



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

Page # 1
Invoice # 23270051-2016-1
Project # 23/27-0051
Client # 59
March 04, 2016

Invoice of Account with
BARR ENGINEERING COMPANY

For professional services during the period of
January 30, 2016 through February 26, 2016

ENGINEERING

TECHNICAL SERVICES

Coordinate with administrator regarding projects and estimated costs of BCWMC projects to include in Hennepin County All Hazard Multi-Jurisdiction Mitigation Plan; communications with new Minnetonka staff member; communications with New Hope staff regarding contact information; communications with Golden Valley staff regarding lake setbacks; communications with administrator and follow-up with internally regarding 2017 budget items; prepare 2016 budget table; and review 2014 tour costs.

James P. Herbert, Principal Engineer/Scientist	
0.5 hours @ \$180.00 per hour.....	\$ 90.00
Karen L. Chandler, Consultant/Advisor	
7.7 hours @ \$165.00 per hour.....	\$ 1,270.50
Sterling G. Williams, Engineer/Scientist/Specialist III	
1.0 hours @ \$130.00 per hour.....	\$ 130.00
Michael B. Strong, Engineer/Scientist/Specialist II	
0.3 hours @ \$105.00 per hour.....	\$ 31.50
<i>Subtotal, Technical Services</i>	<i>\$ 1,522.00</i>

MONTHLY MEETING PREPARATION

Communications/coordination with administrator regarding draft/final agenda and meeting packet for February 2016 meeting; review/edit draft January meeting minutes; prepare for February Commission meeting, including set up and attend pre-meeting conference call with Chair de Lambert, vice chair Mueller and administrator to review meeting agenda; provide grant tracking information to administrator; internal meeting to review presentation for February Commission meeting; communications with Golden Valley staff regarding stream restoration costs; and coordination and communications with administrator and internal staff regarding follow-up tasks from February Commission meeting and upcoming meeting agenda items.

James P. Herbert, Principal Engineer/Scientist	
7.8 hours @ \$180.00 per hour.....	\$ 1,404.00
Karen L. Chandler, Consultant/Advisor	
18.7 hours @ \$165.00 per hour.....	\$ 3,085.50
Technicians/Administrative	\$ 570.00
Expenses (Marco, Inc.)	\$ 23.22
<i>Subtotal, Monthly Meeting Preparation</i>	<i>\$ 5,082.72</i>

WETLAND ISSUES

Prepare draft Wetland Conservation Act resolution delegating certain WCA decisions to Commission staff, and prepare memo for February Commission meeting.

Karen L. Chandler, Consultant/Advisor	
2.4 hours @ \$165.00 per hour.....	\$ 396.00
Karen S. Wold, Engineer/Scientist/Specialist II	
1.3 hours @ \$120.00 per hour.....	\$ 156.00
<i>Subtotal, Wetland Issues</i>	<i>\$ 552.00</i>

TAC PREPARATION

Prepare for February 5 TAC meeting; communications with administrator regarding March TAC meeting agenda; prepare agenda materials for March 3 TAC meeting packet, including prepare cost estimate for Bassett Creek Park Pond project (CIP BCP-2), review/edit Golden Valley's proposed DeCola/ Medicine Lake Road CIP project description; update Flood Control Project recommendations, review/edit 5-year CIP, call to BWSR staff regarding BBR listing of projects, and provide materials to administrator.

James P. Herbert, Principal Engineer/Scientist	
5.5 hours @ \$180.00 per hour.....	\$ 990.00
Karen L. Chandler, Consultant/Advisor	
6.1 hours @ \$165.00 per hour.....	\$ 1,006.50
Megan J. Wika, Engineer/Scientist/Specialist I	
2.0 hours @ \$70.00 per hour	\$ 140.00
<i>Subtotal, TAC Preparation</i>	<i>\$ 2,136.50</i>
<i>Subtotal Technical Services</i>	<i>\$ 9,293.22</i>

PLAT REVIEW

1301 Theodore Wirth Parkway (2016-01)

Plat review set up; preliminary review; and coordination with city staff and applicant.

James P. Herbert, Principal Engineer Scientist	
2.0 hours @ \$180.00 per hour.....	\$ 360.00

Candice M. Kantor, Engineer/Scientist/Specialist II	
0.3 hours @ \$100.00 per hour.....	\$ 30.00
Technicians/Administrative	\$ 45.00
<i>Subtotal, 1301 Theodore Wirth Parkway</i>	<i>\$ 435.00</i>

2016 Northwood Lake Improvements (2016-02)

Review grading, drainage and erosion control plans; review floodplain impacts; prepare memo for February Commission meeting; communications with city staff and city consultant; and prepare and send approval letter to city staff.

