Mr. Jim de Lambert Bassett Creek Watershed Management Commission 7800 Golden Valley Road Golden Valley, MN 55427 Page # 1 Invoice # 23270051-2017-1 Project # 23/27-0051

Client # 59 March 03, 2017

# Invoice of Account with BARR ENGINEERING COMPANY

For professional services during the period of January 28, 2017 through February 24, 2017

#### **ENGINEERING**

#### **TECHNICAL SERVICES**

Communications with administrator and internal staff regarding MIDS for linear projects issues; communications with administrator regarding BCWMC logo; review 2016 end-of-year budget status and discuss with administrator; communications with Minneapolis staff regarding potential fill in floodplain at Fruen Mill; set up 2017 budgets; set up 2017 plat review files, spreadsheet and report; review gate hydraulics at Wisconsin Avenue and effect on culvert, per Golden Valley request; review datum for elevation information on BCWMC website; distribution of Phase 2 model to consultants per city requests; and miscellaneous communications with administrator.

James P. Herbert, Principal Engineer/Scientist 1.0 hours @ \$190.00 per hour\$	190.00
Karen L. Chandler, Principal Engineer/Scientist 5.0 hours @ \$170.00 per hour\$	850.00
Sterling G. Williams, Engineer/Scientist/Specialist III  0.5 hours @ \$130.00 per hour\$	65.00
Jennifer A. Koehler, Engineer/Scientist/Specialist III  0.5 hours @ \$130.00 per hour\$	65.00
Josh P. Phillips, Engineer/Scientist/Specialist I 0.2 hours @ \$75.00 per hour\$	15.00
Technicians/Administrative\$_	366.50
Subtotal, Technical Services\$	1,551.50

#### **MONTHLY MEETING PREPARATION**

Communications/coordination with administrator regarding draft/final agenda and meeting packet for February Commission meeting; review/edit draft January meeting minutes; prepare for February 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 February Commission meeting and upcoming Commission meeting agenda items.

James P. Herbert, Principal Engineer/Scientist 5.8 hours @ \$190.00 per hour	\$	1,102.00
Karen L. Chandler, Principal Engineer/Scientist 11.1 hours @ \$170.00 per hour	\$	1,887.00
Candice M. Kantor, Engineer/Scientist/Specialist II	<b>.</b>	21.00
0.2 hours @ \$105.00 per hour	\$	21.00
Technicians/Administrative	\$	427.50
Subtotal, Monthly Meeting Preparation	\$	3,437.50

#### TECH ANALYSES (H&H ETC.)

Attend meeting with New Hope staff and consultant regarding Rosalyn Court, provide Medicine Lake Road and Winnetka Avenue (DeCola Ponds) XP-SWMM model to New Hope consultant, and respond to follow-up questions from New Hope consultant (per administrator's authorization).

Jennifer A. Koehler, Engineer/Scientist/Specialist III	
3.7 hours @ \$130.00 per hour\$_	481.00
Subtotal, Tech Analyses (H&H, Etc.)\$	481.00

#### WCA LGU ADMINISTRATION

Create WCA administration tracking spreadsheet, prepare 2016 WCA annual reporting form, internal communications, and submit annual reporting form to BWSR.

\$ 34.00
336.00
370.00
4

#### TAC PREPARATION

Prepare for February 3 TAC meeting; communications with administrator regarding March 2 TAC agenda and meeting packet; look into potential wetland issues and stormwater BMP limitations (including groundwater separation requirements) for proposed Medicine Lake CIP project and provide information to administrator for inclusion in March 2 TAC meeting packet; and review March 2 TAC meeting packet.

Mark A. Jacobson, Principal Engineer/Scientist 0.7 hours @ \$175.00 per hour\$	122.50
Karen L. Chandler, Principal Engineer/Scientist 7.5 hours @ \$170.00 per hour\$	1,275.00
Karen S. Wold, Engineer/Scientist/Specialist II  0.7 hours @ \$120.00 per hour\$	84.00

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Candice M. Kantor, Engineer/Scientist/Specialist II  0.3 hours @ \$105.00 per hour	\$ 31.50
Ross S. Mullen, Engineer/Scientist/Specialist I  0.3 hours @ \$95.00 per hour	\$ <u> 28.50</u>
Subtotal, TAC Preparation	\$ 1,541.50
Subtotal Technical Services	\$ 7,381.50
PLAT REVIEW	
@glenwood Campus (2016-29)	
Coordinate with applicant's consultant, Minneapolis staff, and administrator to see for and attend February 7 <sup>th</sup> meeting with administrator, applicant, applicant's cor	

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		rincipal Engineer/Scientis \$190.00 per hour				\$ 760.00
		Principal Engineer/Scient \$170.00 per hour				\$ 51.00
	Subtota	l, @glenwood Campus	 			\$ 811.00

regarding review processes and design; and internal discussion regarding floodplain issues.

