

**EXHIBIT A
(SCOPE OF WORK)**

GARVER agrees to perform basic engineering services in connection with the City of Independence Missouri's, Municipal Services, Rock Creek Wastewater Treatment Plant (RCWWTP) Clarifier Rehabilitation as hereinafter stated, in accordance with the stipulations in this agreement. Generally, the scope of services includes design, bidding services, and construction support services. The planned improvements include rehabilitation of the existing primary clarifiers and generally include the following:

- (a) Primary Clarifiers Rehabilitation
 - 1) Replace clarifier mechanism for the four (4) existing primary clarifiers.
- (b) Scum Relief and Classification at the Thickening Facility
 - 1) Install a telescoping valve at the thickening basin's scum collection box
 - 2) Install a scum classifier and a scum conveyor in the solids handling building
- (c) Site Civil Improvements
 - 1) Install yard piping for interconnecting the new telescoping valve and the new scum classifier.
- (d) Site Electrical Improvements
 - 1) Site electrical improvements as needed to support improvements herein.

The following Tasks 1-4 are included in this contract:

I. TASK 1 - PROJECT MANAGEMENT

1.1 GARVER will prepare for and conduct a project kickoff meeting with the Owner. The kickoff meeting will include the following:

- (a) Develop a project management plan, including project objectives, project deliverables, project communication protocol, project schedule, project documentation, and work plan.
- (b) Prepare and present a request for information to the Owner prior to the project kickoff meeting.
- (c) Prepare kickoff meeting minutes that document discussions and action items.

1.2 GARVER will also perform the following:

- (d) Conduct internal reviews of deliverables with the comments incorporated prior to delivery to Owner.
- (e) Provide project planning and scheduling including meeting with Owner as required to coordinate the planning and scheduling tasks of the project.
- (f) Provide the Owner with monthly project status reports including progress on work tasks and schedule throughout the project.
- (g) Submit to the Owner detailed monthly invoices.

2 TASK 2 - PRELIMINARY DESIGN

The Preliminary Design phase submittal will include a preliminary design report (PDR) documenting the design criteria, preliminary drawings, and an opinion of probable construction cost (OPCC) within -30% to +30% accuracy range of expected construction cost. The PDR will include the following sections:

- Executive Summary
- Overall Project Design Criteria
- Existing Primary Clarifiers Rehabilitation
- Scum Transfer and Classification
- Settleability Review (See Task 4)

- Construction Sequencing and Constraints
- Opinion of Probable Construction Cost
- Equipment Cut Sheets
- 30% Drawings

The preliminary design phase will represent approximately 30 percent of final construction contract plans. This submittal will not include technical specifications or “front end” contract documents. Owner comments will be discussed at a Preliminary Design Workshop. Garver will incorporate comments from the Owner on the Preliminary Design in the Final Design.

2.1 Preliminary Design Workshop

Following submission of the draft Preliminary Design Report, GARVER will lead and participate in a workshop. The workshop will be held at the Owner’s office and major items of discussion will include:

- (a) Review major equipment selection.
- (b) Review of preliminary piping and instrumentation diagrams (P&IDs).
- (c) Review of the preliminary site plan and facility layouts.
- (d) Review proposed construction sequencing.
- (e) Review 30% OPCC.

2.2 Deliverables

This task will include the following deliverables:

1. PDF format of Draft and Final Preliminary Design Report.
2. Five hard copies of draft Preliminary Design Report with half size drawings.
3. One (1) final copy of the final Preliminary Design Report to Missouri Department of Natural Resources (MDNR). The submittal to MDNR is for reference only and is not anticipated to require revisions.

3 TASK 3 - FINAL DESIGN

During the final design phase of the project, GARVER will conduct final designs to prepare construction plans and specifications for one (1) construction contract, including final construction details, final quantities, special provisions, and OPCC. The final design phase is anticipated to have three major submittals: a 60%, 90%, and 100%, and an appropriate design progression allowance, bidding contingency, and escalation to midpoint of construction will be included in the OPCC and based upon the level of design.

3.1 Drawings and Specifications

Based upon the results of the approved preliminary design by the Owner, GARVER will develop the detailed plans and specifications as a part of the Final Design for a single construction contract. Garver will provide technical specifications, and the Owner will obtain bids. GARVER will utilize Engineers Joint Council Documents Committee (EJCDC) standard documents as a base for developing the project’s front-end documents. EJCDC’s standard General Conditions shall be utilized with edits being provided by the Supplementary Conditions. Multiple design scenarios or bid packages and/or pre-purchased equipment packages are not included as part of the level of effort provided with this agreement.

