



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

Page # 1
Invoice # 23270051-2019-10
Project # 23/27-0051
Client # 59
December 5, 2019

Invoice of Account with
BARR ENGINEERING COMPANY

For professional services during the period of
November 2, 2019 through November 29, 2019

ENGINEERING

TECHNICAL SERVICES

Communications with and hold November 6 conference call with administrator and MPCA staff regarding MPCA 2020-2021 monitoring/grants and impact on BCWMC 2020 monitoring program, and communications with administrator and internal staff regarding correlation/potential overlap of 2020-2021 MPCA and BCWMC monitoring of Sweeney Lake Branch; Sochacki Park subwatershed assessment: revise draft scope and provide to TRPD staff and administrator, hold November 14 conference call with administrator and TRPD staff regarding work scope and November 18 steering committee meeting agenda, provide revised task language to TRPD staff, and prepare for and attend November 18 meeting with steering committee (TRPD staff, city staff, administrator and resident representative) regarding work scope; communications with administrator and internal staff regarding upcoming TMDLs in watershed, and hold November 26 conference call with MPCA staff and administrator regarding MPCA's next round of TMDLs/WRAPS in the Bassett Creek watershed; communications with administrator, MCES staff, and internal staff regarding potential move of WOMP station; internal discussions regarding 2020 Sweeney Branch stream monitoring; review Minneapolis 30% plans for sanitary sewer in Bryn Mawr Meadows Park and crossing of Bassett Creek, including review of Bryn Mawr Meadows CIP information and internal meeting, and provide comments to Minneapolis staff, MPRB staff, city consultant and administrator regarding impact on Bryn Mawr Meadows CIP project, preferred alignment, and preferred methods for crossing Bassett Creek; and communications with administrator regarding budget status, St. Louis Park wetland plan meeting, Commission staff evaluations, and CIP budget spreadsheet.

Karen L. Chandler, Principal Engineer/Scientist 26.0 hours @ \$175.00 per hour	\$ 4,550.00
Gregory J. Wilson, Consultant/Advisor 12.5 hours @ \$165.00 per hour	\$ 2,062.50
Michelle A. Kimble, Engineer/Scientist/Specialist III 2.5 hours @ \$135.00 per hour	\$ 337.50
Margaret R. Rattei, Engineer/Scientist/Specialist III 6.6 hours @ \$135.00 per hour	\$ 891.00

Karen S. Wold, Engineer/Scientist/Specialist III 1.0 hours @ \$130.00 per hour.....	\$	130.00
Christopher J. Bonick, Engineer/Scientist/Specialist III 3.5 hours @ \$125.00 per hour.....	\$	437.50
Technicians/Administrative.....	\$	9.50
Expenses (Mileage/WebEx).....	\$	<u>32.21</u>
<i>Subtotal, Technical Services.....</i>	\$	<i>8,450.21</i>

MONTHLY MEETING PREPARATION

Communications/coordination with administrator and internal staff regarding draft/final agenda and meeting packet for November Commission meeting; review/edit draft October meeting minutes; prepare for November Commission meeting, including pre-meeting conference call with Chair Prom and administrator, review tunnel inspection information, and review meeting packet; and communications with administrator and internal staff regarding follow-up items from November Commission meeting and upcoming meeting agenda items.

James P. Herbert, Principal Engineer/Scientist 4.8 hours @ \$195.00 per hour.....	\$	936.00
Karen L. Chandler, Principal Engineer/Scientist 15.1 hours @ \$175.00 per hour.....	\$	2,642.50
Technicians/Administrative.....	\$	<u>540.00</u>
<i>Subtotal, Monthly Meeting Preparation.....</i>	\$	<i>4,118.50</i>

TAC PREPARATION

Develop draft memo regarding TAC water monitoring goals and whether BCWMC monitoring program meets, exceeds or does not meet TAC goals, including review and summary of state water quality standards, state monitoring standards/guidance, and BCWMC monitoring protocols; revise memo per administrator comments and provide final memo to administrator for TAC meeting packet; prepare for November 25 TAC meeting, including communications with administrator and internal staff; and post-TAC meeting follow-up, including provide revised/corrected memo to administrator and look into responses to TAC questions regarding possible changes to the BCWMC monitoring program.

