



TASK ORDER FOR ENGINEER-OWNER AGREEMENT

Task Order No. 10

This Task Order is entered into and authorized by Owner this _____ day of August 2020, by and between City of Republic, Missouri (hereinafter called OWNER) and Burns & McDonnell Engineering Company, Inc. (hereinafter called ENGINEER).

The parties agree that the ENGINEER shall perform the following Services in accordance with the terms of the Engineer-Owner Agreement dated February 6th, 2018:

Scope of Services:

- A. Engineering services related to preparation of preliminary design for CIP No. 9 from the Existing and Future Condition Assessment Technical Memorandum dated January 14, 2020.
- B. Engineering services related to preparation of conceptual design for storage solutions in the collection system not previously considered in the Existing and Future Condition Assessment Technical Memorandum dated January 14, 2020.
- C. Engineering services related to preparation of final design of approved wastewater improvements, support in coordinating state revolving loan fund application, and participation in public outreach meetings associated with state revolving loan fund requirements. Task Order 10, Exhibit B (attached) provides a defined scope of services for this Task Order. Design will include the following from the Wastewater Treatment Plant Technical Memorandum by Burns & McDonnell dated January 14, 2020:
 - 1. Headworks: screening, grit removal, wet weather pumping
 - 2. Secondary Treatment Phase 1: rehabilitation of Aeration Complex No. 2, expansion of selector basin, construction of the fourth final clarifier, and chemical feed
 - 3. Secondary Treatment Phase 2: rehabilitation of Aeration Complex No. 1
 - 4. Tertiary Filtration: retrofit existing traveling bridge sand filters with disc filter technology
 - 5. Disinfection: replace existing medium pressure ultraviolet disinfection with high pressure low output technology in existing chlorine contact basins
 - 6. Solids Handling: addition of a fourth aerobic digester and sludge dewatering facility adjacent to new Administration Building
 - 7. Administration Building: include control room, meeting/break room, restroom, shower, laundry, office, storage, electrical room, process area, and covered dumpster area

Compensation:

A. Amount of Payment:

- 1. For Services performed, OWNER shall pay ENGINEER as follows:
 - a. For time spent by personnel, payment at the hourly rates indicated in the attached Exhibit C, "Schedule of Hourly Professional Service Billing Rates" Form BMR920. Such rates include overhead and profit. The rate schedule is effective to December 31, 2020, and will be increased annually thereafter.

- b. For photocopy, telephone, fax, normal computer usage and computer-aided drafting (CAD), and mail, a technology charge per labor hour as specified on the rate schedule in effect at the time the Service is provided.
 - c. For expenses incurred by ENGINEER, such as authorized travel and subsistence, including airfare, food, lodging, automobile rental, commercial services, and incidental expenses, the cost to ENGINEER plus ten percent (10%).
 - d. For reproduction, company vehicle usage, and testing apparatus, amounts will be charged according to the ENGINEER's standard rates in effect at the time the Service is provided.
 - e. For Services rendered by other firms or individuals as subcontractors to ENGINEER, including but not limited to surveying, real property descriptions, soil borings, subsurface investigations, laboratory testing, field quality control tests, environmental data base search, photos, or other activities required or requested by OWNER, the same will be billed at the cost to ENGINEER plus ten percent (10%). Expenses incurred by such outside ENGINEERS in service to OWNER shall be reimbursable in accordance with 1.c. above.
- 2. Total payment for the Scope of Service described herein is not to exceed Two Million Three Hundred Seventy-Seven Thousand Five Hundred Dollars (\$2,377,500.00) which amount shall not be exceeded without prior written consent of OWNER.
 - 3. For additional, reduced, or changed Scope of Services, the amount of payment shall be adjusted on a mutually agreeable lump sum basis.

B. Statements:

- 1. Monthly statements will be submitted by ENGINEER to OWNER. Statements will be based on ENGINEER's estimated percent of Services completed at the end of the preceding month.
- 2. Statements will set forth: hours worked by each person, total hours worked and total labor billing, and a summary of expenses and charges. Upon request, documentation of reimbursable expenses included in the statement will be provided.

