



June 10, 2022

Hon. Kevin Neal – Judge Executive
Marshall County Fiscal Court
1101 Main Street
Benton, KY 42025

**Re: Catfish Kitchen Lift Station Improvements
Engineering Services Proposal
Draffenville, Marshall County, KY**

Judge Neal:

Thank you for the opportunity to prepare this engineering services proposal for your review. In preparing this proposal, RIVERCREST Engineering, Inc. (RIVERCREST) has reviewed previously collected lift station information and performed a field review of the Catfish Kitchen Lift Station site and existing force main corridor. The following provides an outline of the engineering services and associated fees proposed for the design/construction of a new lift station at the approximate midway point along the existing Catfish Kitchen force main. The purpose of this project will be twofold, (a) to reduce head pressure and to extend the operating life of the existing Catfish Kitchen lift station, and (b) to provide necessary infrastructure for future development along US 641 east of Draffenville where existing sanitary sewer service does not currently exist. At this time, RIVERCREST has the capacity to begin work on this project immediately following approval of this proposal. Our proposal addresses the following project phases,

- a) Preliminary Evaluation
- b) Surveying & Preliminary Design
- c) Final Design & Permitting
- d) Easement/Property Acquisition
- e) Construction Engineering & Observation

The following is a more detailed summary of our proposed scope of services, fees, and projected schedule for this project:

I. Preliminary Evaluation

RIVERCREST has prepared GIS level preliminary mapping for the project and will coordinate with our surveying sub-consultant and the Marshall County PVA, to review adjacent property ownership information.

Rivercrest Engineering Incorporated, 7020 U.S. Highway 68 W, Paducah, Kentucky 42003

RIVERCREST understands that topographic surveys will be required at the lift station site to evaluate the existing infrastructure, topography, incoming utilities, and available property limits. RIVERCREST assumes that construction activities will be performed within a proposed utility easement, and/or property that the County either currently owns or has authority to use by way of existing easements. Access will continue to be along existing traveled road rights of way, and utility easements.

During this preliminary evaluation phase, RIVERCREST will also coordinate with the County to review the proposed lift station site as well as the existing lift station for defects that may need to be addressed as part of this project.

II. Surveying & Preliminary Design

The RIVERCREST team will conduct a field survey of the project limits for the proposed lift station, critical spot shots on the existing force main alignment to verify high points, and tie-in manhole. In addition, our survey will include areas directly adjacent to the existing site for general area drainage and constructability reviews.

The project's field survey phase will consist of:

- Completing KY 811 BUD calls and coordination of field utility locates
- Establishing project survey control to KY State Plane coordinate system
- Collecting survey data including existing edges of pavement, visible property/right-of-way corners, existing marked utility information, and general topographic data.
- Utilizing GPS or conventional survey techniques set up on the established control monuments. The horizontal control datum will be referenced to Kentucky State Plane South Zone for GIS compatibility. Vertical control is typically referenced to NAVD88 datum.

The preliminary design process will consist of:

- Developing preliminary lift station construction drawings
- Evaluating existing utilities, property limits and ownership
- Developing and reviewing existing ground surface models
- Reviewing existing available USGS geological mapping
- Developing plan/profile sheets associated with the proposed lift station
- Conducting on site review with Owner and operations staff
- Issuing final design recommendations based on engineering judgment and feedback from meeting held with Owner, operations staff, contractors, and material suppliers
- Prepare and deliver a preliminary opinion of probable construction cost.

III. Final Design & Permitting Phase

Upon receiving the County's approval of the preliminary design concepts, RIVERCREST will update design documents and complete final construction plans. Design drawings typically include the following:

- Cover Sheet
- General Notes & Location Map
- Project Pay Item Quantity Summary Sheet
- Lift Station Site Plan & Profile
- Construction Details
- Electrical Details

Plan sheets are typically developed at minimum 1" = 50' horizontal scale.

RIVERCREST will utilize standard technical specifications for completion and submittal of a standard KY Division of Water – Wastewater Construction permit application package. This submittal typically includes design plans, technical specifications, construction permit application and related submittal documents. Due to the nature and configuration of this project, RIVERCREST does not anticipate the need to prepare and submit a KY Transportation Cabinet encroachment permit application.

