



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

Page # 1
Invoice # 23270051-2016-4
Project # 23/27-0051
Client # 59
June 03, 2016

Invoice of Account with
BARR ENGINEERING COMPANY

For professional services during the period of
April 30, 2016 through May 27, 2016

ENGINEERING

TECHNICAL SERVICES

Prepare for meeting with Medicine Lake residents, including communications with administrator, and preparing site map, and attend May 12 site meeting with Medicine Lake residents and administrator regarding potential CIP project in city and city's future culvert replacement project; communications with Golden Valley staff regarding future CIP project BC-3 and Blue Line LRT coordination; internal communications regarding eLINK login credentials; update application templates; and communications with administrator.

Karen L. Chandler, Consultant/Advisor	
8.7 hours @ \$165.00 per hour	\$ 1,435.50
Ross S. Mullen, Engineer/Scientist/Specialist I	
2.2 hours @ \$90.00 per hour	\$ 198.00
Technicians/Administrative.....	\$ <u>18.00</u>
<i>Subtotal, Technical Services.....</i>	<i>\$ 1,651.50</i>

MONTHLY MEETING PREPARATION

Communications/coordination with administrator regarding draft/final agenda and meeting packet for May 2016 meeting; review/edit draft April meeting minutes; review administrator's draft memo for May Commission meeting regarding addition of Winnetka Pond dredging to CIP (per administrator's request); prepare for May Commission meeting, including set up and attend pre-meeting with chair de Lambert and administrator to review meeting agenda; provide grant tracking information to administrator; 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	
7.4 hours @ \$180.00 per hour	\$ 1,332.00

Karen L. Chandler, Consultant/Advisor	
9.5 hours @ \$165.00 per hour	\$ 1,567.50
Technicians/Administrative.....	\$ 475.00
<i>Subtotal, Monthly Meeting Preparation.....</i>	<i>\$ 3,374.50</i>

WETLAND ISSUES

Prepare wetland map of Jevne Park in Medicine Lake in preparation for May 12 site meeting.

Karen S. Wold, Engineer/Scientist/Specialist II	
0.6 hours @ \$120.00 per hour	\$ 72.00
<i>Subtotal, Wetland Issues.....</i>	<i>\$ 72.00</i>

TAC PREPARATION

Prepare presentation on P8 Model updates for May 5 TAC meeting; prepare draft memo from TAC regarding Flood Control Project responsibilities and funding mechanisms; revise/final TAC memo per TAC and administrator comments; communications with Minneapolis staff regarding comments on draft TAC FCP memo.

James P. Herbert, Principal Engineer Scientist	
1.5 hours @ \$180.00 per hour	\$ 270.00
Karen L. Chandler, Consultant/Advisor	
8.7 hours @ \$165.00 per hour	\$ 1,435.50
Gregory J. Wilson, Consultant/Advisor	
1.5 hours @ \$155.00 per hour	\$ 232.50
<i>Subtotal, TAC Preparation.....</i>	<i>\$ 1,938.00</i>
<i>Subtotal Technical Services</i>	<i>\$ 7,036.00</i>

PLAT REVIEW

Waterford Innovation Center (2015-34)

Prepare and send final approval letter to city staff.

James P. Herbert, Principal Engineer Scientist	
1.5 hours @ \$180.00 per hour	\$ 270.00
Amy R. Anderson, Engineer/Scientist/Specialist I	
0.2 hours @ \$90.00 per hour.....	\$ 18.00
<i>Subtotal, Waterford Innovation Center.....</i>	<i>\$ 288.00</i>

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

Communications with city staff regarding comments on preliminary review of technical memo; and provide preliminary comments on proposed relining of culverts and impact on creek flood elevations to city staff in an email.

Karen L. Chandler, Consultant/Advisor
1.9 hours @ \$165.00 per hour \$ 313.50
Subtotal, 10th Avenue-UP Rail Culvert Repair..... \$ 313.50

Three Rivers PD BC Regional Trail (2016-04)

Coordination with applicant; review final drawings; and prepare and send final approval letter to city staff.