Time of Service:

- A. ENGINEER will proceed with providing the services set forth herein within approximately 10 days of the execution of this Task Order. It is anticipated that these services will be completed within approximately 760 days of the execution of this task order.
- B. Completing the services within the above time frame is contingent upon timely receipt of required information, approval and/or reviews.



Other Terms:

A. The terms of this Task Order supersede any contrary terms of the Engineer-Owner Agreement.

IN WITNESS WHEREOF, the parties have made and executed this TASK ORDER as of the day and year first above written.

OWNER: City of Republic, Missouri

**ENGINEER: Burns & McDonnell
Engineering Company, Inc.**

By: _____

Name: _____

Title: _____

By: _____

Name: Breck R. Washam, P.E.

Title: Vice President



Exhibit B – Task Order No. 10

Scope of Services - Wastewater Treatment Facility Phase 1 Services

9.1 Project Management and Coordination

- 9.1.1 ENGINEER will provide Administrative Assistance in the form of Project Management and Coordination as described in paragraph 3.1.4 as follows:
 - 9.1.1.1 Task Kick-Off Meeting – ENGINEER shall prepare agenda, minutes and host kick-off meeting for scope of services within Task Order No. 10. Kick off meeting to coordinate project goals, preferred communications, and schedule with the project team.
 - 9.1.1.2 Work Task Coordination – ENGINEER to provide general project management activities, including oversight and coordination of the contract and budget, schedule, quality control, and monthly invoice preparation for a maximum period of time not to exceed of 760 calendar days.
 - 9.1.1.3 ENGINEER shall develop a formal Request for Information (RFI) Log that communicates data request to and from OWNER and ENGINEER.
- 9.1.2 OWNER has designated the following person(s) to act as OWNER’S representative with respect to the services to be performed under this Task Order as described in paragraph 4.7:
 - 9.1.2.1 City Administrator: David Cameron
 - 9.1.2.2 Public Works Director: Andrew Nelson
 - 9.1.2.3 City Engineer: Garrett Brickner
 - 9.1.2.4 Wastewater Superintendent: Craig Lusby

9.2 Data Acquisition

- 9.2.1 ENGINEER will Obtain Services of Others with respect to both the Survey and Geotechnical scope of work as described in paragraph 3.1.5 as follows:
 - 9.2.1.1 ENGINEER to subcontract for completion of boundary and topographic survey of the OWNER site located at 915 North West Avenue Republic, Missouri. Survey will be initiated during the Preliminary Design.
 - 9.2.1.2 ENGINEER to subcontract for completion of geotechnical investigation including geophysical investigation using an MASW (Multi-channel Analysis of Surface Waves) seismic survey and eight (8) soil borings to a depth fifty (50) feet below existing grade or auger refusal. A geotechnical report will be prepared documenting existing soil types and groundwater levels. Laboratory tests will be completed to classify soils. The report will contain recommendations for construction considerations including dewatering, foundation type and depth, backfill materials, and compaction requirements. Geotechnical investigation will be initiated during the Preliminary Design. Karst features including voids and sink holes have been identified in the vicinity of the site. Investigation will lessen the risk of unknown karst features beneath the footprint of new structures, but not alleviate all risk. If karst is encountered that results in a change of scope related to foundation or structural requirements, additional scope, schedule, and fee may be necessary.

9.3 Wastewater Treatment Plant Basis of Design Report (Preliminary Design)

Design will include the following from the Wastewater Treatment Plant Technical Memorandum (TM) by Burns & McDonnell dated January 14, 2020:

- Headworks: screening, grit removal, wet weather pumping
- Secondary Treatment Phase 1: rehabilitation of Aeration Complex No. 2, expansion of selector basin, construction of the fourth final clarifier, and chemical feed
- Secondary Treatment Phase 2: rehabilitation of Aeration Complex No. 1
- Tertiary Filtration: retrofit existing traveling bridge sand filters with disc filter technology
- Disinfection: replace existing medium pressure ultraviolet disinfection with high pressure low output technology in existing chlorine contact basins
- Solids Handling: addition of a fourth aerobic digester and sludge dewatering facility adjacent to new Administration Building
- Administration Building: include control room, meeting/break room, restroom, shower, laundry, office, storage, electrical room, process area, and covered dumpster area

Following completion of improvements, Wastewater Treatment Plant capacity will be 4.1 million gallons per day (MGD).