## CSAH 24 Reconstruction Project (2016-32)

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

James P. Herbert, Principal Engineer/Scientist 2.1 hours @ \$190.00 per hour\$	399.00
Josh P. Phillips, Engineer/Scientist/Specialist I  2.6 hours @ \$75.00 per hour\$	195.00
Technicians/Administrative\$	36.00
Expenses (Postage)\$_	0.46
Subtotal, CSAH 24 Reconstruction Project\$	630.46

## Northwood N. Infrastructure Improvements (2016-38)

Review grading, drainage and erosion control plans; and conference call with applicant to discuss BCWMC's comments following review.

James P. Herbert, Principal Engineer/Scientist 0.6 hours @ \$190.00 per hour\$	114.00
Josh P. Phillips, Engineer/Scientist/Specialist I  0.6 hours @ \$75.00 per hour\$	45.00
Subtotal, Northwood N. Infrastructure Improvements\$	_

## French Regional Park Street Improvements (2016-39)

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

James P. Herbert, Principal Engineer/Scientist	
4.6 hours @ \$190.00 per hour\$	874.00
Karen L. Chandler, Principal Engineer/Scientist 0.4 hours @ \$170.00 per hour\$	68.00
Josh P. Phillips, Engineer/Scientist/Specialist I	
6.6 hours @ \$75.00 per hour\$_	495.00
Subtotal, French Regional Park Street Improvements\$	1,437.00

## Agora Development (2017-01)

Review grading, drainage and erosion control plans; review additional information, including floodplain information; prepare review memo for February Commission meeting; prepare and send approval/comment letter to city staff; communications with applicant's consultant regarding follow-up meeting; and communications with applicant's consultant and administrator.

James P. Herbert, Principal Engineer/Scientist 7.6 hours @ \$190.00 per hour\$	1,444.00
Karen L. Chandler, Principal Engineer/Scientist 12.6 hours @ \$170.00 per hour\$	2,142.00
Candice M. Kantor, Engineer/Scientist/Specialist II  2.6 hours @ \$105.00 per hour\$	273.00
Josh P. Phillips, Engineer/Scientist/Specialist I  19.8 hours @ \$75.00 per hour\$	1,485.00
Technicians/Administrative\$	63.00
Expenses (Postage)\$_	0.46
Subtotal, Agora Development\$	5,407.46
Golden Valley 2017 PMP (2017-02)	
Preliminary review; and communications with city staff and administrator.	
James P. Herbert, Principal Engineer/Scientist 1.0 hours @ \$190.00 per hour\$	190.00
Josh P. Phillips, Engineer/Scientist/Specialist I  0.8 hours @ \$75.00 per hour\$	60.00
Technicians/Administrative\$	81.00

Subtotal, Golden Valley 2017 PMP.....\$

331.46

#### CenterPoint Energy MBLC Replacement (2017-03)

Communications with applicant's consultant regarding creek flows and provide WOMP data; and communications with applicant's consultant regarding proposed construction methods, work in the floodplain, and BCWMC submittal/review.

Subtotal Plat Review\$	9.424.38
Subtotal, CenterPoint Energy MBLC Replacement\$	648.00
Jennifer A. Koehler, Engineer/Scientist/Specialist III 1.9 hours @ \$130.00 per hour\$_	247.00
Karen L. Chandler, Principal Engineer/Scientist  1.8 hours @ \$170.00 per hour\$	306.00
James P. Herbert, Principal Engineer/Scientist 0.5 hours @ \$190.00 per hour\$	95.00

#### PRELIMINARY COMMUNICATIONS AND NON-FEE REVIEWS

## **PRELIMINARY COMMUNICATIONS**

Respond to request from Golden Valley staff confirming flood elevations along Bassett Creek; preliminary communications with developers' consultants regarding Plymouth projects; provide TH 55 control structure drawings to consultant; discussion with Alternate Commissioner Sicora and Golden Valley staff regarding utility crossing of Bassett Creek and Golden Valley Road crossing of creek; coordinate with internal staff and utility's consultant regarding same; and communications with Golden Valley staff regarding Golden Valley road crossing, and follow-up call with Hennepin County.