James P. Herbert, Principal Engineer Scientist	
3.3 hours @ \$180.00 per hour.....	\$ 594.00
Karen L. Chandler, Consultant/Advisor	
2.5 hours @ \$165.00 per hour.....	\$ 412.50
Candice M. Kantor, Engineer/Scientist/Specialist II	
5.7 hours @ \$100.00 per hour.....	\$ 570.00
Technicians/Administrative	\$ 63.00
<i>Subtotal, 2016 Northwood Lake Improvements</i>	<i>\$ 1,639.50</i>

2016 Northwood South Area Infrastructure (2016-03)

Review grading, drainage and erosion control plans; review city's submittal regarding MIDS flow chart/flexible treatment options, including city's proposal to take partial credit for water quality treatment provided by Jordan Pond; prepare memo for February Commission meeting; communications with city consultant and administrator; and prepare draft approval/comment letter.

James P. Herbert, Principal Engineer Scientist	
3.4 hours @ \$180.00 per hour.....	\$ 612.00
Karen L. Chandler, Consultant/Advisor	
10.6 hours @ \$165.00 per hour.....	\$ 1,749.00
Candice M. Kantor, Engineer/Scientist/Specialist II	
10.2 hours @ \$100.00 per hour.....	\$ 1,020.00
Technicians/Administrative	\$ 54.00
<i>Subtotal, 2016 Northwood South Area Infrastructure.....</i>	<i>\$ 3,435.00</i>

Three Rivers PD BC Regional Trail (2016-04)

Plat review set up; preliminary review, including review criteria for trails; and coordination with applicant.

James P. Herbert, Principal Engineer Scientist	
2.0 hours @ \$180.00 per hour.....	\$ 360.00
Candice M. Kantor, Engineer/Scientist/Specialist II	
1.6 hours @ \$100.00 per hour.....	\$ 160.00

Amy R. Anderson, Engineer/Scientist/Specialist I	
0.5 hours @ \$90.00 per hour	\$ 45.00
Technicians/Administrative	\$ 90.00
<i>Subtotal, Three Rivers PD BC Regional Trail</i>	<i>\$ 655.00</i>

Arlington Row East Apartments (2016-05)

Plat review set up; and preliminary review.

Candice M. Kantor, Engineer/Scientist/Specialist II	
0.5 hours @ \$100.00 per hour	\$ 50.00
Amy R. Anderson, Engineer/Scientist/Specialist I	
0.5 hours @ \$90.00 per hour	\$ 45.00
Technicians/Administrative	\$ 45.00
<i>Subtotal, Arlington Row East Apartments</i>	<i>\$ 140.00</i>

GV 2016 PMP STH169 Plymouth Ave (2016-06)

Plat review set up.

Technicians/Administrative	\$ 45.00
<i>Subtotal, GV 2016 PMP STH 169 Plymouth Ave</i>	<i>\$ 45.00</i>

<i>Subtotal Plat Review</i>	<i>\$ 6,349.50</i>
-----------------------------------	--------------------

NON-FEE REVIEWS AND PRELIMINARY COMMUNICATIONS

PRELIMINARY COMMUNICATIONS

Communications with applicant regarding preliminary sites and referred caller to city staff; follow-up from applicant on closed-out project (application 2015-27); communications with Crystal staff regarding Gardendale development and application information; and call from consultant regarding project in Golden Valley.

James P. Herbert, Principal Engineer/Scientist	
1.5 hours @ \$180.00 per hour	\$ 270.00
Karen L. Chandler, Consultant/Advisor	
0.5 hours @ \$165.00 per hour	\$ 82.50
<i>Subtotal, Plat Review – Preliminary Communications</i>	<i>\$ 352.50</i>

NON-FEE REVIEWS

SW LRT

Meeting with administrator regarding status and next steps; communications with SWLRT consultant regarding proposed connection; review SWLRT memo regarding model results; internal meetings regarding SWLRT and city proposed connections to tunnel, potential for mitigation, and Commission review; communications with administrator and SWLRT staff regarding additional information needs;

coordinate with administrator, SWLRT staff, and Minneapolis staff to set up meeting; and begin review of additional information.

