ENGINEERING SERVICES AGREEMENT

THIS IS AN AGREEMENT made as of November 17, 2019, between the LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT, an urban county government of the Commonwealth of Kentucky pursuant to KRS Chapter 67A ("OWNER") and Strand Associates, Inc. with offices located at 1525 Bull Lea Road, Suite 100, Lexington, KY OWNER intends to proceed with the Engineering Services for ("CONSULTANT"). Investigation/Design Services for Town Branch WWTP Scum Handling and Scum Facility Improvements as described in the attached EXHIBIT A, Scope of Engineering Services and Related Matters RFP # 32-2019 (the "PROJECT"). The CONSULTANT shall perform professional engineering services and deliverables as described in EXHIBIT A which include customary master planning, civil, geotechnical, electrical, mechanical, structural, programming, water quality and sanitary engineering services as related to providing the deliverables specific to this agreement-that will assist the OWNER in successfully implementing the PROJECT and complying with any requirements which are related to the Consent Decree entered in a case styled United States & Commonwealth of Kentucky v. Lexington Fayette Urban County Government, United States District Court for the Eastern District of Kentucky, Civil Action No. 5:06-cv-386-KSF (the "CONSENT DECREE"). The services are hereinafter referred to as the PROJECT. The primary goal of the PROJECT is to provide the OWNER with the technical support necessary to successfully meet the RMP Implementation Plan-WWTP Reliability Upgrade Town Branch WWTP-13 Scum Facility obligations and deadlines of the CONSENT DECREE. OWNER and CONSULTANT in consideration of their mutual covenants herein agree in respect of the performance of professional engineering services by **CONSULTANT** and the payment for those services by **OWNER** as set forth below.

CONSULTANT shall provide professional consulting services for **OWNER** in all phases of the **PROJECT** to which this Agreement applies, serve as **OWNER'S** professional engineering representative for the **PROJECT** as set forth below and shall give professional consultation and advice to **OWNER** during the performance of services hereunder.

SECTION 1 - BASIC SERVICES OF CONSULTANT

1.1. General

CONSULTANT shall perform professional services as hereinafter stated that include customary civil, geotechnical, structural, mechanical, electrical and sanitary engineering services incidental thereto.

1.2. Incorporated Documents

The following documents are incorporated by reference as part of this Agreement:

- 1. The **CONSENT DECREE**, as may be amended, including all appendices.
- 2. **EXHIBIT A** Scope of Engineering Services and Related Matters RFP # 32-2019 (Including Addendums).
- 3. **EXHIBIT B** Certificate of Insurance and Evidence of Insurability.
- 4. **EXHIBIT** C Proposal of Engineering Services and Related Matters (the **CONSULTANT**'s response to RFP # 32-2019).

To the extent of any conflict among the provisions of these documents and/or this Agreement, the provisions of this Agreement shall control, followed by the provisions of **EXHIBIT A**, and then **EXHIBIT C**.

1.3 Project Phase

A complete description of the duties and responsibilities of the **CONSULTANT** are as indicated in **EXHIBIT A**, Scope of Engineering Services and Related Matters <u>RFP # 32-2019</u>, and **EXHIBIT C** Proposal of Engineering Services and Related Matters. After written authorization to proceed from the **OWNER**, **CONSULTANT** shall:

- **1.3.1.** Notify the **OWNER** in writing of its authorized representative who shall act as Project Engineer and liaison representative between the **CONSULTANT** and the **OWNER**. **OWNER** has the right to approve the Project Engineer, or any change thereto, which approval shall not be unreasonably withheld.
- 1.3.2. The CONSULTANT must perform all duties necessary to fully complete the deliverables as further described in attached EXHIBIT A, Scope of Engineering Services and Related Matters RFP # 32-2019, and attached EXHIBIT C, Proposal of Engineering Services and Related Matters unless otherwise agreed to in writing by the parties.
- 1.3.3 The CONSULTANT shall provide written documentation of all meetings and be responsible for incorporating all comments and changes resulting therefrom in final work product.
- 1.3.4. The CONSULTANT shall submit five (5) copies (hardcover) of all initial draft final work products for this **PROJECT** unless otherwise described in Exhibit A. The copies of the initial draft final reports are submitted for review and comment by the **OWNER**, and should be presented in person to the **OWNER**.
- 1.3.5. After the OWNER'S detailed review, the CONSULTANT will revise the initial draft final for all work products for this PROJECT, and the CONSULTANT shall submit five (5) copies (hardcover) unless otherwise described in Exhibit A. One electronic copy of the all work products for this PROJECT, including all appendices, shall be provided and prepared in such a manner that it can readily be converted to a quick-link accessible form for the OWNER'S Website. The OWNER shall have ten (10) business days within which to accept or deny each such final draft. If it is denied, the OWNER shall provide a detailed explanation in writing for the basis of such denial. Once the OWNER accepts the draft as final, a total of ten (10) final copies (hardcover) are required in addition to an electronic copy unless otherwise described in Exhibit A.
- 1.3.6 Immediately notify **OWNER** of any delay in the delivery of a work product or deliverable, regardless of cause. Give written notice to **OWNER** within five (5) business days whenever **CONSULTANT** observes or otherwise becomes aware of any development that affects the scope or timing of **CONSULTANT'S** services, or any defect in the work of Contractor(s).

