



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

Page # 1
Invoice # 23270051-2017-10
Project # 23/27-0051
Client # 59
December 8, 2017

Invoice of Account with
BARR ENGINEERING COMPANY

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

ENGINEERING

TECHNICAL SERVICES

Communications with administrator regarding impaired waters listings questions and listing process; Medicine Lake zebra mussels: communications with administrator and internal staff regarding response to new zebra mussel infestation, including potential next steps, create figure of Medicine Lake zebra mussel locations, internal discussions regarding response options and grant/rapid response funds, communications with MDNR staff regarding new infestation and next steps, communications with Plymouth staff regarding infestation, communications with Commissioner Carlson regarding zebra mussel questions and intended dock search event, and provide follow-up information to Commissioner Carlson, develop summary of Medicine Lake zebra mussel infestation and potential next steps, communications with Minnesota Aquatic Invasive Species Research Center zebra mussel specialist and set up meeting with specialist and administrator to discuss infestation and next steps for Medicine Lake; internal meeting to discuss/review draft records retention schedule and communications with administrator regarding records retention document; FEMA modeling: October 30th meeting with MDNR staff and administrator regarding work scope, including floodway modeling, survey, and documentation requirements, follow-up communications with MDNR staff and internal staff regarding scope questions and MDNR responses to questions, develop work scope and budget, internal meetings regarding scope and budget, survey information, and survey needs, review FEMA technical survey standards for crossings and cross sections, look into available as-built data and HEC-2 crossing information for project, create map for survey/as-built/data type, request survey quote from survey firm; communications with administrator regarding Hennepin county AIS grant application; prepare draft flood elevation write-up for fact sheet and provide to administrator, revise fact sheet and provide to administrator, and review final fact sheet; communications with administrator regarding Medicine Lake carp follow-up; communications with Golden Valley staff and administrator regarding watermain break; communications with administrator and internal staff regarding past and future Blue Line LRT WCA and review costs, past and future SWLRT review costs, and potential revisions to BCWMC agreements with Met Council; compile and send Phase 2 XP-SWMM model to TRPD consultant; planning for MCES data assessment group meeting and review/comment on administrator's slides for meeting; and provide water quality report files to administrator.

James P. Herbert, Principal Engineer/Scientist 0.5 hours @ \$190.00 per hour	\$ 95.00
Karen L. Chandler, Principal Engineer/Scientist 30.3 hours @ \$170.00 per hour	\$ 5,151.00
Gregory J. Wilson, Consultant/Advisor 1.5 hours @ \$155.00 per hour	\$ 232.50
Sarah M. Stratton Engineer/Scientist/Specialist III 3.0 hours @ \$150.00 per hour	\$ 450.00
Jennifer A. Koehler, Engineer/Scientist/Specialist III 14.3 hours @ \$130.00 per hour	\$ 1,859.00
Margaret R. Rattei, Engineer/Scientist/Specialist III 12.1 hours @ \$130.00 per hour	\$ 1,573.00
Sterling G. Williams, Engineer/Scientist/Specialist III 1.0 hours @ \$130.00 per hour	\$ 130.00
Ross S. Mullen, Engineer/Scientist/Specialist II 30.6 hours @ \$95.00 per hour	\$ 2,907.00
Joshua R. Vosejпка, Engineer/Scientist/Specialist I 0.5 hours @ \$80.00 per hour	\$ 40.00
Kelly A. Wild, Engineer/Scientist/Specialist I 0.5 hours @ \$90.00 per hour.....	\$ 45.00
Josh P. Phillips, Engineer/Scientist/Specialist I 0.9 hours @ \$75.00 per hour.....	\$ 67.50
Technicians/Administrative.....	\$ <u>310.50</u>
<i>Subtotal, Technical Services.....</i>	<i>\$ 12,860.50</i>

MONTHLY MEETING PREPARATION

Communications/coordination with administrator regarding draft/final agenda and meeting packet for November Commission meeting; review/edit draft October meeting minutes; provide zebra mussel summary to administrator; and coordination and communications with administrator and internal staff regarding December Commission meeting agenda items.