James P. Herbert, Principal Engineer Scientist
0.5 hours @ \$180.00 per hour \$ 90.00
Subtotal, Three Rivers PD BC Regional Trail..... \$ 90.00

Four Seasons Mall Demolition (2016-09)

Review final drawings; 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
Subtotal, Four Seasons Mall Demolition..... \$ 180.00

Old Rockford Road Overlay and Trail (2016-10)

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

James P. Herbert, Principal Engineer Scientist
1.7 hours @ \$180.00 per hour \$ 306.00
Amy R. Anderson, Engineer/Scientist/Specialist I
2.1 hours @ \$90.00 per hour..... \$ 189.00
Subtotal, Old Rockford Road Overlay and Trail..... \$ 495.00

Armstrong High School Baseball Field Improvements (2016-11)

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

James P. Herbert, Principal Engineer Scientist
1.8 hours @ \$180.00 per hour \$ 324.00
Amy R. Anderson, Engineer/Scientist/Specialist I
1.6 hours @ \$90.00 per hour..... \$ 144.00
Subtotal, Armstrong HS Baseball Field Improvements..... \$ 468.00

Pilgrim Lane Elementary Additions (2016-12)

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

James P. Herbert, Principal Engineer Scientist	
2.5 hours @ \$180.00 per hour	\$ 450.00
Amy R. Anderson, Engineer/Scientist/Specialist I	
2.6 hours @ \$90.00 per hour.....	\$ <u>234.00</u>
<i>Subtotal, Pilgrim Lane Elementary Additions.....</i>	<i>\$ 684.00</i>

Little Newtons Addition (2016-13)

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

James P. Herbert, Principal Engineer Scientist	
1.5 hours @ \$180.00 per hour	\$ 270.00
Amy R. Anderson, Engineer/Scientist/Specialist I	
3.7 hours @ \$90.00 per hour.....	\$ 333.00
Technicians/Administrative.....	\$ <u>45.00</u>
<i>Subtotal, Little Newtons Addition.....</i>	<i>\$ 648.00</i>

Mortenson Headquarters Addition (2016-14)

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

Amy R. Anderson, Engineer/Scientist/Specialist I	
3.7 hours @ \$90.00 per hour.....	\$ 333.00
Technicians/Administrative.....	\$ <u>45.00</u>
<i>Subtotal, Mortenson Headquarters Addition</i>	<i>\$ 378.00</i>

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

Communications with Medicine Lake consultant and internal staff regarding wetland buffer requirements, site survey, wetland delineation, and restoration plan; review preliminary information; communications with applicant's consultant regarding restoration and buffers; review wetland delineation report and restoration plan; prepare Notice of Application and send to TEP, agent, and applicant; schedule and conduct a site review; prepare review memo, map and attachments for May Commission meeting regarding the wetland restoration plan review and recommending acceptance with conditions, and provide memo to administrator; and follow-up communications with commissioner Welch.

Karen L. Chandler, Consultant/Advisor	
5.0 hours @ \$165.00 per hour	\$ 825.00
Karen S. Wold, Engineer/Scientist/Specialist II	
11.3 hours @ \$120.00 per hour	\$ 1,356.00
Joshua R. Vosejpka, Engineer/Scientist/Specialist I	
0.5 hours @ \$75.00 per hour	\$ 37.50

Expenses (Mileage)	\$ 15.12
<i>Subtotal, 1143 South Shore Dr-Med Lake WCA.....</i>	<i>\$ 2,233.62</i>

SWLRT Minneapolis (2016-17)

Plat review set up; internal staff meeting; and preliminary review.

