

TASK ORDER No. 6i- 2022 WOMP Station Services
Pursuant to Agreement for Engineering Services
Riley Purgatory Bluff Creek Watershed District and BARR Engineering Company.
February 15, 2022

This Task Order is issued pursuant to Section 1 of the above-cited engineering services agreement between the Riley Purgatory Bluff Creek Watershed District (District) and BARR Engineering Company (Engineer) and incorporated as a part thereof.

1. Description of Services:

TASK A

Support District staff in transitioning to full responsibility for the operation and maintenance tasks related to the Purgatory Creek Monitoring Station located at Pioneer Trail in Eden Prairie (Pioneer Trail Station). The Pioneer Trail Station is enrolled in Metropolitan Council's (MCES) Watershed Outlet Monitoring Program (WOMP). As part of the WOMP, the District will work with MCES in a cooperative effort to collect flow, rainfall, and water quality data at the Pioneer Trail Station.

TASK B

Perform operation and maintenance, data management, and project management tasks related to the Purgatory Creek Monitoring Station located at Valley View Rd in Eden Prairie (Valley View Rd Station). (Note: the Valley View Rd Station will not be enrolled in MCES'S WOMP, so this station will be the sole responsibility of the District).

2. Scope of Services:

TASK A – Pioneer Trail Station

The District Engineer will provide support for District staff as they begin to assume full responsibility for the operation and maintenance tasks for the Pioneer Trail Station as requested by the MCES WOMP Coordinator and approved by the District Administrator. Support will include written and verbal communication, training, and meetings, as needed. The MCES uses a discrete auto-sampler and datalogger system to collect storm event samples and has adopted a bi-weekly grab sampling routine at this station. MCES staff sets activation levels for storm events, but expects the co-operator (i.e., District staff) to collect the storm event samples and the bi-weekly grab samples. MCES staff will continue to be responsible for conducting flow measurements and rating curve development. However, the MCES may request District staff to take a flow measurement on occasion, if MCES staff is unavailable.

District Engineer Tasks will include:

- a) Supporting District staff efforts to collect storm event samples, collect bi-weekly grab samples, perform routine equipment maintenance, coordinate with MCES, and manage data and files.

NOTE: As part of the WOMP contract, the MCES responsibilities include all laboratory work/fees associated with the sampling, data management (year-end QA/QC, summarizing, storing in database), major maintenance costs (i.e., replacement cost of equipment, subcontractor fees for repair, etc.), and project management/coordination tasks.

TASK B – Valley View Road Station

The District Engineer will perform the following operation and maintenance tasks:

- a) Supporting District staff bi-weekly grab sampling efforts, project coordination and data and file management. District staff will be responsible for grab sample collection, delivery to lab and completion of sample submission forms for the lab.
- b) Setting sample activation parameters (i.e., activation level and volume) to trigger the station's auto-sampler during storm events. Collecting storm event composite samples for significant events (i.e., rainfall > ½ in.) and delivering these samples to a certified laboratory for testing.
- c) Performing routine maintenance of the equipment at the station; including verifying/calibrating water quality sensors, clearing debris from sensors, changing out desiccants, and winterizing the station.
- d) Troubleshooting equipment issues, as needed. The amount of troubleshooting in any given year is unpredictable. Therefore, the maintenance portion of the budget has included up to 20 hours of time to troubleshoot equipment issues. If additional time beyond what has been assumed in the budget below is needed, the troubleshooting effort will be coordinated with the District Administrator. The assumed time allocated for troubleshooting equipment will not be exceeded without prior authorization by the District Administrator.
- e) Performing stage-discharge measurements for development, verification and/or updating of the rating-curve equation (i.e., the relationship between stream flow and water level that is developed based on manual measurements at a monitoring station).
- f) Downloading and reviewing monitoring data (i.e., stage, flow, conductivity, temperature, rainfall, turbidity) throughout the monitoring period; including QA/QC tasks.
- g) Year-end QA/QC and summary of all monitoring data for the station.

h) Managing and coordinating project.

Note: A certified laboratory will provide the lab work services. A budget has been included for anticipated lab fees for samples collected from the Valley View Station based on the MCES Lab’s analyte costs.

3. Deliverables:

TASK A:

The water quality, flow, and rainfall data collected at the Pioneer Trail Station will be stored in a database maintained by MCES. The District and the District Engineer will have access to this data either through the MCES website or per request to the MCES WOMP coordinator.

TASK B:

QA/QC’d water quality, flow, and rainfall data will be summarized and stored per the District Administrator’s instruction (for example, in an MS Excel, Access, or EQUIS Database).

4. Budget:

Services under this Task Order will be compensated for in accordance with the engineering services agreement and will not exceed \$27,700, without written authorization by the Administrator. (Note: the District will likely be reimbursed \$5,000 through a State Grant Agreement with MCES) Table 1 provides a summary of the anticipated cost for major tasks associated with scope of services described above. Attachment 1 provides additional detail of the anticipated cost for each task and subtask, schedule, and laboratory costs.

