



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

Page # 1
Invoice # 23270051-2016-3
Project # 23/27-0051
Client # 59
May 06, 2016

Invoice of Account with
BARR ENGINEERING COMPANY

For professional services during the period of
April 02, 2016 through April 29, 2016

ENGINEERING

TECHNICAL SERVICES

Revise BWSR 2018-2019 biennial budget request, submit BBR request through eLINK, and communications with administrator; communications with administrator regarding presentation request from senior facility, upcoming TH 169 projects in BCWMC, and sediment coring on Medicine Lake; communications with administrator and Hennepin County staff regarding ditch information, and look into ditch information; communications with administrator regarding draft 2017 budgets, including question about aeration study work scope clarification; look into BWSR grant payment and discuss with administrator; communications with administrator, commissioner Mueller, and Crystal staff regarding Bassett Creek Park Pond feasibility study and potential of adding Winnetka Pond to CIP; communications with contractor regarding questions about creek flows; communications with administrator and Golden Valley staff regarding TMDL and CIP project budgets questions; and communications with administrator regarding reviews, Sweeney Lake Outlet CIP funding, budget status and agreement, and mapping of CIP projects.

James P. Herbert, Principal Engineer/Scientist 2.0 hours @ \$180.00 per hour	\$ 360.00
Karen L. Chandler, Consultant/Advisor 9.3 hours @ \$165.00 per hour	\$ 1,534.50
Gregory J. Wilson, Consultant/Advisor 1.2 hours @ \$155.00 per hour	\$ 186.00
Amy R. Anderson, Engineer/Scientist/Specialist I 1.5 hours @ \$90.00 per hour	\$ 135.00
Technicians/Administrative.....	\$ 395.00
<i>Subtotal, Technical Services.....</i>	<i>\$ 2,610.50</i>

MONTHLY MEETING PREPARATION

Communications/coordination with administrator regarding draft/final agenda and meeting packet for April 2016 meeting; review/edit draft March meeting minutes; prepare for April Commission meeting, including set up and attend pre-meeting conference call with chair de Lambert and administrator to review meeting agenda; provide grant tracking information to administrator; prepare presentation for April Commission meeting regarding 2015 lake water quality monitoring and biotic index monitoring results; and coordination and communications with administrator and internal staff regarding follow-up tasks from April Commission meeting and upcoming meeting agenda items.

James P. Herbert, Principal Engineer/Scientist 7.5 hours @ \$180.00 per hour	\$	1,350.00
Karen L. Chandler, Consultant/Advisor 21.4 hours @ \$165.00 per hour	\$	3,531.00
Margaret R. Rattei, Engineer/Scientist/Specialist III 13.8 hours @ \$130.00 per hour	\$	1,794.00
Sterling G. Williams, Engineer/Scientist/Specialist III 3.1 hours @ \$130.00 per hour	\$	403.00
Technicians/Administrative.....	\$	<u>570.00</u>
<i>Subtotal, Monthly Meeting Preparation.....</i>	\$	<i>7,648.00</i>

TAC PREPARATION

Communications with administrator and internal staff regarding May 5 TAC meeting agenda; April 18 meeting with administrator/call to RWMWD staff regarding presentation at May 5 TAC meeting; and prepare for May 5 TAC meeting.

Karen L. Chandler, Consultant/Advisor 2.4 hours @ \$165.00 per hour	\$	<u>396.00</u>
<i>Subtotal, TAC Preparation.....</i>	\$	<i>396.00</i>

Subtotal Technical Services \$ 10,654.50

PLAT REVIEW

Plymouth Ice Center/Life Time Parking Lot (2015-14)

Communications with applicant, review resubmittal, including P8 model and MIDS calculator results; and revised sand filter design; and prepare and send final approval letter to city staff.

James P. Herbert, Principal Engineer Scientist 3.6 hours @ \$180.00 per hour	\$	648.00
Adam K. Howard, Engineer/Scientist/Specialist II 2.8 hours @ \$100.00 per hour	\$	280.00

Amy R. Anderson, Engineer/Scientist/Specialist I
7.0 hours @ \$90.00 per hour..... \$ 630.00
Subtotal, Plymouth Ice Center/Life Time Parking Lot..... \$ 1,558.00

Waterford Innovation Center (2015-34)

Communications with applicant, review revised grading, drainage and erosion control plans; review MIDS calculator results; and prepare draft approval letter.