SECTION 2 - EXTRA WORK BY CONSULTANT

- 2.1. The OWNER may desire to have the CONSULTANT perform work or render services in connection with this PROJECT other than provided by the expressed intent of this Agreement. Such work shall be considered as Extra Work, subject to a change order, supplemental to this Agreement, setting forth the character and scope thereof and the compensation therefore. Work under such change order shall not proceed until the OWNER gives written authorization. Should the OWNER find it desirable to have previously satisfactorily completed and accepted plans or parts thereof revised, the CONSULTANT shall make such revisions as directed, in writing, by the OWNER. This work shall be considered as Extra Work and shall be paid as such.
- **2.2.** All Extra Work is subject to prior written authorization of **OWNER** and necessary appropriations made by the Urban County Council.

SECTION 3 - OWNER'S RESPONSIBILITIES

OWNER shall:

- 3.1. Provide criteria and information as to **OWNER'S** requirements for the **PROJECT**, including design objectives and constraints, space, capacity and performance requirements, flexibility and expandability, and any budgetary limitations.
- **3.2.** Assist **CONSULTANT** by placing at his disposal available information pertinent to the Project.
- **3.3.** Examine all studies, reports, sketches, drawings, specifications, proposals and other documents presented by **CONSULTANT**, and provide written approval or disapproval thereof within a reasonable time so as not to delay the services of **CONSULTANT**.
- 3.4. Designate in writing a person to act as OWNER'S representative agent with respect to the services to be rendered under this Agreement (see Section 8.1.1.). Such person shall have complete authority to transmit instructions, receive information, interpret, and define OWNER'S policies and decisions with respect to materials, equipment, elements, and systems pertinent to CONSULTANT'S services.
- **3.5.** Give written notice to **CONSULTANT** whenever **OWNER** observes or otherwise becomes aware of any development that affects the scope or timing of **CONSULTANT'S** services, or any defect in the work of **CONSULTANT**.
- **3.6.** Furnish or direct **CONSULTANT** to provide, Extra Work as stipulated in Section Two (2) of this Agreement or other services as required.

SECTION 4 - PERIOD OF SERVICES

- 4.1. Time is of the essence in the performance of this Agreement. CONSULTANT is aware that the OWNER is subject to penalties for non-compliance with the CONSENT DECREE deadlines. See attached EXHIBIT A for the overall current project schedule.
- **4.2.** The provisions of this Section Four (4) and the various rates of compensation for **CONSULTANT'S** services provided for elsewhere in this Agreement have been agreed to in anticipation of the orderly and continuous progress of the **PROJECT** through completion.
- **4.3.** If a delay results from the acts of **OWNER** or another entity that is required to permit or

approve the work or services, an extension of time for such delay will be considered by **OWNER**.

- 4.3.1. If the above type of delay occurs and **CONSULTANT** wants an extension of time, it must, within ten (10) days from the date of the delay, apply in writing to **OWNER** for an extension of time for a reasonable period, which must be agreed upon by **OWNER**.
- 4.3.2. If the extension of time is approved by **OWNER**, the **PROJECT** schedule shall be revised to reflect the extension. Such extension of time to the completion date shall in no way be construed to operate as a waiver on the part of **OWNER** of any of its other rights in the Agreement.
- 4.3.3. If the above type of delay would prevent complete performance of the **PROJECT** within sixty (60) days of the time specified therein, **OWNER** shall have the option of cancelling the **PROJECT** or otherwise adjusting the scope of the services or work.
- **4.3.4.** If the parties cannot mutually agree to an extension of time or an adjustment, Section 6.5 under "DISPUTES" of this Agreement shall apply.
- 4.4. If delays result solely by reason of acts of the CONSULTANT, the CONSULTANT shall be held liable for any financial penalties incurred by the OWNER as a result of the delay, including but not limited to those assessed pursuant to the CONSENT DECREE. Section 6.5 of this Agreement (Disputes), shall apply in the event the parties cannot mutually agree upon the cause(s) associated with delays in completing project deliverables. The CONSULTANT must immediately notify the OWNER in the event of such delay, and provide the OWNER a written action plan within five (5) business days on how it will attempt to resolve the delay.

SECTION 5 - PAYMENTS TO CONSULTANT

5.1. Methods of Payment for Services of CONSULTANT.

5.1.1. For Basic Services

OWNER shall pay **CONSULTANT** a lump sum amount not to exceed \$215,000.00. As defined in Exhibit C.