Karen L. Chandler, Principal Engineer/Scientist 23.9 hours @ \$175.00 per hour.....	\$	4,182.50
Margaret R. Rattei, Engineer/Scientist/Specialist III 20.8 hours @ \$135.00 per hour.....	\$	<u>2,808.00</u>
<i>Subtotal, TAC Preparation.....</i>	\$	<i>6,990.50</i>

Subtotal Technical Services \$ 19,559.21

PLAT REVIEW

Days Inn Remodel (2019-17)

Project close-out, including documentation, tracking, and filing.

Josh P. Phillips, Engineer/Scientist/Specialist II
0.7 hours @ \$95.00 per hour \$ 66.50
Subtotal, Days Inn Remodel..... \$ 66.50

Northwest Campus Improvements (2019-18)

Project close-out, including documentation, tracking, and filing.

Josh P. Phillips, Engineer/Scientist/Specialist II
0.5 hours @ \$95.00 per hour \$ 47.50
Subtotal, Northwest Campus Improvements..... \$ 47.50

Ascension Lutheran Church Addition (2019-19)

Project close-out, including documentation, tracking, and filing.

Josh P. Phillips, Engineer/Scientist/Specialist II
0.5 hours @ \$95.00 per hour \$ 47.50
Subtotal, Ascension Lutheran Church Addition..... \$ 47.50

Damascus Way Re-Entry Center (2019-20)

Project close-out, including documentation, tracking, and filing.

Josh P. Phillips, Engineer/Scientist/Specialist II
0.3 hours @ \$95.00 per hour \$ 28.50
Subtotal, Damascus Way Re-Entry Center..... \$ 28.50

Association Free Lutheran Bible School (2019-21)

Review multiple revised grading, drainage, and erosion control plans, and stormwater study submittals for stormwater quality treatment, rate control, and erosion and sediment control; communications with city staff, administrator, Chair Prom, and applicant regarding review; prepare and send approval letter to city staff; and project close-out, including documentation, tracking, and filing.

James P. Herbert, Principal Engineer/Scientist
9.3 hours @ \$195.00 per hour \$ 1,813.50
Josh P. Phillips, Engineer/Scientist/Specialist II
12.8 hours @ \$95.00 per hour \$ 1,216.00
Subtotal, Association Free Lutheran Bible School..... \$ 3,029.50

Morrie's Cadillac Parking Expansion (2019-22)

Project close-out, including documentation, tracking, and filing.

Josh P. Phillips, Engineer/Scientist/Specialist II
0.3 hours @ \$95.00 per hour \$ 28.50
Subtotal, Morrie's Cadillac Parking Expansion..... \$ 28.50

Banner – Outlot A (2019-23)

Project close-out, including documentation, tracking, and filing.

Josh P. Phillips, Engineer/Scientist/Specialist II
0.4 hours @ \$95.00 per hour \$ 38.00
Subtotal, Banner – Outlot A..... \$ 38.00

Plymouth Senior Living (2019-24)

Review grading, drainage, and erosion control plans for stormwater quality treatment, rate control, and erosion and sediment control; prepare and send comment letter to city staff; review revised grading, drainage, and erosion control plans; and prepare and send approval letter to city staff.

James P. Herbert, Principal Engineer/Scientist
1.9 hours @ \$195.00 per hour \$ 370.50
Josh P. Phillips, Engineer/Scientist/Specialist II
6.4 hours @ \$95.00 per hour \$ 608.00
Subtotal, Plymouth Senior Living \$ 978.50

215 Peninsula Road – WCA

Review wetland delineation report; and prepare and submit WCA Notice of Application.

Karen S. Wold, Engineer/Scientist/Specialist III
1.8 hours @ \$130.00 per hour \$ 234.00
Subtotal, 215 Peninsula Road - WCA..... \$ 234.00

215 Peninsula Road (2019-26)

Plat review set up and preliminary review.

