

Item 4Ciii.  
BCWMC 4-15-21



resourceful. naturally.  
engineering and environmental consultants

Ms. Catherin Cesnik  
Bassett Creek Watershed Management Commission  
7800 Golden Valley Road  
Golden Valley, MN 55427

Page # 1  
Invoice # 23270051-2021-02  
Project # 23/27-0051  
Client # 59  
April 2, 2021

Invoice of Account with  
BARR ENGINEERING COMPANY

For professional services during the period of  
February 27, 2021 through March 26, 2021

**1000—ENGINEERING & MONITORING**

**1010—Technical Services**

Technical Services

Attend March 1 virtual meeting with BWSR staff and administrator regarding PRAP II program review; communications with Medicine Lake consultant, MPCA staff and administrator regarding scheduling a meeting about the city’s MS4 permit and BCWMC requirements, prepare for meeting (meeting was cancelled), and follow up communications with Medicine Lake consultant regarding Medicine Lake TMDL allocation question; communications with administrator and internal staff regarding new BCWMC application fee check mailing process; communications with administrator regarding status of Parkers Lake chloride project; provide Twin Lake Internal Load investigation report to administrator; communications with Metro Transit and administrator regarding SWLRT water quality design and modeling; review MPCA’s proposed MTD credit program and provide comments to MPCA and administrator; develop draft 2022 budgets for technical services, including water quality budgets (Northwood Lake, Lost Lake, Plymouth Creek biological monitoring and year 1 Plymouth Creek stream monitoring), virtual meeting with Plymouth staff and communications with Plymouth staff and TRPD staff regarding partnering on Plymouth Creek monitoring, Bassett Creek WOMP station flow measurement budget estimate, internal discussions, provide draft 2022 budgets to administrator for Budget Committee meeting, and review/begin to address Budget Committee questions (forwarded by administrator); internal communications regarding 2021 water quantity/lake level monitoring budget; prepare invoice "mock-up" with new invoice codes per Redpath and provide to administrator for review; and attend March 18 virtual meeting with administrator, Minneapolis staff, and Shingle Creek WMC consultant to discuss green stormwater infrastructure training.

James P. Herbert, Principal Engineer/Scientist 7.4 hours @ \$200.00 per hour.....	\$ 1,480.00
Karen L. Chandler, Principal Engineer/Scientist 22.3 hours @ \$185.00 per hour .....	\$ 4,125.50
Josh P. Phillips, Engineer/Scientist/Specialist II 2.0 hours @ \$115.00 per hour.....	\$ 230.00

Gregory Wilson, Engineer/Scientist/Specialist IV 2.7 hours @ \$175.00 per hour .....	\$ 472.50
Chris Bonick, Engineer/Scientist/Specialist III 9.0 hours @ \$135.00 per hour .....	\$ 1,215.00
Terri Olson, Engineer/Scientist/Specialist III 0.5 hours @ \$150.00 per hour .....	\$ 75.00
Meg Rattei, Engineer/Scientist/Specialist III 9.9 hours @ \$145.00 per hour .....	\$ 1,435.50
Technicians/Administrative.....	\$ <u>1,230.50</u>
<i>Subtotal, Technical Services.....</i>	<i>\$ 10,264.00</i>

Monthly Meeting Preparation

Communications/coordination with administrator and internal staff regarding draft/final agenda and meeting packet for March meeting; review/edit draft February meeting minutes; prepare for March Commission meeting, including review meeting packet, pre-meeting conference call with Chair Cesnik and administrator, and preparing Engineer's communications; and communications with administrator and internal staff regarding follow-up items from March Commission meeting and upcoming meeting agenda items.

James P. Herbert, Principal Engineer/Scientist 2.0 hours @ \$200.00 per hour .....	\$ 400.00
Karen L. Chandler, Principal Engineer/Scientist 13.2 hours @ \$185.00 per hour .....	\$ 2,442.00
Josh P. Phillips, Engineer/Scientist/Specialist II 0.2 hours @ \$115.00 per hour .....	\$ 23.00
Technicians/Administrative.....	\$ <u>100.00</u>
<i>Subtotal, Monthly Meeting Preparation.....</i>	<i>\$ 2,965.00</i>

WCA LGU Administration

Attend March 8 pre-application meeting regarding the City of Medicine Lake's wetland excavation project in Jevne Park and Wetland Conservation Act (WCA) requirements; provide previous file number to USACE project manager; communications with MDNR staff regarding previous MDNR communications and MDNR jurisdiction; and respond to WCA questions from Medicine Lake consultant regarding proposed project plans for Jevne Park.