James P. Herbert, Principal Engineer Scientist
1.3 hours @ \$180.00 per hour \$ 234.00
Amy R. Anderson, Engineer/Scientist/Specialist I
7.5 hours @ \$90.00 per hour..... \$ 675.00
Subtotal, Waterford Innovation Center..... \$ 909.00

10th Avenue – UP Rail Culvert Repair (2015-36)

Preliminary review of railroad consultant’s memo regarding proposed culvert lining project and impact on Bassett Creek flood elevations; internal meeting regarding LOMR/CLOMR DNR requirements; and communications with administrator and Golden Valley staff.

James P. Herbert, Principal Engineer Scientist
1.0 hours @ \$180.00 per hour \$ 180.00
Thomas E. MacDonald, Principal Engineer Scientist
0.3 hours @ \$165.00 per hour \$ 49.50
Karen L. Chandler, Consultant/Advisor
2.1 hours @ \$165.00 per hour \$ 346.50
Sarah M. Stratton, Engineer/Scientist/Specialist III
0.5 hours @ \$145.00 per hour \$ 72.50
Amy R. Anderson, Engineer/Scientist/Specialist I
1.0 hours @ \$90.00 per hour..... \$ 90.00
Subtotal, 10th Avenue-UP Rail Culvert Repair..... \$ 738.50

1301 Theodore Wirth Parkway (2016-01)

Review applicant’s response to comments; communications with applicant; and prepare and send final Welcome and Adventure Center approval letter to city staff.

James P. Herbert, Principal Engineer Scientist
2.1 hours @ \$180.00 per hour \$ 378.00
Amy R. Anderson, Engineer/Scientist/Specialist I
3.2 hours @ \$90.00 per hour \$ 288.00
Subtotal, 1301 Theodore Wirth Parkway..... \$ 666.00

2016 Northwood Lake Improvements (2016-02)

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

James P. Herbert, Principal Engineer Scientist 1.2 hours @ \$180.00 per hour	\$ 216.00
Amy R. Anderson, Engineer/Scientist/Specialist I 1.2 hours @ \$90.00 per hour.....	\$ <u>108.00</u>
<i>Subtotal, 2016 Northwood Lake Improvements.....</i>	<i>\$ 324.00</i>

2016 Northwood South Area Infrastructure (2016-03)

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

James P. Herbert, Principal Engineer Scientist 1.7 hours @ \$180.00 per hour	\$ 306.00
Karen L. Chandler, Consultant/Advisor 0.3 hours @ \$165.00 per hour	\$ 49.50
Amy R. Anderson, Engineer/Scientist/Specialist I 1.2 hours @ \$90.00 per hour.....	\$ <u>108.00</u>
<i>Subtotal, 2016 Northwood South Area Infrastructure.....</i>	<i>\$ 463.50</i>

Arlington Row East Apartments (2016-05)

Coordination with applicant; and prepare and send final approval letter to St. Louis Park staff.

James P. Herbert, Principal Engineer Scientist 1.8 hours @ \$180.00 per hour	\$ 324.00
Amy R. Anderson, Engineer/Scientist/Specialist I 0.4 hours @ \$90.00 per hour.....	\$ <u>36.00</u>
<i>Subtotal, Arlington Row East Apartments.....</i>	<i>\$ 360.00</i>

GV 2016 PMP STH169 Plymouth Ave (2016-06)

Review grading, drainage and erosion control plans; coordination with applicant; and prepare and send final approval letter to Golden Valley staff.

James P. Herbert, Principal Engineer Scientist 2.8 hours @ \$180.00 per hour	\$ 504.00
Amy R. Anderson, Engineer/Scientist/Specialist I 2.7 hours @ \$90.00 per hour.....	\$ <u>243.00</u>
<i>Subtotal, GV 2016 PMP STH 169 Plymouth Ave.....</i>	<i>\$ 747.00</i>

Morries Lincoln of SLP (2016-08)

Review resubmittal; coordination with applicant; and prepare and send final approval letter to city staff.

James P. Herbert, Principal Engineer Scientist 2.0 hours @ \$180.00 per hour	\$ 360.00
Amy R. Anderson, Engineer/Scientist/Specialist I 9.5 hours @ \$90.00 per hour.....	\$ 855.00
Technicians/Administrative.....	\$ <u>9.00</u>
<i>Subtotal, Morries Lincoln of SLP</i>	<i>\$ 1,224.00</i>

Four Seasons Mall Demolition (2016-09)

Communications with applicant; review grading, drainage and erosion control plans; prepare and send approval/comment letter to city staff.