James P. Herbert, Principal Engineer/Scientist
0.8 hours @ \$195.00 per hour \$ 156.00
Josh P. Phillips, Engineer/Scientist/Specialist II
0.2 hours @ \$95.00 per hour \$ 19.00
Technicians/Administrative..... \$ 66.50
Expenses (Postage) \$ 0.50
Subtotal, 215 Peninsula Road..... \$ 242.00

Four Seasons Mall Redevelopment (2019-25)

Plat review set up and preliminary review.

James P. Herbert, Principal Engineer/Scientist
0.5 hours @ \$195.00 per hour \$ 97.50

Karen L. Chandler, Principal Engineer/Scientist 0.3 hours @ \$175.00 per hour	\$	52.50
Josh P. Phillips, Engineer/Scientist/Specialist II 0.3 hours @ \$95.00 per hour	\$	28.50
Technicians/Administrative.....	\$	47.50
Expenses (Postage)	\$	0.50
<i>Subtotal, Four Seasons Mall Redevelopment.....</i>	<i>\$</i>	<i>226.50</i>
Subtotal Plat Review.....	\$	4,967.00

PRELIMINARY COMMUNICATIONS AND NON-FEE REVIEWS

PRELIMINARY COMMUNICATIONS

Communications with developer regarding historic Carousel Porsche/Audi information and file search; communications with Golden Valley staff regarding development site, and communications with MPRB staff, Minneapolis staff, and administrator regarding MPRB Bassett's Creek Park project, including determining/providing Bassett Creek floodplain elevation in the park.

James P. Herbert, Principal Engineer/Scientist 4.8 hours @ \$195.00 per hour	\$	936.00
Josh P. Phillips, Engineer/Scientist/Specialist II 1.8 hours @ \$95.00 per hour	\$	171.00
Technicians/Administrative.....	\$	7.50
Subtotal, Preliminary Communications.....	\$	1,114.50

NON-FEE REVIEWS

Bassett Creek Valley

Prepare for and attend November 7 meeting with administrator, Minneapolis staff and Wenck staff regarding draft Bassett Creek Valley study report; communications with Wenck regarding Hennepin County Phase I study; review draft report, internal communications regarding review, comment on draft report and upload report with comments to document sharing site; review revised report; and communications with Minneapolis staff.

James P. Herbert, Principal Engineer/Scientist 6.4 hours @ \$195.00 per hour	\$	1,248.00
Karen L. Chandler, Principal Engineer/Scientist 14.0 hours @ \$175.00 per hour	\$	2,450.00
Ross S. Mullen, Engineer/Scientist/Specialist II 3.5 hours @ \$110.00 per hour	\$	385.00
Expenses (Mileage/parking)	\$	37.18
<i>Subtotal, Bassett Creek Valley.....</i>	<i>\$</i>	<i>4,120.18</i>

510 Cloverleaf Drive (Channel Maintenance Fund)

Project close-out, including documentation, tracking, and filing.

Josh P. Phillips, Engineer/Scientist/Specialist II 0.5 hours @ \$95.00 per hour	\$ 47.50
<i>Subtotal, 510 Cloverleaf Drive</i>	<i>\$ 47.50</i>
Subtotal Non-Fee Reviews	\$ 4,167.68
Subtotal Preliminary Communications and Non-Fee Reviews	\$ 5,282.18

COMMISSION AND TAC MEETINGS

Attend November 20 Commission meeting and November 25 TAC meeting.

Karen L. Chandler, Principal Engineer/Scientist 5.7 hours @ \$175.00 per hour	\$ 977.50
Margaret R. Rattei, Engineer/Scientist/Specialist III 2.5 hours @ \$135.00 per hour	\$ 337.50
Expenses (Mileage)	\$ 8.12
Subtotal, Commission and TAC Meetings	\$ 1,343.12

SURVEYS & STUDIES

Subtotal Surveys & Studies	\$ 0.00
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WATER QUALITY/MONITORING

Cavanaugh and Northwood Lakes Monitoring

Tabulate and graph 2019 lake water quality data.