James P. Herbert, Principal Engineer/Scientist  2.7 hours @ \$190.00 per hour\$	513.00
Karen L. Chandler, Principal Engineer/Scientist 1.0 hours @ \$170.00 per hour\$_	170.00
Subtotal, Plat Review – Preliminary Communications\$	683.00

#### **NON-FEE REVIEWS**

#### **BLUE LINE LRT**

Communications and coordination with Blue Line LRT consultant team and internal staff regarding meeting and meeting agenda.

James P. Herbert, Principal Engineer/Scientist		
1.2 hours @ \$190.00 per hour	.\$	228.00
Karen L. Chandler, Principal Engineer/Scientist		
1.5 hours @ \$170.00 per hour	.\$	255.00
Subtotal. Blue Line LRT	.\$	483.00

## **BLUE LINE LRT WCA LGU ADMIN**

## Golden Valley

Communications with Blue Line LRT consultant regarding project plans; submit joint application; and prepare for and participate in TEP meeting.

Karen S. Wold, Engineer/Scientist/Specialist II 3.2 hours @ \$120.00 per hour	.\$	384.0 <u>0</u>
Subtotal, Golden Valley	\$	384.00
Robbinsdale Communications with Blue Line LRT consultant regarding project plans; submit joint prepare for and participate in TEP meeting.	t apı	olication; and
Karen S. Wold, Engineer/Scientist/Specialist II  3.2 hours @ \$120.00 per hour	.\$	384.00
Expenses (Mileage)	.\$	16.05
Subtotal, Robbinsdale	\$	400.05
Subtotal Blue Line LRT WCA LGU AdminSubtotal Blue Line LRT & Blue Line LRT WCA LGU Admin		784.05 1,267.05
Subtotal Non-Fee Reviews	.\$	1,267.05
Subtotal Preliminary Communications and Non-Fee Reviews	.\$	1,950.05
Subtotal Preliminary Communications and Non-Fee Reviews  COMMISSION AND TAC MEETINGS	.\$	1,950.05
•	.\$	1,950.05
COMMISSION AND TAC MEETINGS		<b>1,950.05</b> 1,139.00
COMMISSION AND TAC MEETINGS  Attend February 16 Commission meeting and February 3 TAC meeting.  Karen L. Chandler, Principal Engineer/Scientist	.\$	1,139.00
COMMISSION AND TAC MEETINGS  Attend February 16 Commission meeting and February 3 TAC meeting.  Karen L. Chandler, Principal Engineer/Scientist 6.7 hours @ \$170.00 per hour	.\$	1,139.00 403.00
COMMISSION AND TAC MEETINGS  Attend February 16 Commission meeting and February 3 TAC meeting.  Karen L. Chandler, Principal Engineer/Scientist 6.7 hours @ \$170.00 per hour	.\$	1,139.00 403.00

## WATER QUALITY/MONITORING

## Sweeney Lake Aeration Study

Review aeration system information; communications with Sweeney Lake Association and administrator responding to questions about Sweeney Lake aeration study, additional monitoring and operation of Sweeney Lake aeration system during upcoming study; and coordinate lake monitoring with administrator.

Karen L. Chandler, Principal Engineer/Scientist 2.3hours @ \$170.00 per hour\$	391.00
Gregory J. Wilson, Consultant/Advisor 4.0 hours @ \$155.00 per hour\$	620.00
Subtotal, Sweeney Lake Aeration Study\$	

#### **General Water Quality Requests**

Assist administrator with development of Sweeney Lake monitoring scope for monitoring consultant; receive and review revised analytical lab report from 8/22/16 sampling event and enter data into EQuIS; edit draft reports for Medicine Lake, Northwood Lake and Crane Lake 2016 monitoring per administrator review/comments and provide reports to administrator for February Commission meeting, including creation of two report formats (booklet and website); finalize presentation of water quality monitoring results for February Commission meeting; communications with New Hope consultant regarding Northwood Lake sediment; and provide internal update on MPCA's TALU comment period/process and chloride legislation.

Henry M. Runke, Principal Engineer/Scientist 1.5 hours @ \$175.00 per hour\$	262.50
Karen L. Chandler, Principal Engineer/Scientist 2.7 hours @ \$170.00 per hour\$	459.00
Gregory J. Wilson, Consultant/Advisor 3.0 hours @ \$155.00 per hour\$	465.00
Margaret R. Rattei, Engineer/Scientist/Specialist III  13.2 hours @ \$130.00 per hour\$	1,716.00
Sterling G. Williams, Engineer/Scientist/Specialist III 3.0 hours @ \$130.00 per hour\$	390.00
Technicians/Administrative\$_	1,004.50
Subtotal, General Water Quality Requests\$	4,297.00

#### Chloride Source Assessment:

Prepare for and conduct "hotspot" chloride/conductivity sampling at 18 locations throughout the Bassett Creek watershed, including prepare for field work, sample collection, setup account with MCES lab, sample preparation, specific conductivity measurements, and field notes.