James P. Herbert, Principal Engineer Scientist 3.8 hours @ \$180.00 per hour	\$ 684.00
Karen L. Chandler, Consultant/Advisor 1.0 hours @ \$165.00 per hour	\$ 165.00
Jennifer A. Koehler, Engineer/Scientist/Specialist III 7.4 hours @ \$125.00 per hour	\$ 925.00
Amy R. Anderson, Engineer/Scientist/Specialist I 0.6 hours @ \$90.00 per hour.....	\$ 54.00
Technicians/Administrative.....	\$ 45.00
<i>Subtotal, SWLRT Minneapolis.....</i>	<i>\$ 1,873.00</i>

Beacon Academy (2016-18)

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

James P. Herbert, Principal Engineer Scientist 3.1 hours @ \$180.00 per hour	\$ 558.00
Amy R. Anderson, Engineer/Scientist/Specialist I 2.7 hours @ \$90.00 per hour	\$ 243.00
Technicians/Administrative.....	\$ 63.00
<i>Subtotal, Beacon Academy.....</i>	<i>\$ 864.00</i>

Plymouth PW Campus Facility Addition (2016-19)

Plat review set up and preliminary review.

James P. Herbert, Principal Engineer Scientist 0.7 hours @ \$180.00 per hour	\$ 126.00
Technicians/Administrative.....	\$ 72.00
<i>Subtotal, Plymouth PW Campus Facility Addition.....</i>	<i>\$ 198.00</i>

Cherrywood Pointe (2016-20)

Plat review set up and preliminary review.

James P. Herbert, Principal Engineer Scientist 1.0 hours @ \$180.00 per hour	\$ 180.00
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Technicians/Administrative.....	\$	45.00
<i>Subtotal, Cherrywood Pointe</i>	<i>\$</i>	<i>225.00</i>

Tennant Company Dock/Plaza (2016-21)

Plat review set up and preliminary review.

James P. Herbert, Principal Engineer Scientist		
0.5 hours @ \$180.00 per hour	\$	90.00
Amy R. Anderson, Engineer/Scientist/Specialist I		
0.6 hours @ \$90.00 per hour.....	\$	54.00
Technicians/Administrative.....	\$	45.00
<i>Subtotal, Tennant Company Dock/Plaza</i>	<i>\$</i>	<i>189.00</i>

Theodore Wirth Utility Improvements (2016-22)

Plat review set up and preliminary review.

James P. Herbert, Principal Engineer Scientist		
0.5 hours @ \$180.00 per hour	\$	90.00
Technicians/Administrative.....	\$	45.00
<i>Subtotal, 1301 Theodore Wirth Utility Improvements.....</i>	<i>\$</i>	<i>135.00</i>

Subtotal Plat Review	\$	9,262.12
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PRELIMINARY COMMUNICATIONS AND NON-FEE REVIEWS

PRELIMINARY COMMUNICATIONS

Calls from consultants regarding proposed projects; coordinate with City staff regarding proposed residential project in Crystal; communications with consultant regarding development along Bassett Creek at Glenwood Ave; call from Medicine Lake resident/staff regarding preliminary site review; call and follow-up with consultant regarding Ridgedale Library project; and call from consultant regarding proposed CenterPoint project in Golden Valley.

James P. Herbert, Principal Engineer/Scientist		
6.0 hours @ \$180.00 per hour	\$	1,080.00
Karen L. Chandler, Consultant/Advisor		
0.2 hours @ \$165.00 per hour	\$	33.00
Amy R. Anderson, Engineer/Scientist/Specialist I		
0.3 hours @ \$90.00 per hour.....	\$	27.00
Subtotal, Plat Review – Preliminary Communications.....	\$	1,140.00

NON-FEE REVIEWS

BLUE LINE LRT/BOTTINEAU TRANSITWAY

Prepare for and attend May 6 meeting regarding watershed concerns, including stormwater management features, and potential locations for a joint project with BCWMC; and internal communications regarding design team's design assumptions.

