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engineering and environmental consultants

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

Page # 1
Invoice # 23270051-2017-3
Project # 23/27-0051
Client # 59
May 05, 2017

Invoice of Account with
BARR ENGINEERING COMPANY

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

ENGINEERING

TECHNICAL SERVICES

Communications with Westwood Nature Center staff and TRPD staff regarding partnering with them to provide monitoring assistance for Westwood and Parkers Lakes in 2018, and provide updated 2018 water quality monitoring cost estimate to administrator for Westwood and Parkers Lakes; internal communications and communications with administrator regarding potential revisions to stream monitoring budget (equipment costs) and biotic index monitoring; prepare and provide revised cost estimate to administrator for stream monitoring based on rental/purchasing of equipment; prepare and provide revised cost estimates to administrator for biotic monitoring scenarios (coordinating with North Branch stream monitoring), including monitoring North Branch location only and two or three Main Stem locations plus North Branch; communications with MPRB staff and administrator regarding Wirth Lake aquatic plant survey for 2018; review 2014 – 2016, and 2017 to-date plat review costs and revenues, develop proposed changes to application fees to better match revenues and costs, and communications with administrator regarding potential revised applications fees and 2018 plat review budget; communications with administrator regarding WMO sales tax exemption; communications with AMLAC representative regarding status of XP- SWMM model; communications with administrator regarding Flood Control Project information; and communications with DNR staff regarding Westwood/Crane aquatic plants.

James P. Herbert, Principal Engineer/Scientist		
8.3 hours @ \$190.00 per hour	\$	1,577.00
Henry M. Runke, Principal Engineer/Scientist		
0.5 hours @ \$170.00 per hour	\$	87.50
Karen L. Chandler, Principal Engineer/Scientist		
14.1 hours @ \$170.00 per hour	\$	2,397.00
Margaret R. Rattei, Engineer/Scientist/Specialist III		
7.5 hours @ \$130.00 per hour	\$	975.00
Technicians/Administrative.....	\$	135.00
<i>Subtotal, Technical Services.....</i>	<i>\$</i>	<i>5,171.50</i>

MONTHLY MEETING PREPARATION

Communications/coordination with administrator regarding draft/final agenda and meeting packet for April Commission meeting; review/edit draft March meeting minutes; prepare for April Commission meeting, including pre-meeting conference call 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 Commission meeting agenda items.

James P. Herbert, Principal Engineer/Scientist 4.5 hours @ \$190.00 per hour	\$ 855.00
Karen L. Chandler, Principal Engineer/Scientist 6.5 hours @ \$170.00 per hour	\$ 1,105.00
Technicians/Administrative.....	\$ 332.50
<i>Subtotal, Monthly Meeting Preparation.....</i>	<i>\$ 2,292.50</i>

PROPERTY FLOODPLAIN REVIEW

Review BCWMC and FEMA floodplain elevations at Sweeney Lake (per administrator request), and send email to consultant.

James P. Herbert, Principal Engineer/Scientist 0.6 hours @ \$190.00 per hour	\$ 114.00
Sarah M. Stratton, Engineer/Scientist/Specialist III 1.0 hours @ \$150.00 per hour	\$ 150.00
<i>Subtotal, Property Floodplain Review.....</i>	<i>\$ 264.00</i>

TAC PREPARATION

Prepare table of alternatives for MIDS for linear projects, including trigger and treatment requirement alternatives, comparisons to other WDs/WMOs and impact on linear projects to-date; prepare and provide table and accompanying text to administrator for May TAC agenda; internal meetings regarding alternatives table; and communications with administrator regarding XP-SWMM Phase 2 flood elevation policies/discussion items.