3.2 Contract Documents

The Contract Documents will consist of drawings and specifications that set forth requirements for construction of the improvements, and shall include proposal forms, notice to bidders, bid forms, bond forms, and other information as required by the Owner to competitively bid the work. GARVER’s standard contract forms including documents from the Engineers Joint Contract Documents Committee (EJCDC) will be used, along with GARVER’s standard drawing format and technical specifications. Standard forms required by the funding source will also be included as necessary.

3.3 MDNR Construction Permit

GARVER will prepare and submit a MDNR NPDES Permit Application for a construction permit only. The Owner will pay for advertisement costs (proof of publication) outside this agreement. Garver will request Interim Authority from the MDNR Director to expedite permitting.

3.4 Construction Sequencing Review and Plan

GARVER will review potential construction sequencing and the overall approach to project implementation to minimize disruption of the WWTF operation during construction. This review will occur at the Design Submittal Workshops.

3.5 Design Submittal Workshops

GARVER will lead a review workshop for two (2) final design phases: 60% and 90%. These workshops will be held at the Owner's office to solicit comments and feedback from the Owner.

3.6 Deliverables

This task will include the following deliverables:

- (a) PDF copies at 60%, 90%, & 100%
- (b) 60% plans, specifications, and OPCC:
 - 1) Three (3) copies of specifications and three (3) half size drawings to the Owner.
 - 2) One (1) copy of specifications and one (1) full size drawing set to MDNR.
- (c) 90% plans, specifications, and OPCC:
 - 1) Three (3) copies of specifications and three (3) half size drawings to the Owner.
 - 2) One (1) copy of specifications and one (1) full size drawing set to MDNR.
- (d) 100% plans, specifications, and OPCC:
 - 1) Five (5) copies of specifications, three (3) half size drawings, two (2) full size drawings and one (1) electronic PDF copy of plans and specs to the Owner.
 - 2) One (1) copy of specifications and one (1) full size drawing set to MDNR

4 TASK 4 – SLUDGESETTLABILITY REVIEW

This task will accomplish the following:

4.1. Existing System Review

GARVER will research, collect, and review data on the existing system including, but not limited to, the following:

- a) Previous master plans, studies, and reports
- b) Existing plans
- c) Performance history for processes
- d) Equipment maintenance records and operations and maintenance (O&M) manuals
- e) Microscope images taken over past three years of the activated sludge
- f) Other data and materials

4.2. Influent Wastewater Flow and Characteristics Review and Loading Assessment

GARVER will obtain existing wastewater quality characteristics and wastewater loads from City, including but not limited to the following:

- a) Review five years of historical data for carbonaceous biochemical oxygen demand (CBOD), ammonia nitrogen (NH₃-N), total phosphorus (T-P), total suspended solids (TSS), effluent dissolved oxygen (DO), fecal coliform bacteria, and pH. This will include all recorded data and sampling locations at the plant. The City will furnish the data in Excel format.

- b) Review five years of historical industrial flow data for biochemical oxygen demand (BOD), ammonia nitrogen (NH3-N), total phosphorus (T-P), total suspended solids (TSS), and pH if available. The City will furnish the data in Excel format.
- c) Review five years of operational data including mixed liquor suspended solids concentration at the aeration basin as well as data collected at the thickening and dewatering facilities
- d) Document and review non-permit related sampling events.

Upon receiving the data requested, Garver will begin analyzing the information to identify trends, deficiencies, or anomalies. Garver will review and determine concentrations (mg/L) and loads (lbs/day) to be used in evaluation of the existing activated sludge system.

4.3. Operational Assessment

GARVER will conduct an operational assessment based on capacity of the existing primary and secondary treatment trains at the RCWWTP as compared to the influent flow and loadings. The historical influent and primary effluent data will be utilized to investigate the potential reasoning for sludge settling issues at the plant. The operation of the solids handling facility will also be investigated and reviewed. Recommendation(s) will be provided to address the sludge settleability issue.

4.4. As part of the 30% PDR a Settleability Review, will be developed by GARVER describing historical data review, flow and loadings, and findings of the operational assessment.

4.5. GARVER will review the findings from the Sludge Settleability Review in the 30% workshop.

The following Tasks 5-8 are not included in this contract and are considered Extra Work but can be included via an amendment or supplemental contract if agreeable to both parties.

