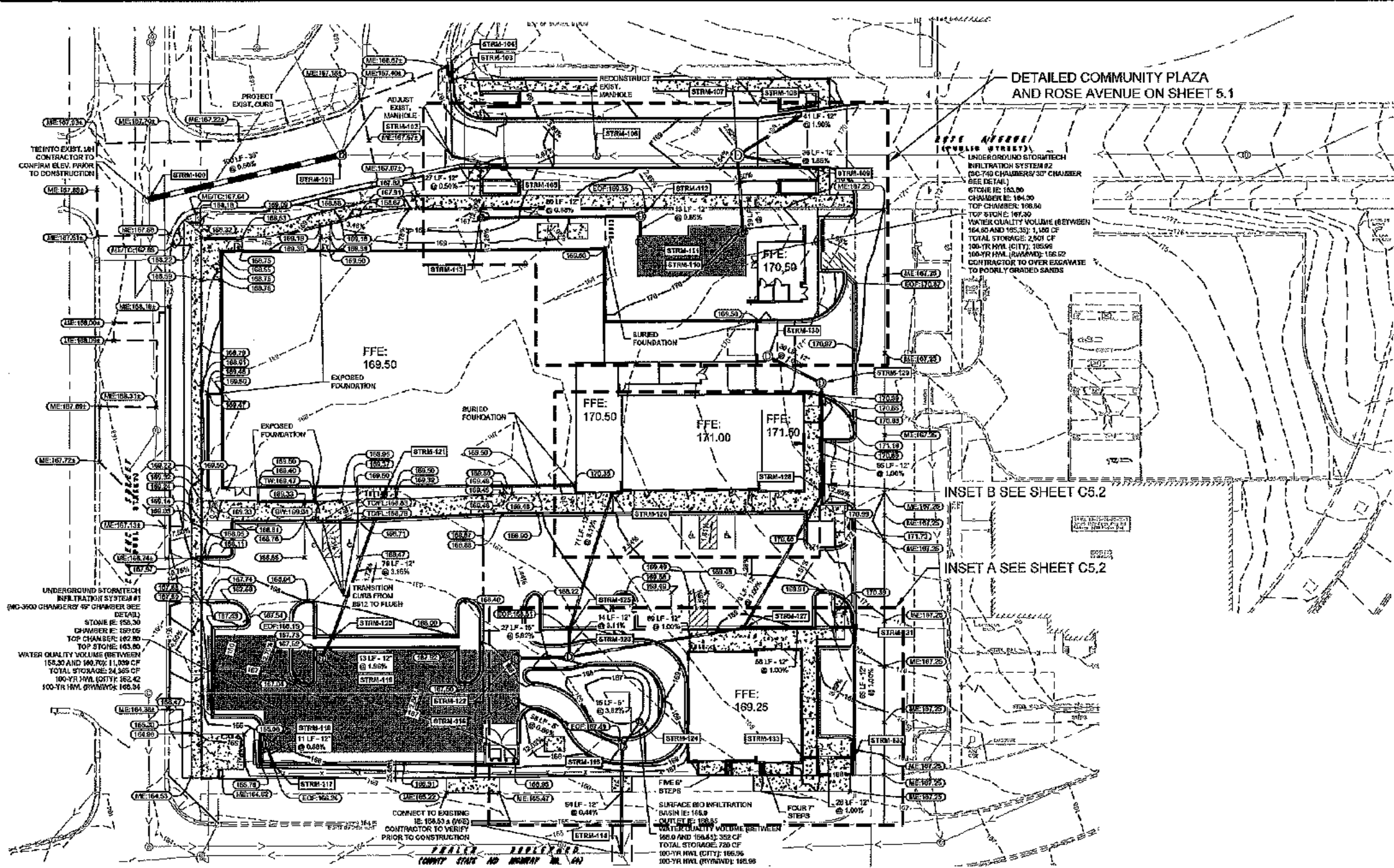
4&Sa &

M

&

3

&



LEGEND

- PROPERTY LINE
- - - EXISTING CONTOUR
- - - PROPOSED CONTOUR
- PROPOSED MANHOLE
- PROPOSED CATCH BASIN
- PROPOSED STORM SEWER
- PROPOSED SPOT ELEVATION
- PROPOSED UNDERGROUND STORAGE SYSTEM
- EXISTING MANHOLE
- EXISTING CATCH BASIN
- EXISTING STORM SEWER

- GRADING PLAN NOTES**
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF ST. PAUL, SPECIFICATIONS AND BUILDING PERMIT REQUIREMENTS.
 - CONTRACTOR TO CALL DOPHER STATE CALL ONE @ 1-800-252-1166 AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATION/CONSTRUCTION FOR UTILITY LOCATIONS.
 - STORM SEWER PIPE SHALL BE AS FOLLOWS:
RCP PER ASTM C-78
HOPE 0" - 10" PER AASHTO M-252
HOPE 12" OR GREATER PER ASTM F-2306
PVC 8" - 18" PER ASTM D-3034
STORM SEWER FITTINGS SHALL BE AS FOLLOWS:
RCP PER ASTM C-78, JOINTS PER ASTM C-381, C-390, AND C-443
HOPE 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 OFFSET ANY STABILITY PROBLEMS DUE TO 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 SURFACE.
 - 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 OBSERVED 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 CURB AND ADA STATUTORY STANDARDS. IN NO CASE SHALL ACCESSIBLE RAMP SLOPES EXCEED 1:12 HORIZONTAL, IN NO CASE SHALL SIDEWALK CROSS SLOPES EXCEED 2%, IN NO CASE SHALL LONGITUDINAL SIDEWALK SLOPES EXCEED 5%. IN NO CASE SHALL ACCESSIBLE PARKING SPACES OR AREAS EXCEED 1:50 (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 0.6% GUTTER SLOPE TOWARDS LOW POINTS.
 - CONTRACTOR TO PROVIDE 3" INSULATION BY 5" 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 164.5 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.
 - CONTRACTOR SHALL REVIEW PAVEMENT GRADIENT AND CONSTRUCT "IN-FILL CURBS" WHERE PAVEMENT DRAINS TOWARD GUTTER, AND "OUT-FALL" CURBS WHERE PAVEMENT DRAINS AWAY FROM GUTTER.
 - CLEAN AND TELEVISION ALL NEW SEWERS AND TELEVISION ALL EXISTING CITY SEWERS BEFORE AND AFTER CONSTRUCTION.
 - CONTRACTOR SHALL EMPLOY APPROPRIATE ON-SITE TESTING (CONSISTENT WITH THE RECOMMENDATIONS FOUND IN THE MINNESOTA STORMWATER MANUAL) TO VERIFY SUB-TYPE AND TO ENSURE A MINIMUM OF THREE (3) FEET OF SEPARATION SATURATED SOIL AND THE BOTTOM OF THE PROPOSED INFILTRATION/STORAGE SYSTEM.
 - CONTRACTOR SHALL FOLLOW APPROPRIATE ON-SITE TESTING (CONSISTENT WITH THE RECOMMENDATIONS FOUND IN THE MINNESOTA STORMWATER MANUAL) TO VERIFY SUB-TYPE AND TO ENSURE A MINIMUM OF THREE (3) FEET OF SEPARATION SATURATED SOIL AND THE BOTTOM OF THE PROPOSED INFILTRATION/STORAGE SYSTEM.
 - NOTIFY RIDDLE SODERHOLM, RAMSEY-WASHINGTON METRO WATERWORKS DISTRICT, AT 651-792-7995 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION OF INFILTRATION AREAS.
 - ALL INFILTRATION AREAS SHALL REMAIN DEFINED AND PROTECTED FROM CONSTRUCTION ACTIVITY UNTIL SITE IS RESTORED.

DRAINAGE SCHEDULE

| STRUCTURE NO. | STRUCTURE/CASTING TYPE | RIM/GRATE ELEVATION | INVERT ELEVATION | PIPE SIZE IN | PIPE SLOPE | INVERT ELEVATION OUT | PIPE SIZE OUT | PIPE SLOPE OUT | SUMP DEPTH |
|---------------|------------------------|---------------------|------------------|--------------|------------|----------------------|---------------|----------------|------------|
| STRM-100 | CA MEDIUM RIBBON | 169.31 | | | | 169.30 | 12" | 1.00% | |
| STRM-101 | CA MEDIUM RIBBON | 169.36 | | | | 169.35 | 12" | 1.00% | |
| STRM-102 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-103 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-104 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-105 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-106 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-107 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-108 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-109 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-110 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-111 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-112 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-113 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-114 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-115 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-116 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-117 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-118 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-119 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-120 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-121 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-122 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-123 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-124 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-125 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-126 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-127 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-128 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-129 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-130 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-131 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-132 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-133 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |

| STRUCTURE NO. | STRUCTURE/CASTING TYPE | RIM/GRATE ELEVATION | INVERT ELEVATION | PIPE SIZE IN | PIPE SLOPE IN | INVERT ELEVATION OUT | PIPE SIZE OUT | PIPE SLOPE OUT | SUMP DEPTH |
|---------------|------------------------|---------------------|------------------|--------------|---------------|----------------------|---------------|----------------|------------|
| STRM-134 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-135 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-136 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-137 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-138 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-139 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-140 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-141 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-142 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-143 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-144 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-145 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-146 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-147 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-148 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-149 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-150 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |

| STRUCTURE NO. | STRUCTURE/CASTING TYPE | RIM/GRATE ELEVATION | INVERT ELEVATION | PIPE SIZE IN | PIPE SLOPE IN | INVERT ELEVATION OUT | PIPE SIZE OUT | PIPE SLOPE OUT | SUMP DEPTH |
|---------------|------------------------|---------------------|------------------|--------------|---------------|----------------------|---------------|----------------|------------|
| STRM-151 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-152 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-153 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-154 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-155 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-156 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-157 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-158 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-159 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-160 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-161 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-162 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-163 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-164 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-165 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-166 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-167 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-168 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-169 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |
| STRM-170 | CA MEDIUM RIBBON | 170.02 | SEE DETAIL | | | | | | |

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

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

Kimley»Horn

250 UNIVERSITY AVENUE WEST, SUITE 200K, ST. PAUL, MN 55144
PHONE: 651-464-1177
WWW.KIMLEY-HORN.COM

PHALEN VILLAGE

PREPARED FOR
PASTER PROPERTIES

MINNESOTA

ST. PAUL

SHEET NUMBER
C5.0

ISSUED FOR PERMIT - NOT FOR CONSTRUCTION

DATE: 03/07/18
BY: [Signature]

