Mr. Jim Prom Bassett Creek Watershed Management Commission 7800 Golden Valley Road Golden Valley, MN 55427 Page # 1

Invoice # 23270051-2019-6

Project # 23/27-0051

Client # 59 August 2, 2019

Invoice of Account with BARR ENGINEERING COMPANY

For professional services during the period of June 29, 2019 through July 26, 2019

ENGINEERING

TECHNICAL SERVICES

Communications with MPRB staff regarding wetland work in Wirth Park; communications with Minneapolis and MPRB staff regarding resident question about flooding of Wirth Park trail; communications with administrator regarding potential BWSR CWF grant application for Bryn Mawr Meadows CIP project; communications with administrator, Golden Valley staff and internal staff regarding possible blue green algae in Sweeney Lake; provide Bassett Creek tunnel shapefile to Hennepin County staff; South Rice Pond/Sochacki Park: communications with administrator, Golden Valley staff and TRPD staff regarding South Rice Pond background/history/previous studies and future meeting, prepare and attend July 22meeting/site visit with TRPD staff, TRPD commissioner, and Golden Valley staff regarding South Rice Pond issues and future tasks to address resident concerns, and follow-up, including communications with administrator and meeting attendees regarding meeting notes and photos (uploaded photos to ftp site); scan and file historical recording secretary documents and review documents with administrator; communications with administrator regarding meeting with MPCA, set up, prepare for and attend July 25 meeting with MPCA staff and administrator regarding BCWMC/MPCA water quality monitoring and assessment programs; communications with Golden Valley staff, internal staff, and administrator regarding status of annual XP SWMM model update; communications with administrator, Minneapolis staff, Minneapolis consultant and internal staff regarding upcoming Irving Avenue sanitary sewer replacement project, and set up meeting; set up meeting with administrator regarding biotic index report and water quality monitoring workshop/committee; communications with Minneapolis staff regarding sewer overflow into Bassett Creek near Penn Avenue (overflow was from watermain); and begin updating water quality graphs with 2018 data for BCWMC website.

James P. Herbert, Principal Engineer/Scientist 3.3 hours @ \$195.00 per hour\$	643.50
Karen L. Chandler, Principal Engineer/Scientist 23.2 hours @ \$175.00 per hour\$	4,060.00

Gregory J. Wilson, Consultant/Advisor 2.0 hours @ \$165.00 per hour\$	330.00
Sterling 'Greg' Williams, Engineer/Scientist/Specialist III 2.0 hours @ \$140.00 per hour\$	280.00
Margaret R. Rattei, Engineer/Scientist/Specialist III 0.3 hours @ \$135.00 per hour\$	40.50
Ross S. Mullen, Engineer/Scientist/Specialist II 0.3 hours @ \$110.00 per hour\$	33.00
Joshua R. Vosejpka, Engineer/Scientist/Specialist I 0.3 hours @ \$85.00 per hour\$	25.50
Tyler A. Olsen, Engineer/Scientist/Specialist I 0.1 hours @ \$85.00 per hour\$_	<u>8.50</u>
Subtotal, Technical Services\$	5,421.00

MONTHLY MEETING PREPARATION

Communications/coordination with administrator and internal staff regarding draft/final agenda and meeting packet for July Commission meeting; review/edit draft June meeting minutes; prepare for July Commission meeting, including pre-meeting conference call with Chair Prom and administrator, and review meeting packet; and communications with administrator and internal staff regarding follow-up items from July Commission meeting and upcoming meeting agenda items.

James P. Herbert, Principal Engineer/Scientist 3.0 hours @ \$195.00 per hour\$	585.00
Karen L. Chandler, Principal Engineer/Scientist 9.5 hours @ \$175.00 per hour\$	1,662.50
Josh P. Phillips, Engineer/Scientist/Specialist II 0.2 hours @ \$95.00 per hour\$	19.00
Technicians/Administrative\$_	400.00
Subtotal, Monthly Meeting Preparation\$	2,666.50

TAC PREPARATION

Prepare draft memo with supplemental information for July 8 TAC meeting; revise memo per administrator's comments and provide final memo to administrator for meeting packet; prepare for July 8 TAC meeting; internal discussion regarding TAC recommendations from 7/8 meeting; review/edit administrator's draft TAC memo for July Commission meeting; review comments/edits from Crystal staff and revise TAC memo; review WEF STEPP summary information and program status, communications with administrator, and develop revised MPCA letter recommendation for July Commission meeting; prepare draft letter to MPCA regarding verification/certification of MTDs for administrator review; communications with administrator regarding Capitol Region WD staff comments; review/edit revised draft letter to MPCA regarding MTD evaluation and approval; and communications with administrator, MPCA staff and internal staff regarding MPCA response to MTD letter.