James P. Herbert, Principal Engineer Scientist 2.8 hours @ \$180.00 per hour	\$ 504.00
Karen L. Chandler, Consultant/Advisor 0.1 hours @ \$165.00 per hour	\$ 16.50
Amy R. Anderson, Engineer/Scientist/Specialist I 5.0 hours @ \$90.00 per hour.....	\$ <u>450.00</u>
<i>Subtotal, Four Seasons Mall Demolition.....</i>	<i>\$ 970.50</i>

Old Rockford Road Overlay and Trail (2016-10)

Plat review set up; preliminary review; and request information from city staff.

James P. Herbert, Principal Engineer Scientist 0.2 hours @ \$180.00 per hour	\$ 36.00
Amy R. Anderson, Engineer/Scientist/Specialist I 2.6 hours @ \$90.00 per hour.....	\$ 234.00
Technicians/Administrative.....	\$ <u>45.00</u>
<i>Subtotal, Old Rockford Road Overlay and Trail.....</i>	<i>\$ 315.00</i>

Armstrong High School Baseball Field Improvements (2016-11)

Plat review set up; and preliminary review.

James P. Herbert, Principal Engineer Scientist 0.8 hours @ \$180.00 per hour	\$ 144.00
Amy R. Anderson, Engineer/Scientist/Specialist I 1.2 hours @ \$90.00 per hour.....	\$ 108.00
Technicians/Administrative.....	\$ <u>45.00</u>
<i>Subtotal, Armstrong HS Baseball Field Improvements.....</i>	<i>\$ 297.00</i>

Pilgrim Lane Elementary Additions (2016-12)

Plat review set up; and preliminary review.

James P. Herbert, Principal Engineer Scientist 0.8 hours @ \$180.00 per hour	\$ 144.00
Amy R. Anderson, Engineer/Scientist/Specialist I 1.2 hours @ \$90.00 per hour.....	\$ 108.00
Technicians/Administrative.....	\$ <u>45.00</u>
<i>Subtotal, Pilgrim Lane Elementary Additions.....</i>	<i>\$ 297.00</i>

1143 South Shore Drive-Medicine Lake WCA (2016-16)

Communications with Medicine Lake consultant, administrator and internal staff regarding potential wetland violation at site; schedule a site review; review desktop information and prepare for site review; conduct April 14 site review with TEP members regarding potential wetland violation; and communications with applicant regarding wetland restoration.

James P. Herbert, Principal Engineer Scientist 0.5 hours @ \$180.00 per hour	\$ 90.00
Karen L. Chandler, Consultant/Advisor 3.9 hours @ \$165.00 per hour	\$ 643.50
Karen S. Wold, Engineer/Scientist/Specialist II 4.3 hours @ \$120.00 per hour	\$ <u>516.00</u>
<i>Subtotal, 1143 South Shore Dr-Med Lake WCA.....</i>	<i>\$ 1,249.50</i>

Subtotal Plat Review..... \$ 10,119.00

PRELIMINARY COMMUNICATIONS AND NON-FEE REVIEWS

PRELIMINARY COMMUNICATIONS

Coordination with St. Louis Park staff and preliminary review for Marriot West site; call from consultant regarding site development; call from consultant regarding TH 169 project; call from consultant (as directed by administrator); and communications with Medicine Lake consultant regarding BCWMC review triggers.

James P. Herbert, Principal Engineer/Scientist 3.7 hours @ \$180.00 per hour	\$ 666.00
Karen L. Chandler, Consultant/Advisor 0.4 hours @ \$165.00 per hour	\$ 66.00
Amy R. Anderson, Engineer/Scientist/Specialist I 1.0 hours @ \$90.00 per hour.....	\$ <u>90.00</u>
<i>Subtotal, Plat Review – Preliminary Communications.....</i>	<i>\$ 822.00</i>

NON-FEE REVIEWS

BLUE LINE LRT/BOTTINEAU TRANSITWAY

Communications with Blue Line LRT consultant regarding scheduling meeting.

Karen L. Chandler, Consultant/Advisor
0.3 hours @ \$165.00 per hour \$ 49.50
Subtotal, Blue Line LRT/Bottineau Transitway..... \$ 49.50

BLUE LINE LRT WCA LGU ADMIN

Golden Valley

Schedule and attend TEP meeting to review incidental wetland request; communications with TEP members and Golden Valley staff regarding incidental wetland request; prepare a summary of TEP comments on the incidental wetland request and send out for review and additional comments; provide summary of comments on the incidental wetland determination request to applicant, agent, and TEP and extend the decision to allow for comment responses; and review response to comments on incidental determinations.

