



Mr. Jim de Lambert
Bassett Creek Watershed Management Commission
7800 Golden Valley Road
Golden Valley, MN 55427

Page # 1
Invoice # 23270051-2017-6
Project # 23/27-0051
Client # 59
August 4, 2017

Invoice of Account with
BARR ENGINEERING COMPANY

For professional services during the period of
July 1, 2017 through July 28, 2017

ENGINEERING

TECHNICAL SERVICES

Complete updates to requirements document and MIDS design sequence flowchart to reflect BCWMC changes to linear project water quality treatment requirements and newly-adopted floodplain elevations, including providing draft requirements document to administrator and responding to comments, communications with MPCA staff requesting (and receiving) most recent version of MIDS design sequence flowchart, communications with administrator and internal meetings; communications with administrator regarding BCWMC review of Minnehaha Creek WD plan; provide point intercept aquatic plant survey data to University of Minnesota graduate student for inclusion in Minnesota aquatic plant database; review and revise administrator's revisions to BCWMC Plan document to reflect plan amendment and other revisions, and communications with administrator regarding plan changes; communications with administrator regarding Minnehaha Creek bacteria study; provide information regarding Neill Elementary School project to Commissioner Mueller; communications with administrator regarding local plan review process; review revised XP SWMM users agreement, and communications with legal counsel and administrator regarding agreement; and communications with administrator, Golden Valley staff and St. Louis Park staff regarding 2019 CIP projects.

James P. Herbert, Principal Engineer/Scientist 10.0 hours @ \$190.00 per hour	\$ 1,900.00
Karen L. Chandler, Principal Engineer/Scientist 23.7 hours @ \$170.00 per hour	\$ 4,029.00
Margaret R. Rattei, Engineer/Scientist/Specialist III 0.6 hours @ \$130.00 per hour	\$ 78.00
Josh P. Phillips, Engineer/Scientist/Specialist I 9.1 hours @ \$75.00 per hour	\$ 682.50
<i>Subtotal, Technical Services</i>	\$ 6,689.50

MONTHLY MEETING PREPARATION

Communications/coordination with administrator regarding draft/final agenda and meeting packet for July Commission meeting; review/edit draft June meeting minutes; prepare for July Commission meeting, including setting up and attending pre-meeting conference call with Vice Chair Mueller and administrator; and coordination and communications with administrator and internal staff regarding follow-up tasks from July Commission meeting and upcoming Commission meeting agenda items.

James P. Herbert, Principal Engineer/Scientist 3.7 hours @ \$190.00 per hour	\$	703.00
Karen L. Chandler, Principal Engineer/Scientist 10.4 hours @ \$170.00 per hour	\$	1,768.00
Technicians/Administrative.....	\$	<u>470.00</u>
<i>Subtotal, Monthly Meeting Preparation.....</i>	<i>\$</i>	<i>2,941.00</i>

TAC PREPARATION

Communications with administrator regarding August TAC meeting agenda; communications with MDNR staff regarding FEMA funding for modeling of Bassett Creek, potential BCWMC involvement, and MDNR staff attendance at TAC meeting; prepare write-up regarding the FEMA modeling for August TAC meeting agenda document; follow-up communications with MDNR staff, administrator, Plymouth staff and internal staff regarding FEMA modeling; provide write-up for annual XP SWMM model updates for August TAC meeting agenda document; prepare draft revised BCWMC project review fee schedule for consideration at August TAC meeting; and prepare table comparing review fees collected versus review costs for inclusion in August TAC meeting packet.