Karen L. Chandler, Consultant/Advisor	
3.5 hours @ \$165.00 per hour	\$ 577.50
Expenses (Mileage)	\$ 5.94
<i>Subtotal, Blue Line LRT/Bottineau Transitway</i>	<i>\$ 583.44</i>

BLUE LINE LRT WCA LGU ADMIN

Golden Valley

Review incidental wetland determination request; conference call to discuss permitting status; prepare Notice of Decision form for incidental wetland determination; send Notice of Decision for incidental wetland determination to applicant, agent, and TEP; and review wetland permit application and send notice of incomplete application.

Karen S. Wold, Engineer/Scientist/Specialist II	
5.6 hours @ \$120.00 per hour (5/2/16, 5/3/16, 5/4/16, 5/5/16, 5/6/16, 5/9/16, 5/11/16, 5/16/16, 5/17/16, 5/18/16, 5/23/16, 5/24/16)	\$ 672.00
<i>Subtotal, Golden Valley</i>	<i>\$ 672.00</i>

Minneapolis

Review incidental wetland determination request; conference call to discuss permitting status; prepare Notice of Decision form for incidental wetland determination; send Notice of Decision for incidental wetland determination to applicant, agent, and TEP; and review wetland permit application and send notice of incomplete application.

Karen S. Wold, Engineer/Scientist/Specialist II	
5.6 hours @ \$120.00 per hour (5/2/16, 5/3/16, 5/4/16, 5/5/16, 5/6/16, 5/9/16, 5/11/16, 5/16/16, 5/17/16, 5/18/16, 5/23/16, 5/24/16)	\$ 672.00
<i>Subtotal, Minneapolis</i>	<i>\$ 672.00</i>

Robbinsdale

Review incidental wetland determination request; conference call to discuss permitting status; prepare Notice of Decision form for incidental wetland determination; send Notice of Decision for incidental wetland determination to applicant, agent, and TEP; and review wetland permit application and send notice of incomplete application.

Karen S. Wold, Engineer/Scientist/Specialist II	
5.6 hours @ \$120.00 per hour (5/2/16, 5/3/16, 5/4/16, 5/5/16, 5/6/16, 5/9/16, 5/11/16, 5/16/16, 5/17/16, 5/18/16, 5/23/16, 5/24/16)	\$ 672.00

<i>Subtotal, Robbinsdale</i>	\$	672.00
<i>Subtotal Blue Line LRT WCA LGU Admin</i>	\$	2,016.00
<i>Subtotal Blue Line LRT/Bottineau Transitway & Blue Line LRT WCA LGU Admin</i>	\$	2,599.44

SP 2772-104 TH 169 (2016-15A)

Plat review set up; coordinate with administrator and applicant; and preliminary review.

James P. Herbert, Principal Engineer Scientist 1.0 hours @ \$180.00 per hour	\$	180.00
Technicians/Administrative.....	\$	<u>72.00</u>
<i>Subtotal, SP 2772-104 TH 169</i>	\$	252.00

SP 2772-105 TH 169 (2016-15B)

Plat review set up; coordinate with administrator and applicant; and preliminary review.

James P. Herbert, Principal Engineer Scientist 1.5 hours @ \$180.00 per hour	\$	<u>270.00</u>
<i>Subtotal, SP 2772-105 TH 169</i>	\$	270.00

Subtotal Non-Fee Reviews \$ **3,121.44**

Subtotal Preliminary Communications and Non-Fee Reviews \$ **4,261.44**

COMMISSION AND TAC MEETINGS

Attend May 5 TAC meeting and May 19 Commission meeting.

James P. Herbert, Principal Engineer/Scientist 4.0 hours @ \$180.00 per hour	\$	720.00
Karen L. Chandler, Consultant/Advisor 6.7 hours @ \$165.00 per hour	\$	1,105.50
Gregory J. Wilson, Consultant/Advisor 1.5 hours @ \$155.00 per hour	\$	232.50
Expenses (Mileage)	\$	<u>26.46</u>
<i>Subtotal, Commission and TAC Meetings</i>.....	\$	2,084.46

SURVEYS & STUDIES

AMLAC PRESENTATION

Internal discussions regarding past Medicine Lake flood elevations; prepare presentation regarding XP-SWMM phase 2 project, including figures, and attend/present at May 18 AMLAC annual meeting; and provide presentation to administrator.