James P. Herbert, Principal Engineer/Scientist 5.1 hours @ \$180.00 per hour.....	\$ 918.00
Karen L. Chandler, Consultant/Advisor 7.8 hours @ \$165.00 per hour.....	\$ 1,287.00
Jennifer A. Koehler, Engineer/Scientist/Specialist III 4.2 hours @ \$125.00 per hour.....	\$ 525.00
Brandon J. Barnes, Engineer/Scientist/Specialist III 0.5 hours @ \$125.00 per hour.....	\$ <u>62.50</u>
<i>Subtotal, SW LRT</i>	<i>\$ 2,792.50</i>
<i>Subtotal Non-Fee Reviews</i>	<i>\$ 2,792.50</i>
<i>Subtotal Non-Fee Reviews and Preliminary Communications</i>	<i>\$ 3,145.00</i>

COMMISSION AND TAC MEETINGS

Attend February 5 TAC meeting and February 18 Commission meeting.

James P. Herbert, Principal Engineer/Scientist 3.5 hours @ \$180.00 per hour.....	\$ 630.00
Karen L. Chandler, Consultant/Advisor 6.5 hours @ \$165.00 per hour.....	\$ 1,072.50
Expenses (Mileage)	\$ <u>28.08</u>
<i>Subtotal, Commission and TAC Meetings</i>	<i>\$ 1,730.58</i>

SURVEYS & STUDIES

<i>Subtotal, Surveys & Studies.....</i>	<i>\$ 0.00</i>
---	----------------

WATER QUALITY/MONITORING

Communications with administrator and internal communications regarding 2017 Twin Lake water quality monitoring and sediment sampling, Sweeney Lake water quality monitoring and aeration study, and Schaper Pond monitoring recommendations; and internal meeting regarding water quality presentations for March Commission meeting. Westwood Lake 2015 monitoring: enter 2015 surface water field data into Equis database; review draft Westwood Lake water quality monitoring report; and internal communications regarding protocol for historical water quality graphs; Stream Biotic Index Monitoring: complete draft biotic index monitoring report.

Henry M. Runke, Principal Engineer/Scientist 0.5 hours @ \$175.00 per hour.....	\$ 87.50
Karen L. Chandler, Consultant/Advisor 2.9 hours @ \$165.00 per hour.....	\$ 478.50
Gregory J. Wilson, Engineer/Scientist/Specialist III 4.0 hours @ \$155.00 per hour.....	\$ 620.00

Margaret R. Rattei, Engineer/Scientist/Specialist III	
4.7 hours @ \$130.00 per hour.....	\$ 611.00
Kelly A. Wild, Engineer/Scientist/Specialist I	
0.7 hours @ \$85.00 per hour	\$ 59.50
Technicians/Administrative	\$ <u>2,272.00</u>
<i>Subtotal, Water Quality/Monitoring.....</i>	<i>\$ 4,128.50</i>

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>53.62</u>
<i>Subtotal, Water Quantity</i>	<i>\$ 413.62</i>
TOTAL ENGINEERING	\$ 25,060.42

SECRETARIAL SERVICES

SECRETARIAL SERVICES EXPENSES

Expenses for postage.

Expenses (Postage).....	\$ <u>99.83</u>
TOTAL SECRETARIAL SERVICES EXPENSES	\$ 99.83

ANNUAL REPORT

TOTAL ANNUAL REPORT.....	\$ 0.00
---------------------------------	----------------

PUBLIC COMMUNICATIONS

TOTAL PUBLIC COMMUNICATIONS	\$ 0.00
--	----------------

WEBSITE

Provide GIS data for BCWMC priority waterbodies for the website; and communications/coordination with administrator, website consultant, and Commission staff.

Sterling G. Williams, Engineer/Scientist/Specialist III	
1.5 hours @ \$130.00 per hour.....	\$ <u>195.00</u>
<i>Subtotal, Website.....</i>	<i>\$ 195.00</i>
TOTAL WEBSITE	\$ 195.00

WATERSHED OUTLET MONITORING PROGRAM (WOMP)

WATERSHED OUTLET MONITORING PROGRAM (WOMP)

Retrieve 2013-15 WOMP data from Metropolitan Council.

Christopher J. Bonick, Engineer/Scientist/Specialist II	
1.0 hours @ \$120.00 per hour.....	\$ 120.00
<i>Subtotal, Watershed Outlet Monitoring Program.....</i>	<i>\$ 120.00</i>
TOTAL WOMP	\$ 120.00

CAPITAL IMPROVEMENT PROJECTS (Funded through tax levy)

NORTHWOOD LAKE IMPROVEMENT PROJECT (2016) (NL-1)

Review 100% plans; and prepare draft approval/comment letter.