James P. Herbert, Principal Engineer/Scientist 4.1 hours @ \$190.00 per hour	\$	779.00
Karen L. Chandler, Principal Engineer/Scientist 6.8 hours @ \$170.00 per hour	\$	1,156.00
Sarah M. Stratton, Engineer/Scientist/Specialist III 0.4 hours @ \$150.00 per hour	\$	60.00
Josh P. Phillips, Engineer/Scientist/Specialist I 3.2 hours @ \$75.00 per hour	\$	240.00
Technicians/Administrative.....	\$	<u>36.00</u>
<i>Subtotal, TAC Preparation.....</i>	<i>\$</i>	<i>2,271.00</i>

Subtotal Technical Services\$ 11,901.50

PLAT REVIEW

Fretham 24 Second Add Lots 1-3 (2016-30)

Provide project information to administrator, in response to Plymouth resident's request for information.

James P. Herbert, Principal Engineer/Scientist 1.4 hours @ \$190.00 per hour	\$ 266.00
Karen L. Chandler, Principal Engineer/Scientist 0.4 hours @ \$170.00 per hour	\$ <u>68.00</u>
<i>Subtotal, Fretham 24 Second Add Lots 1-3.....</i>	<i>\$ 334.00</i>

Ridgedale Corner Shoppes (2016-34)

Coordinate with administrator and city staff regarding revised plans; and review of revised plans.

James P. Herbert, Principal Engineer/Scientist 1.9 hours @ \$190.00 per hour	\$ <u>361.00</u>
<i>Subtotal, Ridgedale Corner Shoppes.....</i>	<i>\$ 361.00</i>

Banner Eng. Outlet A Addition (2017-15)

Review revised grading, drainage and erosion control plans; and prepare and send approval letter to city staff.

Karen L. Chandler, Principal Engineer/Scientist 0.7 hours @ \$170.00 per hour	\$ 119.00
Josh P. Phillips, Engineer/Scientist/Specialist I 1.5 hours @ \$75.00 per hour.....	\$ <u>112.50</u>
<i>Subtotal, Banner Eng. Outlet A Addition.....</i>	<i>\$ 231.50</i>

CSAH 66 Culvert Replacement (2017-19)

Coordination with Hennepin County staff and communications with administrator regarding XP SWMM model request.

James P. Herbert, Principal Engineer/Scientist 2.0 hours @ \$190.00 per hour.....	\$ 380.00
Karen L. Chandler, Principal Engineer/Scientist 0.4 hours @ \$170.00 per hour.....	\$ <u>68.00</u>
<i>Subtotal, CSAH 66 Culvert Replacement.....</i>	<i>\$ 448.00</i>

Creekside Woods I and II (2017-21)

Communications with applicant regarding BCWMC floodplain and policies; review revised submittal; and prepare and send approval letter to city staff.

James P. Herbert, Principal Engineer/Scientist 1.8 hours @ \$190.00 per hour	\$ 342.00
---	-----------

Karen L. Chandler, Principal Engineer/Scientist 0.5 hours @ \$170.00 per hour	\$ 85.00
Josh P. Phillips, Engineer/Scientist/Specialist I 1.2 hours @ \$75.00 per hour.....	\$ <u>90.00</u>
<i>Subtotal, Creekside Woods I and II</i>	<i>\$ 517.00</i>

Wagner Spray Tech Phase 3 (2017-24)

Review revised grading, drainage and erosion control plans; and prepare and send approval letter to city staff.

Karen L. Chandler, Principal Engineer/Scientist 0.7 hours @ \$170.00 per hour	\$ 119.00
Josh P. Phillips, Engineer/Scientist/Specialist I 3.0 hours @ \$75.00 per hour.....	\$ <u>225.00</u>
<i>Subtotal, Wagner Spray Tech Phase 3</i>	<i>\$ 344.00</i>

1820 Major Drive No Landscape (2017-25)

Review shoreline restoration plan; prepare memo for July Commission meeting; and prepare and send approval letter.