REVISIONS

NO. DATE BY

A R

a A _____
 & n _____

A A M 3 & _____
 & k _____

a _____
m M 3 & j A

 S
 k
 y

a _____ **t** _____
 _____ *e* _____ **R**
 _____ *o* _____

R _____

: _____

A _____
 :
 p

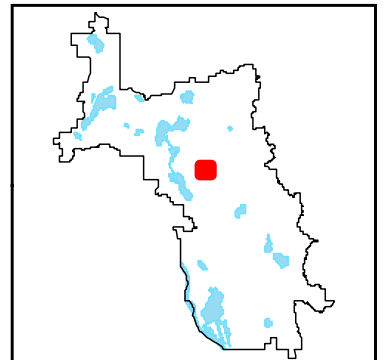
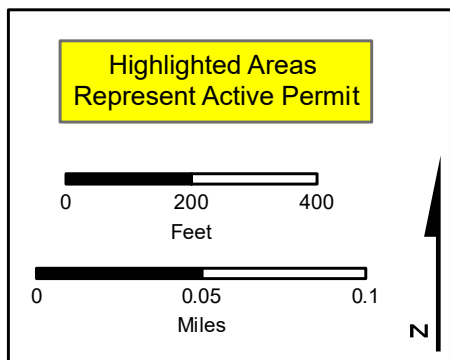
#18-07 Wakefield Park Improvements



Wetlands

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

| | |
|--|-------------------|
| | RWMWD Boundary |
| | Flow Arrows |
| | Major Flow Arrows |
| | Subwatersheds |
| | Creeks |
| | Permits |
| | City Boundaries |



Copyright neamap 2015

3 S 4

y

&

& & &&&

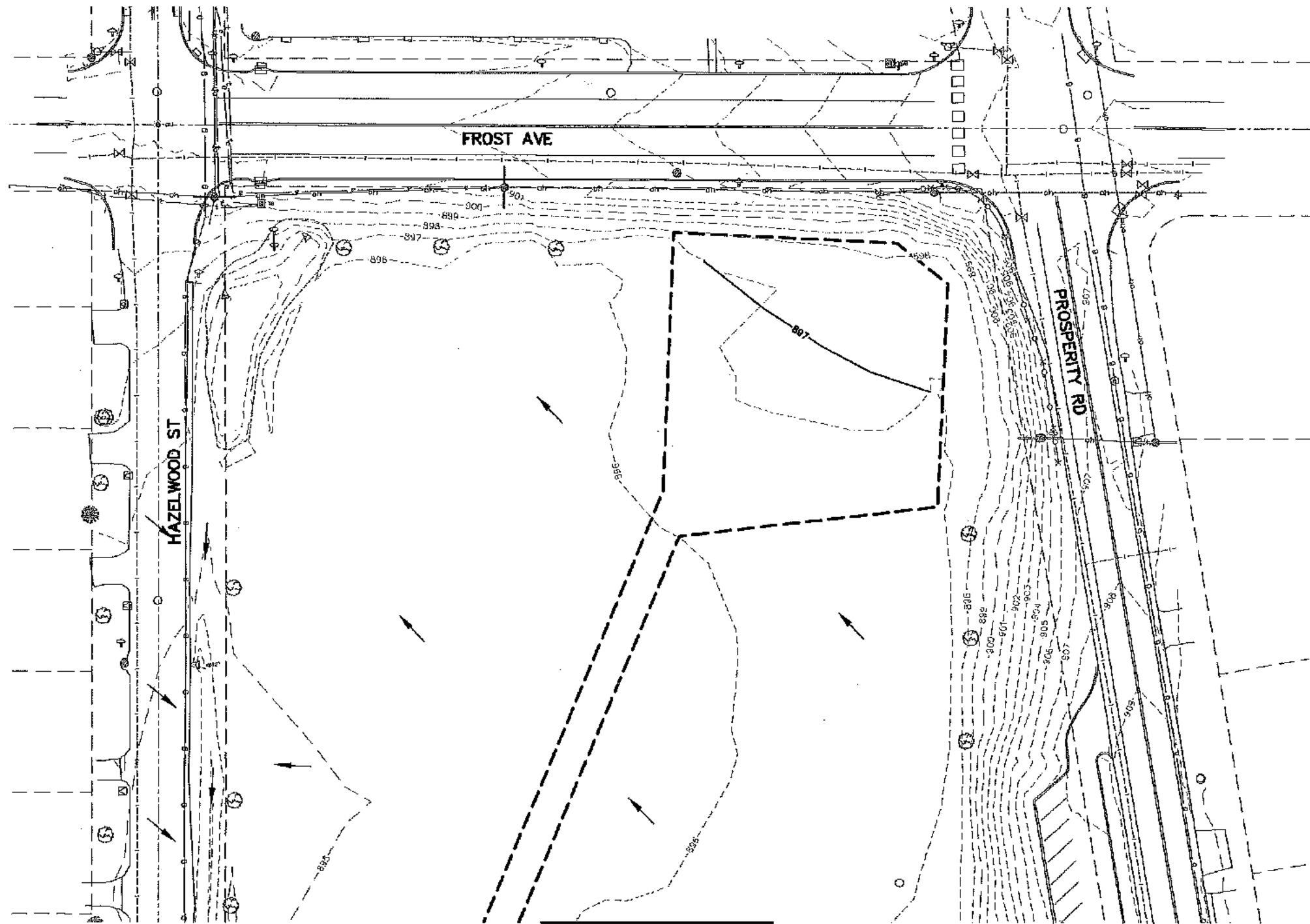
S

a

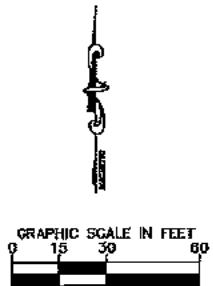
M M M

M A 4&Sa & M & 3 &

K:\TWC_Civil\CITY\MAPLEWOOD\WAKFIELD PARK FINAL DESIGN\CAD\Plan Sheets\160500053-Grading_Drainage_Plan.dwg March 01, 2018 - 5:03am



MATCH LINE SEE SHEET c4.1



| No. | Date | Revisions | App. |
|-----|------|-----------|------|
| | | | |
| | | | |
| | | | |

| DRAWING NAME DWG | |
|---------------------|-----------|
| DESIGNED BY: | RBC |
| DRAWN BY: | RBC |
| CHECKED BY: | CSL |
| DATE: | 2/28/2018 |
| PROJECT NO. | 160500053 |

Kimley»Horn
 2650 UNIVERSITY AVENUE WEST, SUITE 238N
 SHIRT FAIR, MINNEAPOLIS, MN 55414
 PH: 612-645-4197 www.kimley-horn.com

HABEN, CHRISTENSEN & MCILWAIN
 ARCHITECTS

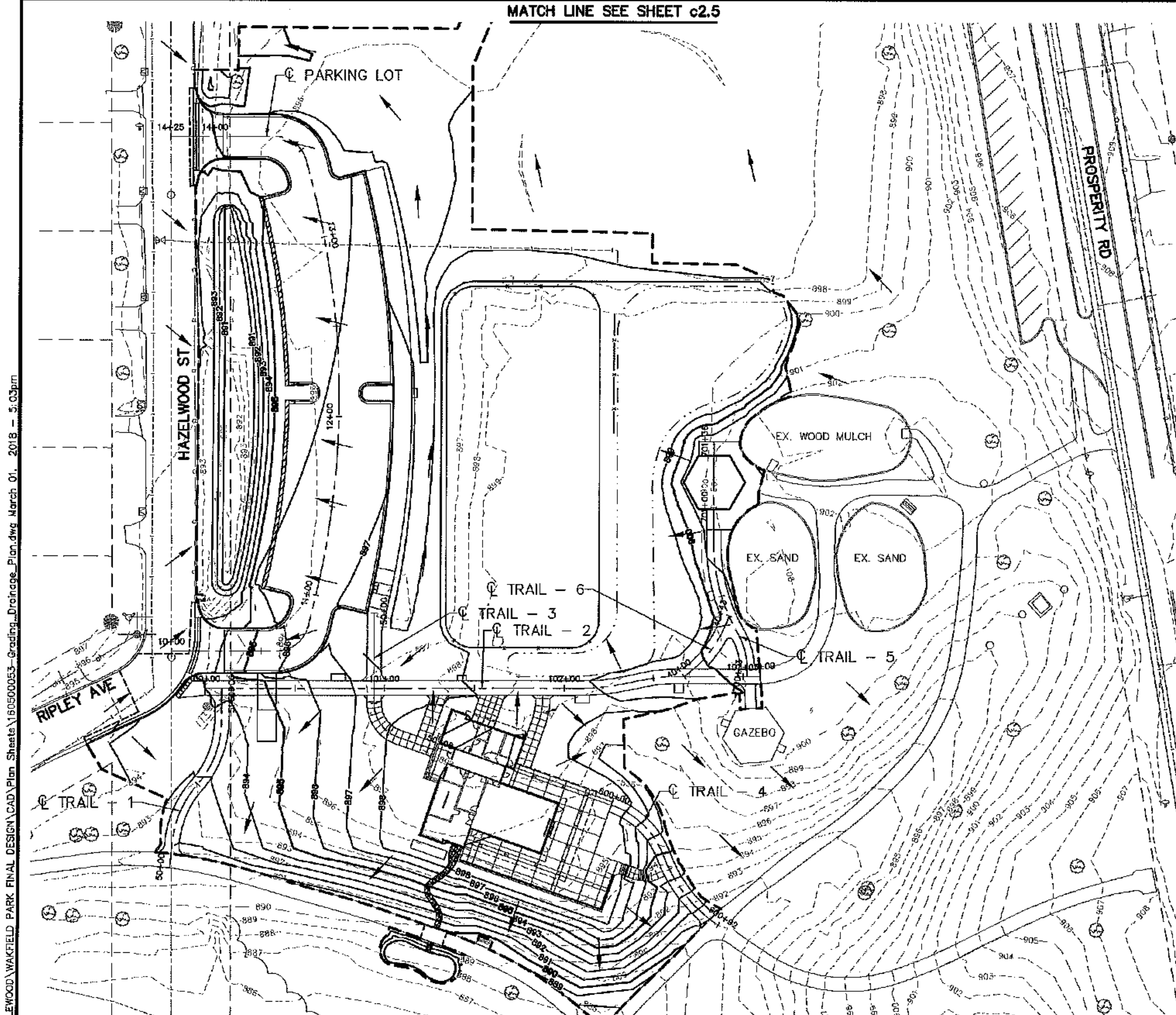
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
Chad B. Larson
 CHADD B. LARSON
 DATE: 2/28/2018 MN LIC. NO. 41864






CITY OF MAPLEWOOD
 WAKEFIELD PARK IMPROVEMENTS
 CITY PROJECT NO. PR17-01
 GRADING PLAN

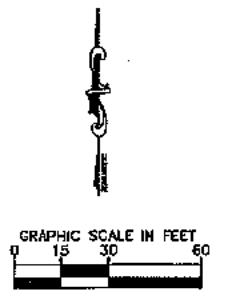
SHEET NO.
c4.0

MATCH LINE SEE SHEET c2.5



LEGEND

-  EXISTING CONTOUR
-  PROPOSED CONTOUR
-  FLOW ARROW

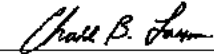


| No. | Date | Revisions | App. |
|-----|------|-----------|------|
| | | | |
| | | | |
| | | | |

| | |
|---------------------|-----------|
| DRAWING NAME DWG | |
| DESIGNED BY: | RBC |
| DRAWN BY: | RBC |
| CHECKED BY: | CBL |
| DATE: | 2/28/2018 |
| PROJECT NO. | 160500053 |

Kimley»Horn
 2530 UNIVERSITY AVENUE WEST, SUITE 220N
 SAINT PAUL, MINNESOTA 55114
 P: 651-645-4157 www.kimley-horn.com


 HAGEN, CHRISTENSEN & MCILWAIN
 ARCHITECTS

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.