Karen L. Chandler, Consultant/Advisor	
3.5 hours @ \$165.00 per hour	\$ 577.50
Sarah M. Stratton, Engineer/Scientist/Specialist III	
1.3 hours @ \$145.00 per hour	\$ 188.50
Jennifer A. Koehler, Engineer/Scientist/Specialist III	
11.1 hours @ \$125.00 per hour	\$ 1,387.50
Ross S. Mullen, Engineer/Scientist/Specialist I	
8.4 hours @ \$90.00 per hour	\$ 756.00
<i>Subtotal, AMLAC Presentations.....</i>	<i>\$ 2,909.50</i>

APM/AIS TASK FORCE

Communications with administrator and internal staff regarding curlyleaf pondweed treatments on Medicine Lake; and prepare notes from April 28 meeting.

Karen L. Chandler, Consultant/Advisor	
0.4 hours @ \$165.00 per hour	\$ 66.00
Gregory J. Wilson, Consultant/Advisor	
0.5 hours @ \$155.00 per hour	\$ 77.50
Technicians/Administrative.....	\$ 90.00
<i>Subtotal, APM/AIS Task Force</i>	<i>\$ 233.50</i>
<i>Subtotal, Surveys & Studies</i>	<i>\$ 3,143.00</i>

WATER QUALITY/MONITORING

Northwood and Crane Lakes 2016 monitoring: schedule June monitoring; place June water bottle order; and file laboratory reports.

Margaret R. Rattei, Engineer/Scientist/Specialist III	
0.3 hours @ \$130.00 per hour	\$ 39.00
Terri A. Olson, Engineer/Scientist/Specialist III	
0.2 hours @ \$130.00 per hour	\$ 26.00
Technicians/Administrative.....	\$ 81.00
<i>Subtotal, Water Quality/Monitoring.....</i>	<i>\$ 146.00</i>

SHORELAND HABITAT MONITORING

Develop habitat monitoring plan.

Sterling G. Williams, Engineer/Scientist/Specialist III	
4.6 hours @ \$130.00 per hour	\$ 598.00
<i>Subtotal, Shoreland Habitat Monitoring</i>	<i>\$ 598.00</i>

WATER QUANTITY

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

Technicians/Administrative.....	\$	720.00
Expenses (Mileage/2WD field vehicle)	\$	107.24
Subtotal, Water Quantity.....	\$	827.24
TOTAL ENGINEERING	\$	27,358.26

SECRETARIAL SERVICES

SECRETARIAL SERVICES EXPENSES

Expenses for postage.

Expenses (Postage)	\$	11.62
TOTAL SECRETARIAL SERVICES EXPENSES	\$	11.62

ANNUAL REPORT

TOTAL ANNUAL REPORT \$ **0.00**

PUBLIC COMMUNICATIONS

TOTAL PUBLIC COMMUNICATIONS \$ **0.00**

WEBSITE

TOTAL WEBSITE \$ **0.00**

WATERSHED OUTLET MONITORING PROGRAM (WOMP)

WATERSHED OUTLET MONITORING PROGRAM (WOMP)

Review old flow measurement data for coordination with MCES on rating curve updates; meeting with MCES staff at WOMP station to discuss moving staff gage and flow measurements; and communications with administrator regarding MCES flow measurement and rating curve duties.