James P. Herbert, Principal Engineer/Scientist 2.7 hours @ \$190.00 per hour	\$ 513.00
Karen L. Chandler, Principal Engineer/Scientist 0.9 hours @ \$170.00 per hour	\$ 153.00
Josh P. Phillips, Engineer/Scientist/Specialist I 3.7 hours @ \$75.00 per hour.....	\$ <u>277.50</u>
<i>Subtotal, 1820 Major Drive N Landscape.....</i>	<i>\$ 943.50</i>

Plymouth Commons Apartments (2017-26)

Review grading, drainage and erosion control plans; prepare and send approval/comment letter to city staff, review revised grading, drainage and erosion control plans; and prepare and send approval letter to city staff.

Karen L. Chandler, Principal Engineer/Scientist 0.9 hours @ \$170.00 per hour	\$ 153.00
Josh P. Phillips, Engineer/Scientist/Specialist I 4.4 hours @ \$75.00 per hour.....	\$ <u>330.00</u>
<i>Subtotal, Plymouth Commons Apartments.....</i>	<i>\$ 483.00</i>

Northwood East Ballfield Improvements (2017-27)

Communications with administrator and city's consultant regarding ballfield improvements project; plat review set up; and preliminary review of submittal.

James P. Herbert, Principal Engineer/Scientist 1.7 hours @ \$190.00 per hour	\$	323.00
Karen L. Chandler, Principal Engineer/Scientist 0.3 hours @ \$170.00 per hour	\$	51.00
Technicians/Administrative.....	\$	<u>27.00</u>
<i>Subtotal, Northwood East Ballfield Improvements.....</i>	\$	<i>401.00</i>
Subtotal Plat Review.....	\$	4,063.00

PRELIMINARY COMMUNICATIONS AND NON-FEE REVIEWS

PRELIMINARY COMMUNICATIONS

Communications with administrator and review information regarding driveway culvert replacement project in Medicine Lake; and coordination and site meeting with MPRB, City of Golden Valley staff, and potential applicant regarding Wirth Park mountain bike trail.

James P. Herbert, Principal Engineer/Scientist 2.5 hours @ \$190.00 per hour	\$	475.00
Karen L. Chandler, Principal Engineer/Scientist 1.9 hours @ \$170.00 per hour	\$	323.00
Josh P. Phillips, Engineer/Scientist/Specialist I 1.3 hours @ \$75.00 per hour.....	\$	97.50
Expenses (Mileage)	\$	<u>18.73</u>
Subtotal, Preliminary Communications.....	\$	914.23

NON-FEE REVIEWS

BLUE LINE LRT

Communications with Blue Line LRT consultant regarding BCWMC rate control requirements for project.

Karen L. Chandler, Principal Engineer/Scientist 0.9 hours @ \$170.00 per hour	\$	<u>153.00</u>
<i>Subtotal, Blue Line LRT.....</i>	\$	<i>153.00</i>

BLUE LINE LRT WCA LGU ADMIN

Golden Valley

Review wetland permit application; prepare Notice of Application and send to Golden Valley staff requesting signature.

Karen S. Wold, Engineer/Scientist/Specialist II 4.2 hours @ \$120.00 per hour	\$	<u>504.00</u>
<i>Subtotal, Golden Valley.....</i>	\$	<i>504.00</i>

Minneapolis

Review wetland permit application; prepare Notice of Application and send to Minneapolis staff requesting signature.

Karen S. Wold, Engineer/Scientist/Specialist II
3.2 hours @ \$120.00 per hour \$ 384.00
Subtotal, Minneapolis \$ 384.00

Robbinsdale

Review wetland permit application and communications with Blue Line LRT wetland consultant regarding wetland permit application submittal; and prepare and submit Notice of Application.

Karen S. Wold, Engineer/Scientist/Specialist II
4.7 hours @ \$120.00 per hour \$ 564.00
Subtotal, Robbinsdale \$ 564.00
Subtotal Blue Line LRT WCA LGU Admin \$ 1,452.00
Subtotal Blue Line LRT & Blue Line LRT WCA LGU Admin \$ 1,605.00

***Subtotal Non-Fee Reviews* \$ 1,605.00**

***Subtotal Preliminary Communications and Non-Fee Reviews* \$ 2,519.23**

COMMISSION AND TAC MEETINGS

Attend July 20 Commission meeting.