5.1.2. For Extra Work

Extra Work shall be paid for by the **OWNER** on the basis of a fixed fee, the amount of which shall be determined by negotiation. The **OWNER** shall have the right to negotiate alternate methods of payment for Extra Work if the **OWNER** determines that the fixed fee basis is not feasible. In the event the **OWNER** and the **CONSULTANT** are unable to agree upon the amount of payment for Extra Work, then the amount of such payment shall be determined pursuant to Section 6.5 (**Disputes**).

5.2. Times of Payment

5.2.1 CONSULTANT shall submit to OWNER detailed monthly statements for Basic Services and Extra Work rendered. The Statements will be based upon CONSULTANT'S estimate of the proportion of the total services actually completed at the time of billing. OWNER shall respond to CONSULTANT'S monthly statements within thirty (30) days, either denying payment or making payment.

5.3. Other Provisions Concerning Payments

- 5.3.1. In the event the Agreement is terminated by the OWNER without fault on the part of the CONSULTANT, the CONSULTANT shall be paid for the work performed or services rendered for which it has not already been paid in an amount bearing the same ratio to the total Agreement fee as the amount of work completed or partially completed and delivered to the OWNER is to the total amount of work provided for herein, as determined by mutual agreement between the OWNER and the CONSULTANT.
- 5.3.2. In the event the services of the CONSULTANT are terminated by the OWNER for fault on the part of the CONSULTANT, the CONSULTANT shall be paid reasonable value of the work performed or services rendered and delivered for which it has not already been paid, and the amount to be paid shall be determined by the OWNER.

SECTION 6 - GENERAL CONSIDERATIONS

6.1. Termination

- 6.1.1. CONSULTANT may only terminate this Agreement due to OWNER'S material breach of the terms hereof which breach causes CONSULTANT to be unable to perform its duties and responsibilities under this Agreement and upon forty-five (45) days written advance notice to OWNER.
- 6.1.2. The **OWNER** may terminate this Agreement for cause upon seven (7) business days written advance notice to the **CONSULTANT**. The **OWNER** reserves the right to terminate the Agreement for any reason whatsoever, with or without cause, at any time upon thirty (30) days written advance notice to the **CONSULTANT**.

6.2. Ownership and Reuse of Documents

All documents, including raw data, reports, drawings and specifications, prepared by the **CONSULTANT** pursuant to this Agreement shall be delivered to and become the property of the **OWNER**. The **OWNER** shall have the right to reuse same without restriction or limitation, but without liability or legal exposure to **CONSULTANT**.

6.3. Legal Responsibilities and Legal Relations

- **6.3.1.** The **CONSULTANT** shall familiarize itself with and shall at all times comply with the **CONSENT DECREE** and all federal, state, and local laws, ordinances, and regulations that in any manner affect the services of this Agreement.
- 6.3.2. In performing the services hereunder, the CONSULTANT and its consultants, employees, agents and representatives shall not be deemed or construed to be employees of OWNER in any manner whatsoever. Except as otherwise provided in this Agreement, the CONSULTANT shall be acting as an independent contractor. The CONSULTANT shall not hold itself out as, nor claim to be, an officer or employee of OWNER by reason hereof and shall not make any claim, demand or application to or for any right or privilege applicable to an officer or employee of OWNER. The CONSULTANT shall be solely responsible for any claims for wages or compensation by CONSULTANT'S employees, agents and representatives, including consultants, and shall save and hold OWNER harmless therefrom.
- **6.3.3.** The parties hereto agree that causes of actions between the parties shall be governed by applicable provisions of the Kentucky Revised Statues, and that venue of any legal action shall be a court of appropriate jurisdiction in Fayette County, Kentucky. The parties further agree that Kentucky law shall apply with respect to the interpretation of any provision of this Agreement.

6.4. Successors and Assigns

- **6.4.1. CONSULTANT** binds itself and its partners, successors, assigns and legal representatives to this Agreement. **CONSULTANT** shall not assign any interest in this Agreement without prior written consent of **OWNER**. **OWNER'S** consent shall not relieve the **CONSULTANT** of any responsibility for compliance with the provisions of this Agreement.
- **6.4.2.** In no event shall the CONSULTANT subcontract more than fifty percent (50%) of the work, based upon dollar value of the work.
- **6.4.3.** Nothing herein shall be construed to give any rights or benefits hereunder to anyone other than **OWNER** and **CONSULTANT**.

6.5. Disputes

Except as otherwise provided in this Agreement, any dispute hereunder may be resolved by agreement of the **OWNER'S** Agent (Section 8.1.1) and the **CONSULTANT**. In the absence of such an agreement, the dispute shall be submitted to the **OWNER'S** Commissioner, Department of Environmental Quality, whose decision shall be final and conclusive unless determined by a court of competent jurisdiction to have been fraudulent, capricious, arbitrary, or so grossly erroneous as necessarily to imply bad faith. Pending a final decision of a dispute hereunder, the **CONSULTANT** shall proceed diligently with the performance of the Agreement in accordance with the directions of the **OWNER**.