5 TASK 5 - BIDDING SERVICES

This task will accomplish the following:

5.1 Bidding Assistance

The scope of services assumes the bidding period for prequalified bidders is 30 calendar days. During the bidding period phase of the project, GARVER will:

- (a) Prepare and submit Advertisement for Bids to newspaper(s) for publication as directed by the Owner. Owner will pay advertising costs outside of this contract.
- (b) Post advertisement for bids, construction contract documents, and any associated information to GARVER's online plan room for download by prospective bidders (at an appropriate cost for handling).
- (c) Support the contract documents by preparing addenda as appropriate and posting on GARVER's online plan room.
- (d) Participate in a pre-bid meeting.
- (e) Prepare pre-bid meeting minutes. Following Owner authorization, post the pre-bid meeting minutes with attendance record on GARVER's online plan room.
- (f) Participate and chair a construction site tour by interested pre-bid meeting attendees and other interested parties.
- (g) Attend the bid opening.
- (h) Prepare bid tabulation.
- (i) Evaluate bids and recommend award.
- (j) Attend and participate in reporting recommendation of award to the Commission.
- (k) Prepare construction contracts.
- (l) Prepare conformed documents.

6 TASK 6 - CONSTRUCTION ADMINISTRATION SERVICES

During the construction phase of work, GARVER will accomplish the following:

- (a) Issue a Notice to Proceed letter to the Contractor and prepare and attend preconstruction meeting.
- (b) Evaluate and respond to construction material submittals and shop drawings. Corrections or comments made by GARVER on the shop drawings during this review will not relieve Contractor from compliance with requirements of the drawings and specifications. The check will only be for review of general conformance with the design concept of the project and general compliance with the information given in the contract documents. The Contractor will be responsible for confirming and correlating all quantities and dimensions, selecting fabrication processes and techniques of construction, coordinating his work with that of all other trades, and performing his work in a safe and satisfactory manner. GARVER's review shall not constitute approval of safety precautions or constitute approval of construction means, methods, techniques, sequences, procedures, or assembly of various components. When certification of performance characteristics of materials, systems or equipment is required by the Contract Documents, either directly or implied for a complete and workable system, GARVER shall be entitled to rely upon such submittal or implied certification to establish that the materials, systems or equipment will meet the performance criteria required by the Contract Documents. The fee is based upon approximately 15 estimated submittals, and up to 80 hours of review time.
- (c) Issue instructions to the Contractor on behalf of the Owner and issue necessary clarifications (respond to RFIs) regarding the construction contract documents. The fee is based upon approximately 5 estimated RFIs, and up to 30 hours of review and response time.
- (d) Review the Contractor's progress payment requests, up to a maximum of 12, based on the actual quantities of contract items completed and accepted, and make recommendations to the Owner regarding payment. GARVER's recommendation for payment shall not be a representation that GARVER has made exhaustive or continuous inspections to (1) check the quality or exact quantities of the Work; (2) to review billings from Subcontractors and material suppliers to substantiate the Contractor's right to payment; or (3) to ascertain how the Contractor has used money previously paid to the Contractor.
- (e) When authorized by the Owner, prepare change orders for changes in the work from that originally provided for in the construction contract documents. If redesign or substantial engineering or surveying is required in the preparation of these change order documents, the Owner will pay GARVER an additional fee to be agreed upon by the Owner and GARVER. The fee is based upon reviewing approximately 4 estimated contract modification requests and preparing up to 2 change orders. This corresponds to up to 30 hours of review and preparation time.
- (f) Participate in final project inspection, prepare punch list, review final project closing documents, and submit final pay request. GARVER will also provide a project certification letter with final project cost to the Owner.
- (g) Provide record drawings incorporating any change orders, field changes, and Contractor revisions.
- (h) The Construction Contract will include provisions for the Contractor to pay for excess professional services beyond limits described herein.

6.1 Deliverables

- (a) PDF file of all submittals, RFIs, O&M manuals with digital bookmarks.
- (b) PDF of Record Drawings and Specifications.

- (c) Record plans, and specifications and one electronic PDF copy of each:
 - 1) Five (5) copies of specifications, three (3) half size drawings, and two (2) full size drawings to the Owner.