 CHADD B. LARSON
 DATE: 2/28/2018 MN LIC. NO. 41864



CITY OF MAPLEWOOD
 WAKEFIELD PARK IMPROVEMENTS
 CITY PROJECT NO. PR17-01
 GRADING PLAN

SHEET NO.
c4.1

K:\TMC_Civil\CITY\MAPLEWOOD\WAKEFIELD PARK FINAL DESIGN\CAD\Plan Sheets\160500053-Grading_Drainage_Plan.dwg March 01, 2018 - 5:03pm



RAMSEY-WASHINGTON

METRO WATERSHED DISTRICT

MEMORANDUM

Date: April 4, 2018
To: Board of Managers and Staff
From: Nicole Soderholm, Permit Coordinator
Subject: March Enforcement Action Report

During March 2018:

Number of Violations: 0

Ongoing Activities:

Erosion/sediment control inspections will be ramping up in April as frozen soil conditions and snow cover subside. Anna Beining will be starting part-time on April 9th as the District Inspector intern and will switch to full-time late spring. Anna will complete erosion and sediment control inspections on active construction sites and inspect stormwater BMPs for maintenance. In March, staff assisted engineers, local government, and developers with permitting and completed monthly permit review with Barr Engineering. Staff responded to inquiries on projects in the District and provided Wetland Conservation Act (WCA) guidance/administration.

Project Updates:

Permit #17-02 McMillan Development, Shoreview

A subcontractor on the McMillan mixed used development in Shoreview installed an underground infiltration system this month. Staff visited the site to observe installation and inquire about methods used to prevent clogging of the system. According to the installer, the system will remain offline until adjacent areas are stabilized. Work continues on the residential portion of the development on the west side of the site. A second underground infiltration system will be installed during the spring/summer as work on the east side of the site wraps up.

Permit #15-11 Cherrywood Pointe, Roseville

The majority of construction wrapped up last fall on the Cherrywood Pointe senior living facility in Roseville. Staff will inspect the filtration basin and stabilization of the south side of the site when conditions allow. At the time of this month's visit, snow cover prevented a proper assessment of the site. If necessary, a punchlist will be generated this spring as part of the final inspection and permit close-out procedures.

Permit #13-12 Whispering Pines, Little Canada

Staff visited the site and observed that all homes in the Whispering Pines development in Little Canada have been completed. When conditions allow, staff will complete a final inspection of the infiltration BMPs and lot stabilization in order to close out the permit. At the time of this month's visit, snow cover prevented proper assessment of the site.

Permit #13-16 Havencrest, Maplewood

Staff visited the site and observed that all homes in the Havencrest development in Maplewood have been completed. When conditions allow, staff will complete a final inspection of the infiltration basin and lot stabilization in order to close out the permit. At the time of this month's visit, snow cover prevented proper assessment of the site.

Permit #15-03 Cardinal Place, Oakdale

Staff visited the site and observed that all townhomes in the Cardinal Place development in Oakdale have been completed. In collaboration with city staff, the District will continue to work with the contractor this spring to ensure the filtration basin is properly repaired following a failed attempt last year. If the developer does not complete the basin within a reasonable timeframe, the District may utilize the development's escrow to get the work completed.

Permit #15-09 Cardinal Glen, North St. Paul

Staff visited the site and observed that all homes and townhomes in the Cardinal Glen development in North St. Paul have been completed. When conditions allow, staff will complete a final inspection of the infiltration basin and lot stabilization in order to close out the permit. At the time of this month's visit, snow cover prevented proper assessment of the site.

Permit #17-30 Grass Lake Berm Raise, Shoreview

The permit has been issued for the District-led Grass Lake Berm project in Shoreview. A preconstruction meeting has been scheduled for March 30th.

Permits Closed in March 2018:

None

* * * * *

Stewardship Grant Program

* * * * *

BMP Incentive Application Summary

Project Name: Vesterholt

Application Number: 18-04 CS

Board Meeting Date: 4/4/2018

Applicant Name: Peter Vesterholt

Residential

Commercial/Government

Project Overview:

This property is located on the southeast side of Lake Owasso in the City of Roseville. The existing turf grass lawn slopes towards the lake along 160 lineal feet of lakeshore. The applicant is proposing to install a natural buffer to minimize erosion of the shoreline and minimize runoff from the lawn into the lake. The applicant will have the contractor perform maintenance for at least the first three years after the project is installed.

This project is eligible for 100% up to \$15,000.

BMP type(s):

Shoreline Restoration(1)

Grant Request:

\$14,000.00

Recommendation:

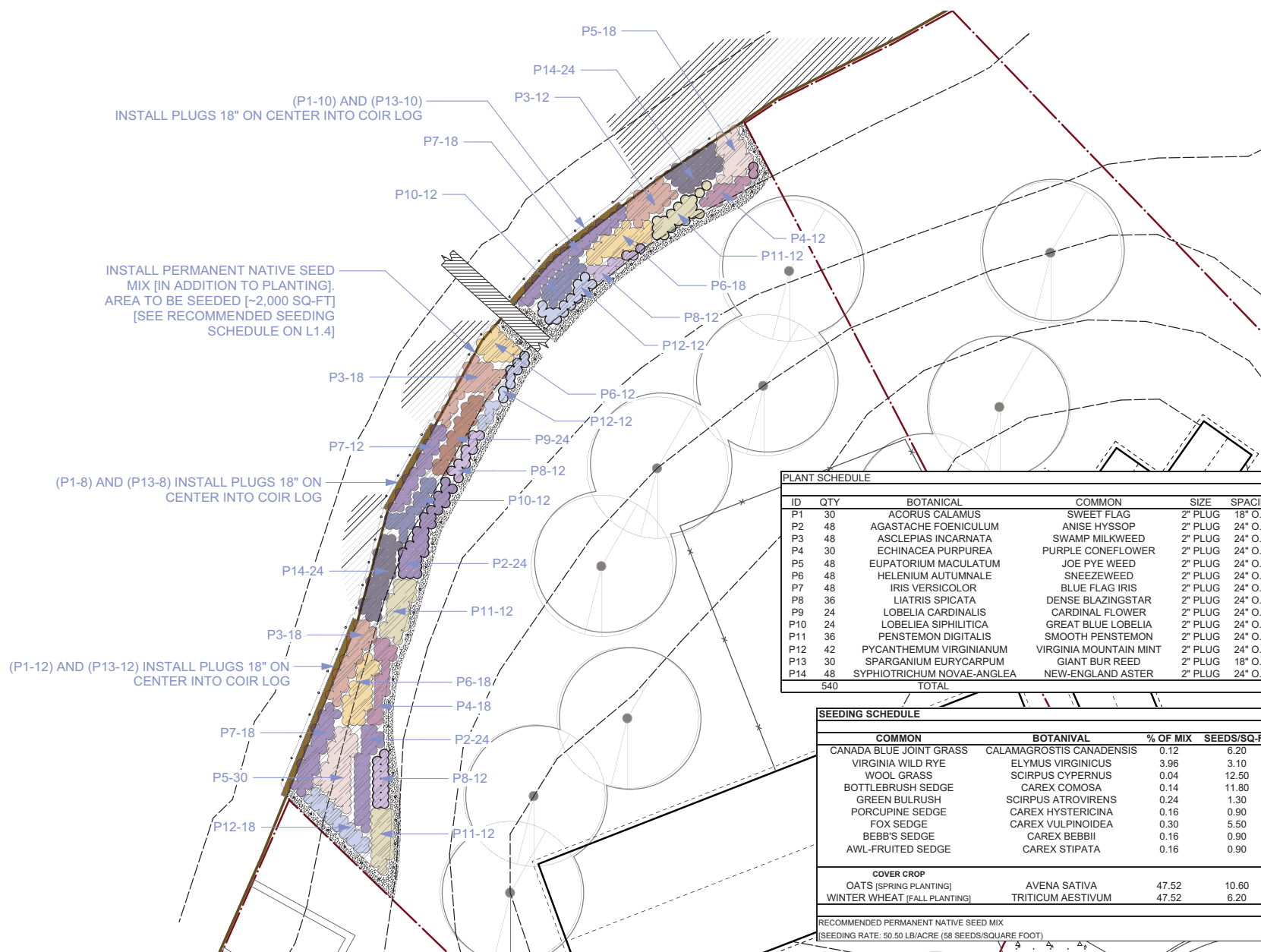
Staff recommends approval of this application.

Subwatershed:

Lake Owasso

Location Maps:





BMP Incentive Application Summary

Project Name: Lionsgate Academy

Application Number: 18-05 CS

Board Meeting Date: 4/4/2018

Applicant Name: Sarah Hauer

Residential

Commercial/Government

Project Overview:

This property is located in an industrial area in the City of Shoreview. The applicant will be renovating an existing building into a public charter school. The applicant is proposing to remove 16,300 sq ft of asphalt from the existing parking lot. A rain garden will be installed on one end, and the remaining portion will be planted with a mixture of native plants and grasses for an outdoor activity area. Lionsgate works with students with special needs, lower income families, and a diverse population from across the metro area which falls in line with our equity initiative program.

This project qualifies for our school site retrofit funds and is eligible for 100% funding.

BMP type(s):

Rain Garden(1)

Grant Request:

\$80,000.00

Recommendation:

This project qualifies for our school site retrofit funds and is eligible for 100% funding. Staff recommends approval of this application.