6.6. Accuracy of Consultant's Work

CONSULTANT shall be required to perform this Agreement in accordance with the degree of ordinary and reasonable skill and care usually exercised by professional engineers prevailing at the time, place and under similar conditions as the services hereunder are rendered. CONSULTANT shall be responsible for the accuracy of all work, even though raw data, reports, Drawings and Specifications have been accepted by OWNER, and it shall make any necessary revisions or corrections resulting from its errors and/or omissions for no additional compensation. By submission of reports, soils and subsurface information, quantities estimates, calculations and Drawings and Specifications to OWNER, CONSULTANT has made an incontrovertible representation that the information is accurate within the appropriate standard of skill and care. Failure on the part of CONSULTANT to provide the expected level of accuracy may be grounds for OWNER to terminate this Agreement

6.7. Security Clause

The **CONSULTANT** certifies that he shall not at any time release or divulge any information concerning the services covered by this Agreement to any person or any public or private organization without prior approval of the **OWNER** unless otherwise required by law

6.8. Access to Records

The CONSULTANT and its sub-consultants shall maintain all books, documents, papers, and accounting records, and make such materials available at their respective offices at all reasonable times during the Agreement period and for three (3) years from the date of final payment under the Agreement for inspection by the OWNER, and copies thereof shall be furnished if requested. Failure to maintain such records for three (3) years after the date of final payment may be grounds for the OWNER to disqualify the CONSULTANT from consideration for future consultant engineering Agreements.

6.9. Risk Management Provisions, Insurance and Indemnification

6.9.1. **DEFINITIONS**

The **CONSULTANT** understands and agrees that the Risk Management Provisions of this Agreement define the responsibilities of the **CONSULTANT** to the **OWNER**.

As used in these Risk Management Provisions, the terms "CONSULTANT" and "OWNER" shall be defined as follows:

- **a. CONSULTANT** means the consultant and its employees, agents, servants, owners, principals, licensees, assigns and subcontractors of any tier.
- **owner** means the Lexington-Fayette Urban County Government and its elected and appointed officials, employees, agents, boards, assigns, volunteers, and successors in interest.

6.9.2. INDEMNIFICATION AND HOLD HARMLESS PROVISION

- a. It is understood and agreed by the parties that **CONSULTANT** hereby assumes the entire responsibility and liability for any and all damages to persons or property caused by or resulting from or arising out of any act or omission on the part of **CONSULTANT** or its employees, agents, servants, owners, principals, licensees, assigns or subcontractors of any tier (hereinafter "**CONSULTANT**") under or in connection with this agreement and/or the provision of goods or services and the performance or failure to perform any work required thereby.
- Fayette Urban County Government and its elected and appointed officials, employees, agents, volunteers, and successors in interest (hereinafter "OWNER") from and against all liability, damages, and losses, including but not limited to, demands, claims, obligations, causes of action, judgments, penalties, fines, liens, costs, expenses, interest, defense costs and reasonable attorney's fees that are in any way incidental to or connected with, or that arise or are alleged to have arisen, directly or indirectly, from or by CONSULTANT's performance or breach of the agreement and/or the provision of goods or services provided that:

 (a) it is attributable to personal injury, bodily injury, sickness, or death, or to injury to or destruction of property (including the loss of use resulting therefrom), or to or from the negligent acts, errors or omissions or willful misconduct of the CONSULTANT; and (b) not caused solely by the active negligence or willful misconduct of OWNER.
- c. Notwithstanding, the foregoing, with respect to any professional services performed by CONSULTANT hereunder (and to the fullest extent permitted by law), CONSULTANT shall indemnify, save, hold harmless and defend OWNER from and against any and all liability, damages and losses, including but not limited to, demands, claims, obligations, causes of action, judgments, penalties, fines, liens, costs, expenses, interest, defense costs and reasonable attorney's fees, for any damage due to death or injury to any person or injury to any property (including the loss of use resulting therefrom) to the extent arising out of, pertaining to or relating to the negligence, recklessness or willful misconduct of CONSULTANT in the performance of this agreement.
- d. In the event **OWNER** is alleged to be liable based upon the above, **CONSULTANT** shall defend such allegations and shall bear all costs, fees and expenses of such defense, including but not limited to, all reasonable attorneys' fees and expenses, court costs, and expert witness fees and expenses, using attorneys approved in writing by **OWNER**, which approval shall not be unreasonably withheld.
- e. These provisions shall in no way be limited by any financial responsibility or insurance requirements, and shall survive the termination of this agreement.

f. OWNER is a political subdivision of the Commonwealth of Kentucky. CONSULTANT acknowledges and agrees that OWNER is unable to provide indemnity or otherwise save, hold harmless, or defend the CONSULTANT in any manner.

6.9.3. DAMAGES RELATED TO NONPERFORMANCE OR DELAY BY CONSULTANT

In the event that **CONSULTANT**'S delay or other nonperformance of its obligations hereunder results in the imposition of penalties against the **OWNER** pursuant to the **CONSENT DECREE**, or the **OWNER** otherwise suffers damage as a result of such delay or nonperformance, **CONSULTANT** shall be solely liable to **OWNER** for any and all such damages, including any costs and attorney's fees.