James P. Herbert, Principal Engineer/Scientist 6.8 hours @ \$195.00 per hour	\$	1,326.00
Karen L. Chandler, Principal Engineer/Scientist 12.9 hours @ \$175.00 per hour	\$	2,257.50
Josh P. Phillips, Engineer/Scientist/Specialist II 0.9 hours @ \$95.00 per hour	\$_	85.50
Subtotal, TAC Preparation	\$	3,669.00
Subtotal Technical Services	\$	11,756.50
<u>PLAT REVIEW</u>		
Golden Valley Road Senior Living (2017-35)		
Review previous submittal; and communications with applicant, city staff ar	nd admi	nistrator.
James P. Herbert, Principal Engineer/Scientist 1.7 hours @ \$195.00 per hour	¢	331.50
Technicians/Administrative		
Subtotal, Golden Valley Road Senior Living		341.00
Minneapolis Impound Lot Facility Improvements (2017-37)	φ	377.00
Review revised submittal; communications with applicant regarding comme final approval letter to city staff; and project close-out and filing. James P. Herbert, Principal Engineer/Scientist 1.0 hours @ \$195.00 per hour	·	epare and se
Josh P. Phillips, Engineer/Scientist/Specialist II		
3.3 hours @ \$95.00 per hour	\$	313.50
Technicians/Administrative	\$_	22.50
Subtotal, Minneapolis Impound Lot Facility Improvements	\$	531.00
Theo Wirth GC Cart Path (2019-12)		
Communications with applicant regarding review comments.		
James P. Herbert, Principal Engineer/Scientist		
0.5 hours @ \$195.00 per hour	\$	97.50
0.5 hours @ \$195.00 per hour		
Josh P. Phillips, Engineer/Scientist/Specialist II	\$_	
Josh P. Phillips, Engineer/Scientist/Specialist II 0.3 hours @ \$95.00 per hour	\$_	28.50
Josh P. Phillips, Engineer/Scientist/Specialist II 0.3 hours @ \$95.00 per hour	\$_	28.50
Josh P. Phillips, Engineer/Scientist/Specialist II 0.3 hours @ \$95.00 per hour	\$_ \$	28.50 126.00

Automotive Concepts Facility (2019-15)

Review grading, drainage and erosion control plans for erosion and sediment control, rate control, and water quality; and prepare and send comment letter to city staff.

water quality; and prepare and send comment letter to city staff.	
James P. Herbert, Principal Engineer/Scientist 3.2 hours @ \$195.00 per hour\$	624.00
Heather N. Hlavaty, Engineer/Scientist/Specialist II 2.0 hours @ \$100.00 per hour\$	200.00
Josh P. Phillips, Engineer/Scientist/Specialist II 5.1 hours @ \$95.00 per hour\$	484.50
Subtotal, Automotive Concepts Facility\$	1,308.50
Grainger Site Improvement (2019-16)	
Review grading, drainage and erosion control plans for erosion and sediment control send approval letter to city staff.	; and prepare and
James P. Herbert, Principal Engineer/Scientist 1.1 hours @ \$195.00 per hour\$	214.50
Josh P. Phillips, Engineer/Scientist/Specialist II 3.0 hours @ \$95.00 per hour\$	285.00
Technicians/Administrative\$	74.00
Expenses (Postage)	1.15
Subtotal, Grainger Site Improvement\$	<i>574</i> .65
Days Inn Remodel (2019-17)	
Plat review set up and preliminary review.	
James P. Herbert, Principal Engineer/Scientist 0.3 hours @ \$195.00 per hour\$	58.50
Josh P. Phillips, Engineer/Scientist/Specialist II 0.4 hours @ \$95.00 per hour\$	38.00
Technicians/Administrative\$	47.50
Subtotal, Days Inn Remodel\$	144.00
Northwest Campus Improvements (2019-18)	
Review grading, drainage and erosion control plans for erosion and sediment control water quality; and prepare and send comment letter to city staff.	, rate control, and
James P. Herbert, Principal Engineer/Scientist 1.8 hours @ \$195.00 per hour\$	351.00
Josh P. Phillips, Engineer/Scientist/Specialist II 6.2 hours @ \$95.00 per hour\$	589.00