Karen S. Wold, Engineer/Scientist/Specialist III 2.3 hours @ \$140.00 per hour .....	\$ <u>322.00</u>
<i>Subtotal, WCA LGU Administration.....</i>	<i>\$ 322.00</i>

TAC Preparation

Prepare for March 5 TAC meeting, including review meeting packet and communications with administrator; and review/edit draft TAC memo for March Commission meeting.

Karen L. Chandler, Principal Engineer/Scientist 1.5 hours @ \$185.00 per hour .....	\$ <u>277.50</u>
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*Subtotal, TAC Preparation*..... \$ 277.50  
**Subtotal 1010—Technical Services** ..... \$ **13,828.50**

**1020—Development/Project Reviews**

Van Heest Retaining Wall (2020-26)

Review revised retaining wall alignment at residential property in Golden Valley; and communications with applicant and city staff.

James P. Herbert, Principal Engineer/Scientist  
0.3 hours @ \$200.00 per hour ..... \$ 60.00  
Josh P. Phillips, Engineer/Scientist/Specialist II  
0.9 hours @ \$115.00 per hour ..... \$ 103.50  
*Subtotal, Van Heest Retaining Wall (2020-26)*..... \$ 163.50

2021 LTFM Sandburg Middle Sch (2020-31)

Review resubmittal; communications with applicant; and prepare and send approval letter to city staff.

James P. Herbert, Principal Engineer/Scientist  
1.9 hours @ \$200.00 per hour ..... \$ 380.00  
Josh P. Phillips, Engineer/Scientist/Specialist II  
4.5 hours @ \$115.00 per hour ..... \$ 517.50  
*Subtotal, 2021 LTFM Sandburg Middle Sch (2020-31)* ..... \$ 897.50

Plymouth Fire Station 2 Reconstr. (2020-33)

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

James P. Herbert, Principal Engineer/Scientist  
0.4 hours @ \$200.00 per hour ..... \$ 80.00  
Josh P. Phillips, Engineer/Scientist/Specialist II  
1.8 hours @ \$115.00 per hour ..... \$ 207.00  
*Subtotal, Plymouth Fire Station 2 Reconstr. (2020-33)* ..... \$ 287.00

Ridgemount Ave Improvements (2021-03)

Review grading, drainage and erosion control plans for linear project; communications with applicant; and prepare and send approval letter to Minnetonka and Plymouth staff.

James P. Herbert, Principal Engineer/Scientist  
2.3 hours @ \$200.00 per hour ..... \$ 460.00  
Karen L. Chandler, Principal Engineer/Scientist  
0.2 hours @ \$185.00 per hour ..... \$ 37.00  
Edward Anderson, Engineer/Scientist/Specialist II  
1.1 hours @ \$95.00 per hour ..... \$ 104.50  
Josh P. Phillips, Engineer/Scientist/Specialist II  
5.8 hours @ \$115.00 per hour ..... \$ 667.00  
*Subtotal, Ridgemount Ave Improvements (2021-03)*..... \$ 1,268.50

Louisiana Ave Culvert Replacement (2021-04)

Review street reconstruction and utility improvement plans; review Louisiana Avenue culvert (conveys North Branch flows) replacement plans and XSPSWMM models for conformance with BCWMC requirements; prepare review memo for March Commission meeting; communications with applicant and city staff; and prepare and send approval letter to city staff.