6.9.4. FINANCIAL RESPONSIBILITY

The CONSULTANT understands and agrees that the CONSULTANT shall, prior to final acceptance of the CONSULTANT'S proposal and the commencement of any work; demonstrate the ability to assure compliance with the Indemnity Agreement and other provisions of this Agreement.

6.9.5. INSURANCE REQUIREMENTS

6.9.5.1. Required Insurance Coverage

CONSULTANT shall procure and maintain for the duration of this Agreement the following or equivalent insurance policies at no less than the limits shown below and cause its subcontractors to maintain similar insurance with limits acceptable to OWNER in order to protect OWNER against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by CONSULTANT. The cost of such insurance shall be included in any proposal:

Coverage	Limits
General Liability (Insurance Services Office Form CG 00 01)	\$1 million per occurrence, \$2 million aggregate or \$2 million combined single limit
Commercial Automobile Liability (Insurance Services Office Form CA 0001)	combined single, \$1 million per occurrence
Professional Liability	\$1 million per occurrence, \$ 2 million aggregate
Worker's Compensation	Statutory

The policies above shall contain the following conditions:

- **a. OWNER** shall be named as an additional insured in the General Liability Policy and Commercial Automobile Liability Policy.
- **b.** The General Liability Policy shall be primary to any insurance or self-insurance retained by **OWNER**.
- c. The General Liability Policy shall include Business Interruption coverage.
- d. The Contractor shall carry Builders Risk coverage at a level sufficient to cover the replacement cost of any equipment or machinery used at the work site, if applicable.
- e. The General Liability Policy shall include a Pollution Liability endorsement and/or Environmental Casualty coverage unless it is deemed not to apply by **OWNER**.
- f. The General Liability Policy shall have a Professional Liability endorsement (including Errors and Omissions), which shall include Business interruption coverage and this policy or endorsement shall include Environmental Casualty coverage for any services performed pursuant to the contract, and/or a separate Professional Liability Policy shall be obtained unless it is deemed not to apply by OWNER. (OWNER does not need to be named as additional insured).
- g. OWNER shall be provided at least 30 days advance written notice via certified mail, return receipt requested, in the event any of the required policies are canceled or non-renewed.
- h. The Professional Liability policy shall be maintained for a minimum of three years beyond the completion date of the project, to the extent commercially available. If not commercially available, CONSULTANT shall notify OWNER and obtain similar insurance that is commercially available and acceptable to OWNER.
- i. Said coverage shall be written by insurers acceptable to **OWNER** and shall be in a form acceptable to **OWNER**. Insurance placed with insurers with a rating classification of no less than Excellent (A or A-) and a financial size category of no less than VIII, as defined by the most current Best's Key Rating Guide shall be deemed automatically acceptable.

6.9.5.2. Renewals

After insurance has been approved by **OWNER**, evidence of renewal of an expiring policy must be submitted to **OWNER**, and may be submitted on a manually signed renewal endorsement form. If the policy or carrier has changed,

however, new evidence of coverage must be submitted in accordance with these Insurance Requirements.

6.9.5.3. Right to Review, Audit and Inspect

CONSULTANT understands and agrees that **OWNER** may review, audit and inspect any and all of **CONSULTANT'S** records and operations to insure compliance with these Insurance Requirements.

6.9.6. SAFETY AND LOSS CONTROL

CONSULTANT shall comply with all applicable federal, state, and local safety standards related to the performance of its works or services under this Agreement and take necessary action to protect the life, health and safety and property of all of its personnel on the job site, the public, and OWNER.

6.9.7. **DEFINITION OF DEFAULT**

CONSULTANT understands and agrees that the failure to comply with any of these insurance, safety, or loss control provisions shall constitute default under this Agreement. CONSULTANT also agrees that OWNER may elect as its option any single remedy or penalty or any combination of remedies and penalties, as available, including but not limited to purchasing insurance and charging CONSULTANT for any such insurance premiums purchased, or suspending or terminating this Agreement.

SECTION 7 - EQUAL EMPLOYMENT OPPORTUNITY

During the performance of this Agreement, the CONSULTANT agrees as follows:

- 7.1. The CONSULTANT will not discriminate against any employee or application for employment because of race, color, religion, national origin, sex, age, or handicap. The CONSULTANT will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, national origin, sex, age, or handicap. Such action shall include, but not be limited to the following: employment upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeships. The CONSULTANT agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this non-discrimination clause.
- 7.2. The CONSULTANT will, in all solicitations or advertisements for employees placed by or on behalf of the CONSULTANT, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, national origin, sex, age (between forty and seventy), or handicap.