Technicians/Administrative	\$ 324.00
<i>Subtotal, Cavanaugh and Northwood Lakes Monitoring</i>	<i>\$ 324.00</i>

North Branch Monitoring Year 2

Remove sampler and replace battery; collect grab sample and perform flow measurement on November 25; and internal communications and reconnaissance trip to check out potential 2020 Sweeney Branch monitoring station locations.

Christopher J. Bonick, Engineer/Scientist/Specialist III 4.5 hours @ \$125.00 per hour	\$ 562.50
Heather N. Hlavaty, Engineer/Scientist/Specialist II 3.3 hours @ \$100.00 per hour	\$ 330.00
Expenses (Verizon Wireless/mileage/2WD vehicle/camera)	\$ 120.75
<i>Subtotal, North Branch Monitoring Year 2</i>	<i>\$ 1,013.25</i>
Subtotal, Water Quality/Monitoring	\$ 1,337.25

WATER QUANTITY

Subtotal, Water Quantity.....\$ 0.00

FLOOD CONTROL PROJECT ANNUAL INSPECTION & DOUBLE BOX CULVERT INSPECTION

Annual inspection: communications with internal staff regarding report; Double box culvert inspection: upload data, prepare report, and equipment expenses, including confined space rescue retrieval kit.

James P. Herbert, Principal Engineer/Scientist 2.0 hours @ \$195.00 per hour	\$ 390.00
Joseph A. Welna, Engineer/Scientist/Specialist III 5.0 hours @ \$135.00 per hour	\$ 675.00
Tyler W. Fincher, Engineer/Scientist/Specialist II 1.0 hours @ \$105.00 per hour	\$ 105.00
Expenses (Mileage/2WD vehicle/radios/confined space rescue kit/breathing apparatus/gas meter).....	<u>\$ 1,397.68</u>

Subtotal, Flood Control Annual Proj Inspect&Dbl Box Culvert\$ 2,567.68

DEEP TUNNEL INSPECTION

Communications with Corps of Engineers staff, administrator, Minneapolis staff, and internal staff regarding schedule for deep tunnel inspection.

James P. Herbert, Principal Engineer/Scientist 5.3 hours @ \$195.00 per hour	<u>\$ 1,033.50</u>
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Subtotal, Deep Tunnel Inspections.....\$ 1,033.50

MUNICIPAL PLAN REVIEWS

Review Medicine Lake, Minneapolis, Minnetonka, Plymouth and Robbinsdale ordinances to assist administrator in completing table regarding status of ordinance updates for November Commission meeting agenda item; internal communications regarding Plymouth official controls; and communications with Robbinsdale staff and administrator.

Karen L. Chandler, Principal Engineer/Scientist 3.3 hours @ \$175.00 per hour	\$ 577.50
Sterling 'Greg' Williams, Engineer/Scientist/Specialist III 5.5 hours @ \$140.00 per hour	<u>\$ 770.00</u>

Subtotal, Municipal Plan Reviews \$ 1,347.50

Subtotal, Municipal Plan Reviews.....\$ 1,347.50

TOTAL ENGINEERING.....\$ 37,437.44

WATERSHED OUTLET MONITORING PROGRAM (WOMP)

Perform flow measurement at WOMP station, download flow file, provide flow information to MCES staff, and communications with MCES staff regarding flow measurement questions; and internal communications regarding possible WOMP station relocation.

Gregory J. Wilson, Consultant/Advisor 1.2 hours @ \$165.00 per hour	\$	198.00
Christopher J. Bonick, Engineer/Scientist/Specialist III 5.5 hours @ \$125.00 per hour	\$	687.50
Expenses (Mileage/2WD vehicle/Sontek ADV)	\$	<u>119.68</u>
<i>Subtotal, Watershed Outlet Monitoring Program</i>	\$	<i>1,005.18</i>
TOTAL WOMP	\$	1,005.18

APM/AIS WORK

TOTAL APM/AIS WORK.....	\$	0.00
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CAPITAL IMPROVEMENT PROJECTS (Funded through tax levy)

FOUR SEASONS AREA WQ PROJECT (NL-2)

Preliminary review; and communications with administrator and internal staff regarding review.