Technicians/Administrative	\$	47.50
Expenses (Postage)	<u>\$</u>	0.50
Subtotal, Northwest Campus Improvements	\$	988.00
Ascension Lutheran Church Addition (2019-19)		
Review grading, drainage and erosion control plans for erosion and sediment consend comment letter to city staff.	ntrol; a	and prepare and
James P. Herbert, Principal Engineer/Scientist 1.3 hours @ \$195.00 per hour	\$	253.50
Josh P. Phillips, Engineer/Scientist/Specialist II 1.7 hours @ \$95.00 per hour	\$	161.50
Technicians/Administrative	\$	47.50
Expenses (Postage)	<u>\$</u>	0.50
Subtotal, Ascension Lutheran Church Addition	\$	463.00
Subtotal Plat Review	\$	4,571.15
PRELIMINARY COMMUNICATIONS AND NON-FEE REVIEWS		
PRELIMINARY COMMUNICATIONS		
Communications with consultants regarding proposed developments in Plymout	h and	Golden Valley.
James P. Herbert, Principal Engineer/Scientist 0.5 hours @ \$195.00 per hour	\$	97.50
Josh P. Phillips, Engineer/Scientist/Specialist II 0.3 hours @ \$95.00 per hour	\$_	28.50
Subtotal, Preliminary Communications	\$	126.00
NON-FEE REVIEWS		
Bassett Creek Valley		
Prepare for and attend July 24 design charette meeting with administrator, M staff and Wenck staff; communications with Wenck; and locate 2000 BCWMC		
Karen L. Chandler, Principal Engineer/Scientist 7.5 hours @ \$175.00 per hour	\$	1,312.50
Expenses (Parking)	<u>\$</u>	10.00
Subtotal, Bassett Creek Valley	\$	1,322.50
510 Cloverleaf Drive (Channel Maintenance Fund)		
Communications with city staff and applicant regarding review comments; and channel.	d esti	mate velocities in
James P. Herbert, Principal Engineer/Scientist 2.4 hours @ \$195.00 per hour	\$	468.00

Karen L. Chandler, Principal Engineer/Scientist 0.3 hours @ \$175.00 per hour\$	52.50
Ross S. Mullen, Engineer/Scientist/Specialist II 0.6 hours @ \$110.00 per hour\$_	66.00
Subtotal, 510 Cloverleaf Drive (Channel Maint Fund)\$	586.50
Subtotal Non-Fee Reviews\$	1,909.00
Subtotal Preliminary Communications and Non-Fee Reviews\$	2,035.00
COMMISSION AND TAC MEETINGS	
Attend July 8 TAC meeting and July 18 Commission meeting.	
James P. Herbert, Principal Engineer/Scientist 2.0 hours @ \$195.00 per hour\$	390.00
Karen L. Chandler, Principal Engineer/Scientist 4.1 hours @ \$175.00 per hour\$	717.50
Expenses (Mileage) <u>\$</u>	13.34
Subtotal, Commission and TAC Meetings\$	1,120.84
SURVEYS & STUDIES	
Subtotal Surveys & Studies\$	0.00
WATER OUALITY/MONITORING	

WATER QUALITY/MONITORING

Cavanaugh and Northwood Lakes Monitoring

Complete July 15 water quality monitoring of Cavanaugh and Northwood Lakes; review and file lab results and lab quality assurance data for June 15 monitoring event; communications with Endangered Resource Services, LLC regarding June plant survey data, download data/maps from FTP site, file June aquatic plant survey data/maps in project folder, and review aquatic plant survey data/maps; compute Northwood Lake Plant IBI from June plant survey data; and answer question from Cavanaugh Lake resident about the June aquatic plant survey event and BCWMC water quality monitoring program.

Terri A. Olson, Engineer/Scientist/Specialist III	
0.2 hours @ \$140.00 per hour\$	28.00
Margaret R. Rattei, Engineer/Scientist/Specialist III	
5.7 hours @ \$135.00 per hour\$	769.50
Technicians/Administrative\$	738.00
Expenses (WQ meter/filtration apparatus/canoe/mileage/2WD vehicle)\$	221.12
Subtotal, Cavanaugh and Northwood Lakes Monitoring\$	1,756.62

North Branch Monitoring Year 2

Download and review data; set sampler for storm sample collection; collect storm sample on July 2; clean sample bottles from July 2 storm sample event; collect baseflow sample on July 23; and repair probe and intake tubing.

- age /			
Margaret R. Rattei, Engineer/Scientist/Specialist III 0.1 hours @ \$135.00 per hour	\$	13.50	
Christopher J. Bonick, Engineer/Scientist/Specialist III 1.5 hours @ \$125.00 per hour	\$	187.50	
Heather N. Hlavaty, Engineer/Scientist/Specialist II 4.4 hours @ \$100.00 per hour	\$	440.00	
Technicians/Administrative	\$	27.00	
Expenses (Verizon Wireless/mileage/turbidimeter/conductivity meter)	<u>\$</u>	127.74	
Subtotal, North Branch Monitoring Year 2	\$	795.74	
2018 Biotic Index Monitoring			
Review administrator's comments on draft biotic index report and internal meet and potential changes to biotic index and stream monitoring report.	ing to di	scuss comme	nt

Rev nts and

Karen L. Chandler, Principal Engineer/Scientist	
2.0 hours @ \$175.00 per hour\$	350.00
Margaret R. Rattei, Engineer/Scientist/Specialist III	
4.2 hours @ \$135.00 per hour <u>\$</u>	567.00
Subtotal, 2018 Biotic Index Monitoring\$	917.00
Subtotal, Water Quality/Monitoring\$	3,469.36

WATER QUANTITY

Measure and review lake level elevations as part of the lake-gauging program; and perform high water inspections after large rain events.