SECTION 8 - SPECIAL PROVISIONS, EXHIBITS, AND SCHEDULES

- **8.1.** This Agreement is subject to the following provisions.
 - 8.1.1. Pursuant to subparagraph 3.4 of this Agreement, OWNER has assigned Charles H. Martin, P.E., Director of the Division of Water Quality (the "OWNER'S Agent"), as the authorized agent of OWNER, to monitor, direct and review the performance of work of the CONSULTANT. Documents, data, reports, and all matters associated with carrying out this Agreement shall be addressed to the OWNER'S Agent or his designee. Questions by the CONSULTANT regarding interpretations of the terms, provisions and requirements under this Agreement shall be addressed to the OWNER'S Agent or his designee. The CONSULTANT shall look only to the OWNER'S Agent or his designee for direction in its performance under this Agreement; no other direction shall be binding upon OWNER. OWNER shall respond to written requests by CONSULTANT within thirty (30) days.
- **8.2.** This Agreement, together with the Incorporated Documents (Section 1.2) constitutes the entire Agreement between **OWNER** and **CONSULTANT** and supersedes all prior written or oral understandings. This Agreement and **EXHIBITS A, B, C and D** and any related schedules or documents may only be amended, supplemented, modified or canceled by a duly executed written instrument.
- **8.3. NO THIRD PARTY RIGHTS.** This agreement does not create a contractual relationship with or right of action in favor of a third party against either **OWNER** or **CONSULTANT.**
- **8.4 UNENFORCEABLE TERMS/SURVIVABILITY**. If any term or provision of this Agreement shall be found to be illegal or unenforceable, this Agreement shall remain in full force and such term or provision shall be deemed stricken. The provisions of Section 6 of this Agreement shall survive its termination.
- **8.5. NON-WAIVER.** The failure of either party to enforce any right reserved to it in this Agreement shall not be a waiver of any such right to which the party is entitled.

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

OWNER: LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT	CONSULTANT: _Strand Associates, Inc.
BY: Rindo Sorton LINDA GORTON, MAYOR	BY: Jugh M Busher
ATTEST:	
Charley & Semmers URBAN COUNTY COUNCIL CLERK Deputy	
COMMONWEALTH OF KENTUCKY State of Wisconsin COUNTY OF FAYETTE Sand	
The foregoing Agreement was subscribed, so that of Strong Associates, on this the 114h day	the duly authorized representative for and on
My commission expires: Month 21, 8021	<u>*</u>
NOTARY I	PUBLIC .

EXHIBIT A

Scope of Engineering

Services and Related Matters

RFP# 32-2019

Investigation / Design Services for Town Branch WWTP Scum Handling and Scum Facility Improvements

Lexington – Fayette Urban County Government (LFUCG) Division of Water Quality

The Lexington-Fayette Urban County Government is accepting proposals from interested consulting engineering firms for the Investigation / Design Services for Town Branch Wastewater Treatment Plant (WWTP) Scum Handling and Scum Facility Improvements.

1. General Project Description

The CONSULTANT shall perform professional services as hereinafter stated which shall include but is not limited to customary civil, geotechnical, structural, mechanical, electrical engineering, and programming services as related to the Investigation / Design for Town Branch Wastewater Treatment Plant (WWTP) Scum Handling and Scum Facility Improvements.

Per the Group Two Sanitary Sewer System and WWTP Remedial Measures Plan, the intent of the Town Branch WWTP Scum Handling and Scum Facility Improvements Project is to replace equipment that has surpassed its useful life therefore increasing reliability and lowering operating cost by improving efficiency. Construction of the Town Branch WWTP Scum Handling and Scum Facility Improvements Project must be complete by December 31, 2021.

As stated in the *Group Two Sanitary Sewer System and WWTP Remedial Measures Plan* the scum collection facility on the primary clarifiers is over 25 years old, is at the end of its useful service life, and cannot reliably meet the volume of scum produced. Therefore, it is recommended that the scum facility be replaced and expanded to meet the current and future volumes of scum produced by the primary clarifiers.

The CONSULTANT will evaluate the existing Scum Facility for rehabilitation; the existing facility will be used to handle the scum from the Primary Clarifiers. Recommendations for a system to handle the additional streams of scum/grease/septage/vactor dump station will be expected from the CONSULTANT.

Funding for this project is 100% sewer fund revenue, no federal fund involvement is expected.

2. Scope of Work: Scum Handling and Scum Facility Improvements Project

The CONSULTANT will evaluate the existing Scum Facility for rehabilitation; the existing facility will be used to handle the scum from the Primary Clarifiers. Recommendations for a system to handle the additional streams of scum/grease/septage/vactor dump station will be expected from the CONSULTANT. Scum/grease/septage quantities accepted at Town Branch 2017 and 2018 are attached.

The CONSULTANT will evaluate the existing Scum Facility for rehabilitation and research scum/grease/septage/vactor dump station receiving technologies available for additional streams of scum/grease/septage/vactor dump station receiving capacity. The additional capacity will be a new/expansion system. The CONSULTANT will be responsible for evaluating the optimal technology and location. The design will also include odor control design/rehab for the existing scum facility and odor control for the new/expansion system.