James P. Herbert, Principal Engineer/Scientist 2.5 hours @ \$190.00 per hour	\$ 475.00
Karen L. Chandler, Principal Engineer/Scientist 12.1 hours @ \$170.00 per hour	\$ 2,057.00
Candice M. Kantor, Engineer/Scientist/Specialist II 1.5 hours @ \$105.00 per hour	\$ 157.50
Josh P. Phillips, Engineer/Scientist/Specialist I 17.0 hours @ \$75.00 per hour	\$ 1,275.00
<i>Subtotal, TAC Preparation.....</i>	<i>\$ 3,964.50</i>
<i>Subtotal Technical Services</i>	<i>\$ 11,692.50</i>

PLAT REVIEW

Luther Support Center (2016-24)

Review revised 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 0.5 hours @ \$190.00 per hour	\$	95.00
Candice M. Kantor, Engineer/Scientist/Specialist II 0.2 hours @ \$105.00 per hour	\$	21.00
Josh P. Phillips, Engineer/Scientist/Specialist I 12.7 hours @ \$75.00 per hour	\$	952.50
Technicians/Administrative.....	\$	<u>45.00</u>
<i>Subtotal, Luther Support Center</i>	\$	<i>1,113.50</i>

CSAH 24 Reconstruction Project (2016-32)

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

James P. Herbert, Principal Engineer/Scientist 1.0 hours @ \$190.00 per hour	\$	190.00
Josh P. Phillips, Engineer/Scientist/Specialist I 1.5 hours @ \$75.00 per hour.....	\$	112.50
Technicians/Administrative.....	\$	18.00
Expenses (Copies).....	\$	<u>11.48</u>
<i>Subtotal, CSAH 24 Reconstruction Project</i>	\$	<i>331.98</i>

Agora Development (2017-01)

Communications with developer's consultant regarding revised resubmittal; and upload resubmittal files.

James P. Herbert, Principal Engineer/Scientist 1.3 hours @ \$190.00 per hour	\$	247.00
Josh P. Phillips, Engineer/Scientist/Specialist I 0.1 hours @ \$75.00 per hour	\$	7.50
Technicians/Administrative.....	\$	<u>36.00</u>
<i>Subtotal, Agora Development</i>	\$	<i>290.50</i>

Golden Valley 2017 PMP (2017-02)

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

James P. Herbert, Principal Engineer/Scientist 0.8 hours @ \$190.00 per hour	\$	152.00
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Josh P. Phillips, Engineer/Scientist/Specialist I
1.6 hours @ \$75.00 per hour..... \$ 120.00
Technicians/Administrative..... \$ 45.00
Subtotal, Golden Valley 2017 PMP \$ 317.00

CenterPoint Energy MBLC Replacement (2017-03)

Project close-out.

Josh P. Phillips, Engineer/Scientist/Specialist I
0.8 hours @ \$75.00 per hour \$ 60.00
Subtotal, CenterPoint Energy MBLC Replacement \$ 60.00

Dakota Growers Pasta Rail Exp (2017-04)

Communications with applicant regarding comment letter.

Josh P. Phillips, Engineer/Scientist/Specialist I
1.3 hours @ \$75.00 per hour \$ 97.50
Subtotal, Dakota Growers Pasta Rail Exp \$ 97.50

Daikin Addition and Parking Lot (2017-05)

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

James P. Herbert, Principal Engineer/Scientist
0.7 hours @ \$190.00 per hour \$ 133.00
Josh P. Phillips, Engineer/Scientist/Specialist I
1.4 hours @ \$75.00 per hour \$ 105.00
Technicians/Administrative..... \$ 36.00
Subtotal, Daikin Addition and Parking Lot \$ 274.00

Ridgedale Ctr OPD Phase 3 (2017-06)

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

James P. Herbert, Principal Engineer/Scientist
1.5 hours @ \$190.00 per hour \$ 285.00
Josh P. Phillips, Engineer/Scientist/Specialist I
5.0 hours @ \$75.00 per hour..... \$ 375.00
Technicians/Administrative..... \$ 45.00
Subtotal, Ridgedale Ctr OPD Phase 3 \$ 705.00

212 James Avenue North (2017-07)

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

James P. Herbert, Principal Engineer/Scientist 1.2 hours @ \$190.00 per hour	\$ 228.00
Josh P. Phillips, Engineer/Scientist/Specialist I 6.3 hours @ \$75.00 per hour.....	\$ 472.50
Technicians/Administrative.....	\$ <u>45.00</u>
<i>Subtotal, 212 James Avenue North.....</i>	<i>\$ 745.50</i>