Karen L. Chandler, Principal Engineer/Scientist
3.5 hours @ \$170.00 per hour \$ 595.00
***Subtotal, Commission and TAC Meetings* \$ 595.00**

SURVEYS & STUDIES

Sweeney Lake Sediment Testing

Perform sediment phosphorus testing/analysis of Sweeney Lake sediment samples; prepare figure of sample locations; and summarize data.

Kevin D. Menken, Engineer/Scientist/Specialist II
8.5 hours @ \$110.00 per hour \$ 935.00
Edward M. Anderson, Engineer/Scientist/Specialist I
0.7 hours @ \$80.00 per hour \$ 56.00
Subtotal, Sweeney Lake Sediment Testing \$ 991.00

APM/AIS Committee

Review/edit APM/AIS recommendations memo for July Commission meeting; communications with administrator regarding memo; and communications with administrator regarding addition of vulnerability analysis to 2018 water quality program.

Karen L. Chandler, Principal Engineer/Scientist 2.0 hours @ \$170.00 per hour	\$ 340.00
Margaret R. Rattei, Engineer/Scientist/Specialist III 0.4 hours @ \$130.00 per hour	\$ <u>52.00</u>
<i>Subtotal, APM/AIS Committee</i>	<i>\$ 392.00</i>
Subtotal Surveys & Studies	\$ 1,383.00

WATER QUALITY/MONITORING

Sweeney Lake Aeration Study

Perform sediment phosphorus fractionation; and upload and verify field data.

Erin M. Dietrich, Engineer/Scientist/Specialist III 0.6 hours @ \$135.00 per hour	\$ 81.00
Kevin D. Menken, Engineer/Scientist/Specialist II 3.5 hours @ \$110.00 per hour	\$ <u>385.00</u>
<i>Subtotal, Sweeney Lake Aeration Study.....</i>	<i>\$ 466.00</i>
Subtotal, Water Quality/Monitoring.....	\$ 466.00

WATER QUANTITY

Measure and review lake level elevations as part of the lake-gauging program.

Technicians/Administrative.....	\$ 360.00
Expenses (Mileage/2WD field vehicle)	\$ <u>53.36</u>
Subtotal, Water Quantity.....	\$ 413.36

XP-SWMM Model Updates

Revise report, including moving Table 3-7 to Appendix A and adding additional crossing results to flood elevation table; provide revised report to administrator; prepare memo for August TAC meeting regarding annual XP SWMM updates; update XP SWMM model and results for changes on trail/field crossing information between Highway 55 and Dunkirk Lane; and communications with administrator.

Jennifer A. Koehler, Engineer/Scientist/Specialist III 6.5 hours @ \$130.00 per hour	\$ 845.00
Ross S. Mullen, Engineer/Scientist/Specialist II 7.3 hours @ \$95.00 per hour	\$ <u>693.50</u>
Subtotal, XP-SWMM Model Updates	\$ 1,538.50

TOTAL ENGINEERING \$ **22,879.59**

ANNUAL REPORT

TOTAL ANNUAL REPORT\$ 0.00

PUBLIC COMMUNICATIONS

TOTAL PUBLIC COMMUNICATIONS\$ 0.00

WEBSITE

TOTAL WEBSITE\$ 0.00

WATERSHED OUTLET MONITORING PROGRAM (WOMP)

TOTAL WOMP\$ 0.00

CAPITAL IMPROVEMENT PROJECTS (Funded through tax levy)

FOUR SEASONS MALL AREA WATER QUALITY PROJECT (NL-2)

Prepare and run "clipped" 1-year, 2-year, and 100-year XP SWMM models and provide to developer's consultant for their use; review and evaluate wetland monitoring data to estimate water quality treatment; and communications with developer's consultant regarding evaluation.