The CONSULTANT will also be responsible for all related electrical and mechanical design for equipment related to the project.

A. Task 1: Existing Scum Handling and Scum Facility Review

- (1) Interview Town Branch Wastewater Treatment Plant Operations and Management staff for input regarding the current process equipment control and functionality related to the existing Scum Facility and the additional streams and how they are currently managed. Scum/grease/septage quantities accepted at Town Branch 2017 and 2018 are attached.
- (2) Collect any information needed on the additional scum/grease/septage streams that are dumped at the plant.
- (3) Collect any other supporting data needed for design decisions.
- (4) Observe the operations of each area.

B. Task 2: Develop Equipment/Process Replacement Concepts and Schedules

- (1) List and compare available technologies for scum/grease/septage/vactor dump station. Meet with plant staff and engineering group to select 3 technologies to continue evaluation.
- (2) Prepare a conceptual layout for three (3) concepts evaluated along with design calculations.
- (3) Conduct a 20-year life cycle and present worth analysis for each conceptual design evaluated.
- (4) Prepare preliminary cost estimates and implementation schedules for all conceptual designs.
- (5) Present Preliminary Engineering Report to Treatment Plant Management Staff and Engineering Group for a review of all conceptual designs and receive guidance for progress towards the final design.
- (6) LFUCG will respond in writing to the preliminary Engineering Report, providing authorization for work under Task 3.
- (7) Preliminary Engineering Report will be finalized to document final decisions.

C. Task 3: Detailed Design

- (1) Conduct detailed design progress meetings at 25%, 50%, and 90% completion. The dates for these progress meetings will be decided on during the first pre-design meeting. Progress reports and drawings will be submitted one week before the Lexington-Fayette Urban County Government review and comment. (3 copies)
- (2) Conduct and present any related design calculations to support the new equipment/process.
- (3) Furnish detailed cost estimates for probable cost and revise the 20-year life cycle and present worth analysis for the 50% review and the final design.
- (4) Update project schedules at 25%, 50% and 90%?

D. Task 4: Bidding Services

- (1) Prepare final plans and specifications ready for bidding. Plans and specifications are to be provided in both hard copy and standard electronic format compatible with Lexington-Fayette Urban County Government equipment. The most recent plans and specifications have been submitted in PDF format. A minimum of 7 copies will be required.
- (2) Coordinate and submit plans, specifications, and permit application to the Kentucky Division of Water for the purposes of receiving a construction permit.
- (3) Provide customary bidding services including preparation of advertisement, conducting pre-bid meeting, issuing required addenda, evaluating bids and providing a recommendation of award.

E. Task 5: Construction Administration Services

- (1) Track, review and approve all shop drawings.
- (2) Track change orders, review requests, recommendation comments, and prepare the paper work to be submitted to council.
- (3) Track and answer all Request for Information (RFIs)
- (4) Coordinate and lead monthly construction progress meetings.
- (5) Conduct construction inspections and submit weekly reports once construction begins. Please submit estimated hours per week, total hours included for inspections and the hourly rate with your detailed cost estimate
- (6) Take before and after photos of all stages of construction.

- (7) Review and approve contractor's monthly payment applications.
- (8) Attend and maintain test reports for all equipment start-up for the project.
- (9) Coordinate final inspection of completed work and prepare the final punch list.
- (10) Transfer field notes from the contractor's drawings and submit final as-built drawings to the owner.

NOTE: This outline is not intended to be all inclusive but is intended to be a guide for prospective firms as to the general expectations of the Owner. The Lexington-Fayette Urban County Government will not compensate firms for the cost of proposal preparation.

3. Detailed Cost Estimates

The CONSULTANT shall prepare a detailed cost estimate for this proposal based on the Tasks defined in this Request for Proposal. The estimate shall show a preliminary schedule estimating the time necessary to complete the Tasks outlined with a unit price associated. The intent of this proposal is to show the number of hours associated with a lump sum fee for the Scum Handling and Scum Facility Improvements Projects. If your firm has additional Tasks that would be recommended show the new Tasks as separate line items with the scope well defined.

4. Proposal Content

The proposal will contain the following components.

- A. Cover Letter
- B. Scope/fee (Detailed Cost Estimate) No more than 8 pages. The attached Fee Schedule completed with your estimated cost will be the last page in this section.
- C. Estimated Schedule No more than 4 pages.
- D. Project Team with **One-Page** Resumes (Do not submit resumes for individuals contributing less than 10% of total man hours allocated)
- E. A list of 5 similar projects with owner contact information. This section shall be no more than 5 pages total.

5. Schedule and Completion

The proposed timeline for completion of the Scope of Services outlined in the proposal is as follows:

Scum Handling and Scum Facility Improvements Project

Award Design Contract	September	2019
Meeting to Review Final Design – 90% Completion	March	2020
Bid Opening	May	2020
Award of GC Contract	June	2020

The CONSULTANT shall coordinate the exact time and location of all meetings with the Plant Engineering Manager, Division of Water Quality.