James P. Herbert, Principal Engineer/Scientist 6.6 hours @ \$190.00 per hour	\$ 1,254.00
Karen L. Chandler, Principal Engineer/Scientist 10.1 hours @ \$170.00 per hour	\$ 1,717.00
Technicians/Administrative.....	\$ <u>475.00</u>
<i>Subtotal, Monthly Meeting Preparation.....</i>	<i>\$ 3,446.00</i>

Subtotal Technical Services\$ 16,306.50

PLAT REVIEW

Ridgedale Corner Shoppes (2016-34)

Communications with applicant regarding revised model output files based on revised design.

Josh P. Phillips, Engineer/Scientist/Specialist I
0.1 hours @ \$75.00 per hour..... \$ 7.50
Subtotal, Ridgedale Corner Shoppes..... \$ 7.50

Metro Transit C Line BRT (2017-33)

Communications with applicant and BCWMC treasurer.

James P. Herbert, Principal Engineer/Scientist
0.4 hours @ \$190.00 per hour \$ 76.00
Subtotal, Metro Transit C Line BRT..... \$ 76.00

Westwood Hills Park-SLP WCA (2017-34)

Conduct wetland delineation TEP site review; discuss wetland delineation report comments with USACE staff; follow up on wetland review documentation; and review revised delineation data and send to other TEP member.

Karen S. Wold, Engineer/Scientist/Specialist II
5.0 hours @ \$120.00 per hour \$ 600.00
Expenses (Mileage) \$ 10.70
Subtotal, Westwood Hills Park-SLP WCA..... \$ 610.70

Golden Valley Road Senior Living (2017-35)

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

James P. Herbert, Principal Engineer/Scientist
2.7 hours @ \$190.00 per hour \$ 513.00
Josh P. Phillips, Engineer/Scientist/Specialist I
7.5 hours @ \$75.00 per hour..... \$ 562.50
Technicians/Administrative..... \$ 45.00
Subtotal, Golden Valley Road Senior Living..... \$ 1,120.50

Tennant Company Headquarters (2017-36)

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
1.5 hours @ \$190.00 per hour \$ 285.00

Josh P. Phillips, Engineer/Scientist/Specialist I 11.2 hours @ \$75.00 per hour.....	\$ 840.00
Technicians/Administrative.....	\$ 45.00
Expenses (Postage)	\$ <u>1.19</u>
<i>Subtotal, Tennant Company Headquarters.....</i>	<i>\$ 1,171.19</i>

Mpls Impound Lot Facility Improvements (2017-37)

Review grading, drainage and erosion control plans; prepare review memo for November Commission meeting and send to administrator; prepare and send approval/comment letter to city staff; and communications with applicant.

James P. Herbert, Principal Engineer/Scientist 2.5 hours @ \$190.00 per hour	\$ 475.00
Karen L. Chandler, Principal Engineer/Scientist 2.4 hours @ \$170.00 per hour	\$ 408.00
Josh P. Phillips, Engineer/Scientist/Specialist I 15.9 hours @ \$75.00 per hour.....	\$ 1,192.50
Technicians/Administrative.....	\$ <u>72.00</u>
<i>Subtotal, Mpls Impound Lot Facility Improvements.....</i>	<i>\$ 2,147.50</i>

TMS Johnson Parking Lot Addition (2017-38)

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

James P. Herbert, Principal Engineer/Scientist 2.3 hours @ \$190.00 per hour	\$ 437.00
Josh P. Phillips, Engineer/Scientist/Specialist I 3.2 hours @ \$75.00 per hour.....	\$ 240.00
Technicians/Administrative.....	\$ 45.00
Expenses (Postage)	\$ <u>0.46</u>
<i>Subtotal, TMS Johnson Prkg Lot Addition.....</i>	<i>\$ 722.46</i>