Karen S. Wold, Engineer/Scientist/Specialist II
5.0 hours @ \$120.00 per hour (4/4/16, 4/6/16, 4/7/16, 4/8/16,
4/12/16, 4/13/16, 4/14/16, 4/15/16, 4/18/16, 4/20/16, 4/21/16,
4/22/16, 4/25/16, 4/26/16)..... \$ 600.00
Subtotal, Golden Valley..... \$ 600.00

Minneapolis

Schedule and attend TEP meeting to review incidental wetland request; communications with TEP members regarding incidental wetland request; prepare a summary of TEP comments on the incidental wetland request and send out for review and additional comments; provide summary of comments on the incidental wetland determination request to applicant, agent, and TEP and extend the decision to allow for comment responses; and review response to comments on incidental determinations.

Karen S. Wold, Engineer/Scientist/Specialist II
4.3 hours @ \$120.00 per hour (4/4/16, 4/7/16, 4/8/16, 4/12/16,
4/13/16, 4/14/16, 4/15/16, 4/18/16, 4/20/16, 4/21/16, 4/22/16,
4/25/16, 4/26/16)..... \$ 516.00
Subtotal, Minneapolis..... \$ 516.00

Robbinsdale

Schedule and attend TEP meeting to review incidental wetland request; communications with TEP members regarding incidental wetland request; prepare a summary of TEP comments on the incidental wetland request and send out for review and additional comments; provide summary of comments on the incidental wetland determination request to applicant, agent, and TEP and extend the decision to allow for comment responses; and review response to comments on incidental determinations.

Karen S. Wold, Engineer/Scientist/Specialist II 4.7 hours @ \$120.00 per hour (4/4/16, 4/7/16, 4/8/16, 4/12/16, 4/13/16, 4/14/16, 4/15/16, 4/18/16, 4/20/16, 4/21/16, 4/22/16, 4/25/16, 4/26/16).....	\$	<u>564.00</u>
<i>Subtotal, Robbinsdale.....</i>	\$	564.00
<i>Subtotal Blue Line LRT WCA LGU Admin.....</i>	\$	1,680.00
<i>Subtotal Blue Line LRT/Bottineau Transitway & Blue Line LRT WCA LGU Admin.....</i>	\$	1,729.50

SW LRT

Communications with administrator and city staff regarding upcoming project review.

Karen L. Chandler, Consultant/Advisor 0.9 hours @ \$165.00 per hour	\$	<u>148.50</u>
<i>Subtotal, SW LRT.....</i>	\$	148.50
<i>Subtotal Non-Fee Reviews</i>	\$	1,878.00
<i>Subtotal Preliminary Communications and Non-Fee Reviews</i>	\$	2,700.00

COMMISSION AND TAC MEETINGS

Attend April 21 Commission meeting.

Karen L. Chandler, Consultant/Advisor 3.7 hours @ \$165.00 per hour	\$	610.50
Margaret R. Rattei, Engineer/Scientist/Specialist III 4.0 hours @ \$130.00 per hour	\$	520.00
Expenses (Mileage)	\$	<u>24.30</u>
<i>Subtotal, Commission and TAC Meetings.....</i>	\$	1,154.80

SURVEYS & STUDIES

AMLAC PRESENTATION

Prepare outline for May 18 AMLAC presentation.

Karen L. Chandler, Consultant/Advisor 0.3 hours @ \$165.00 per hour	\$	49.50
Jennifer A. Koehler, Engineer/Scientist/Specialist III 0.7 hours @ \$125.00 per hour	\$	<u>87.50</u>
<i>Subtotal, AMLAC Presentations.....</i>	\$	137.00

APM/AIS TASK FORCE

Prepare for and attend internal meeting and April 28 meeting with administrator to discuss ideas/agendas for APM/AIS task force meetings and members/presenters.

Henry M. Runke, Principal Engineer/Scientist 4.5 hours @ \$175.00 per hour	\$ 787.50
Karen L. Chandler, Consultant/Advisor 3.9 hours @ \$165.00 per hour	\$ 643.50
Margaret R. Rattei, Engineer/Scientist/Specialist III 2.6 hours @ \$130.00 per hour	\$ 338.00
Sterling G. Williams, Engineer/Scientist/Specialist III 2.0 hours @ \$130.00 per hour	\$ <u>260.00</u>
<i>Subtotal, APM/AIS Task Force</i>	\$ 2,029.00
<i>Subtotal, Surveys & Studies</i>	\$ 2,166.00

WATER QUALITY/MONITORING

Final revisions to Biotic Index Monitoring report, per administrator's comments; Northwood and Crane Lakes 2016 monitoring: prepare for and conduct ice out monitoring; QA/QC review of laboratory report and communications with laboratory staff; and enter surface water quality data into Equis.