Jennifer A. Koehler, Engineer/Scientist/Specialist III	
1.2 hours @ \$125.00 per hour.....	\$ 150.00
Candice M. Kantor, Engineer/Scientist/Specialist II	
1.3 hours @ \$100.00 per hour.....	\$ 130.00
<i>Subtotal, Northwood Lake Improvement Project</i>	<i>\$ 280.00</i>

NORTHWOOD LAKE [NON-MPCA REIMBURSABLE]

Revise and finalize work plan for Northwood Lake BWSR Clean Water Fund grant, per communications with administrator and BWSR staff; communications with administrator regarding work plan and grant agreement.

Amy R. Anderson, Engineer/Scientist/Specialist I	
7.5 hours @ \$90.00 per hour	\$ 675.00
<i>Subtotal, Northwood Lake [Non-MPCA Reimbursable]</i>	<i>\$ 675.00</i>

MAIN STEM CHANNEL RESTORATION, CEDAR LK RD TO DUPONT, PLUS FRUEN MILL (2017CR-M)

Prepare for and attend meeting with Pioneer Paper, administrator, Minneapolis staff to discuss property access for soil investigation and future construction; assist administrator and legal counsel regarding access agreement, review draft agreement, and coordinate with administrator and Minneapolis staff regarding access agreement; develop and refine draft stabilization alternatives and cost estimates; work on wetland delineation report; plan and prepare for Phase II soil investigations; subcontract with geoprobe driller and coordinate with lab for analysis; field work to observe geoprobe soil sampling and collect hand auger samples; soil sample and chain-of-custody management and delivery to lab for analysis; process and manage data from soil samples and field work; prepare data analysis report; project management, communications, and team meetings to discuss progress.

Daniel J. Fetter, Principal Engineer/Scientist 7.5 hours @ \$200.00 per hour.....	\$ 1,500.00
James P. Herbert, Principal Engineer/Scientist 3.2 hours @ \$180.00 per hour.....	\$ 576.00
Jeffrey T. Lee, Principal Engineer/Scientist 3.8 hours @ \$155.00 per hour.....	\$ 589.00
Jennifer L. Brekken, Engineer/Scientist/Specialist III 11.2 hours @ \$140.00 per hour.....	\$ 1,568.00
Terri A. Olson, Engineer/Scientist/Specialist III 1.8 hours @ \$130.00 per hour.....	\$ 234.00
Brent A. Lindstrom, Engineer/Scientist/Specialist III 3.2 hours @ \$125.00 per hour.....	\$ 400.00
Peter J. Hinck, Engineer/Scientist/Specialist II 24.4 hours @ \$125.00 per hour.....	\$ 3,050.00
John W. Juntilla, Engineer/Scientist/Specialist II 24.0 hours @ \$110.00 per hour.....	\$ 2,640.00
Patrick J. McHugh, Engineer/Scientist/Specialist II 4.9 hours @ \$100.00 per hour.....	\$ 490.00
Christian E. Frias, Engineer/Scientist/Specialist II 9.5 hours @ \$105.00 per hour.....	\$ 997.50
Jeffrey D. Weiss, Engineer/Scientist/Specialist II 15.5 hours @ \$125.00 per hour.....	\$ 1,937.50
Brian K. Burgner, Engineer/Scientist/Specialist I 18.5 hours @ \$95.00 per hour.....	\$ 1,757.50
Christopher R. Ross, Engineer/Scientist/Specialist I 2.0 hours @ \$65.00 per hour	\$ 130.00
Technicians/Administrative	\$ 919.00
Expenses (Matrix Environmental/mileage/binding/detector lamp/ GSP system/digital camera/split tube probe/copies)	\$ 3,415.89
<i>Subtotal, Main Stem Channel Restoration, Cedar Lk Rd to Dupont, Plus Fruen Mill.....</i>	<i>\$ 20,204.39</i>

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

Revisions to draft report to address comments from Plymouth staff and administrator; review DNR comments and revise report to address comments; revise figures and cost estimates to reflect revisions to the report and recommended alternatives; compare estimated costs to similar BCWMC projects; prepare for and present study at February Commission meeting.