Table 1. Summary of Task Order 06g Anticipated Cost for Major Tasks

Task	Description	Labor Costs ¹	Other Expenses ²	Total Cost
A	Support District Staff Efforts to Operate and Maintain the Purgatory Cr. WOMP Station at Pioneer Trail in Cooperation with MCES for 2022	\$2,500	\$250	\$2,750
B	Operate and Maintain the Purgatory Cr. Monitoring Station at Valley View Rd for 2022	\$17,900	\$7,050	\$24,950
Task Order 6i Total				\$27,700

¹Labor costs will be billed on an hourly rate per time spent on each task, but will not exceed amount shown without written authorization. District staff will be responsible for monthly grab sample collection, delivery to lab and data management.

²Other expenses billed as costs incur, including purchase of new equipment, mileage, laboratory charges (if applicable), equipment rental if needed, and supplies as necessary.

5. Schedule and Assumptions Upon Which Schedule is Based

- a) TASK A: The project schedule is included as part of Attachment 1. The Pioneer Trail Station is operated and maintained year-round.
- b) TASK B: The project schedule is included as part of Attachment 1. This schedule is weather dependent; for example, a late spring and ice conditions could push back Mar-2022 tasks to April-2022.

IN WITNESS WHEREOF, intending to be legally bound, the parties hereto execute and deliver this Agreement.

**CONSULTANT
DISTRICT**

RILEY PURGATORY BLUFF CREEK WATERSHED

By _____

By _____

Its _____

Its _____

Date:

Date:

APPROVED AS TO FORM & EXECUTION

Attachment 1: Breakdown of Services for Task Order 6i including Anticipated Cost and Schedule

Task/Phase	Subtask	Description	Labor Costs ¹	Other Expenses ²	Total Cost	Schedule
Task A	1	Support RPBCWD staff as part of transition to RPBCWD assuming full responsibility for all monitoring activities (i.e. communications, meetings, training)	\$2,500.00	\$250.00	\$2,750.00	Feb to Dec-22
	Subtotals		\$2,500.00	\$250.00		
	Task A Subtotals				\$2,750.00	
Task B Operate and Maintain the Purgatory Cr. Monitoring Station at Valley View Rd.	1	Bi-weekly Grab Samples: support RPBCWD staff as part of a collaborative sampling effort and manage data/files. RPBCWD staff will typically collect the samples.	\$500.00	\$50.00	\$550.00	Mar to Dec-22
	2	Storm event samples: collect composite samples during storm events (assumes sampling begins in March and 15 sampleable storm events of > 0.5" of rain occur).	\$6,900.00	\$650.00	\$7,550.00	Mar to Nov-22
	3	Maintenance: verify/calibrate sensors, troubleshoot problem issues as necessary, prepare for monitoring season in spring, and winterize station.	\$4,000.00	\$375.00	\$4,375.00	Feb to Dec-22
	4	Rating Curve: perform stage-discharge measurements to verify rating curve is accurate and update rating curve if needed.	\$2,500.00	\$175.00	\$2,675.00	Feb to Dec-22
	5	Data management: download and review data throughout monitoring period. Year's end QA/QC tasks and data summary.	\$4,000.00	\$0.00	\$4,000.00	Feb to Dec-22
	Subtotals		\$17,900.00	\$1,250.00		
	Task B - Subtotals				\$19,150.00	
Task B Anticipated Laboratory Testing Costs for Valley View Station	Analyte		Lab Test Cost	No. of Samples	Total Cost	Budgeting
	Alkalinity		\$13.50	19	\$256.50	
	Bacteria, E. Coli		\$28.25	24	\$678.00	
	Carbon, Total Organic		\$18.00	19	\$342.00	
	Chemical Oxygen Demand		\$9.75	15	\$146.25	
	Chloride		\$15.75	39	\$614.25	
	Chlorophyll-a		\$15.50	24	\$372.00	
	Dissolved Phosphorus		\$15.25	39	\$594.75	
	Hardness		\$12.00	19	\$228.00	
	Metals		\$36.00	4	\$144.00	
	Nitrogen, Ammonia		\$8.25	39	\$321.75	
	Nitrogen, Kjeldahl and Total Phosphorus		\$15.25	39	\$594.75	
	Nitrogen, Nitrate+Nitrite		\$7.75	39	\$302.25	
	Phosphorus, orthophosphate		\$7.75	39	\$302.25	
	Solids, Total and Volatile Suspended		\$12.25	39	\$477.75	
	Sulfate		\$13.50	19	\$256.50	
Turbidity		\$8.25	15	\$123.75		
Lab Testing Cost Subtotal				\$5,800.00		
Task Order 6i Total					\$27,700.00	

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²Other expenses billed as costs incur, including purchase of new equipment, mileage, equipment rental if needed, and supplies as necessary.