Additional permitting services such as endangered species studies, critical habitat studies, floodplain permitting, and historical landmark or archaeological studies have not been included in our proposed scope of work. These studies can be added to our scope later at the County's request, with our service fees being adjusted on an agreed lump sum or hourly T&M basis.

IV. Utility Easement Development (Acquisition by County)

RIVERCREST anticipates the need to prepare and secure an additional utility easement for completion of the project's construction phase. Our anticipations are based upon site reviews conducted at the existing site and correspondence relayed to us by the Sanitation District. RIVERCREST proposes to prepare one (1) easement description for review by the County's attorney. RIVERCREST's surveying sub consultant will certify each description prior to the County's legal counsel preparing the proper easement acquisition document. For the purposes of this proposal, RIVERCREST assumes that any required easements will be secured by the Sanitation District.

In the event additional easement development and/or negotiations become necessary, the RIVERCREST team can conduct these activities in accordance with our established time & materials service rates.

V. Procurement Services – Not Applicable

Based upon our understanding of the project scope and the funding source, it is our understanding that this project will not require bidding/procurement services.

VI. Construction Engineering & Closeout

RIVERCREST's project manager will receive, review and comment on material and shop drawings submittals. RIVERCREST's project manager will schedule and conduct a pre-construction meeting with the selected general contractor, major subcontractors, and the County's operations staff. Our project manager will review the construction schedule, project communication roles, permitting and property constraints, plans and details, pay item summaries, pay request format, and any additional information deemed useful by the MCFC and Sanitation District.

RIVERCREST will provide construction engineering services during the active construction period as well as throughout the project closeout period. Services typically include coordination with the County, Contractor, and the project inspector on project activities. Attending and coordinating periodic progress meetings (as required), processing Contractor's monthly pay requests, final punch list inspection, KDOW certification, project closeout, and record drawing development.

VII. Construction Observation

RIVERCREST estimates our construction representative will be on site approximately three (3) hours per day during active construction activity. We have also allocated one (1) hour per day for preparation, travel, document preparation, and photographic logging of daily construction activity. We estimate our field personnel will be actively involved with the construction process, four (4) days per week for a project duration of 2 calendar weeks.

During this construction phase, our project representative will track daily pay item quantities, prepare detailed field book sketches for the lift station installation, log daily photos of the construction activities, assist with interpretation of the project plans and specifications, and coordinate with County operations staff for required system shut-downs, pump and conveyance line testing, and tie-ins.

VIII. Proposed Fee

Our proposed engineering fee is divided into Lump Sum work descriptions as noted below:

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• Preliminary Evaluation	\$1,000.00
• Preliminary Design & Survey Coordination	\$2,700.00
• Final Design & Permitting	\$4,900.00
• Easement Development	\$500.00
• Construction Engineering & Closeout	\$3,400.00
• Construction Observation	\$3,100.00
• <u>Direct Expenses – Survey/Electrical/Mileage</u>	<u>\$2,700.00</u>
Total Proposed Fee	\$18,300.00

IX. Schedule

We estimate that the engineering services for the project as described herein can begin immediately following execution of this proposal, and can be completed on the general timeframe as noted below:

Preliminary Evaluation	1 week
Preliminary Design & Surveying	2 weeks
Final Design	2 weeks
Permitting	4 weeks
Construction Phase	3 weeks
Project Closeout	2 weeks

Once you have had an opportunity to review our proposal, please contact me to discuss any concerns or questions you may have. If the Fiscal Court is agreeable to starting this work in accordance with this proposal, please sign below and return to us for initiating work.

Thank you for this opportunity, and we look forward to continuing our relationship with the County.

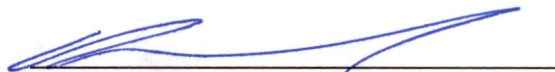
Sincerely,

RIVERCREST ENGINEERING, INC.



Charles D. McCann II, P.E.
Project Manager

APPROVED BY:



Kevin Neal, Judge Executive
Marshall Co. Fiscal Court

cc: Randy Green, Chairman
Marshall Co. Sanitation District