James P. Herbert, Principal Engineer/Scientist 2.9 hours @ \$200.00 per hour .....	\$	580.00
Karen L. Chandler, Principal Engineer/Scientist 0.8 hours @ \$185.00 per hour .....	\$	148.00
Edward Anderson, Engineer/Scientist/Specialist II 1.2 hours @ \$95.00 per hour .....	\$	114.00
Lulu Fang, Engineer/Scientist/Specialist II 0.8 hours @ \$115.00 per hour .....	\$	92.00
Josh P. Phillips, Engineer/Scientist/Specialist II 8.3 hours @ \$115.00 per hour .....	\$	954.50
Dallen Webster, Engineer/Scientist/Specialist II 2.5 hours @ \$100.00 per hour .....	\$	<u>250.00</u>
<i>Subtotal, Louisiana Ave Culvert Replacement (2021-04).....</i>	<i>\$</i>	<i>2,138.50</i>

TGK Automotive (2021-05)

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

James P. Herbert, Principal Engineer/Scientist 0.8 hours @ \$200.00 per hour .....	\$	160.00
Josh P. Phillips, Engineer/Scientist/Specialist II 2.4 hours @ \$115.00 per hour .....	\$	276.00
Technicians/Administrative.....	\$	<u>85.50</u>
<i>Subtotal, TGK Automotive (2021-05).....</i>	<i>\$</i>	<i>521.50</i>

**Subtotal, 1020—Development/Project Reviews .....\$ 5,276.50**

**1030—Non-Fee and Preliminary Reviews**

Preliminary Reviews

Run/modify BCWMC XPSWMM model to evaluate impacts of proposed SWLRT temporary dewatering (MDNR appropriation permit applications 2020-3244, 2020-3457, and 2020-3459) on Bassett Creek tunnel flows, and communications with administrator and city of Minneapolis; attend March 4 virtual meeting with consultant regarding Main Stem floodplain at Plymouth redevelopment site; prepare for and attend March 8 meeting with administrator, US Army Corps of Engineers staff, MDNR staff, city council member and city consultant regarding proposed City of Medicine Lake project work in Jevne Park, permit requirements and BCWMC requirements, follow up communications with Medicine Lake consultant regarding survey data, provide survey data to city consultant, and further follow up communications with city representatives, administrator and internal staff regarding wetland excavation and WCA questions; communications with consultant, New Hope staff, administrator and internal staff regarding tower

removal work in wetland and BCWMC requirements; and preliminary review of MNDR MPARS permit application 2021-0360 for Louisiana Ave culvert in Crystal.

James P. Herbert, Principal Engineer/Scientist 2.0 hours @ \$200.00 per hour .....	\$ 400.00
Karen L. Chandler, Principal Engineer/Scientist 4.2 hours @ \$185.00 per hour .....	\$ 777.00
Jennifer Koehler, Engineer/Scientist/Specialist IV 5.9 hours @ \$155.00 per hour .....	\$ 914.50
Lulu Fang, Engineer/Scientist/Specialist II 3.0 hours @ \$115.00 per hour .....	\$ 345.00
<i>Subtotal, Preliminary Reviews</i> .....	\$ 2,436.50

Non-Fee Reviews

*Subtotal Non-Fee Reviews*..... \$ 0.00

**Subtotal, 1030— Non-Fee and Preliminary Reviews.....\$ 2,436.50**

**1040—Commission and TAC Meetings**

Attend March 5 TAC meeting (virtual) and March 18 Commission meeting (virtual).

Karen L. Chandler, Principal Engineer/Scientist 4.9 hours @ \$185.00 per hour .....	\$ 906.50
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**Subtotal, 1040—Commission and TAC Meetings.....\$ 906.50**

**1050—Surveys and Studies**

Medicine Lake Staff Gage

Prepare for installation of new Medicine Lake staff gage, including site visit to mark for utility locate, request utility locate, communications with Plymouth staff and obtain supplies; install staff gage on March 17, including perform survey level loop; and communications with Medicine Lake representatives, administrator and Plymouth staff regarding installation of new staff gage.