All quantities of equipment, redundancy, and treatment capacity shall be per the TM. Design shall include all ancillary systems and structures necessary for proper functioning of the improvements.

ENGINEER will coordinate and participate in up to four (4) wastewater treatment plant site visits to gather information on proposed equipment and discuss operations. Maximum hours for plant site visits will not exceed forty eight (48) hours.

9.3.1 Upon approval of the Facility Plan (Wastewater Treatment Plant Evaluation) by the Missouri Department of Natural Resources (MDNR) and the OWNER, ENGINEER will proceed with Preliminary Design Services as described in Paragraph 2.4 of the Professional Services Agreement (Agreement) with the following modifications. 2.4.1 shall have the following language added:

- 9.3.1.1 Engineering for Preliminary Design Services will include documentation of basis of design, codes and standards review, establishing a Contract Drawing and specification list for final design and the following engineering discipline specific deliverables:
- 9.3.1.2 Architectural: basic floor plans, materials of construction, elevation and section drawings. This scope of work includes up to three Architectural renderings, as listed in paragraph 3.1.5 of the Professional Services Agreement (Agreement). Professional renderings and models submitted to OWNER will be provided for review purposes throughout the design process. Renderings and models will not be provided for construction purposes.
- 9.3.1.3 Electrical: coordinate site layout with electrical distribution; develop conceptual one-line diagram; prepare preliminary load calculation; prepare preliminary

- control system architecture; develop preliminary process instrumentation diagram (PID) based on process flow diagram; prepare preliminary I/O list; establish supply and utilization voltage; size major electrical equipment.
- 9.3.1.4 Mechanical: develop U-value calculations and heat load calculations; establish required ventilation rates for new buildings; size equipment; provide general arrangement of equipment; develop equipment schedule and sequence of operation.
- 9.3.1.5 Process: document capacity and process design criteria; develop process flow diagrams for liquid and solid stream process; include process-level process and instrumentation diagrams; establish hydraulic profile; develop general site layout and yard piping corridors; draft preliminary control description.
- 9.3.1.6 Structural: develop preliminary foundation plans; preliminary framing plans, preliminary roof plans.
- 9.3.1.7 Civil Site: establish general location of new facilities; identify laydown areas; preliminary grading plan.
- 9.3.2 In accordance with 2.4.2 and 2.4.3 of the Professional Services Agreement, an updated opinion of probable cost will be provided along with three (3) approval copies of the preliminary design documents at the completion of the preliminary design.
- 9.3.3 Up to three (3) progress meetings will be held at the OWNER's facilities during the course of the Preliminary Design and will be attended by the Project Manager and one engineer from the ENGINEER's project team.

9.4 Wastewater Treatment Plant Phase 1 (Final) Design

- 9.4.1 Upon approval of the Wastewater Treatment Plant Basis of Design Report by the OWNER, ENGINEER, and Missouri Department of Natural Resources will proceed with Final Design Services as described in paragraph 2.5 of the Professional Services Agreement. Changes initiated by the OWNER following approval of the Basis of Design Report may result in additional schedule and fee; all changes will be documented by ENGINEER.
- 9.4.2 Engineering for Final Design will include development of Contract Drawings in support of the Bid Documents as described in paragraph 2.5.1 of the Professional Services Agreement or Progressive Design Build as described in paragraph 3.4 of the Professional Services Agreement. The final design will include discipline specific Contract Drawings completed to a level adequate to support a Design-Bid-Build or Design Build form of project execution:
- 9.4.2.1 Architectural
 - 9.4.2.2 Electrical
 - 9.4.2.3 Mechanical
 - 9.4.2.4 Process
 - 9.4.2.5 Structural
 - 9.4.2.6 Civil
- 9.4.3 In accordance with 2.5.3 and 2.5.4 of the Professional Services Agreement, an updated opinion of probable cost will be provided along with three (3) approval copies of the Contract Drawings.