James P. Herbert, Principal Engineer/Scientist 0.8 hours @ \$195.00 per hour	\$	156.00
Karen L. Chandler, Principal Engineer/Scientist 0.6 hours @ \$175.00 per hour	\$	<u>105.00</u>
<i>Subtotal, Four Seasons Area WQ Project (NL-2)</i>	\$	<i>261.00</i>

SCHAPER POND 2018 MONITORING AND REPORTING (SL-3)

Follow-up with Carp Solutions regarding carp barriers and Sweeney Lake options, including November 7 on-site meeting with Carp Solutions.

Gregory J. Wilson, Consultant/Advisor 4.0 hours @ \$165.00 per hour	\$	660.00
Expenses (Mileage)	\$	<u>17.40</u>
<i>Subtotal, Schaper Pond 2018 Monitoring and Reporting.....</i>	\$	<i>677.40</i>

MAIN STEM DREDGING PROJECT FEASIBILITY STUDY (2021) (BC-7)

Prepare agency meeting agenda and figures, attend November 22 agency meeting, and develop meeting minutes; prepare wetland delineation figures and memo (desktop review); review and manage sediment testing data; subconsultant testing fees for sediment sampling; internal communications regarding

sediment testing results; stream restoration site visit; develop colored elevation figures for top of sediment elevations; review historical data for lagoon depths; estimate dredging volumes for multiple depths; continue XP SWMM model updates; and prepare and send project email updates.

Karen L. Chandler, Principal Engineer/Scientist 5.7 hours @ \$175.00 per hour	\$ 997.50
Jennifer L. Brekken, Consultant/Advisor 1.5 hours @ \$155.00 per hour	\$ 232.50
Terri A. Olson, Engineer/Scientist/Specialist III 4.1 hours @ \$140.00 per hour	\$ 574.00
John W. Juntilla, Engineer/Scientist/Specialist II 0.5 hours @ \$120.00 per hour	\$ 60.00
Adam K. Howard, Engineer/Scientist/Specialist II 4.4 hours @ \$120.00 per hour	\$ 528.00
Patrick E. Brockamp, Engineer/Scientist/Specialist II 14.5 hours @ \$105.00 per hour	\$ 1,522.50
Lulu Fang, Engineer/Scientist/Specialist II 2.0 hours @ \$95.00 per hour	\$ 190.00
Tyler A. Conley, Engineer/Scientist/Specialist I 6.0 hours @ \$75.00 per hour	\$ 450.00
Technicians/Administrative.....	\$ 423.00
Expenses (Pace Analytical Services, Inc.).....	\$ 4,429.00
Subtotal, Main Stem Dredging Project Feasibility Study.....	\$ 9,406.50

MOUNT OLIVET STREAM STABILIZATION PROJECT (2021)(ML-20) AND PARKERS LAKE DRAINAGE IMPROVEMENT PROJECT (2021)(PL-7) FEASIBILITY STUDY

Mount Olivet Stream Stabilization Project Feasibility Study (2021)(ML-20)

Perform threatened and endangered species review; complete site topographic survey and tree survey; develop initial concept options and figures; and assist administrator with agency meeting coordination.