Henry M. Runke, Principal Engineer/Scientist 1.0 hours @ \$175.00 per hour	\$ 175.00
Margaret R. Rattei, Engineer/Scientist/Specialist III 7.6 hours @ \$130.00 per hour	\$ 988.00
Terri A. Olson, Engineer/Scientist/Specialist III 0.4 hours @ \$130.00 per hour	\$ 52.00
Technicians/Administrative.....	\$ 754.00
Expenses (Pace Analytical Services/Mileage/Filtration Apparatus).....	\$ <u>152.85</u>
<i>Subtotal, Water Quality/Monitoring</i>	\$ 2,121.85

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>	\$ 413.62
TOTAL ENGINEERING	\$ 29,329.77

SECRETARIAL SERVICES

SECRETARIAL SERVICES EXPENSES

Report production and expenses for postage.

Technicians/Administrative.....	\$	156.00
Expenses (Postage)	\$	<u>112.65</u>
TOTAL SECRETARIAL SERVICES EXPENSES.....	\$	268.65

ANNUAL REPORT

TOTAL ANNUAL REPORT	\$	0.00
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PUBLIC COMMUNICATIONS

TOTAL PUBLIC COMMUNICATIONS	\$	0.00
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WEBSITE

TOTAL WEBSITE.....	\$	0.00
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WATERSHED OUTLET MONITORING PROGRAM (WOMP)

WATERSHED OUTLET MONITORING PROGRAM (WOMP)

Communications with MCES staff, internal staff and administrator regarding MCES role in flow measurement/rating curve development in 2016 – 2017.

Henry M. Runke, Principal Engineer/Scientist 0.5 hours @ \$175.00 per hour	\$	87.50
Karen L. Chandler, Consultant/Advisor 0.6 hours @ \$165.00 per hour.....	\$	99.00
Christopher J. Bonick, Engineer/Scientist/Specialist II 0.5 hours @ \$120.00 per hour	\$	<u>60.00</u>
<i>Subtotal, Watershed Outlet Monitoring Program</i>	<i>\$</i>	<i>246.50</i>
TOTAL WOMP	\$	246.50

CAPITAL IMPROVEMENT PROJECTS (Funded through tax levy)

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

Communications with city’s consultant; review final 100% plans; and prepare and send final approval letter to city staff.

James P. Herbert, Principal Engineer/Scientist 1.0 hours @ \$180.00 per hour	\$	180.00
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Karen L. Chandler, Consultant/Advisor	
0.2 hours @ \$165.00 per hour	\$ 33.00
<i>Subtotal, Northwood Lake Improvement Projects</i>	<i>\$ 213.00</i>

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

Final edits to text and figures for the draft feasibility report to address comments from the City of Minneapolis, BCWMC Administrator, and City of Minneapolis Commissioners; final edits to appendices for the draft feasibility report; summarize the path forward and steps necessary to position the BCWMC to seek grants for soil clean-up associated with the project; and prepare and present a summary of the report to the BCWMC at the April Commission meeting.

Daniel J. Fetter, Principal Engineer/Scientist	
2.3 hours @ \$200.00 per hour	\$ 460.00
Jeffrey T. Lee, Principal Engineer/Scientist	
1.3 hours @ \$155.00 per hour	\$ 201.50
Karen L. Chandler, Consultant/Advisor	
6.4 hours @ \$165.00 per hour	\$ 1,056.00
Jennifer L. Brekken, Engineer/Scientist/Specialist III	
1.1 hours @ \$140.00 per hour	\$ 154.00
Jeffrey D. Weiss, Engineer/Scientist/Specialist II	
46.4 hours @ \$125.00 per hour	\$ 5,800.00
Peter J. Hinck, Engineer/Scientist/Specialist II	
13.5 hours @ \$125.00 per hour	\$ 1,687.50
Julie Kloss Molina, Engineer/Scientist/Specialist II	
2.0 hours @ \$105.00 per hour	\$ 210.00
Christian E. Frias, Engineer/Scientist/Specialist II	
12.0 hours @ \$105.00 per hour	\$ 1,260.00
Brian K. Burgner, Engineer/Scientist/Specialist I	
2.7 hours @ \$95.00 per hour	\$ 256.50
Amy R. Anderson, Engineer/Scientist/Specialist I	
1.0 hours @ \$90.00 per hour.....	\$ 90.00
Technicians/Administrative.....	\$ 66.00
Expenses (Copies).....	\$ <u>741.00</u>
<i>Subtotal, Main Stem Channel Restoration, Cedar Lk Rd to Dupont,</i>	
<i>Plus Fruen Mill.....</i>	<i>\$ 11,982.50</i>
TOTAL CAPITAL IMPROVEMENTS PROJECTS (Tax Levy)	\$ 12,195.50