Northwood Mill Area PL Replace (2017-08)

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

James P. Herbert, Principal Engineer/Scientist 1.5 hours @ \$190.00 per hour	\$ 285.00
Josh P. Phillips, Engineer/Scientist/Specialist I 3.0 hours @ \$75.00 per hour.....	\$ 225.00
Technicians/Administrative.....	\$ 61.50
Expenses (Postage)	\$ <u>0.46</u>
<i>Subtotal, Northwood Mill Area PL Replace</i>	<i>\$ 571.96</i>

BNSF Bridge 1.7 (LS 202) (2017-09)

Preliminary review of submittal; prepare location map; and communications with administrator, city staff, and applicant.

James P. Herbert, Principal Engineer/Scientist 1.1 hours @ \$190.00 per hour	\$ 209.00
Josh P. Phillips, Engineer/Scientist/Specialist I 0.8 hours @ \$75.00 per hour.....	\$ 60.00
Edward M. Anderson, Engineer/Scientist/Specialist I 1.0 hours @ \$80.00 per hour.....	\$ 80.00
Technicians/Administrative.....	\$ 99.00
Expenses (Postage)	\$ <u>0.46</u>
<i>Subtotal, BNSF Bridge 1.7 (LS 202)</i>	<i>\$ 448.46</i>

Neill Elementary Deferred Maintenance (2017-10)

Plat review set up and preliminary review.

Josh P. Phillips, Engineer/Scientist/Specialist I 1.0 hours @ \$75.00 per hour.....	\$	75.00
Technicians/Administrative.....	\$	<u>72.00</u>
<i>Subtotal, Neill Elementary Deferred Maintenance.....</i>	\$	<i>147.00</i>

GV/MPLS Interceptor Rehab (2017-11)

Plat review set up, and coordination with applicant.

James P. Herbert, Principal Engineer/Scientist 0.5 hours @ \$190.00 per hour	\$	95.00
Technicians/Administrative.....	\$	<u>45.00</u>
<i>Subtotal, GV/MPLS Interceptor Rehab.....</i>	\$	<i>140.00</i>

10th Avenue N Culvert Replacement (2017-12)

Plat review set up, preliminary review of submittal, and communications with city staff.

James P. Herbert, Principal Engineer/Scientist 1.5 hours @ \$190.00 per hour	\$	285.00
Josh P. Phillips, Engineer/Scientist/Specialist I 0.2 hours @ \$75.00 per hour.....	\$	15.00
Technicians/Administrative.....	\$	45.00
Expenses (Postage)	\$	<u>0.46</u>
<i>Subtotal, 10th Avenue N Culvert Replacement.....</i>	\$	<i>345.46</i>
<i>Subtotal Plat Review</i>	\$	<i>5,587.86</i>

PRELIMINARY COMMUNICATIONS AND NON-FEE REVIEWS

PRELIMINARY COMMUNICATIONS

Communications with consultants and administrator regarding proposed appropriation of water from Bassett Creek for snowmaking at Wirth Park; communications with developer's consultant regarding proposed Room & Board project; communications with applicant considering development at Medicine Lake and provide city contact information; communications with consultant regarding BMPs; and communications with administrator and SWLRT consultant regarding potential project change.

James P. Herbert, Principal Engineer/Scientist 5.4 hours @ \$190.00 per hour	\$	1,026.00
Karen L. Chandler, Principal Engineer/Scientist 0.4 hours @ \$170.00 per hour	\$	<u>68.00</u>
<i>Subtotal, Plat Review – Preliminary Communications.....</i>	\$	<i>1,094.00</i>

NON-FEE REVIEWS

BLUE LINE LRT WCA LGU ADMIN

Golden Valley

Conduct site review of potential wetland restoration area; and communications with Blue Line LRT consultant.

Karen S. Wold, Engineer/Scientist/Specialist II 3.1 hours @ \$120.00 per hour	\$	372.00
Expenses (Mileage)	\$	<u>11.77</u>
<i>Subtotal, Golden Valley</i>	\$	383.77

Robbinsdale

Communications with Blue Line LRT consultant.