Subtotal, Water Quantity\$	769.64
Expenses (Verizon Wireless/mileage/turbidimeter)\$	77.14
Technicians/Administrative\$	400.00
James P. Herbert, Principal Engineer/Scientist 1.5 hours @ \$195.00 per hour\$	292.50

MISSISSIPPI WATERSHED MANAGEMENT ORGANIZATION PLAN REVIEW

MWMO Plan: review most recent WMO plan, in preparation for submitting information in response to MWMO information request for 4th Generation Plan.

175.00	aren L. Chandler, Principal Engineer/Scientist
	1.0 hours @ \$175.00 per hour\$
175.00	Subtotal, Mississippi Watershed Mgmt Org Plan Review\$
23 897 49	TOTAL ENGINEERING \$

WATERSHED OUTLET MONITORING PROGRAM (WOMP)	
TOTAL WOMP\$	0.00
APM/AIS WORK	
TOTAL APM/AIS WORK\$	0.00
CAPITAL IMPROVEMENT PROJECTS (Funded through tax levy)	
FOUR SEASONS AREA WQ PROJECT (NL-2)	
Communications with developer's consultant and re-send GIS shape files to developer	's consultant.
James P. Herbert, Principal Engineer/Scientist 0.5 hours @ \$190.00 per hour\$	97.50
Lulu Fang, Engineer/Scientist/Specialist II 0.2 hours @ \$95.00 per hour\$_	19.00
Subtotal, Four Seasons Area WQ Project (NL-2)\$	116.50
SCHAPER POND 2018 MONITORING AND REPORTING (SL-3)	
Subconsultant (Carp Solutions) expenses for carp survey.	
Expenses (Carp Solutions) <u>\$</u>	1,045.08
Subtotal, Schaper Pond 2018 Monitoring and Reporting\$	1,045.08
TOTAL CAPITAL IMPROVEMENTS PROJECTS (Tax Levy)\$	1,161.58
TMDL WORK	
TOTAL TMDL WORK\$	0.00
IMPROVED FEMA FLOODPLAIN MODELING & MAPPING (MDNR)	
IMPROVED FEMA FLOODPLAIN MODELING & MAPPING (MDNR)	
Hydrologic Analysis Respond to formal comments from MDNR staff on selection of hydrologic parameters parameters; and prepare draft change order for additional out-of-scope work items red MDNR.	-
Karen L. Chandler, Principal Engineer/Scientist 1.1 hours @ \$175.00 per hour\$	192.50
Ross S. Mullen, Engineer/Scientist/Specialist II 2.8 hours @ \$110.00 per hour\$_	308.00
Subtotal, Hydrologic Analysis\$	500.50

Hydraulic Analysis

Respond to formal comments from MDNR staff on selection of hydrologic parameters and hydraulic parameters; and prepare draft change order for additional out-of-scope work items requested by the MDNR.

Ross S. Mullen, Engineer/Scientist/Specialist II	
6.7 hours @ \$110.00 per hour	\$ 737.00
Subtotal, Hydraulic Analysis	\$ 737.00

Floodplain, Floodway, and Cross section Shapefiles

Complete preliminary set of inundation mapping to verify approach for generating floodplain, floodway, and cross sections and depth grid inputs after models are finalized.

Ross S. Mullen, Engineer/Scientist/Specialist II 0.6 hours @ \$110.00 per hour\$	66.00
Joshua R. Vosejpka, Engineer/Scientist/Specialist I	
5.2 hours @ \$85.00 per hour\$	442.00
Technicians/Administrative\$_	1,105.00
Subtotal, Floodplain, Floodway, Cross Sections Data-Inputs\$	1,613.00
TOTAL IMPROVED FEMA FLOODPLAIN MODELING &	
MAPPING (MDNR)\$	2,850.50

SUMMARY TOTALS

Total Engineering\$	23,897.49
Total WOMP\$	0.00
Total APM/AIS Work\$	
Total TMDL Work\$	
Total Capital Improvement Projects (Tax Levy)\$	
Total Improved FEMA Floodplain Modeling & Mapping (MDNR)\$	
Total improved remark roodplain wodeling & mapping (mbrity	2,030.30
TOTAL PAYABLE\$	27.909.57

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