James P. Herbert, Principal Engineer/Scientist 0.5 hours @ \$200.00 per hour .....	\$ 100.00
Karen L. Chandler, Principal Engineer/Scientist 1.0 hours @ \$185.00 per hour .....	\$ 185.00
Technicians/Administrative.....	\$ 1,348.50
Expenses (hardware/vehicle/band saw/generator/mileage).....	\$ 156.06
<i>Subtotal, Medicine Lake Staff Gage</i> .....	\$ 1,789.56

**Subtotal, 1050—Surveys and Studies.....\$ 1,789.56**

**1060—Water Quality/Monitoring**

General Water Quality

*Subtotal, General Water Quality*..... \$ 0.00

Sweeney Branch Monitoring Year 2

Deliver late February chloride sample to MCES lab; collect snowmelt grab sample on March 9 and monthly grab sample on March 12 and deliver samples to MCES lab for analysis; set up the monitoring station for 2021 water quality monitoring; calibrate the in-stream conductivity/temperature sensor; replace the monitoring station cell modem with a temporary one; and install, test, and repair the autosampler.

Chris Bonick, Engineer/Scientist/Specialist III 15.5 hours @ \$135.00 per hour.....	\$	2,092.50
Kallie Doeden, Engineer/Scientist/Specialist II 4.8 hours @ \$110.00 per hour .....	\$	528.00
Technicians/Administrative .....	\$	289.00
Expenses (Verizon Wireless/mileage/vehicle/meters).....	\$	<u>292.99</u>
<i>Subtotal, Sweeney Branch Monitoring Year 2 .....</i>	\$	<i>3,202.49</i>

Parkers Lake 2021 Monitoring

Communications with Three Rivers Park District staff regarding 2021 monitoring details; obtain bottles from Pace Laboratories for monitoring the AIS Suitability Analyses parameters; prepare phytoplankton and zooplankton sample containers; and courier the 2021 sample containers to TRPD staff.

Terri Olson, Engineer/Scientist/Specialist III 0.1 hours @ \$150.00 per hour .....	\$	15.00
Margaret R. Rattei, Engineer/Scientist/Specialist III 1.0 hours @ \$145.00 per hour .....	\$	145.00
Technicians/Administrative.....	\$	<u>279.00</u>
<i>Subtotal, Parkers Lake 2021 Monitoring.....</i>	\$	<i>439.00</i>

Westwood Lake 2021 Monitoring

Communications with internal staff and administrator regarding 2021 monitoring plans; schedule ice-out monitoring; and coordination with Pace Laboratories to obtain the sample bottles for April ice-out monitoring.

Karen L. Chandler, Principal Engineer/Scientist 0.5 hours @ \$185.00 per hour.....	\$	92.50
Terri Olson, Engineer/Scientist/Specialist III 0.2 hours @ \$150.00 per hour .....	\$	30.00
Margaret R. Rattei, Engineer/Scientist/Specialist III 0.8 hours @ \$145.00 per hour .....	\$	116.00
Technicians/Administrative.....	\$	<u>45.00</u>
<i>Subtotal, Westwood Lake 2021 Monitoring.....</i>	\$	<i>283.50</i>

Crane Lake 2021 Monitoring

Communications with internal staff and administrator regarding 2021 monitoring plans; schedule ice-out monitoring; and coordination with Pace Laboratories to obtain the sample bottles for April ice-out monitoring.

Terri Olson, Engineer/Scientist/Specialist III 0.2 hours @ \$150.00 per hour .....	\$	30.00
Technicians/Administrative.....	\$	<u>81.00</u>
<i>Subtotal, Crane Lake 2021 Monitoring .....</i>	<i>\$</i>	<i>111.00</i>
<b>Subtotal, 1060—Water Quality/Monitoring.....</b>	<b>\$</b>	<b>4,035.99</b>

**1070—Water Quantity**

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

Technicians/Administrative.....	\$	472.50
Expenses (mileage/vehicle).....	\$	<u>73.00</u>
<b>Subtotal, 1070—Water Quantity .....</b>	<b>\$</b>	<b>545.50</b>

**1080—Annual Flood Control Project Inspections**

<b>Subtotal, 1080—Annual Flood Control Project Inspections .....</b>	<b>\$</b>	<b>0.00</b>
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**1090—Municipal Plan Review**

<b>Subtotal, 1090—Municipal Plan Review .....</b>	<b>\$</b>	<b>0.00</b>
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**1100—Watershed Outlet Monitoring Program**

WOMP Rating Curve

Perform flow measurement at new WOMP station location; process and send data files to MCES staff; and provide flow measurement information to MCES staff.