Subwatershed:

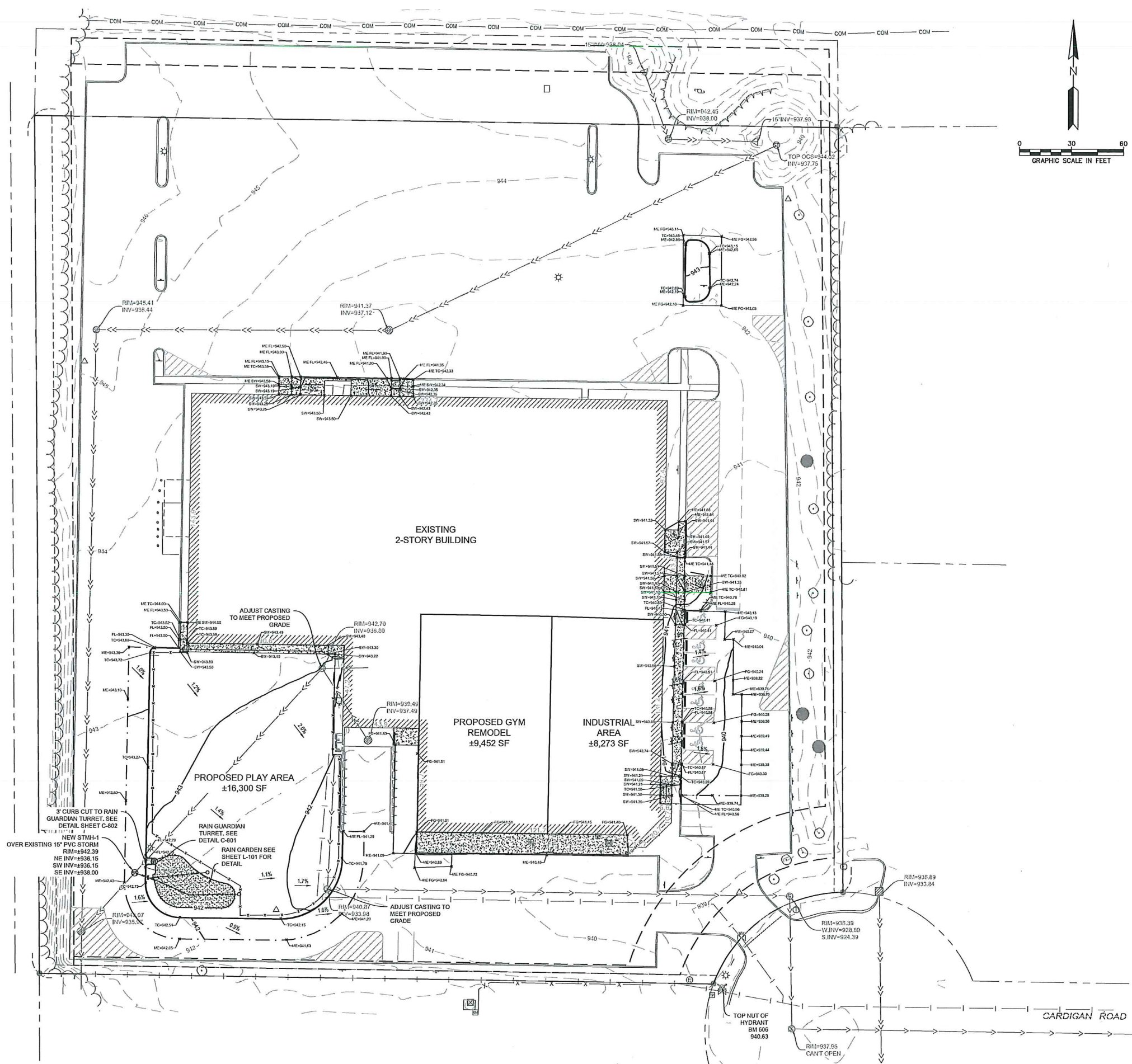
Grass Lake

Location Maps:



#18-05CS

1/11/2018 2:22:18 PM



GENERAL LEGEND

- PROPERTY LINE
- - - ADJACENT PROPERTY LINE
- - - EASEMENT LINE
- - - SETBACK LINE
- FOUND MONUMENT

GRADING LEGEND

- 940 — PROPOSED CONTOURS
- 941 — 4" PVC DRAIN TILE SEE L-101 FOR DETAIL
- 2.0% FINISHED GRADE SLOPE PERCENTAGE
- TC=940.00 TOP BACK OF CURB ELEVATION
- FG=940.00 FINISH GROUND ELEVATION
- SW=940.00 SIDEWALK ELEVATION
- ME=940.00 MATCH EXISTING ELEVATION
- FL=940.00 FLOW LINE ELEVATION

GRADING NOTES

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF SHOREVIEW SPECIFICATIONS AND BUILDING PERMIT REQUIREMENTS.
2. CONTRACTOR TO CALL GOPHER STATE CALL ONE @ 1-800-252-1166 AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATION / CONSTRUCTION FOR UTILITY LOCATIONS.
3. CONTRACTOR TO FIELD VERIFY THE LOCATIONS AND ELEVATIONS FOR EXISTING UTILITIES AND TOPOGRAPHIC FEATURES PRIOR TO THE START OF SITE GRADING. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE PROJECT ENGINEER OF ANY DISCREPANCIES OR VARIATIONS.
4. SUBGRADE EXCAVATION SHALL BE BACKFILLED IMMEDIATELY AFTER EXCAVATION TO HELP OFFSET ANY 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 PAVMENT.
5. CONTRACTOR SHALL NOTE EXISTING AREAS OF GROUND WATER IMPACT AND SOIL VAPOR EXTENT ON PROJECT ALTA PROVIDED BY WENCK ASSOCIATES, INC. DATED 8/23/2017. AT NO TIME SHALL EXCAVATION WITHIN THESE AREAS EXTEND FURTHER THAN IS NECESSARY TO INSTALL THE PROPOSED BUILDING FOOTINGS, UTILITIES, OR SLAB.
6. ALL EXCESS MATERIAL, BITUMINOUS SURFACING, CONCRETE ITEMS, ANY ABANDONED UTILITY ITEMS, AND OTHER UNSUITABLE MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFF THE CONSTRUCTION SITE.
7. CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION OF PAVEMENTS AND CURB AND GUTTER WITH SMOOTH UNIFORM SLOPES TO PROVIDE POSITIVE DRAINAGE.
8. INSTALL A MINIMUM OF 6" CLASS 5 AGGREGATE BASE UNDER CURB AND GUTTER.
9. UPON COMPLETION OF EXCAVATION AND FILLING, CONTRACTOR SHALL RESTORE ALL STREETS AND DISTURBED AREAS ON SITE.
10. THE ENTIRE PAVEMENT SECTION WITHIN THE PROPOSED PLAY AREA SHALL BE REMOVED PRIOR TO PLACING PLAY AREA FILL. CONTRACTOR SHALL REMOVE CLASS 5 AND BITUMINOUS MATERIAL UNTIL SUBGRADE IS EXPOSED AND FILL PROPOSED PLAY AREA WITH ORGANIC FILL AND NO LESS THAN 4" OF TOPSOIL SUITABLE FOR VEGETATION.
11. ALL SPOT ELEVATIONS / CONTOURS ARE TO FLOWLINE / FINISHED GRADE UNLESS OTHERWISE NOTED.
12. GRADING FOR ALL SIDEWALKS AND ACCESSIBLE ROUTES INCLUDING CROSSING DRIVEWAYS SHALL CONFORM TO CURRENT ADA STATE/ NATIONAL STANDARDS. SLOPES SHALL NOT EXCEED 5% LONGITUDINALLY OR EXCEED 2% CROSS SLOPE. SIDEWALK ACCESS TO EXTERNAL BUILDING DOORS SHALL BE ADA COMPLIANT. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF ADA CRITERIA CANNOT BE MET IN ANY LOCATION.
13. MAINTAIN A MINIMUM OF 0.5% GUTTER SLOPE TOWARDS LOW POINTS.

SITE IMPROVEMENTS

599 CARDIGAN ROAD
SHOREVIEW, MN 55126
Project For: WELLINGTON MANAGEMENT, INC.
1625 ENERGY PARK DRIVE, SUITE 100
ST. PAUL, MN 55108

| Issue # | Description |
|---------|------------------------|
| 1 | CITY SUBMITTAL |
| 2 | CONSTRUCTION DOCUMENTS |
| 3 | ADDENDUM #1 |

| | |
|---|---------------------------|
| Date: | 08/20/17 |
| Date: | 11/20/17 |
| Date: | 01/11/2018 |
| I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MN #52374. | |
| License #: | 52243 |
| Date: | 01/11/2018 |
| Project #: | 6186-0004 |
| Drawn By: | JRA |
| Issue Date: | 01/11/2018 |
| Issue #: | 3 |
| Sheet #: | C-301 |
| Sheet Title: | GRADING AND DRAINAGE PLAN |

WENCK ASSOCIATES
Responsive partner. Exceptional outcomes.
1800 PIONEER CREEK CENTER (P) (763) 479-4200
MAPLE PLAIN, MN 55359 (F) (763) 479-4242

Stewardship Grant Program Budget Status Update

April 4, 2018

| Homeowner | Coverage | Number of Projects | Funds Allocated |
|---|---------------------------------|--------------------|-----------------|
| Habitat Restoration and rain garden w/o hard surface drainage | 50% Cost Share \$15,000 Max | 1 | \$2,384.41 |
| Rain garden w/hard surface drainage, pervious pavement, green roof | 75% Cost Share \$15,000 Max | 1 | \$5,000 |
| Shoreland Restoration (below 100-year flood elevation w/actively eroding banks) | 100% Cost Share \$15,000 Max | 0 | \$0 |

| Commercial, School, Government, Church, Associations, etc. | Coverage | Number of Projects | Funds Allocated |
|---|---|--------------------|--------------------|
| Habitat Restoration | 50% Cost Share \$15,000 Max | 1 | \$230 |
| Shoreland Restoration (below 100-year flood elevation w/actively eroding banks) | 100% Cost Share \$100,000 Max | 0 | \$0 |
| PRIORITY AREAS: | 100% Cost Share \$100,000 Max | 0 | \$0 |
| NON-PRIORITY AREAS: | 75% Cost Share \$50,000 Max | 0 | \$0 |
| Maintenance | 50% Cost Share \$5,000 Max for 5 Years | 4 | \$3,500 |
| Consultant Fees | | | \$19,307.00 |
| Total Allocated | | | \$30,421.41 |

| 2018 Stewardship Grant Program Budget | |
|--|---------------------|
| Budget | \$800,000.00 |
| Total Funds Allocated | \$30,421.41 |
| Total Available Funds | \$769,578.59 |

* * * * *

Action Items

* * * * *

Request for Board Action

Board Meeting Date: April 4, 2018

Agenda Item No.: 8A

Preparer: Tina Carstens, Administrator

Item Description: Change Order No. 6 for Beltline/Battle Creek Tunnel Repair Project

Background:

Over the last month, PCiRoads performed repairs in the Mississippi branch including drilling ports, conducting crack injection with chemical grout, chipping poor concrete in preparation for concrete surface repairs, and performing concrete surface repairs (shotcreting).

Per change order 5, the revised substantial completion date for this work is March 15, 2018. Since that change order was executed, PCiRoads has encountered additional quantities of repairs above the original design, performing an extra 2,500 feet in crack repairs and an extra 600 square feet in concrete surface repairs. Given the contractor's typical rate of crack repair (130 feet per day) and concrete surface repair (100 square feet per day), this has resulted in a lengthened construction period. To address this additional work, and in attempt to complete the work as close to the substantial completion date as possible, PCiRoads has added additional staff, is working six days a week, and is beginning shifts as early as 2:00 a.m. to conduct the work when flows are low.