Daniel J. Fetter, Principal Engineer/Scientist 0.5 hours @ \$200.00 per hour.....	\$ 100.00
Jeffrey T. Lee, Principal Engineer/Scientist 0.8 hours @ \$155.00 per hour.....	\$ 124.00
Karen L. Chandler, Consultant/Advisor 3.7 hours @ \$165.00 per hour.....	\$ 610.50
Jennifer L. Brekken, Engineer/Scientist/Specialist III 1.5 hours @ \$140.00 per hour.....	\$ 210.00
Peter J. Hinck, Engineer/Scientist/Specialist II 28.1 hours @ \$125.00 per hour.....	\$ 3,512.50
Jeffrey D. Weiss, Engineer/Scientist/Specialist II 14.5 hours @ \$125.00 per hour.....	\$ 1,812.50
Adam J. Howard, Engineer/Scientist/Specialist II 22.4 hours @ \$100.00 per hour.....	\$ 2,240.00
Christopher R. Ross, Engineer/Scientist/Specialist I 2.0 hours @ \$65.00 per hour	\$ 130.00
Joshua R. Vosejpka, Engineer/Scientist/Specialist I 0.4 hours @ \$75.00 per hour	\$ 30.00
Brian K. Burgner, Engineer/Scientist/Specialist I 2.7 hours @ \$95.00 per hour	\$ 256.50
Amy R. Anderson, Engineer/Scientist/Specialist I 0.5 hours @ \$90.00 per hour	\$ 45.00
<i>Subtotal, Plymouth Creek Restoration, Annapolis Ln to 2,500 Ft Upstream of Annapolis Ln</i>	<i>\$ 9,071.00</i>
TOTAL CAPITAL IMPROVEMENTS PROJECTS (Tax Levy)	\$ 30,230.39

TMDL WORK

TMDL IMPLEMENTATION REPORTING

Update, revise, re-run P8 model; and map P8 model results.

Gregory J. Wilson, Engineer/Scientist/Specialist III 7.6 hours @ \$155.00 per hour.....	\$ 1,178.00
Joshua R. Vosejpka, Engineer/Scientist/Specialist I 1.5 hours @ \$75.00 per hour	\$ 112.50
<i>Subtotal, TMDL Studies.....</i>	<i>\$ 1,290.50</i>
TOTAL TMDL STUDIES	\$ 1,290.50

XP-SWMM PHASE II

XP-SWMM PHASE II

North Branch & Main Stem Modeling

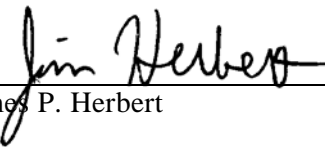
Hold internal kick off meeting for 2016 modeling; compile initial storm sewer data requests to Robbinsdale, Crystal, New Hope, St. Louis Park, and Golden Valley; internal discussion regarding Wisconsin Ave Structure; request to MWMO for precipitation data; develop data request map book for follow-up on storm sewer data; checking watersheds and create XP-SWMM node/ link network for Northwood and Lost Lakes and Bassett Creek Park Pond; develop Crystal area divides on North Branch; create Bassett Creek Park Pond XP-SWMM nodes and links network within New Hope data, based on internal plan files; develop New Hope data request, and digitize overflows for watersheds; look into projection conversion for GIS data; and update model datums of Sweeney Lake, Wirth Lake, and DeCola Pond models.

James P. Herbert, Principal Engineer/Scientist	
0.5 hours @ \$180.00 per hour.....	\$ 90.00
Jennifer A. Koehler, Engineer/Scientist/Specialist III	
10.9 hours @ \$125.00 per hour.....	\$ 1,362.50
Gregory D. Fransen, Engineer/Scientist/Specialist II	
1.7 hours @ \$110.00 per hour.....	\$ 187.00
Ross S. Mullen, Engineer/Scientist/Specialist I	
60.7 hours @ \$90.00 per hour.....	\$ 5,463.00
Joshua R. Vosejpka, Engineer/Scientist/Specialist I	
0.4 hours @ \$75.00 per hour	\$ 30.00
Lulu Fang, Engineer/Scientist/Specialist I	
85.3 hours @ \$75.00 per hour.....	\$ 6,397.50
Megan J. Wika, Engineer/Scientist/Specialist I	
4.4 hours @ \$70.00 per hour	\$ 308.00
<i>Subtotal, XP-SWMM Phase II.....</i>	<i>\$ 13,838.00</i>
TOTAL XP-SWMM PHASE II.....	\$ 13,838.00

SUMMARY TOTALS

Total Engineering	\$ 25,060.42
Total Secretarial Services Expenses.....	\$ 99.83
Total Annual Report/Website/Public Communications	\$ 195.00
Total WOMP	\$ 120.00
Total Capital Improvement Projects (Tax Levy)	\$ 30,230.39
Total TMDL Work	\$ 1,290.50
Total XP-SWMM Phase II	\$ <u>13,838.00</u>
TOTAL PAYABLE	\$ 70,834.14

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



James P. Herbert