Chris Bonick, Engineer/Scientist/Specialist III 6.0 hours @ \$135.00 per hour .....	\$	810.00
Expenses (mileage/vehicle) .....	\$	<u>59.00</u>
<b>Subtotal, 1100—Watershed Outlet Monitoring Program.....</b>	<b>\$</b>	<b>869.00</b>

**1110—Annual XP-SWMM Model Updates/Reviews**

<b>Subtotal, 1110— Annual XP-SWMM Model Updates/Reviews...</b>	<b>\$</b>	<b>0.00</b>
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**1120—TMDL Implementation Reporting**

<b>SUBTOTAL, 1120—TMDL Implementation Reporting .....</b>	<b>\$</b>	<b>0.00</b>
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<b>SUBTOTAL, 1000—ENGINEERING &amp; MONITORING .....</b>	<b>\$</b>	<b>29,688.05</b>
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**4000—OUTREACH & EDUCATION**

**4010—Publications/Annual Report**

<b>Subtotal, 4010—Publications/Annual Report .....</b>	<b>\$ 0.00</b>
<b>SUBTOTAL, 4000—OUTREACH &amp; EDUCATION .....</b>	<b>\$ 0.00</b>

**CAPITAL IMPROVEMENT PROJECTS**

DeCola Ponds - SEA School/Wildwood Park Flood Storage Project Feasibility Study (2022) (BC-2, 3, 8, 10)

Internal communications and virtual meeting with Golden Valley staff and administrator regarding public engagement goals and schedule; prepare for public open house, including revise/finalize boards, and review/edit open house communications; and prepare draft feasibility report.

Karen L. Chandler, Principal Engineer/Scientist 0.6 hours @ \$185.00 per hour.....	\$ 111.00
Erin Feehily, Engineer/Scientist/Specialist II 2.5 hours @ \$100.00 per hour.....	\$ 250.00
Jennifer Koehler, Engineer/Scientist/Specialist IV 4.7 hours @ \$155.00 per hour.....	\$ 728.50
Katelyn Turpin-Nagel, Engineer/Scientist/Specialist II 19.2 hours @ \$120.00 per hour .....	\$ <u>2,304.00</u>

<b>Subtotal, DeCola Ponds - SEA School/Wildwood Park Flood Storage Project Feasibility Study (2022) (BC-2, 3, 8, 10).....</b>	<b>\$ 3,393.50</b>
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Medley Park Stormwater Treatment Facility Feasibility Study (2022) (ML-12)

Communications with Golden Valley staff and administrator regarding public engagement event #2, including script edits, and final board development; meeting with Golden Valley staff and administrator to discuss restoration options and cost comparisons; submit jurisdictional determination request to USACE; and prepare draft feasibility report.

Karen L. Chandler, Principal Engineer/Scientist 0.3 hours @ \$185.00 per hour.....	\$ 55.50
Tyler Conley, Engineer/Scientist/Specialist II 4.7 hours @ \$100.00 per hour.....	\$ 470.00
Erin Feehily, Engineer/Scientist/Specialist II 1.5 hours @ \$100.00 per hour.....	\$ 150.00
Matt Kumka, Engineer/Scientist/Specialist III 4.7 hours @ \$130.00 per hour.....	\$ 611.00
Tyler Olsen, Engineer/Scientist/Specialist II 8.5 hours @ \$105.00 per hour.....	\$ 892.50
Katelyn Turpin-Nagel, Engineer/Scientist/Specialist II 18.3 hours @ \$120.00 per hour.....	\$ <u>2,196.00</u>

<b>Subtotal, Medley Park Stormwater Treatment Facility Feasibility Study (2022)(ML-12) .....</b>	<b>\$ 4,375.00</b>
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Schaper Pond Carp Management (SL-3)

Prepare for and meet with administrator and Golden Valley staff on March 10 to discuss carp control options; communications with Carp Solutions regarding expected results and costs of various carp control efforts and recommendations for implementation; prepare draft matrix to compare/contrast carp control options; and develop recommendations and summarize implications for costs/benefits and operation/maintenance/liability.