We anticipate that PCiRoads will be complete with the initial in-tunnel repairs by the end of March. However, they will have approximately 2 weeks of additional repair work to resolve "punchlist" items in the tunnel in early April. Due to the additional repair work in the Mississippi branch beyond that listed in the contract, combined with the increased efforts in time and manpower in an attempt to expedite the work as much as practical, staff recommends an extension to the substantial completion contract deadline to end of day on April 6, 2018, with a final completion, including the punch list items, to be April 20, 2018, with the exception of final site restoration, which per the contract documents is May 15, 2018.

As mentioned last month, this extension does come at an additional cost to the district in engineering observation and contract administration. Staff estimate with the revised schedule recommended above, the extra cost will be approximately \$15,000 to \$20,000 by the substantial completion date. We will provide an updated estimate at the April Board meeting. Prior to approving the change order, the board should discuss extra cost associated with the revised deadline in the draft change order and determine whether to approve the change and

accept the cost, or deny the change order and recoup the additional cost from the contractor's retainage.

Applicable District Goal and Action Item:

Goal: Manage risk of flooding: The District will reduce the public's risk to life and property from flooding through programs and projects that protect public safety and economic well-being.

Action Items: Maintain District flood storage facilities and storm sewer systems.

Staff Recommendation:

Approve Change Order No. 6.

Financial Implications:

This request does not change the contract price.

Board Action Requested:

Discuss the change order request and potential additional costs associated with the contract extension. Determine if Change Order No. 6 will be approved.

CHANGE ORDER 6

DATE OF ISSUANCE: March 27, 2018
EFFECTIVE DATE: March 27, 2018

PROJECT: Beltline, Sta. 1+45 to 93+50 & 438+77 to 458+18, and
Battle Creek, Sta. 0+00 to 45+00, Repair Project
OWNER: Ramsey-Washington Metro Watershed District
CONTRACTOR: PCiRoads, LLC

NOTIFICATION NAME Mr. Nap Scott
and ADDRESS: PCiRoads, LLC
14123 42nd Street NE
St. Michael, MN 55376

ENGINEER: Barr Engineering Co. (Barr)
4300 MarketPointe Drive, Suite 200
Minneapolis, Minnesota 55435
Attn: Nathan Campeau, P.E.

You are directed to make the following changes in the Contract Documents

6-1. Substantial Completion Date Revision to April 6, 2018

Description: This change provides additional time under the contract to substantially complete all work by April 6, 2018. All work, with the exception of any revegetation, will still be required to be complete within two (2) weeks of the Substantial Completion date.

Reason for Change Order: Provide additional time to complete Phase 2 work due to additional work encountered through quantity overruns in Mississippi branch, with an additional approximately 2,500 feet of crack repair and 600 square feet of concrete surface repair.

Change in Contract Price: This change will not change contract price.

Change in Contract Time: This change will extend the contract's Substantial Completion date to April 6, 2018.

RECOMMENDED:

ACCEPTED:

APPROVED:

By _____

By _____

By _____

Date 3/27/2018

Date _____

Date _____

ENGINEER
Barr Engineering Co.

CONTRACTOR
PCiRoads, LLC

OWNER
Ramsey-Washington Metro Watershed
District



* * * * *

Administrator's Report

* * * * *

MEMO

TO: Board of Managers and Staff
FROM: Tina Carstens, Administrator
SUBJECT: April Administrator's Report
DATE: March 28, 2018

A. Meetings Attended

| | | |
|---------------------|----------|---------------------------------------|
| Wednesday, March 7 | 9:00 AM | MAWA Meeting |
| | 2:00 PM | Washington County Consortium Meeting |
| | 6:30 PM | Board Meeting |
| Thursday, March 8 | 10:00 AM | PERA Audit Meeting |
| | 1:30 PM | Ramsey County Meeting |
| Tuesday, March 13 | 1:00 PM | Met with multi-lingual consultant |
| Wednesday, March 14 | 1:00 PM | Ramsey County Funding Meeting |
| Thursday, March 15 | 2:00 PM | Met with Manager Swope |
| Friday, March 16 | 9:00 AM | Wakefield Park Planning Meeting |
| Monday, March 19 | 11:00 AM | Call re: St. Paul MS4 Permit Language |
| Tuesday, March 20 | 11:00 AM | 694/Rice Discussion |
| Wednesday, March 21 | 9:30 AM | Equity Program Discussion |
| | 1:30 PM | Shoreview Pond Research Discussion |
| Thursday, March 22 | 8:00 AM | Water Resources Conference Planning |
| | 1:00 PM | Met with Barr re: ongoing projects |

B. Upcoming Meetings and Dates

| | |
|--------------------|-------------------|
| Metro MAWD Meeting | Tuesday, April 17 |
| CAC Meeting | Tuesday, April 24 |
| WaterFest | Saturday, June 2 |
| MAWD Summer Tour | June 20-21, 2018 |

C. Watershed-Based Funding Pilot Program

Since last month's update, both counties held their convening meetings regarding the funding. In both county meetings, the consensus was that the watershed entities should receive the funds and work with their cities to implement water quality projects. At the meetings, there was some discussion on how the funding should be dispersed to each of the

entities. In both cases, the meeting attendees thought it would be best for the watersheds to meet to determine the best way to calculate the disbursement.

Ramsey County watersheds will meet in the next couple of weeks to determine the final arrangement but has focused on calculating the disbursement based on land area in the county. Washington County is planning on an even split of the money to each watershed and county entity. In both counties, we will need to identify projects that the money will be put towards. The disbursement and project identification needs to be to BWSR by the end of June. The funds can be used until the end of 2020.

D. Legislative Update

Chris O'Brien in our office has been tracking closely the proposed Minnesota legislation that has been moving through the House (H.F. 3577) and Senate (S.F. 3199). The bills are intended to encourage private salt applicators to take MPCA salt application training in exchange for receiving limited liability protection from ice related injury and property damage. In addition, the legislation could dedicate state funding to the MPCA training program, which is expected to run out of money in August 2019.

We posted an article on our website last week that explains the legislation process thus far: <https://www.rwmwd.org/a-solution-for-salt/>. I anticipate having a verbal update for you at the April board meeting summarizing what has happened with the bills since then.

Stop-Over-Salting, an advocacy group launched by several Master Water Stewards, is referenced in the article and is seeking watershed organizations to join a coalition in support of the legislation. A number of organizations on the west side of the Twin Cities have already done so. Attached to this memo is some information regarding the bill and the Stop-Over-Salting group. One of the attachments is a letter sent by the Shingle Creek/West Mississippi WMO to their local legislative representatives. We can discuss whether you as a board would be interested in sending a similar letter and signing on as a supporter of the coalition.

If passed, this legislation could reduce salt use by private contractors and thereby help us meet our TMDL goals for chloride-impaired waters such as Tanner's Lake and Battle Creek Lake. Metro area cities that have participated in the MPCA training have reduced their salt use by 30 to 50 percent; Saint Paul has achieved a 30 percent reduction over the last 10 years.

Over-Use of Deicers and Limited Liability Legislation

What's the issue?

Winter maintenance professionals who maintain parking lots and sidewalks face significant barriers to reducing use of deicing salts because of:

- fear of personal injury or property damage lawsuits
- pressure from customers to apply 'more' deicer to assure safety
- lack of clarity about how much is enough deicer



Minnesota has a nationally acclaimed salt application training winter applicators in best practices. Many commercial applicators want to join their county and city peers in deicer-reduction efforts. Fear, pressure and ambiguity are keeping that from happening right now.

Why is it important?

Chloride found in deicing salts is permanently accumulating in lakes, groundwater, streams and soil. It is contaminating drinking water supplies, is toxic to fish and plants. There is no feasible way to remove chloride once it's dissolved in water. Keeping our fresh water resources 'fresh' is extremely important.

Chloride pollution is forever.

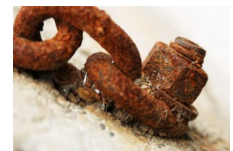
The corrosive affects of chloride cost business, government and individuals millions in repair, replacement and application every year. Salty sidewalks hurt pets.

Chloride is correlated to impervious surfaces. Future development and growth will extend the reach of chloride's devastation.

What we're supporting.

It makes sense to only apply what deicer is needed for public safety, and avoid the extra. We support:

- 1) legislation providing limited liability from personal injury and property damage to commercial applicators and their customers when applicators take voluntary training, certification, and document best practices,
- 2) continuous funding for voluntary, statewide training for all applicators, and
- 3) chloride reduction priorities for all state agencies, because deicers are the #1, but not the only cause, of chloride pollution.



Please use deicers carefully. One teaspoon of deicer permanently pollutes five gallons of water.

How will Limited Liability help?

For business,

- incentivizes commercial applicators and customers to use best practices
- reduces fear of personal injury and property damage lawsuits
- increases pool of certified commercial applicators for property owners to hire

For clean water,

- reduces total amount of deicers used
- aligns commercial and public applicators in common reduction goals/practices
- applicators report 30-60% reduction in deicer use after training

For citizens,

- models consistent deicer use and expectations

What expensive problems will this prevent?

- Loss of revenue from declining fishing and tourism
- Premature aging of infrastructure, bridges, roads; buildings, furnishings and landscaping
- Contaminated ground and drinking water with no practical treatment options
- Overspending on deicer application and cleanup - wasteful use of resources
- 1 Ton Salt costs \$800 to \$3340 in cumulative damages (TCMA Chloride Plan)



What examples do we have?

- Similar legislation in New Hampshire (2013) and Illinois (2016)
- Mn 2016 SF3298: Hawj, Bonoff, Marty and HF2594 Kahn, Erhardt
- Mn 2017 HF1016 Hausman

Where is Minnesota with chloride now?

Since the 1990's increasing amount of deicers have been accumulating in Minnesota's waters.

- Statewide: 47 chloride impairments and elevated chloride in 30% wells (MPCA)
- Twin Cities: 39 impairments, 19 lakes, 16 streams and 4 wetlands, 30% of monitoring wells tested in shallow aquifers exceed chronic standard. (MPCA)
- 365,000 tons of road salt is applied annually in the Twin Cities (MPCA); 78% stays in the Twin Cities waters (Stefan et al. 2008).
- 81% increase in chloride at Hasting Dam 1985-2014 (MCEA St Croix Watershed Research Station)
- 70% of lakes within 500 meters of 1% impervious surfaces are at risk (Dugan, U of Wisconsin)

Who is StopOverSalting (SOS)?

StopOverSalting (SOS) is a group of concerned citizens who found common ground in their awareness of chloride pollution. They advocate for strategies that reduce over salting and maintain safe surfaces on Minnesota's roads, parking lots, and sidewalks.

For more information visit <http://www.stopoversalting.org/> or contact us at stopoversalting@gmail.com.

Support Liability Relief for Certified Salt Applicators & Small Businesses while protecting Minnesota's water resources

Currently landscape professionals and others perform snow and ice removal during winter months using anti-slip/ de-icing products to protect the public from injury.