- 9.4.4 Up to three (3) progress meetings will be held at the OWNER's facilities during the course of the Final Design and will be attended by the Project Manager and one engineer from the ENGINEER's project team.

9.5 State Revolving Loan Fund (SRF) Fund and Permitting Support

- 9.5.1 ENGINEER will provide Grant and Loan Assistance as described in paragraph 3.1.1 of the Professional Services Agreement as follows (all permit fees will be paid by OWNER):
 - 9.5.1.1 Assist with completion of the Clean Water State Revolving Loan Fund (SRLF) Application Form (MO 780-1951).
 - 9.5.1.1.1 Assist with completion of Parts 1-12 with support from the OWNER as required.
 - 9.5.1.1.2 Assist with provision of "Energy Conservation Plan" in part 13. The deliverable will be a technical memorandum addressing energy conservation aspects of the project.
 - 9.5.1.1.3 Assist with provision of "Fiscal Sustainability Plan" in Part 3 and further detailed in 9.2.2 of this scope of work.
 - 9.5.1.1.4 Assist with completion of the "Green Project Reserve (MO 780-2530)" form with support from the OWNER as required. The deliverable will be a technical memorandum addressing green elements of the project.
- 9.5.2 Provide services associated with completion of the Facilities Plan Submittal Checklist parts 1 through 7 including the following:
 - 9.5.2.1 Part 5 - Department of Natural Resources' State Historic Preservation Office (National Historic Preservation Act, Section 106)
 - 9.5.2.2 Part 5 - Indian Tribes (National Historic Preservation Act, Section 106)
 - 9.5.2.3 Part 5 - Army Corps of Engineers
 - 9.5.2.4 Part 5 - Department of Natural Resources, Historic Preservation Office
 - 9.5.2.5 Part 5 - Department of Conservation
 - 9.5.2.6 Part 5 - United States Fish and Wildlife
 - 9.5.2.7 Part 5 - Department of Natural Resources' Missouri Geological Survey (lagoon collapse potential and receiving stream determination)
 - 9.5.2.8 Part 5 - Federal Assistance Clearinghouse
 - 9.5.2.9 Part 5 - Department of Natural Resources' Division of State Parks
 - 9.5.2.10 Part 6 - Public Meetings for Environmental Information Document per 10 CSR 20-4.050 (4)(B)2
- 9.5.3 Complete the following forms with assistance as necessary from OWNER associated with antidegradation review, treatment plant operating permit and construction permit (all permit fees will be paid by OWNER):
 - 9.5.3.1 Submit Antidegradation Review / Summary Request Form (MO 780-2805). Following, submit Antidegradation Report and associated Antidegradation Summary Path A: Tier 2 – Non-Degradation Mass Balance Form (MO 780-2872) or Antidegradation Summary Path B: Tier 2 – Minimal Degradation Form (MO 780-2022).

- 9.5.3.2 Form B2 – Application for Operating Permit for Facilities that Receive Primarily Domestic Waste and have a Design Flow More than 100,000 Gallons Per Day (MO 780-1805).
- 9.5.3.3 Application for Construction Permit – Wastewater Treatment Facility (MO 780-1289).
- 9.5.3.4 Statement of Work Completed (MO 780-2155).
- 9.5.4 Provide up to forty (40) hours of technical support pertaining to the City of Republic's Administrative Order on Compliance (AOC) that will take the place of their existing Voluntary Compliance Agreement. The OWNER has retained the services of others (Stinson LLP) to provide legal services and negotiate the AOC; ENGINEER will provide technical support to Stinson LLP as directed by the OWNER.
- 9.5.5 Support will be provided to develop a construction Stormwater Pollution Prevention Plan (SWPPP), Notice of Intent (NOI), and Erosion and Sediment Control Plan. A desktop study of wetlands threatened and endangered species, and cultural resources will also be provided. Support for other permits can be provided as a separate Task Order (if required). Effort for the following is specifically excluded from this Task Order: on site wetland surveys and/or delineations; floodplain determination, modeling, and/or FEMA map revisions; gas/electric utility crossing permitting; dam studies and/or reports; tree surveys and/or reports; and on site threatened and endangered species studies and/or reports. Based on the project scope and existing site conditions, it is possible that a 401/404 Permit may be required from the U.S. Army Corps of Engineers. This will be confirmed during submittal of the sign-off request required for the SRF loan application. Effort to obtain a 401/404 Permit can be provided as a separate Task Order (if required).