TMDL WORK

TMDL IMPLEMENTATION REPORTING

Update P8 model inputs, including information for Medicine Lake South, Medicine Lake Direct, and Crane Lake; and update figures.

Gregory J. Wilson, Consultant/Advisor		
13.7 hours @ \$155.00 per hour	\$	2,123.50
Joshua R. Vosejpka, Engineer/Scientist/Specialist I		
27.0 hours @ \$75.00 per hour	\$	2,025.00
<i>Subtotal, TMDL Studies</i>	\$	4,148.50
TOTAL TMDL STUDIES.....	\$	4,148.50

XP-SWMM PHASE II

XP-SWMM PHASE II

North Branch & Main Stem Modeling

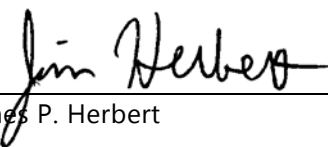
Internal team meeting; send data requests to Golden Valley and New Hope staff; follow-up regarding Wisconsin Ave control structure operation and maintenance; building North Branch XPSWMM model and updating North Branch model (Northwood/Lost) near Zachary Lane; naming nodes/links in Northwood model; entering New Hope data in GIS network; adding initial depths to model and fixing model instability issues; updating Grimes/Rice model; reviewing watershed divides and updating Bassett Creek; develop Upstream West XPSWMM network; updating Sweeney/Wirth divides with more recent information; internal review of watershed delineation, longest flow paths and XPSWMM network, and follow-up; build XPSWMM model of Bassett Upstream West; water capture and model updates to Bassett Creek Upstream West; develop Bassett Creek Upstream East XPSWMM model; assign BCUE runoff node and storage node curves; revisions to subwatersheds and longest flow path based on internal review; updates to GIS/network based on data from cities; develop Westwood Lake XPSWMM model; crop select cross sections along Bassett Creek to prevent double counting of storage in ponds in floodplain; work through XPSWMM errors; look into North Rice outlet information and communications with Robbinsdale staff regarding outlet information; internal review of watershed delineation and add Grimes modeling updates based on discussions; data collection, including WOMP and rainfall data; updates to Wirth and Sweeney XPSWMM models; update Sweeney modeling in GIS for new watersheds (break apart old Sweeney model where divides were incorrect); water capture and run Grimes model and create links/nodes for Bassett Creek Midstream in GIS; update Wirth/Sweeney models with new divides and network and create links/nodes for Bassett Creek Midstream in GIS; water Capture for Wirth/Sweeney Model and create links/nodes for Bassett Creek Midstream in GIS; develop downstream model in XPSWMM; update lengths and roughness coefficients of channel; create folder for report document, create references, and add methodology background information and decision making outline for later reference.

Karen L. Chandler, Consultant/Advisor 1.7 hours @ \$165.00 per hour.....	\$ 280.50
Jennifer A. Koehler, Engineer/Scientist/Specialist III 4.4 hours @ \$125.00 per hour	\$ 550.00
Ross S. Mullen, Engineer/Scientist/Specialist I 128.7 hours @ \$90.00 per hour	\$ 11,583.00
Lulu Fang, Engineer/Scientist/Specialist I 51.9 hours @ \$75.00 per hour	\$ <u>3,892.50</u>
<i>Subtotal, XP-SWMM Phase II.....</i>	\$ 16,306.00
TOTAL XP-SWMM PHASE II.....	\$ 16,306.00

SUMMARY TOTALS

Total Engineering	\$ 29,329.77
Total Secretarial Services Expenses	\$ 268.65
Total Annual Report/Website/Public Communications	\$ 0.00
Total WOMP.....	\$ 246.50
Total Capital Improvement Projects (Tax Levy).....	\$ 12,195.50
Total TMDL Work	\$ 4,148.50
Total XP-SWMM Phase II.....	\$ <u>16,306.00</u>
TOTAL PAYABLE.....	\$ 62,494.92

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