Over-application of chloride-based products is detrimental to our waterways, but applicators are often pressured to apply more product than necessary or ideal to meet demands from their clients to minimize slips & falls on the owners' property. These demands and concerns about potential litigation lead to applicators having few options other than over-application of product which results in water pollution. Even when these applicators follow best practices, they may still face litigation threats.

The Minnesota Pollution Control Agency currently provides training for salt applicators to learn best practices to significantly reduce the use of chlorides while maintaining safety. This proposed legislation connects anti-slip/anti-ice application best management practices to liability protections for salt professionals and their clients—the small business owners across the State of Minnesota—to avoid uncontrollable circumstances and unexpected litigation costs while protecting the public's safety and the health of Minnesota's waterways.

This common-sense legislation provides liability exemption for salt applicators who have completed certified training available through the PCA as well as to their clients, the property owner, occupant or lessee of the land maintained by these salt applicators.

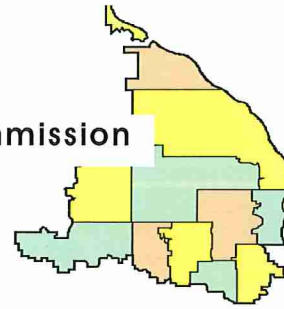
The organizations, businesses and associations shown below join together to urge the Minnesota Legislature to take quick action in 2018 to pass this common-sense legislation which benefits not only struggling small business owners, but our 10,000 lakes, rivers and streams by preventing unnecessary chloride runoff and further irreparable damage to our vital Minnesota waterways.



For more information, please contact Larry Johnson at (651) 633-4987 or larry@mnla.biz

**Support Liability Relief for Certified Salt Applicators & Small
Businesses while protecting Minnesota's water resources**





3235 Fernbrook Lane N • Plymouth, MN 55447
Tel: 763.553.1144 • Fax: 763.553.9326
Email: judie@jass.biz • Website: www.shinglecreek.org

January 10, 2018

Senator Melisa Franzen
Senator Scott Dibble
Representative Dario Anselmo
Representative Frank Hornstein
State of Minnesota

via email

Dear Senators and Representatives:

The efforts to reduce the use of salt, including limiting liability for commercial chloride applicators embodied in HF1016, came before the Shingle Creek Watershed Management Commission and the West Mississippi Watershed Management Commission at their joint meeting held on December 14, 2017. Chloride is a significant concern for the Commissions and they welcome efforts to decrease the use of chloride.

The Commissions considered the information presented to them regarding the efforts of the StopOverSalting group to seek legislation and funding related to this matter. Both Commissions are in support of the effort and voted to direct staff to send a letter to indicate their support.

Therefore, both Commissions are in support of reasonable efforts through legislation such as HF1016 and efforts to raise funds for research and training related to chloride to reduce the use of chloride to improve the health of public waters and the environment generally.

Sincerely,

Judie A. Anderson
Administrator
TJG:JAA:jaa

* * * * *

Project and Program Status Reports

* * * * *

Memorandum

To: Board of Managers and Staff
From: Tina Carstens and Brad Lindaman
Subject: Project and Program Status Report – April 2018
Date: March 28, 2018

Project Feasibility Studies

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

The purpose of this project is to evaluate system-level flood damage reduction options, including mechanical alteration of Lake Phalen and Keller Lake channel outlet structures (and potentially others) to actively manage stormwater runoff from flood-prone areas tributary to the Beltline storm sewer. The project will involve using the RWMWD stormwater model to simulate system-level modifications to evaluate how adjustments to outlet structures during a flood event may be able to optimize the existing system performance to reduce flooding impacts on homes adjacent to RWMWD-managed water bodies.

This period, Barr began optimizing outlet structures and stormwater infrastructure within the first phase of the study. This phase includes the portion of the Gervais Creek watershed between Owasso Basin and Gervais Lake. Initial tasks include evaluating modifications to the stormwater system including culverts, outlet structures, and floodplain storage, as well as considering new storm-sewer pipes to mitigate flood risk for existing structures in the area. After modifications to reduce flood risk are identified, we will optimize outlet structures for RWMWD-managed lakes and streams downstream to prevent adverse impacts to downstream structures. Optimization of outlet structures will be completed using an iterative approach over the next several months.

Snail Lake/Grass Lake optimization study and berm raise project (Barr project manager: Brad Lindaman; RWMWD project manager: Tina Carstens)

The purpose of this study is to evaluate the potential for optimization of the existing Snail Lake/Grass Lake system (from Snail Lake to Grass Lake to Highway 694), with the goal of lowering flood levels in the system's water bodies in order to reduce the flood risk to habitable structures and lessen the impacts to surrounding properties.

Dredging near the outlet of Grass Lake between the lake and the path and between the path and the railroad berm is complete. The contractor has also partially completed the cleanout downstream of Rice Street at the discharge point into West Vadnais Lake.

On March 20, the county board approved the access agreement associated with the berm raise project. Barr expects the contractor to begin work in the near future, when local road restrictions are lifted.

To: Board of Managers and Staff
From: Tina Carstens and Brad Lindaman
Subject: Project and Program Status Report – April 2018
Date: March 28, 2018

Page 2

During March, we began compiling and summarizing the information presented at the March 7 board meeting and entering that information into a decision matrix. We expect to have the information ready for board consideration at the May 2 meeting.

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

The purpose of this project is to coordinate permitting efforts for the proposed Snail, Grass, and West Vadnais lakes outlets with the Minnesota Department of Natural Resources (DNR).

This period, Barr continued to investigate potential DNR concerns as the RWMWD considers the impacts of lowering the outlets (or, in the case of Snail Lake, creating an outlet) for these water bodies, in conjunction with exploring flood control options in the Grass Lake area. A meeting is scheduled with Jen Sorensen of the DNR on March 28 to present the results of hydraulic analyses and to discuss options and requirements.

Modeling of 95-percent confidence limit Atlas 14 district-wide (climate change scenario): flood map generation for future outreach efforts (Barr project manager: Erin Anderson Wenz; 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 95-percent confidence limit of the 100-year rainfall depth. The confidence limit (or uncertainty) associated with the 100-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 be used for discussion with stakeholders when evaluating future flood-risk reduction projects within the RWMWD.

This period, Barr reviewed measured water surface elevations provided by the RWMWD at 15 different locations throughout the district. Three potential validation events were identified, and Barr began reformatting rainfall data so that it could be input into the RWMWD stormwater model.

Capital improvements

Wakefield Park/Frost Avenue stormwater project (Barr project managers: Erin Anderson Wenz and Fred Rozumalski; 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.

On March 16, Barr met with key stakeholders from the RWMWD and city (including the parks department) to brainstorm ideas for the Wakefield Park stormwater project. Consideration was given to the new community building (to be constructed in November of this year) and the narrowing of Frost Avenue, and how these elements might be tied together with the stormwater project planned for the northern half of the park property.

BMP incentive fund: general BMP design assistance and review (Barr project manager: Matt Kumka; RWMWD project manager: Paige Ahlborg)

The purpose of this project is to respond to requests for assistance to find cost-share opportunities from RWMWD partners and to seek out opportunities for cost-share projects throughout the RWMWD.

Barr assisted the RWMWD in developing mobile GIS mapping that focused on underserved communities within the watershed. These areas consist of neighborhoods within the RWMWD that are not well represented in terms of existing water-quality improvement projects as well as communities of higher diversity and lower incomes. The GIS mapping helped identify several potential BMP projects within the RWMWD's portion of St. Paul, including the Boys and Girls Club Eastside on Ames Avenue. The focus of this initiative is to identify high-visibility BMPs that would both improve local water quality and foster relationships between the RWMWD and residents in these communities.

Barr and the City of Shoreview continued discussing a potential project in the Shoreview Lake subwatershed. The project would capture and filter stormwater runoff from a large apartment complex directly tributary to Shoreview Lake, which is currently considered "at risk" of impairment for phosphorus. BMP options are being discussed with the local property owner, as well as with the city staff members who will ultimately be responsible for ongoing maintenance of the BMP. The wetland restoration project for an area south of St. Odelia Church and west of Cottage Place (a cul-de-sac) is planned to be delineated in the spring, with feasibility design beginning immediately afterwards. Although still under evaluation, both projects may be valuable opportunities to partner with the City of Shoreview in 2018.

Phase 1 implementation from Owasso Basin improvements feasibility study (Barr project manager: Erin Anderson Wenz; RWMWD project manager: Tina Carstens)

The purpose of this project is to evaluate flood control options for Owasso Basin and the surrounding area.

This period, Barr used the RWMWD XP-SWMM hydrologic and hydraulic model of Grass Lake, Owasso Basin, and surrounding areas to evaluate how much additional storage would be required to keep the 100-year, 96-hour storm event (which was determined to be the critical event for the area) from overflowing the berm along the western edge of Owasso Basin, and from flooding the mobile-home park on the basin's south side. Various options were tested. Next steps will involve evaluating options that would divert flows to other locations, but only if they do not raise the potential for further flooding downstream. Barr provided an update on this study at the March board meeting.

CIP project repair and maintenance

Beltline and Battle Creek tunnel repair construction services (Barr project manager: Nathan Campeau; RWMWD project manager: Dave Vlasin)

The purpose of this project is to perform ongoing maintenance and repairs of the Beltline tunnel system to significantly increase the service life of the tunnel.

To: Board of Managers and Staff
From: Tina Carstens and Brad Lindaman
Subject: Project and Program Status Report – April 2018
Date: March 28, 2018

Page 4

During this period, PCiRoads performed repairs in the Mississippi branch including drilling ports, conducting crack injection with chemical grout, chipping poor concrete in preparation for concrete surface repairs, and performing concrete surface repairs (shotcreting).

Per change order 5, the revised substantial completion date for this work is March 15, 2018. Since that change order was executed, PCiRoads has encountered additional quantities of repairs above the original design, performing an extra 2,500 feet in crack repairs and an extra 600 square feet in concrete surface repairs. Given the contractor's typical rate of crack repair (130 feet per day) and concrete surface repair (100 square feet per day), this has resulted in a lengthened construction period. To address this additional work, and in attempt to complete the work as close to the substantial completion date as possible, PCiRoads has added additional staff, is working six days a week, and is beginning shifts as early as 2:00 am to conduct the work when flows are low.

We anticipate that PCiRoads will be complete with the initial in-tunnel repairs by the end of March. However, they will have approximately 2 weeks of additional repair work to resolve "punchlist" items in the tunnel in early April. Due to the additional repair work in the Mississippi branch beyond that listed in the contract, combined with the increased efforts in time and manpower in an attempt to expedite the work as much as practical, staff recommends an extension to the substantial completion contract deadline to end of day on April 6, 2018, with a final completion, including the punch list items, to be April 20, 2018, with the exception of final site restoration, which per the contract documents is May 15, 2018.

As mentioned last month, this extension does come at an additional cost to the RWMWD in engineering observation and contract administration. Staff estimate with the revised schedule recommended above, the extra cost will be approximately \$15,000 to \$20,000 by the substantial completion date. We will provide an updated estimate at the April Board meeting.