Karen L. Chandler, Principal Engineer/Scientist 0.5 hours @ \$170.00 per hour	\$	85.00
Gregory J. Wilson, Consultant/Advisor 1.5 hours @ \$155.00 per hour	\$	232.50
Jennifer A. Koehler, Engineer/Scientist/Specialist III 0.4 hours @ \$130.00 per hour	\$	52.00
Ross S. Mullen, Engineer/Scientist/Specialist II 2.0 hours @ \$95.00 per hour.....	\$	190.00
Josh P. Phillips, Engineer/Scientist/Specialist I 5.7 hours @ \$75.00 per hour	\$	427.50
<i>Subtotal, Four Seasons Mall Area Water Quality Project (NL-2).....</i>	<i>\$</i>	<i>987.00</i>

PLYMOUTH CREEK RESTORATION, ANNAPOLIS LN TO 2,500 FT UPSTREAM OF ANNAPOLIS LN (2017 CR-P)

Review restoration plans, including erosion and sediment controls; prepare draft 90% review memo and submit to administrator for review; review communications from adjoining property owner (provided by administrator); communications with city's consultant regarding cost estimate, tree survey/removals, and status of proposed flood level increases; internal communications regarding review; and revise 90% review memo and provide to administrator for July Commission meeting.

James P. Herbert, Principal Engineer/Scientist 1.0 hours @ \$190.00 per hour	\$	190.00
Karen L. Chandler, Principal Engineer/Scientist 10.9 hours @ \$170.00 per hour	\$	1,853.00
Jeff D. Weiss, Engineer/Scientist/Specialist III 15.4 hours @ \$125.00 per hour	\$	1,925.00
Adam K. Howard, Engineer/Scientist/Specialist II 2.3 hours @ \$105.00 per hour	\$	241.50
Josh P. Phillips, Engineer/Scientist/Specialist I 1.5 hours @ \$75.00 per hour	\$	<u>112.50</u>
<i>Subtotal, Plymouth Creek Restoration Annapolis Ln to 2,500 ft. Upstream of Annapolis.....</i>		
	\$	4,322.00

SCHAPER POND EFFECTIVENESS MONITORING (SL-3)

Set up monitoring equipment for bench test, program equipment and run bench tests; site reconnaissance visit; relocate staging area/flowmeter/samplers to different location; install monitoring equipment (including solar panel) at site and test sampling equipment; and internal coordination regarding monitoring schedule.

Karen L. Chandler, Principal Engineer/Scientist 0.2 hours @ \$170.00 per hour	\$	34.00
Gregory J. Wilson, Consultant/Advisor 2.5 hours @ \$155.00 per hour	\$	387.50
Christopher J. Bonick, Engineer/Scientist/Specialist II 16.5 hours @ \$120.00 per hour	\$	1,980.00
Heather N. Hlavaty, Engineer/Scientist/Specialist I 8.5 hours @ \$90.00 per hour	\$	765.00
Technicians/Administrative.....	\$	108.00
Expenses (Mileage/Vehicle-2WD Field/fence post).....	\$	<u>51.22</u>
<i>Subtotal, Schaper Pond Effectiveness Monitoring</i>		
	\$	3,325.72
TOTAL CAPITAL IMPROVEMENTS PROJECTS (Tax Levy)	\$	8,634.72

TMDL WORK

TOTAL TMDL WORK \$ **0.00**

SUMMARY TOTALS

Total Engineering	\$ 22,879.59
Total Annual Report/Website/Public Communications	\$ 0.00
Total WOMP	\$ 0.00
Total Capital Improvement Projects (Tax Levy).....	\$ 8,634.72
Total TMDL Work	\$ 0.00
TOTAL PAYABLE.....	\$ 31,514.31

Barr declares under the penalties of law that this account, claim or demand is just and that no part of it has been paid.