Quail Ridge Drainage Improvements (2017-39)

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 1.3 hours @ \$190.00 per hour	\$ 247.00
Josh P. Phillips, Engineer/Scientist/Specialist I 2.9 hours @ \$75.00 per hour.....	\$ 217.50
Technicians/Administrative.....	\$ <u>45.00</u>
<i>Subtotal, Quail Ridge Drainage Improvements</i>	<i>\$ 509.50</i>

Subtotal Plat Review.....\$ 6,365.35

PRELIMINARY COMMUNICATIONS AND NON-FEE REVIEWS

PRELIMINARY COMMUNICATIONS

Initial review of SWLRT revised project and communications with Met Council staff regarding postponed review; review MDNR permit application for temporary pumping plan, and reply to administrator comments; and communications with Golden Valley staff regarding proposed 2018 PMP/stormwater diversion project and potential meeting, and preliminary review of letter regarding project.

James P. Herbert, Principal Engineer/Scientist
4.6 hours @ \$190.00 per hour \$ 874.00

Karen L. Chandler, Principal Engineer/Scientist
1.6 hours @ \$170.00 per hour \$ 272.00

Josh P. Phillips, Engineer/Scientist/Specialist I
1.0 hours @ \$75.00 per hour..... \$ 75.00

Subtotal, Preliminary Communications.....\$ 1,221.00

NON-FEE REVIEWS

BLUE LINE LRT WCA LGU ADMIN

Golden Valley

Issue 60-day extension, and communications with Met Council staff regarding submittal of a revised wetland permit application.

Karen S. Wold, Engineer/Scientist/Specialist II
0.2 hours @ \$120.00 per hour \$ 24.00

Subtotal, Golden Valley..... \$ 24.00

Minneapolis

Issue 60-day extension, and communications with Met Council staff regarding submittal of a revised wetland permit application.

Karen S. Wold, Engineer/Scientist/Specialist II
0.2 hours @ \$120.00 per hour \$ 24.00

Subtotal, Minneapolis..... \$ 24.00

Robbinsdale

Issue 60-day extension, and communications with Met Council staff regarding submittal of a revised wetland permit application.

Karen S. Wold, Engineer/Scientist/Specialist II
0.2 hours @ \$120.00 per hour \$ 24.00

Subtotal, Robbinsdale..... \$ 24.00

Subtotal Blue Line LRT WCA LGU Admin..... \$ 72.00
Subtotal Blue Line LRT & Blue Line LRT WCA LGU Admin..... \$ 72.00

Subtotal Non-Fee Reviews \$ **72.00**

Subtotal Preliminary Communications and Non-Fee Reviews \$ **1,293.00**

COMMISSION AND TAC MEETINGS

Subtotal, Commission and TAC Meetings..... \$ **0.00**

SURVEYS & STUDIES

Subtotal Surveys & Studies..... \$ **0.00**

WATER QUALITY/MONITORING

Sweeney Lake Aeration Study

Compile and review 2017 monitoring data; respond to Sweeney Lake homeowners association questions; develop daily flow averages for inflows to Sweeney Lake; prepare and send progress update email; and internal discussion regarding sediment core monitoring.

Henry M. Runke, Principal Engineer/Scientist
 1.5 hours @ \$175.00 per hour \$ 262.50

Gregory J. Wilson, Consultant/Advisor
 10.9 hours @ \$155.00 per hour \$ 1,689.50

Heather N. Hlavaty, Engineer/Scientist/Specialist I
 5.4 hours @ \$90.00 per hour \$ 486.00

Subtotal, Sweeney Lake Aeration Study..... \$ 2,438.00

Subtotal, Water Quality/Monitoring..... \$ **2,438.00**

WATER QUANTITY

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

Technicians/Administrative..... \$ 1,080.00

Expenses (Mileage/2WD field vehicle) \$ 131.72

Subtotal, Water Quantity..... \$ **1,211.72**

FLOOD CONTROL PROJECT INSPECTION

Prepare/edit draft inspection report.