Prior to approving the change order, the board should discuss extra cost associated with the revised deadline in the draft change order and determine whether to approve the change and accept the cost, or deny the change order and recoup the additional cost from the contractor's retainage.

Change order 6 with the revised dates is included in this board packet for consideration.

CIP maintenance/repairs 2018 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 MS4 requirements.

Construction work continues, with Fitzgerald Excavating & Trucking already having substantially completed work at several sites including the Fifth Street basin and the Seventh Street weir in Oakdale, cleaning of the Tanner's boat ramp pond, and channel cleaning in Grass Lake and downstream of the

To: Board of Managers and Staff
From: Tina Carstens and Brad Lindaman
Subject: Project and Program Status Report – April 2018
Date: March 28, 2018

Page 5

bituminous path. In addition, as mentioned last month, the contractor has installed the new twin arch culverts in the bituminous path that will serve as the primary outlet for Grass Lake.

Payment application 2 is included in the bill list for consideration this month.

Frost/Kennard enhanced water-quality treatment BMP (Barr project manager: Erin Anderson Wenz; RWMWD project manager: Tina Carstens/Paige Ahlborg)

The purpose of this project is to prepare plans and specifications, conduct project bidding, and observe construction for the water-quality BMP enhancement retrofit of the existing infiltration basin located on the parcel owned by the City of Maplewood. The parcel is located in the southwest quadrant of the intersection of Frost Avenue and Kennard Street.

Homeowners have been notified of the project, and the notice to proceed has been issued to the contractor (Minger Construction). As stated last month, homeowners were contacted early in the final design phase and had no concerns regarding project renderings; the vantage point is limited, and the project is largely underground. Construction is expected to begin soon after the contractor finishes considering the various submittals for the project.

Willow Pond CMAC Project (Barr project manager: Erin Anderson Wenz; RWMWD project manager: Tina Carstens)

The purpose of this study is to evaluate the feasibility of using continuous monitoring and control (CMAC) technology in a project that involves diverting flows from Willow Pond to a filter that will remove dissolved and particulate phosphorus to benefit Bennett Lake.

The period, Barr conducted a hydraulic analysis of the changes expected for Willow Pond's water surface elevation in anticipation of a meeting with the DNR's Jen Sorensen to discuss permitting requirements. The city has no reservations about the project at this time. Development of final plans and specifications and construction of the CMAC filtration system are expected to occur in spring and summer 2018.

Natural Resources Update – Bill Bartodziej and Simba Blood

Lake Owasso Carp Management

Winter Tracking and a Netting Attempt

Over the last few months, NR staff has been working with Carp Solutions on tracking the radio-tagged fish in Owasso. We learned that large schools of carp make their way into the northwest bay (Figure 1). This is the same general area where the summer box-netting took place. Jeff, the commercial fisherman under contract, finds it most favorable to net in this part of the lake, mainly due to the bathymetry. This is good news. However, we learned this winter that carp in Owasso seem to move around quite a bit and really don't stay congregated for long periods of time. As one could imagine, this has made it very difficult to effectively time the carp netting efforts.



Figure 1: Around 75% of the tagged carp were in the northwest bay on January 17th. The white circles identify tagged individuals.

On February 15th, we had over 50% of the tagged carp in the northwest bay. Jeff, the fisherman, decided that it was time to net. He had a crew of eight and two tractors, trailers, and plows on the ice. It took around 4 hours to prepare the site for netting. Eventually, large holes were drilled and the long purse sein was placed in the lake. As the fishermen proceeded to pull, the net snagged a couple of large, heavy objects on the lake bottom. Unfortunately, the seining operation had to be aborted, and the net was pulled out with no fish. Jeff later talked to a homeowner on the lake who thought that the net likely snagged on a couple of cement mooring anchors. Unforeseen objects on the lake bottom seem to be the biggest risk to these winter netting operations.

To: Board of Managers and Staff
From: Tina Carstens and Brad Lindaman
Subject: Project and Program Status Report – April 2018
Date: March 28, 2018

Page 7

Spring 2018

Although the winter netting did not go as planned, Jeff is set to try early spring open water netting. This would involve two boats pulling the net across the bay. The advantage to this approach is that the net can often be maneuvered over objects on the lake bottom. We can also survey for obstructions and possibly remove them before the netting. We will have the Carp Solutions staff track the tagged carp starting immediately after ice-out. If the carp do bunch up in the northwest bay, the netting will be tried again. This type of netting is doable before the aquatic plants start to grow vigorously.

In addition to the possibility of this early spring netting, we plan to expand the summer baited box netting with the staff from Carp Solutions. We are looking at the possibility of placing a few nets in strategic locations (last year, we had one net in operation). NR interns will bait and check on the nets each day. With multiple nets in operation, there is the possibility of removing at least 25% of the carp population in the lake. We believe that this is a fairly conservative estimate.

Along with the removal operations, we plan to place a number of carp barriers in key locations in the Owasso Chain (Figure 2). Throughout spring, we will be keeping a close eye on these barriers to detect mass carp movements. We suspect that the adult carp in Owasso will try to move into connected wetlands to spawn. We are currently in discussions with the DNR regarding barrier placements and any permits that may be needed to carry on this work. We will keep you updated.

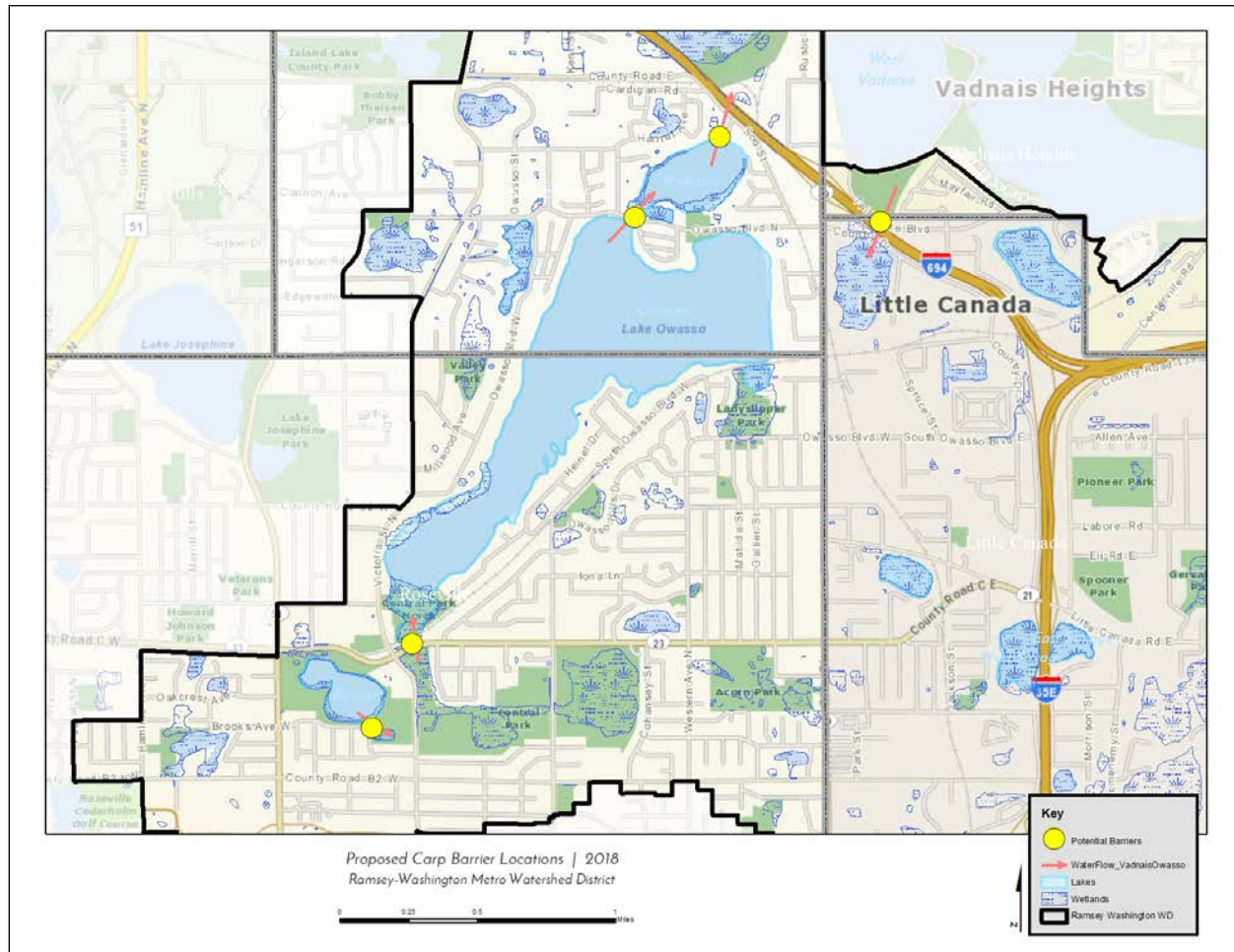


Figure 2: Map of proposed carp barrier locations in the Owasso Chain.

2017 Assessment results - summary

- Current population estimate: 15,500 adult carp
- Average length: 21 inches (526 mm)
- Average weight: 5 pounds (2 kg)
- Biomass: 195 pounds/acre (218 kg/ha); over 2 times the level where water quality can be negatively impacted.
- Total carp removed with a box net (summer): 1,297 (approx. 8% of the population)

Public Involvement and Education Program – Sage Passi

Master Water Stewards Zero in on 2018 Capstone Projects



Our 2018 Master Water Stewards have completed their coursework and are transitioning to their capstone projects. Phil Plumbo, Michelle Natarajan and Melissa Peck), Master Water Stewards, met with Paige Ahlborg, Sage Passi and Michael Schumann to introduce their capstone projects during the final class for the year. On March 20 they joined other members of their cohort in meeting with watershed staff and consultants to outline some of their preliminary ideas for their capstone projects.

Phil Plumbo, a Maplewood resident who is in the Master Water Steward training program, and Chris Strong, a St. Paul Master Gardener and Master Water Steward-in-training in both programs, are working together to develop a multi-year shoreline restoration capstone project on the Maplewood side of Beaver Lake at Phil's residence. They propose to create neighborhood events and activities to draw other residents into their project who are interested in learning hands-on about shoreline restoration opportunities and other BMP projects and pollinator-friendly practices they can apply in their own yards in the Beaver Lake neighborhood and across the broader Watershed District. Phil has begun enlisting the aid of Michael Schumann in planning for a spring site assessment to determine the level of site preparation needed. He and Chris also met with Simba Blood to learn more about the steps in plant identification and invasive removal for restoration projects of this scale. Phil is a beekeeper and volunteer at Tamarack Nature Center and Chris is a longtime resident who lives next to Lake Phalen.


CITYWIDE
Spring Cleanup
Saturday, April 21 | 9-11:30 a.m.

Volunteer to clean up litter at
our parks and neighborhoods!