7 TASK 7 - CONSTRUCTION OBSERVATION

7.1 Resident Project Representative

Construction observation services will be provided by GARVER's Resident Project Representative, who will provide or accomplish the following:

- (a) Consult with and advise the Owner during the construction period.
- (b) Coordinate with the firm providing construction materials quality assurance testing.
- (c) Maintain a file of quantities incorporated into the work, test reports, certifications, shop drawings and submittals, and other appropriate information.
- (d) Maintain a project diary which will contain information pertinent to each site visit.
- (e) Maintain a set of working drawings and prepare and furnish record drawings based upon the Contractor markups.
- (f) Provide full-time resident construction observation services for the actual on-site construction activities. The proposed fee is based on a maximum of 1,040 hours of observation. If the construction time extends beyond the time established in this agreement or if the Owner wishes to increase the time or frequency of the observation, the Owner will pay GARVER an additional fee agreed to by the Owner and GARVER.

7.2 Construction Duration

The proposed fee for Construction Phase Services is based on 12-to-15-month construction contract performance time to allow for submittal, shop drawing review, delivery of equipment, materials as well as contractor mobilization. The estimated duration of actual construction work on site that would require a resident project representative is 6 months. If the construction time extends beyond the time established in this agreement, the Construction Contract will be drafted such that Contractor is required to pay for excess professional services. The Construction Contract will also require the Contractor to pay for excess professional services beyond the observation limits described herein.

In performing construction observation services, GARVER will endeavor to protect the Owner against defects and deficiencies in the work of the Contractor(s); but GARVER cannot guarantee the performance of the Contractor(s), nor be responsible for the actual supervision of construction operations or for the safety measures that the Contractor(s) takes or should take. However, if at any time during construction GARVER observes that the Contractor's work does not comply with the construction contract documents, GARVER will notify the Contractor of such non-compliance. GARVER will also record the observance, the discussion, and the actions taken. If the Contractor continues without satisfactory corrective action, GARVER will notify the Owner immediately, so that appropriate action under the Owner's contract with the Contractor can be taken.

7.3 Deliverables

- (a) PDF of observation reports and testing reports. The Construction Contract documents will the Contractor to complete and provide daily reports.

8 TASK 8 - WARRANTY INSPECTION SERVICES

Garver will participate in a site walk through approximately 30 days prior to the end of the Contractors warranty period. Garver will draft a letter to the Contractor outlining any observed warranty defects.

9 EXTRA WORK

The following items are not included under this agreement and will be considered as extra work:

- (a) Redesign for the Owner's convenience or due to changed conditions after previous alternate direction and/or approval.
- (b) Submittals or deliverables in addition to those listed herein.
- (c) Property line monumentation, including preparation of a survey plat, lot line adjustment, and lot split.
- (d) Geotechnical services, beyond coordination.
- (e) Construction materials testing, beyond coordination.
- (f) US Army Corps of Engineers, US Fish and Wildlife, and Department of Arkansas Heritage permitting and coordination beyond initial clearance letters and requirement determinations for the Construction Contract (including but not limited to archeological work, threatened and endangered species surveys, wetland mitigation, Section 404 permitting, asbestos and lead sampling, and soil and water sampling).
- (g) ADEQ permitting beyond obtaining a construction permit, including NPDES discharge permit renewal.
- (h) Any work associated with karst features beyond Construction Contract provisions for US Fish and Wildlife coordination, inspection, and filling karst features with grout.
- (i) Any work associated with a solid waste landfill located on the Owner's property beyond Construction Contract provisions for testing, removal, and proper disposal.
- (j) Coordination with FEMA and preparation/submittal of a CLOMR and/or LOMR.
- (k) Services after construction, except for the one-year warranty inspection.
- (l) City of Springdale permitting, beyond informal review and approval.
- (m) Alternative Project Delivery ("Design-Build"), including pre-purchasing bids.
- (n) Operations Training, outside the specification requirements for equipment provided by the Contractor.
- (o) ADEQ public meetings.
- (p) Receiving Stream Modeling.

Extra Work will be as directed by the Owner in writing for an addition fee as agreed upon by the Owner and Garver.

10 SCHEDULE

Garver shall begin work under this Agreement within ten (10) days of a Notice to Proceed and shall complete the work in accordance with the schedule below:

Phase Description	Calendar Days
Task 1 – Project Management	Project Duration
Task 2 – Preliminary Design	75 days after kickoff meeting
Task 3 – Final Design – 60% Submittal	90 days from approval of Task 2 Preliminary Design
Task 3 – Final Design – 90% Submittal	60 days after approval of 60% Design
Task 3 – Final Design – 100% Submittal	30 days after MDNR approval.
Task 4 - Bidding	60 days from approval of 100%
Task 5 – Construction Administration and Task 6 – Construction Observation	360 days from Construction Contract Notice to Proceed.
Task 7 – Warranty Inspection Services	Begins 30-days prior to warranty expiration date, complete within 14 days of site inspection.