James P. Herbert, Principal Engineer/Scientist
 1.4 hours @ \$190.00 per hour \$ 266.00

Patrick E. Brockamp, Engineer/Scientist/Specialist I 1.1 hours @ \$90.00 per hour.....	\$	99.00
Josh P. Phillips, Engineer/Scientist/Specialist I 4.7 hours @ \$75.00 per hour.....	\$	352.50
Expenses (Mileage)	\$	29.43
Subtotal, Flood Control Project Inspection	\$	746.93

TOTAL ENGINEERING.....\$ 28,361.50

AIS RAPID RESPONSE PLAN

AIS Rapid Response Plan

Prepare interview questions, set up and hold telephone interviews with Plymouth, Medicine Lake, Golden Valley, Minneapolis, New Hope, and St. Louis Park TAC members, MPRB staff, Westwood Hills Nature Center staff, TRPD staff, Hennepin County staff, Minnehaha Creek Watershed District AIS staff, MNDNR AIS staff, and Minnesota Aquatic Invasive Species Research Center staff (in person meeting); review zebra mussels information; and begin developing AIS Rapid Response Plan, incorporating results from interviews.

Karen L. Chandler, Principal Engineer/Scientist 0.3 hours @ \$170.00 per hour.....	\$	51.00
Margaret R. Rattei, Engineer/Scientist/Specialist III 64.6 hours @ \$130.00 per hour.....	\$	8,398.00
Expenses (Mileage/parking)	\$	19.57
<i>Subtotal, AIS Rapid Response Plan.....</i>	<i>\$</i>	<i>8,468.57</i>

TOTAL AIS RAPID RESPONSE PLAN.....\$ 8,468.57

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)

Prepare for flow measurement at WOMP station.

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)

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

Prepare for and attend November 7th site meeting with administrator, city staff, and the Starrs, as requested by the Starrs; look into source of/review documentation about "conservation drainage easement" language in Phase 1 environmental site assessment (appendix of feasibility study); internal communications; and communications with administrator.

Daniel J. Fetter, Principal Engineer/Scientist	
0.5 hours @ \$200.00 per hour	\$ 100.00
Karen L. Chandler, Principal Engineer/Scientist	
3.3 hours @ \$170.00 per hour	\$ 561.00
Jeffrey D. Weiss, Engineer/Scientist/Specialist III	
4.9 hours @ \$125.00 per hour	\$ 612.50
<i>Subtotal, Plymouth Creek Restoration Annapolis Ln to 2,500 ft. Upstream of Annapolis.....</i>	<i>\$ 1,273.50</i>

DECOLA PONDS B&C IMPROVEMENT PROJECT FEASIBILITY STUDY (2019) (BC-2, BC-3, BC-8)

Coordinate with administrator and internal staff regarding agency meeting and attendee list; develop presentation for agency meeting; complete the notice of application (NOA) for wetland delineation and schedule site meeting; prepare for and conduct LGU site review for wetland delineation; communications with BWSR representative regarding site review; review notice of determination (NOD); complete tree survey, including data download and delivery; perform additional tree survey; edits to tree observation shapefiles; process tree survey data; incorporate trees into basemap; develop and review test trenching work plan, finalize and send to MPCA; prepare threatened and endangered species memo; develop and revise Public Meeting #1 boards and map; print/mount posters for public meeting; communications with Golden Valley staff and administrator regarding open house; attend Public Meeting #1 on November 9th; compile and scan work maps from public open house; follow-up communications with administrator and Alternate Commissioner McDonald Black, and prepare and send project email updates to administrator and city staff.