Gregory J. Wilson, Consultant/Advisor  8.7 hours @ \$155.00 per hour\$	1 348 50
Christopher J. Bonick, Engineer/Scientist/Specialist II	1,5 10.50
19.2 hours @ \$120.00 per hour\$	2,304.00
Joshua R. Vosejpka, Engineer/Scientist/Specialist I	
0.5 hours @ \$80.00 per hour\$	40.00

Technicians/Administrative	\$	96.00
Expenses (Mileage/2WD field vehicle/Water Quality Meter)	<u>\$</u>	166.87
Subtotal, Chloride Source Assessment	\$	3,955.37
Subtotal, Water Quality/Monitoring	\$	9,263.37
WATER QUANTITY		
Measure and review lake level elevations as part of the lake-gauging p	program.	
Technicians/Administrative	\$	405.00
Expenses (Mileage/2WD field vehicle)	<u>\$</u>	53.36
Subtotal, Water Quantity	\$	458.36
TOTAL ENGINEERING	\$	30,019.66
SECRETARIAL SERVICES		
TOTAL SECRETARIAL SERVICES EXPENSES	\$	0.00
ANNUAL REPORT		
TOTAL ANNUAL REPORT	¢	0.00
TOTAL ANNUAL REPORT	Φ	0.00
PUBLIC COMMUNICATIONS		0.00
		0.00
PUBLIC COMMUNICATIONS		
PUBLIC COMMUNICATIONS  TOTAL PUBLIC COMMUNICATIONS	\$	0.00
PUBLIC COMMUNICATIONS  TOTAL PUBLIC COMMUNICATIONS	\$	

## CAPITAL IMPROVEMENT PROJECTS (Funded through tax levy)

## FOUR SEASONS MALL AREA WATER QUALITY PROJECT (NL-2)

Provide XP-SWMM Phase 2 model for Agora development to developer's consultant per city request, including clipping model to reduce to 100 nodes and evaluating impacts of smaller model; meeting with administrator and internal staff to discuss review approach for wetland restoration versus development site; and communications with administrator regarding BCWMC/Agora agreement.

James P. Herbert, Principal Engineer/Scientist 0.5 hours @ \$190.00 per hour\$	95.00
Karen L. Chandler, Principal Engineer/Scientist 4.6 hours @ \$170.00 per hour\$	782.00
Jennifer A. Koehler, Engineer/Scientist/Specialist III  0.5 hours @ \$130.00 per hour\$	65.00
Ross S. Mullen, Engineer/Scientist/Specialist I  1.8 hours @ \$95.00 per hour\$	171.00
Josh P. Phillips, Engineer/Scientist/Specialist I 4.6 hours @ \$75.00 per hour\$_	345.00
Subtotal, Four Seasons Mall Area Water Quality Project (NL-2)\$	1,458.00
NORTHWOOD LAKE IMPROVEMENT PROJECT NON-MPCA REIMBURSABLE	
BWSR Clean Water Fund grant administration: submit grant reporting to BWSR via up with administrator.	eLINK; and follow-
Jennifer A. Koehler, Engineer/Scientist/Specialist III 1.0 hours @ \$130.00 per hour\$_	130.00
Subtotal, Northwood Lake Non-MPCA Reimbursable\$	130.00
PLYMOUTH CREEK RESTORATION, ANNAPOLIS LN TO 2,500 FT UPSTREAM OF ANN CR-P) FEASIBILITY STUDY	NAPOLIS LN (2017
Revise/final wetland delineation report and consolidate into one pdf document.	
Brian K. Burgner, Engineer/Scientist/Specialist II  2.8 hours @ \$95.00 per hour\$_	266.00
Subtotal, Plymouth Crk Restoration Annapolis Ln to 2,500 ft.  Upstream of Annapolis Feasibility Study\$	266.00
PLYMOUTH CREEK RESTORATION, ANNAPOLIS LN TO 2,500 FT UPSTREAM OF ANN	NAPOLIS LN (2017
BWSR Clean Water Fund grant administration: develop draft grant work plan and provide and Plymouth staff for review; revise work plan and provide to administrator for submi	
Jennifer A. Koehler, Engineer/Scientist/Specialist III  2.2 hours @ \$130.00 per hour\$_	286.00
Subtotal, Plymouth Crk Restoration Annapolis Ln to 2,500 ft.  Upstream of Annapolis\$	286.00
MAIN CTEM CHANNEL DECTORATION CEDAR LV DD TO DURONT DILIC EDUEN MI	LL (2017CD M)

Communications with administrator regarding Hennepin County Environmental Response Fund grant.