Karen L. Chandler, Principal Engineer/Scientist 0.8 hours @ \$175.00 per hour	\$ 140.00
Jeffrey D. Weiss, Engineer/Scientist/Specialist III 0.3 hours @ \$130.00 per hour	\$ 40.50
Adam K. Howard, Engineer/Scientist/Specialist II 4.2 hours @ \$120.00 per hour	\$ 504.00
Kallie B. Doeden, Engineer/Scientist/Specialist I 21.5 hours @ \$95.00 per hour	\$ 2,042.50
Tyler A. Conley, Engineer/Scientist/Specialist I 3.8 hours @ \$75.00 per hour	\$ 285.00

Technicians/Administrative.....	\$	3,130.50
Expenses (Mileage/2WD vehicle/GPS Survey system/GPS Trimble system/robotic tool station).....	\$	<u>811.12</u>
<i>Subtotal, Mount Olivet Stream Stabilization Project Feas Study.....</i>	\$	6,953.62

Parkers Lake Drainage Improvement Project (2021)(PL-7)

Perform threatened and endangered species review; complete site topographic survey and tree survey; perform P8 water quality modeling; develop initial concept options and figures; and assist administrator with agency meeting coordination.

Karen L. Chandler, Principal Engineer/Scientist 0.9 hours @ \$175.00 per hour	\$	157.50
Jennifer A. Koehler, Engineer/Scientist/Specialist III 2.6 hours @ \$140.00 per hour	\$	364.00
Jeffrey D. Weiss, Engineer/Scientist/Specialist III 0.3 hours @ \$130.00 per hour	\$	40.50
Adam K. Howard, Engineer/Scientist/Specialist II 4.1 hours @ \$120.00 per hour	\$	492.00
Ross S. Mullen, Engineer/Scientist/Specialist II 0.3 hours @ \$110.00 per hour	\$	33.00
Kallie B, Doeden, Engineer/Scientist/Specialist I 16.3 hours @ \$95.00 per hour	\$	1,548.50
Samantha A. Beck, Engineer/Scientist/Specialist I 18.0 hours @ \$80.00 per hour	\$	1,440.00
Tyler A. Conley, Engineer/Scientist/Specialist I 3.8 hours @ \$75.00 per hour	\$	285.00
Technicians/Administrative.....	\$	2,268.00
Expenses (Mileage/2WD vehicle/GPS Survey system/GPS Trimble system/robotic tool station).....	\$	<u>499.12</u>
<i>Subtotal, Parkers Lake Drainage Improvement Project Feas Study</i>	\$	7,127.62

Subtotal, Mt. Olivet Stream Stabilization Project & Parkers Lake Drainage Improvement Project Feasibility Study..... \$ **14,081.24**

TOTAL CAPITAL IMPROVEMENTS PROJECTS (Tax Levy)\$ 24,426.14

TMDL WORK

TOTAL TMDL WORK\$ 0.00

IMPROVED FEMA FLOODPLAIN MODELING & MAPPING (MDNR)

IMPROVED FEMA FLOODPLAIN MODELING & MAPPING (MDNR)

Develop Depth Grids

Communications with MDNR staff and internal staff regarding revised FEMA mapping requirements and revised mapping schedule resulting from MDNR's 1-year extension from FEMA; and review floodway mapping/modeling methodology.

Karen L. Chandler, Principal Engineer/Scientist 1.1 hours @ \$175.00 per hour	\$ 192.50
Ross S. Mullen, Engineer/Scientist/Specialist II 2.2 hours @ \$110.00 per hour	\$ 242.00
<i>Subtotal, Develop Depth Grids</i>	\$ 434.50

Develop Project Narrative

Communications with MDNR staff and internal staff regarding revised project schedule resulting from MDNR's 1-year extension from FEMA.

Ross S. Mullen, Engineer/Scientist/Specialist II 0.8 hours @ \$110.00 per hour	\$ 88.00
<i>Subtotal, Develop Project Narrative</i>	\$ 88.00

TOTAL IMPROVED FEMA FLOODPLAIN MODELING & MAPPING (MDNR).....\$ 522.50

SUMMARY TOTALS

Total Engineering	\$ 37,437.44
Total WOMP	\$ 1,005.18
Total APM/AIS Work	\$ 0.00
Total TMDL Work	\$ 0.00
Total Capital Improvement Projects (Tax Levy)	\$ 24,426.14
Total Improved FEMA Floodplain Modeling & Mapping (MDNR)	\$ 522.50
TOTAL PAYABLE	\$ 63,391.26

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