9.6 Wastewater Collection System (CIP #9) Preliminary Design

ENGINEER will provide a preliminary design, as described in Section 2.4, for CIP #9 as identified in the Burns & McDonnell report titled *"Existing & Future Conditions Assessment"* dated January 2020.

- 9.6.1 ENGINEER will proceed with Preliminary Design Services as described in Paragraph 2.4 of the Professional Services Agreement (Agreement) with the following modifications. 2.4.1 shall have the following language added:
- 9.6.2 The preliminary design will consider the conceptual alignment as shown in the "Existing and Future Conditions" assessment to complete an initial review of property ownership and available Right-of-Way (ROW) information. The ENGINEER and OWNER will complete an on-site field walk for up to three (3) potential lift station locations, gravity sewer and forcemain alignments.
- 9.6.3 The ENGINEER will prepare and issue three (3) copies of the Pump Station Site Assessment Technical Memorandum (TM) to the OWNER for review. This TM will outline the property acquisition requirements for the new pump station along with necessary staging and laydown areas during construction. Electrical requirements including proximity to 3-phase power supply, required easements for running new power lines, and back-up generator options or a secondary power feed for the proposed 3.75 MGD pump station will be evaluated. Up to three (3) Pump Station sites may be considered and will include an evaluation of the total

tributary land area that could be served by the pump station. An Opinion of Probable Construction Costs (OPCC) will be prepared to identify cost differences between each of the sites. ENGINEER will look at cost and non-cost factors and rank the suitability of each site with a numerical scoring system to assist the OWNER in selecting a site for the new pump station.

- 9.6.4 Based on the selected pump station site, the ENGINEER will prepare and issue three (3) copies of the Alignment Alternatives Technical Memorandum. This TM will include up to three (3) alignment alternatives and will consider the evaluation of approximately 14,600 lineal feet of proposed 18-inch gravity sewers and 14,900 lineal feet dual 8-inch and 16-inch forcemain. ENGINEER will look at cost and non-cost factors and rank the suitability of each alignment with a numerical scoring system to assist the OWNER in selecting a site for the new pump station. Alignment alternatives will evaluate constructability, easement and ROW requirements, and proposed construction technologies for each of the alternatives considered.
- 9.6.5 ENGINEER will Obtain Services of Others with respect to both the Survey and Geotechnical scope of work as described in paragraph 3.1.5 of the Professional Services Agreement as follows:
 - 9.6.5.1 ENGINEER to subcontract for completion of aerial orthomosaic imagery and survey control for the proposed forcemain and gravity sewer alignment. This survey scope will provide information to establish a ground surface model to determine constructability concerns and aid in developing vertical profiles for the alignment alternatives. Survey services as described herein will be initiated during the Preliminary Design. Additional topographic survey will be required for preparation of Final Design deliverables.
 - 9.6.5.2 ENGINEER to subcontract for completion of an exploratory geotechnical investigation including one (1) soil borings at up to three (3) proposed pump station sites to a depth fifty (50) feet below existing grade or until auger refusal. No geotechnical borings or investigations for the forcemain or gravity sewer alignments are included in the Preliminary Design. A geotechnical report will be prepared documenting existing soil types and groundwater levels. Laboratory tests will be completed to classify soils. Additional geotechnical work will be required as part of the final design efforts at a later time. Geotechnical investigation will be initiated during the Preliminary Design. Karst features including voids and sink holes have been identified in the vicinity of the site.
- 9.6.6 ENGINEER shall prepare and issue three (3) copies of the Preliminary Design Report (PDR) following the completion of the Pump Station Site Assessment TM and the Alignment Alternatives TM. The PDR will summarize the recommendations and provide overall design requirements, site acquisition requirements, constructability concerns and construction technologies that are recommended including a revised OPCC for the project including the pump station, gravity sewers and forcemains.