Karen L. Chandler, Principal Engineer/Scientist	
0.3hours @ \$170.00 per hour\$_	51.00
Subtotal, Main Stem Channel Restoration, Cedar Lk Rd to Dupont,	
Plus Fruen Mill\$	51.00

#### BASSETT CREEK PARK & WINNETKA PONDS DREDGING FEASIBILITY STUDY

Prepare sediment characterization memos for inclusion in the feasibility study report; revise wetland delineation figures per USACE request for the wetland delineation jurisdictional determination; discuss wetland value of Bassett Creek Park Pond for wetland buffer recommendations; determine watershed areas for Bassett Creek Park Pond; compute approximate sediment forebay volume for Bassett Creek Park Pond; update concept designs for alternatives and summarize parameters for P8 model inputs to estimate water quality benefits of each alternative; prepare graphic boards for use at the February 16 public open house; prepare for and attend February 16 public open house; and communications with Crystal staff and administrator.

Karen L. Chandler, Principal Engineer/Scientist 5.1 hours @ \$170.00 per hour	.\$	867.00
Brian K. Burgner, Engineer/Scientist/Specialist II  2.3 hours @ \$95.00 per hour	.\$	218.50
Karen S. Wold, Engineer/Scientist/Specialist II  0.3 hours @ \$120.00 per hour	.\$	36.00
Kevin D. Menken, Engineer/Scientist/Specialist II 4.0 hours @ \$110.00 per hour	.\$	440.00
Candice H. Kantor, Engineer/Scientist/Specialist II  9.9 hours @ \$105.00 per hour	.\$	1,039.50
Ross S. Mullen, Engineer/Scientist/Specialist I  0.3 hours @ \$95.00 per hour	.\$	28.50
Charles M. Hinds, Engineer/Scientist/Specialist I 4.1 hours @ \$80.00 per hour	.\$	328.00
Technicians/Administrative	.\$	1,879.00
Expenses (Mileage)	. <u>\$</u>	11.77
Subtotal, Bassett Creek Park & Winnetka Ponds Dredging Feasibility Study	. \$	4,848.27
SCHAPER POND EFFECTIVENESS MONITORING (SL-3)		
Project setup.		
Gregory J. Wilson, Consultant/Advisor 1.0 hours @ \$155.00 per hour	. \$	155.00
Subtotal, Schaper Pond Effectiveness Monitoring	. \$	155.00
TOTAL CAPITAL IMPROVEMENTS PROJECTS (Tax Levy)	.\$	7,194.27

## **TMDL WORK**

TOTAL TMDL WORK ......\$ 0.00

#### **XP-SWMM PHASE II**

#### XP-SWMM PHASE II

Prepare presentation regarding XPSWMM model for February TAC meeting; attend February 3 TAC meeting; review and respond to TAC members' XP SWMM questions and provide to administrator for inclusion in March TAC meeting packet; and revise inundation map.

Karen L. Chandler, Principal Engineer/Scientist  2.8 hours @ \$170.00 per hour\$	476.00
Jennifer A. Koehler, Engineer/Scientist/Specialist III 9.9 hours @ \$130.00 per hour\$	1,287.00
Ross S. Mullen, Engineer/Scientist/Specialist I 0.7 hours @ \$95.00 per hour\$	66.50
Lulu Fang, Engineer/Scientist/Specialist I  0.5 hours @ \$80.00 per hour\$_	40.00
Subtotal, XP-SWMM Phase II\$	1,869.50
TOTAL XP-SWMM PHASE II\$	1,869.50

#### **SUMMARY TOTALS**

Total Engineering\$	30,019.66
Total Secretarial Services Expenses\$	0.00
Total Annual Report/Website/Public Communications\$	0.00
Total WOMP\$	0.00
Total Capital Improvement Projects (Tax Levy)\$	7,194.27
Total TMDL Work\$	0.00
Total XP-SWMM Phase II\$_	1,869.50
TOTAL PAYABLE\$	39,083.43

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

Jim Herber