Karen S. Wold, Engineer/Scientist/Specialist II 0.5 hours @ \$120.00 per hour	\$	<u>60.00</u>
<i>Subtotal, Robbinsdale</i>	\$	60.00
<i>Subtotal Blue Line LRT WCA LGU Admin</i>	\$	443.77
<i>Subtotal Blue Line LRT & Blue Line LRT WCA LGU Admin</i>	\$	443.77

Subtotal Non-Fee Reviews\$ 443.77

Subtotal Preliminary Communications and Non-Fee Reviews\$ 1,537.77

COMMISSION AND TAC MEETINGS

Attend April 20 Commission meeting, and April 24 Budget Committee meeting (per administrator request).

Karen L. Chandler, Principal Engineer/Scientist 5.4 hours @ \$170.00 per hour	\$	<u>918.00</u>
Subtotal, Commission and TAC Meetings	\$	918.00

SURVEYS & STUDIES

Subtotal, Surveys & Studies\$ 0.00

WATER QUALITY/MONITORING

Water Quality Data Request

Preliminary review.

Margaret R. Rattei, Engineer/Scientist/Specialist III 0.1 hours @ \$130.00 per hour	\$	<u>13.00</u>
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<i>Subtotal, Water Quality Data Request.....</i>	\$	13.00
<i>Subtotal, Water Quality/Monitoring.....</i>	\$	13.00

WATER QUANTITY

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

Technicians/Administrative.....	\$	720.00
Expenses (Mileage/2WD field vehicle)	\$	155.11
<i>Subtotal, Water Quantity.....</i>	\$	875.11
TOTAL ENGINEERING	\$	20,624.24

SECRETARIAL SERVICES

TOTAL SECRETARIAL SERVICES EXPENSES.....	\$	0.00
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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)

Perform flow measurement at WOMP station, and download, review, and send file and data to MCES staff.

Christopher J. Bonick, Engineer/Scientist/Specialist II 4.0 hours @ \$120.00 per hour	\$	480.00
Expenses (Mileage/4WD field vehicle)	\$	44.27
<i>Subtotal, Watershed Outlet Monitoring Program</i>	<i>\$</i>	<i>524.27</i>
TOTAL WOMP	\$	524.27

CAPITAL IMPROVEMENT PROJECTS (Funded through tax levy)

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

BWSR Clean Water Fund grant administration: prepare and submit final CWF grant report with payment request to BWSR.

Jennifer A. Koehler, Engineer/Scientist/Specialist III	
1.0 hours @ \$130.00 per hour	\$ <u>130.00</u>
<i>Subtotal, Northwood Lake Improvement Projects</i>	<i>\$ 130.00</i>

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

Coordination with city's consultant regarding status of project design and BCWMC review.

James P. Herbert, Principal Engineer/Scientist	
1.0 hours @ \$190.00 per hour	\$ <u>190.00</u>
<i>Subtotal, Plymouth Crk Restoration Annapolis Ln to 2,500 ft. Upstream of Annapolis.....</i>	<i>\$ 190.00</i>

BASSETT CREEK PARK & WINNETKA PONDS DREDGING FEASIBILITY STUDY

Calculate option for constructing forebay only (no other pond dredging); revise Winnetka Pond East Alternative 2 (deepening pond) to match the maximum budget available; update cost estimates; revise and complete draft feasibility report per Commissioner Mueller, administrator and Crystal city staff comments; compile draft feasibility report and provide to administrator for April Commission meeting packet; review Crystal staff's presentation for city council workshop and provide comments; attend April 13 Crystal City Council workshop regarding Winnetka and Bassett Creek Park Pond projects; prepare presentation regarding feasibility study for April Commission meeting; follow-up on water quality benefits of dredging Bassett Creek Park Pond and Winnetka Pond, including the effects of resuspension on water quality treatment and development of professional judgment TP removals under existing conditions; review goose management methods/impacts for Winnetka Pond and communications with Crystal, Plymouth staff, administrator and internal staff regarding goose management; review native buffer maintenance and costs; communications with Crystal staff regarding use of dredged material in Bassett Creek Park; internal meetings; revise report figures; and communications with administrator and Crystal staff regarding report content and alternatives.