9.7 Peak Wet Weather Storage Feasibility Study

- 9.7.1 ENGINEER will complete a Peak Wet Weather Storage Feasibility Study. This study will be prepared in accordance with paragraph 2.2 of the Professional Services Agreement but shall include the following additions.

- 9.7.1.1 Site Selection Evaluation: the ENGINEER will complete a review of the existing conditions simulation modeling completed as part of the *“Existing & Future Conditions Assessment”* to determine potential peak wet-weather storage locations. Site alternatives will consider benefits to reducing the scope of Capital Improvement Projects and optimizing the potential for future community growth. The ENGINEER will present alternatives for consideration to OWNER for review and consideration. OWNER will provide up to three (3) preferred locations for evaluation.
- 9.7.1.2 Hydraulic Review: The ENGINEER will proceed with one (1) design storm simulation and one (1) long-term extended period simulations to determine possible system storage requirements at the one (1) OWNER selected locations. Peak wet weather storage will be evaluated against the 5-year, 24-hour design storm as well as an extended period simulation to consider the model predicted overflow occurrences considering a regional long term rainfall record.
- 9.7.2 Planning Level Alternatives Evaluation Workshop: The workshop will be attended by the Project Manager and one (1) engineer from the ENGINEER’s project team.
 - 9.7.2.1 The ENGINEER will prepare a “Planning Level Alternatives Evaluation workshop for the OWNER summarizing the results of the hydraulic review and discussing general consideration (tank types, pump station configurations, power requirements, SCADA, site configurations, etc.). The purpose of the workshop is to obtain enough information to develop a conservative footprint for the facility, access and construction needs in support of land acquisition and siting assessment.
 - 9.7.2.2 Peak Wet Weather Feasibility Study: The ENGINEER will prepare and issue three (3) copies of the Study to the OWNER. The Study will provide an overview of the hydraulic results, impacts to existing Capital Improvement Projects, and results of the Preliminary Site assessment for the OWNER authorized alternatives. The Feasibility Study will not provide survey and geotechnical investigations or an Opinion of Probable Construction Costs.

Responsibilities of the OWNER:

1. Refer to Section 4 of the Professional Services Agreement.

EXHIBIT C

Schedule of Hourly Professional Service Billing Rates

Position Classification	Classification Level	Hourly Billing Rate
General Office *	5	\$64.00
Technician *	6	\$81.00
Assistant *	7	\$93.00
	8	\$129.00
	9	\$151.00
Staff *	10	\$175.00
	11	\$189.00
Senior	12	\$213.00
	13	\$237.00
Associate	14	\$245.00
	15	\$249.00
	16	\$252.00
	17	\$257.00

NOTES:

1. Position classifications listed above refer to the firm's internal classification system for employee compensation. For example, "Associate", "Senior", etc., refer to such positions as "Associate Engineer", "Senior Architect", etc.
2. For any nonexempt personnel in positions marked with an asterisk (*), overtime will be billed at 1.5 times the hourly labor billing rates shown.
3. Project time spent by corporate officers will be billed at the Level 17 rate plus 25 percent.
4. For outside expenses incurred by Burns & McDonnell, such as authorized travel and subsistence, and for services rendered by others such as subcontractors, the client shall pay the cost to Burns & McDonnell plus 10%.
5. A charge will be applied at a rate of \$9.95 per labor hour for technology usage, software, hardware, printing & reprographics, shipping and telecommunications. Specialty items are not included in the technology charge.
6. Monthly invoices will be submitted for payment covering services and expenses during the preceding month. Invoices are due upon receipt. A late payment charge of 1.5% per month will be added to all amounts not paid within 30 days of the invoice date.
7. The services of contract/agency and/or any personnel of a Burns & McDonnell subsidiary or affiliate shall be billed to Owner according to the rate sheet as if such personnel is a direct employee of Burns & McDonnell.
8. The rates shown above are effective for services through December 31, 2020, and are subject to revision thereafter.