Daniel J. Fetter, Principal Engineer/Scientist	
1.0 hours @ \$200.00 per hour	\$ 200.00

Karen L. Chandler, Principal Engineer/Scientist 6.9 hours @ \$170.00 per hour	\$	1,173.00
Jennifer L. Brekken, Engineer/Scientist/Specialist III 11.0 hours @ \$145.00 per hour	\$	1,595.00
Shanna R. Braun, Engineer/Scientist/Specialist III 0.5 hours @ \$130.00 per hour	\$	65.00
Jennifer A. Koehler, Engineer/Scientist/Specialist III 19.8 hours @ \$130.00 per hour	\$	2,574.00
Amy R. Meulebroeck, Engineer/Scientist/Specialist II 0.4 hours @ \$105.00 per hour	\$	42.00
Brian K. Burgner, Engineer/Scientist/Specialist II 4.7 hours @ \$95.00 per hour	\$	446.50
Robert L. Jones, Engineer/Scientist/Specialist I 1.0 hours @ \$90.00 per hour	\$	90.00
Megan R. Quinlan, Engineer/Scientist/Specialist I 1.1 hours @ \$65.00 per hour	\$	71.50
Kelly A. Wild, Engineer/Scientist/Specialist I 4.1 hours @ \$90.00 per hour	\$	369.00
Technicians/Administrative.....	\$	2,127.50
Expenses (Differential GPS system)	\$	45.00
<i>Subtotal, DeCola Ponds B&C Feasibility Study.....</i>	<i>\$</i>	<i>8,798.50</i>

WESTWOOD LAKE WATER QUALITY IMPROVEMENT PROJECT FEASIBILITY STUDY

Prepare for and attend November 21st kick-off meeting, including agenda, prepare and send kickoff meeting minutes to attendees, and prepare and send project updates to administrator and city staff.

Karen L. Chandler, Principal Engineer/Scientist 2.7 hours @ \$170.00 per hour	\$	459.00
Michelle A. Kimble, Engineer/Scientist/Specialist III 5.6 hours @ \$125.00 per hour	\$	700.00
<i>Subtotal, Westwood Lake WQ Feasibility Study</i>	<i>\$</i>	<i>1,159.00</i>

BRYN MAWR MEADOWS WATER QUALITY IMPROVEMENT PROJECT FEASIBILITY STUDY (2019) (BC-5)

Prepare and send kickoff meeting minutes to attendees, internal and external communications regarding MPRB design charrettes, begin desktop review of cultural resources, research SWLRT proposed drainage information near site, and prepare and send project updates to administrator, city staff and MPRB staff.

Karen L. Chandler, Principal Engineer/Scientist 0.8 hours @ \$170.00 per hour	\$	136.00
Michelle A. Kimble, Engineer/Scientist/Specialist III 1.5 hours @ \$125.00 per hour	\$	187.50

Shanna R. Braun, Engineer/Scientist/Specialist III 1.5 hours @ \$130.00 per hour	\$	195.00
Rachel C. Stobb, Engineer/Scientist/Specialist I 1.2 hours @ \$75.00 per hour	\$	90.00
Josh P. Phillips, Engineer/Scientist/Specialist I 0.7 hours @ \$75.00 per hour	\$	52.50
Expenses (Color plotter)	\$	<u>30.00</u>
<i>Subtotal, Bryn Mawr Meadows Feasibility Study.....</i>	\$	691.00

TOTAL CAPITAL IMPROVEMENTS PROJECTS (Tax Levy)\$ 11,922.00

TMDL WORK

TMDL IMPLEMENTATION REPORTING

Update P8 model and begin pond prioritization.

Gregory J. Wilson, Consultant/Advisor 1.0 hours @ \$155.00 per hour	\$	<u>155.00</u>
<i>Subtotal, TMDL Implementation Reporting</i>	\$	155.00

TOTAL TMDL WORK\$ 155.00

SUMMARY TOTALS

Total Engineering	\$	28,361.50
Total Annual Report/Website/Public Communications	\$	0.00
Total AIS Rapid Response Plan.....	\$	8,468.57
Total WOMP.....	\$	120.00
Total TMDL Work	\$	155.00
Total Capital Improvement Projects (Tax Levy).....	\$	<u>11,922.00</u>
TOTAL PAYABLE.....	\$	49,027.07

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