James P. Herbert, Principal Engineer/Scientist	
3.0 hours @ \$190.00 per hour	\$ 570.00
Karen L. Chandler, Principal Engineer/Scientist	
24.4 hours @ \$170.00 per hour	\$ 4,148.00
Gregory J. Wilson, Consultant/Advisor	
1.7 hours @ \$155.00 per hour	\$ 263.50
Candice H. Kantor, Engineer/Scientist/Specialist II	
8.8 hours @ \$105.00 per hour	\$ 924.00

Charles M. Hinds, Engineer/Scientist/Specialist I 0.4 hours @ \$80.00 per hour	\$ 32.00
Joshua R. Vosejpka, Engineer/Scientist/Specialist I 4.5 hours @ \$80.00 per hour	\$ 360.00
Expenses (Mileage/2WD field vehicle)	\$ 3.75
<i>Subtotal, Bassett Creek Park & Winnetka Ponds Dredging Feasibility Study.....</i>	
	\$ 6,301.25

SCHAPER POND EFFECTIVENESS MONITORING (SL-3)

Coordinate with internal staff regarding installation at monitoring sites, including historical monitoring site set-up; and investigate monitoring equipment options for 2017.

Gregory J. Wilson, Consultant/Advisor 5.0 hours @ \$155.00 per hour	\$ 775.00
Christopher J. Bonick, Engineer/Scientist/Specialist II 3.0 hours @ \$120.00 per hour	\$ 360.00
Technicians/Administrative.....	\$ 108.00
<i>Subtotal, Schaper Pond Effectiveness Monitoring</i>	
	\$ 1,243.00

TOTAL CAPITAL IMPROVEMENTS PROJECTS (Tax Levy)\$ 7,864.25

TMDL WORK

TMDL IMPLEMENTATION REPORTING

Prepare P8 model updates for North Branch watershed.

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

TOTAL TMDL WORK\$ 155.00

XP-SWMM PHASE II

XP-SWMM PHASE II

Obtain survey data; compile list of comments from cities to incorporate into model; internal meeting regarding model updates; revise model per City comments; update Gardendale neighborhood information in Crystal; review 100-year model results (checking water capture); internal meeting regarding instability model checks and model setup; follow-up with Golden Valley and New Hope staff; follow-up with Blue Line LRT consultant regarding Highway 55 structure survey data and download survey data from Blue Line LRT consultant; update models, tables, and figures; revise report; review revised XP-SWMM results; revise inundation figures (trunk system and non-trunk system); and prepare memo for May TAC meeting and submit to administrator.

Karen L. Chandler, Principal Engineer/Scientist 1.7 hours @ \$170.00 per hour	\$ 289.00
Jennifer A. Koehler, Engineer/Scientist/Specialist III 16.2 hours @ \$130.00 per hour	\$ 2,106.00
Ross S. Mullen, Engineer/Scientist/Specialist I 29.9 hours @ \$95.00 per hour.....	\$ 2,840.50
Michal B. McKinney, Engineer/Scientist/Specialist I 1.1 hours @ \$95.00 per hour	\$ 104.50
Lulu Fang, Engineer/Scientist/Specialist I 8.8 hours @ \$80.00 per hour.....	\$ 704.00
Josh P. Phillips, Engineer/Scientist/Specialist I 0.3 hours @ \$75.00 per hour.....	\$ 22.50
<i>Subtotal, XP-SWMM Phase II.....</i>	<i>\$ 6,066.50</i>
TOTAL XP-SWMM PHASE II.....	\$ 6,066.50

SUMMARY TOTALS

Total Engineering	\$ 20,624.24
Total Secretarial Services Expenses	\$ 0.00
Total Annual Report/Website/Public Communications	\$ 0.00
Total WOMP.....	\$ 524.27
Total Capital Improvement Projects (Tax Levy).....	\$ 7,864.25
Total TMDL Work	\$ 155.00
Total XP-SWMM Phase II.....	\$ 6,066.50
TOTAL PAYABLE.....	\$ 35,234.26

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