Karen L. Chandler, Principal Engineer/Scientist 1.8 hours @ \$185.00 per hour.....	\$ 333.00
Gregory J. Wilson, Engineer/Scientist/Specialist IV 14.7 hours @ \$175.00 per hour .....	\$ 2,572.50
<b>Subtotal, Schaper Pond Carp Management (SL-3) .....</b>	<b>\$ 2,905.50</b>

Main Stem Lagoon Dredging Project (2021) (BC-7)

Prepare draft permitting schedule; set up project folders; and internal communications.

Tyler Conley, Engineer/Scientist/Specialist II 3.1 hours @ \$100.00 per hour .....	\$ 310.00
Technicians/Administrative.....	\$ 19.50
<b>Subtotal, Main Stem Lagoon Dredging Project (2021)(BC-7).....</b>	<b>\$ 329.50</b>

**SUBTOTAL CAPITAL IMPROVEMENTS PROJECTS .....\$ 11,003.50**

**FLOOD CONTROL LONG TERM MAINTENANCE—IMPROVED FEMA FLOODPLAIN MODELING & MAPPING (MDNR)**

Improved FEMA Floodplain Modeling & Mapping (MDNR)

Develop Project Narrative

Finalize hydraulic narrative and send to MDNR staff.

Jennifer A. Koehler, Engineer/Scientist/Specialist IV 1.5 hours @ \$155.00 per hour .....	\$ 232.50
<i>Subtotal, Develop Project Narrative.....</i>	<i>\$ 232.50</i>

Community Meetings

Follow up with Crystal and Plymouth staff in response to questions; attend portion of March 5 (virtual) BCWMC TAC meeting regarding FEMA model/mapping; review upstream storage areas; attend March 9 (virtual) FEMA Flood Risk Review meeting with MDNR staff; and clean up upstream storage areas.

Karen L. Chandler, Principal Engineer/Scientist 1.5 hours @ \$185.00 per hour .....	\$ 277.50
Jennifer A. Koehler, Engineer/Scientist/Specialist IV 8.9 hours @ \$155.00 per hour .....	\$ 1,379.50
<i>Subtotal, Community Meetings.....</i>	<i>\$ 1,657.00</i>

**SUBTOTAL, FLOOD CONTROL LONG TERM MAINTENANCE—  
 IMPROVED FEMA FLOODPLAIN MODELING & MAPPING (MDNR) .....\$ 1,889.50**

**INVOICE SUMMARY**

<b>ACCOUNTING CODE</b>	<b>BUDGET LINE ITEM</b>	<b>INVOICE AMOUNT</b>
<b>1000</b>	<b>ENGINEERING &amp; MONITORING</b>	
1010	Technical Services	\$ 13,828.50
1020	Development/Project Reviews	\$ 5,276.50
1030	Non-fee and Preliminary Reviews	\$ 2,436.50
1040	Commission and TAC Meetings	\$ 906.50
1050	Surveys and Studies	\$ 1,789.56
1060	Water Quality/Monitoring	\$ 4,035.99
1070	Water Quantity	\$ 545.50
1080	Annual Flood Control Project Inspections	\$ -
1090	Municipal Plan Review	\$ -
1100	Watershed Outlet Monitoring Program	\$ 869.00
1110	Annual XP-SWMM Model Updates/Reviews	\$ -
1120	TMDL Implementation Reporting	\$ -
<b>1000</b>	<b>SUBTOTAL ENGINEERING &amp; MONITORING</b>	<b>\$ 29,688.05</b>
<b>4000</b>	<b>OUTREACH &amp; EDUCATION</b>	
4010	Publications/Annual Report	\$ -
<b>4000</b>	<b>SUBTOTAL OUTREACH &amp; EDUCATION</b>	<b>\$ -</b>
--	<b>SUBTOTAL CAPITAL IMPROVEMENT PROJECTS</b>	<b>\$ 11,003.50</b>
--	<b>SUBTOTAL FLOOD CONTROL LONG TERM MAINTENANCE— IMPROVED FEMA FLOODPLAIN MODELING &amp; MAPPING (MDNR)</b>	<b>\$ 1,889.50</b>
<b>TOTAL PAYABLE</b>		<b>\$ 42,581.05</b>

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