Karen L. Chandler, Consultant/Advisor 0.7 hours @ \$165.00 per hour.....	\$	115.50
Christopher J. Bonick, Engineer/Scientist/Specialist II 4.5 hours @ \$120.00 per hour	\$	540.00
Expenses (Mileage/2WD field vehicle)	\$	37.42
Subtotal, Watershed Outlet Monitoring Program	\$	692.92

TOTAL WOMP\$ 692.92

CAPITAL IMPROVEMENT PROJECTS (Funded through tax levy)

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

Final feasibility study edits; communications with the administrator and Minneapolis staff regarding next steps for preparing for possible grant funding; and completion of the Closeout of Assistance (COA) application to secure Hennepin County funding of a Response Action Plan (RAP) for the project reach.

Daniel J. Fetter, Principal Engineer/Scientist	
0.5 hours @ \$200.00 per hour	\$ 100.00
Karen L. Chandler, Consultant/Advisor	
0.6 hours @ \$165.00 per hour	\$ 99.00
Jennifer L. Brekken, Engineer/Scientist/Specialist III	
1.4 hours @ \$140.00 per hour	\$ 196.00
Jeffrey D. Weiss, Engineer/Scientist/Specialist II	
12.0hours @ \$125.00 per hour	\$ 1,500.00
Christian E. Frias, Engineer/Scientist/Specialist II	
1.0 hours @ \$105.00 per hour	\$ 105.00

*Subtotal, Main Stem Channel Restoration, Cedar Lk Rd to Dupont,
Plus Fruen Mill..... \$ 2,000.00*

TOTAL CAPITAL IMPROVEMENTS PROJECTS (Tax Levy)\$ 2,000.00

TMDL WORK

TMDL IMPLEMENTATION REPORTING

Update P8 model, including information for mid-downstream watersheds; internal staff meeting; and update figures.

Timothy J. Anderson, Consultant/Advisor	
0.5 hours @ \$155.00 per hour	\$ 77.50
Gregory J. Wilson, Consultant/Advisor	
20.4 hours @ \$155.00 per hour	\$ 3,162.00
Joshua R. Vosejpka, Engineer/Scientist/Specialist I	
21.7 hours @ \$75.00 per hour	\$ 1,627.50
Technicians/Administrative.....	\$ 954.00
<i>Subtotal, TMDL Studies</i>	<i>\$ 5,821.00</i>

TOTAL TMDL STUDIES.....\$ 5,821.00

XP-SWMM PHASE II

XP-SWMM PHASE II

North Branch & Main Stem Modeling

Send data request to Golden Valley (Wisconsin Ave structure); QA/QC of model (XPSWMM checklist); extend downstream cross sections for water capture; optimize model run time by changing modeling methodology of select cross sections and storage areas; define overbank lengths & Mannings n; process flow data from SCADA system (Wisconsin Ave structure); internal meeting to review data gaps; build DeCola Model, review other model inputs, and make changes; complete checklist for model between Medicine Lake outlet and Highway 100; update runoff layer to 80% direct impervious water capture; check plans for two outlet structures in Golden Valley; water capture; and update BCM TH100 sec 5 pipe information according to plans.

Jennifer A. Koehler, Engineer/Scientist/Specialist III	
3.7 hours @ \$125.00 per hour	\$ 462.50
Ross S. Mullen, Engineer/Scientist/Specialist I	
70.4 hours @ \$90.00 per hour	\$ 6,336.00
Lulu Fang, Engineer/Scientist/Specialist I	
14.9 hours @ \$75.00 per hour	\$ 1,117.50
Technicians/Administrative.....	\$ 654.00
Subtotal, XP-SWMM Phase II.....	\$ 8,570.00
TOTAL XP-SWMM PHASE II.....	\$ 8,570.00

SUMMARY TOTALS

Total Engineering	\$ 27,358.26
Total Secretarial Services Expenses	\$ 11.62
Total Annual Report/Website/Public Communications	\$ 0.00
Total WOMP.....	\$ 692.92
Total Capital Improvement Projects (Tax Levy).....	\$ 2,000.00
Total TMDL Work	\$ 5,821.00
Total XP-SWMM Phase II.....	\$ 8,570.00
TOTAL PAYABLE.....	\$ 44,453.80

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

