

December 7, 2016

Mr. Mark Sneve, P.E.  
Senior Associate  
Strand Associates, Inc.  
325 West Main Street, Suite 710  
Louisville, KY 40202

Re: LFUCG Town Branch WWTP Primary Digester Complex Improvement Project - Structural Engineering Services Proposal - Additional Scope

Dear Mr. Sneve,

Per request, we are pleased to submit this proposal for providing our Structural Engineering and Architectural Services for the Additional Scope on the above referenced project. Our additional scope consists of two major parts. Part I includes items associated with NFPA Classified Area separations as outlined per the meeting at your office on November 16. Part II includes design of detailed structural repairs as described in our preliminary engineering report (PER).

**Part I - Architectural and Structural Design Phase Services associated with NFPA Classified Area separations.**

1) New Two Story Entrance and Exterior Stair to Mezzanine level:

We will require the input information from the owner and Strand with regard to planning. We assume the foundation system to be a shallow foundation and of poured-in-place reinforced concrete. The load bearing walls will be of reinforced block masonry with brick veneer. The 2<sup>nd</sup> floor and roof structures will be of hollow core concrete planks. Also included is an adjacent exterior (open) stair from grade level to the Mezzanine level. New openings are required through the existing exterior wall at the Mezzanine level which may require structural reinforcements.

Our scope also includes design of architectural elements (roofing, flashings, brick veneer, doors etc.)

2) New stair from first floor to basement:

An opening through the existing first floor structural slab is required which will require structural reinforcement. Design of the stair is included in our scope.

Other items include:

- 3) Close off existing stair well between 1<sup>st</sup> floor and Mezzanine level.
- 4) Infill roof hatch and mechanical openings.
- 5) Investigation of [possible] load bearing masonry walls at boiler room which are to be removed and design of permanent shoring.
- 6) Infill of various door & window openings.
- 7) Analysis of existing roof structure to support new HVAC unit and design of steel supports to distribute load.
- 8) Infill material and new slabs at existing pits at generator building for equipment support.
- 9) Attend Progress Meetings, coordination,
- 10) Three Site visits

---

Our fee to perform the above Design Phase scope of Part I is \$47,650.00

**Bid Phase Services:**

We will address bidders' questions raised during the bidding process and prepare addenda as required for Structural Scope and send our responses to STRAND.

Our fee to perform the above Bid Phase Services scope of Part I is \$838.00

**Construction Phase Services:**

We will answer RFIs, perform four (4) site structural inspections and provide reports summarizing inspection findings, shop drawings review, and correspond through emails and phone calls during construction phase.

Our fee to perform the above Construction Phase Services scope of Part I is \$9,205.00

**Total PART I = \$57,643.**

**Part II - Design of Structural Rehabilitation Repairs**

These include the following:

- a) Structural reinforcement of stairwell walls where extensive cracking has occurred.
- b) Apparent cracks and seepage at digester tank pipe penetrations and other locations.
- c) Brick and copings on digester tanks.
- d) Cracks and deteriorating lintels in building brick.
- e) Deterioration at south walkway and steps.

We will provide necessary design, CAD drawings and specification for the scope included in this proposal. Also, we will perform one site visit at the beginning of the design phase and perform internal QA/QC review and address STRAND's review comments.

Our fee to perform the above Design Phase scope of Part II is \$35,570.

**Bid Phase Services:**

We will address bidders' questions raised during the bidding process and prepare addenda as required for Structural Scope and send our responses to STRAND.

Our fee to perform the above Bid Phase Services scope is \$711.00

**Construction Phase Services:**

We will answer RFIs, perform four (4) site structural inspections and provide reports summarizing inspection findings, shop drawings review, and correspond through emails and phone calls during construction phase.

Our fee to perform the above Construction Phase Services scope of Part II is \$7,093.00

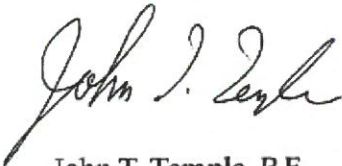
**Total PART II = \$35,570.**

**Scope not included:**

STRAND will provide all necessary Process, Civil and Survey base CAD drawings and we will be responsible for the Structural and Architectural services only. Geotechnical services are not included in our services.

Thank you for the opportunity to submit this proposal for our services on this project. If you have any questions, please feel free to contact me at (502) 493-2717.

Sincerely,



John T. Temple, P.E.  
Senior Structural Engineer