Duluth Case Recreation Center in St. Paul

Melissa Peck and Michelle Natarajan, 2018 Master Water Stewards, are focusing on Natarajan’s neighborhood on the East side of St. Paul, south of Lake Phalen, for their outreach capstone project to engage the community in water quality education and action. In mid-March they did a walk through on the grounds of the Duluth and Case Recreation Center in St. Paul to explore possible infiltration projects near the bike path, parking lot and building and sought application guidelines from Park’s for projects of this nature. While the jury is still out on those project opportunities, Michael Schumann, the District’s Ramsey Conservation District consultant, will follow up with a more detailed assessment of the site. They reached out to St. Paul Parks and Recreation’s volunteer coordinator Tricia Wehrle and the center’s staff person Kong Chang to tag onto the city-wide spring clean-ups in order to engage the neighborhood around the park in an effort to reduce pollution going into nearby storm drains and adjacent streets. This effort will also help them begin to build contacts in the neighborhood.

L’Etoile du Nord School Works to Build and Expand Beaver Lake Neighborhood Connections



Left: Rachel Hanks introduces the Adopt A Drain program to fourth graders at L’Etoile du Nord.



Right: Students posted their ideas for how to engage the Beaver Lake neighborhood in water quality related activities.

One of the Question Students Discussed: How can we engage with neighbors around Beaver Lake? What might inspire them to participate?



Ann Hutchinson, Maplewood Nature Center Lead Naturalist, helps students generate outreach ideas during their Neighborhood Cafe.

“Neighborhood Café” Helps Generate Outreach Ideas

Last year’s fourth grade classes sent a mailing to two hundred homeowners in order to recruit several sites for rain garden projects to be spearheaded by Master Water Stewards. This outreach identified eighteen homeowners in the neighborhood who reached out to the Watershed District to express interest in having their yards assessed for possible BMPs. This year’s classes plan to continue to build on this neighborhood interest. Classes toured the area in the fall, learned about cleaning storm drains and toured the new rain gardens and a LEAP award site where a homeowner has installed three projects on her property. They also monitored water quality on the lake in February with the District’s technicians and started native plant seeds indoors.

On March 20, three classes participated in a “Neighborhood Café”, an activity based on a World Café model for large group dialogue that Peggy Knapp (former facilitator of Freshwater Society, designer and instigator of the successful Master Water Steward program and retired Hamline University professor), has trained watershed educators to use in different community contexts. This is the first time Sage and Tracy have tried it out with students at an elementary level. It was quite successful!

At the beginning of the sessions, Rachel Hanks, the Master Water Steward who championed the Adopt A Drain program with Bill Cranford and Phyllis Webster last year in the Phalen Lake neighborhood, introduced the idea of engaging the classes in the Adopt A Drain Program, then provided coaching for them in their Neighborhood Café dialogue. Sage and Tracy will continue to work with the classes to refine their outreach strategy and service learning project for the spring with intentions of developing follow up activities in the neighborhood including a mailing and other interchanges with the community still to be determined.

Adopt A Drain Program in 2018 Begins to Take Shape



Watershed staff met with Hamline University, St. Paul staff and Master Water Steward on March 26.

To: Board of Managers and Staff
From: Tina Carstens and Brad Lindaman
Subject: Project and Program Status Report – April 2018
Date: March 28, 2018

Page 12

Plans for engaging in the Adopt A Drain Program this spring are being formulated. Sage and Chris met with Hamline Center for Global Environmental Education staff Jana Larson, Tracy Fredin and Jenni Abere and St. Paul Public Works Engineer Patrick Murphy and Master Water Steward Rachel Hanks to discuss targeted neighborhoods, strategies for partnering with L'Etoile du Nord students in the Beaver Lake neighborhood door hanger distribution and building off of the efforts accomplished last year within the Phalen neighborhood by Master Water Stewards. Discussion centered on these suggested goals:

- 1) Build a network of storm drain adoptions in the vicinity of Beaver Lake by using connections to residents made last year through Master Water Steward rain garden capstone projects installed in the summer and fall of 2017 and continue using a letter writing approach to residents begun by L'Etoile du Nord students in 2017 to build interest; Augment this by ideas generated in the Neighborhood Café brainstormed by fourth graders to build community support and interest.
- 2) Engage L'Etoile du Nord students in distribution of door hangers in area adjacent to Beaver Lake in a slightly larger area than last year's letter writing targeted area.
- 3) Extend the outreach area for drain adoptions to south of Case Avenue and to White Bear Avenue using Hamline University students to distribute door hangers and the installation of signs.
- 4) Foster the Beaver Lake neighborhood's interest in stewardship efforts including BMP opportunities by working with the 2018 Master Water Stewards team, Phil Plumbo and Chris Strong.
- 5) Work toward 100% adoptions in last year's targeted area near Lake Phalen, using engagement strategies to strengthen connections with residents, increase communication and foster neighborhood support by working with Farnsworth School and other community groups to achieve that goal in the spring/fall of 2018.

* * * * *

Informational Items

* * * * *

State wants Met Council to help clean up Pig's Eye Lake in St. Paul



Battle Creek flows through the site with St. Paul in the background. Barrels of toxic waste and leaking batteries once dotted the landscape around Pig's Eye Lake, which is the largest dump left from the days before regulated landfills. — Brian Peterson

By [ERIC ROPER](#), STAR TRIBUNE
March 17, 2018

Pollution from Minnesota's largest dump and sewage plant has seeped into the sediment of Pig's Eye Lake in St. Paul, state environmental officials say, and they want the Metropolitan Council to help clean it up.

The cleanup push comes amid separate efforts to restore habitats and attract park visitors to a remote corner of St. Paul alongside the Mississippi River, where the city once threw its garbage in a massive unprotected pit — an unlined landfill that's the biggest of its kind in the state. Pig's Eye is also where about a third of the state's population still sends its wastewater to [one of the nation's largest treatment plants](#), operated by the Met Council, which historically disposed of ash from sludge incineration on nearby land.

The state covered the dump, removed toxic waste drums and [installed a soil barrier to help](#) hold back what one staff member calls "garbage juice" about 20 years ago. And the Met Council stopped dumping its ash on its property in 1985. But the Minnesota Pollution Control Agency says metals remaining in the sediment pose a risk to wormlike organisms there and the animals that eat them.

"We can't go back in time and prevent this. We can try to manage some of it and do the cleanup," said MPCA Assistant Commissioner Kirk Koudelka. "We've learned from our past. And we're going to work to clean this up together with Met Council."

Other plans for the lake, named after early St. Paul settler (and tavern-keeper) Pierre "Pig's Eye" Parrant, are simultaneously taking shape.

The U.S. Army Corps of Engineers solicited public feedback last week for [a project](#) with Ramsey County to build islands in Pig's Eye Lake using materials dredged from the Mississippi River, benefiting migrating birds and reducing erosion. The former dump is now a city park accessible only through a wood-chipping yard, but park planners [highlighted long-term hopes](#) to redevelop it in a major riverfront plan released last year.



MPCA's lead Superfund official Hans Neve walked the former dump site, where barrels of toxic waste are leaking.

"It truly is one of the most surreal urban landscapes," said Mary deLaitre, manager of St. Paul's Great River Passage Initiative. "You can see downtown. You can see all the heavy industry and the infrastructure. And then of course, overhead, you're going to see ducks and geese ... because it's one of the major flyways in the United States."

The Met Council wants to study the surrounding area further before committing to a cleanup, however. In a 2014 letter, it disputed MPCA's assertions that its ash contributed to

contamination and said a survey showed a low risk to the wildlife there. It is now planning to test its land to study what remains of the ash.

“We want to understand what our property presents in terms of a contributor or an ongoing risk, so that we can do the appropriate thing with that,” said Leisa Thompson, who leads the Met Council’s wastewater division. “In part because we can’t commit to clean up all of that sediment ... when the dump we know is a part of the problem. And we don’t know how much of that is ours, so we weren’t ready to be able to say, ‘Well, we’re getting out our bankroll here.’”

“We are not disagreeing that something needs to be done,” she added.

Hans Neve, who supervises the MPCA’s Superfund program, said they believe both the old city dump and the ash are contributors to the contamination. Tests have found what the agency says are unacceptable levels of metals such as cadmium, copper, lead and zinc at a number of sites. It has proposed cleaning up two small sites to see if the contamination returns.

“The contamination came to be located there over a long period of time,” Neve said. “It may be true the worst of it happened in the past.”

The Metropolitan Plant is the workhorse of the region’s wastewater system, pumping through 170 million gallons of water a day. The purified water is cleaner than the Mississippi River where it is discharged, and the modern plant has a good environmental track record.

The solids that sink to the bottom of wastewater holding ponds are called sludge. The sludge is incinerated, producing about 40 tons of ash per day, which is now trucked to a properly lined landfill in Rosemount. Tighter regulations have reduced its metal content dramatically.

“What was going on with that ash, and how did the contamination get to be where it is?” Neve said. “Not completely clear. What is more clear is that there is some contamination there of the land and also extending out into Pig’s Eye Lake.”

‘Constantly on fire’

Once upon a time, Pig’s Eye was known mostly as a nuisance. Not only did trucks deliver enough garbage there to fill about two U.S. Bank Stadiums, but it was often on fire. Angry neighbors demanded answers at a City Council meeting in 1964, noting the fire had been burning since 1956 and littering their yards with ash.

“I’ve spoken with neighbors who lived here during that time. They said it was just constantly on fire. It stunk,” said Rep. Sheldon Johnson, DFL-St. Paul, who lives on a bluff overlooking the lake.

Pig's Eye is largely cut off from the rest of the city, bordered by the river and a large Canadian Pacific rail yard. To the north are barge-reliant businesses supplying the region's chemicals, cement, salt and other bulk goods.

Visitors drive past piles of wood and turn down an unmarked road, where a lone portable toilet signals the trailhead. Little is visible of the dump, which was active from 1956 to 1972, but the garbage remains underground because the MPCA says removing it would cost about \$730 million. Battle Creek runs through it to the lake.

The only major signs of human activity there today are groundwater monitoring wells, a tree-planting experiment area, and a safe that someone busted open and abandoned near the creek. Eagles and Canada geese soar overhead, and beavers have gnawed away at trees to make creekside lodges.

"The remoteness has made it to some extent more ideal because it's been kind of undisturbed since the '70s, which is interesting," Johnson said.



The sprawling 200-acre Pig's Eye Municipal Landfill on St. Paul's far south side in 1967.
Photo credit William Seaman, RPA - Minneapolis Star Tribune

He introduced a bill last year to allocate \$500,000 to help make the area more accessible and add recreational amenities such as trails, boardwalks and better water access.

"My vision is as a large natural area that could be used by the public to view some of the fabulous wildlife we have there," Johnson said. "The many eagles and waterfowl. The largest heron rookery in the region by far sits right there on the south end of the lake."

Structures would have to be limited, however, because it's hard to build foundations in garbage.

eric.roper@startribune.com 612-673-1732
Twitter: @StribRoper