NOTE: Schedule may be adjusted based on final negotiations. When submitting the schedule with your proposals please indicate if your firm could complete this project any sooner than the estimated time above. If your experience indicates a shorter construction period based on shorter equipment lead times, the design period can be adjusted.

6. Method of Invoice and Payment

The CONSULTANT shall submit monthly for basic services or work rendered, based upon the CONSULTANT'S estimate of the portion of the total services actually completed during the billing cycle. Each invoice shall be accompanied by a breakdown of hours attributed to each task for both the billing cycle and the cumulative project period. Also include the percent Disadvantaged Business Enterprise (DBE) cost with each monthly invoice.

The Director of Water Quality or his designee shall respond to the invoice within thirty days of receipt, either denying or approving payment. Specific project time sheets and other payroll information may be subject to reviews and audits by the Lexington-Fayette Urban County Government.

7. Miscellaneous

All plans, specifications and accompanying documents are subject to review by the Lexington-Fayette Urban County Government's Division of Water Quality, Division of Engineering, Division of Risk Management and Division of Building Inspection. The CONSULTANT shall be responsible for incorporating the comments and requirements of the divisions into all documents.

Investigation/Design Services for Town Branch WWTP Scum Handling and Scum Facility Improvements

Fee Schedule

(For a description of task refer to Section 2 of the RFP)

Section 2

Scope of Work: Scum Handling and Scum Facility Improvements

Task 1: Existing Process Performance Review	Cont. Tools 4
	Cost Task 1:
Task 2: Develop Equipment/Process Replacement Concepts	
	Cost Task 2:
Task 3: Detailed Desgin	
	Cost Task 3:
Task 4: Bidding Services	
	Cost Task 4:
Task 5: Construction Administration Services	
	Cost Task 5:
Details for Task 5.5 - The total cost should be included in Co.	_
breakdown. Estimated Weekly Inspection Hrs/Estimated To	tal Inspection Hrs/Hourly Rate.
	1
	,
Section	2 Total Cost:

TOWN BRANCH WWTP YEARLY REPORT 2017 GREASE/SEPTIC FROM HAULERS

MONTHS	LOADS	GALLONS	HAULER TYPE	CHARGED
JANUARY				
	47	85,910	GREASE	\$9,033
	20	30,000	DOMESTIC	\$2,857
	15	17,400	PORTABLE	\$1,460
	6	19,750	OTHER	\$1,682
LFUCG	No Reports	Submitted	OTHER	\$0
FEBRUARY				
	56	105,450	GREASE	\$10,881
	16	26,750	DOMESTIC	\$2,311
	12	14,500	PORTABLE	\$1,218
	10	22,514	OTHER	\$2,080
LFUCG	No Reports	Submitted	OTHER	\$0
MARCH				
	55	104,320	GREASE	\$10,645
	28	41,400	DOMESTIC	\$3,906
	14	20,000	PORTABLE	\$1,680
	9	6,100	OTHER	\$553
LFUCG	No Reports	Submitted	OTHER	\$0
APRIL				F CEL
	55	104,690	GREASE	\$10,231
	17	23,600	DOMESTIC	\$2,159
	15	20,900	PORTABLE	\$1,786
	12	27,100	OTHER	\$2,306
LFUCG	No Reports	Submitted	OTHER	\$0
MAY	T-11-11-2-1-1-1-1-1	812110		08/61
	56	98,888	GREASE	\$9,999
	31	46,700	DOMESTIC	\$4,200
	17	23,400	PORTABLE	\$2,038
	8	16,800	OTHER	\$1,391
LFUCG	No Reports	Submitted	OTHER	\$0
JUNE				100
5	70	126,010	GREASE	\$12,057
	26	47,000	DOMESTIC	\$4,200
	18	25,800	PORTABLE	\$2,190
	5	3,100	OTHER	\$215
LFUCG	No Reports	Submitted	OTHER	
JULY				
	40	97,255	GREASE	\$9,987
	36	50,000	DOMESTIC	\$4,907
	15	20,500	PORTABLE	\$1,764
	5	2,900	OTHER	\$219
LFUÇG	No Reports	Submitted	OTHER	\$0

TOWN BRANCH WWTP YEARLY REPORT 2017 GREASE/SEPTIC FROM HAULERS

MONTHS	Loads	Gallons	Hauler Type	Charge
AUGUST				L-was -
	72	143,690	GREASE	\$14,405
ais.	26	40,500	DOMESTIC	\$3,721
	19	26,100	PORTABLE	\$2,229
	7	3,250	OTHER	\$308
LFUCG			OTHER	\$0
SEPTEMBER				
	61	127,800	GREASE	\$12,546
	20	32,750	DOMESTIC	\$2,995
	20	27,500	PORTABLE	\$2,348
	7	18,500	OTHER	\$1,718
LFUCG	No Reports	Submitted	OTHER	\$0
OCTOBER				Y HEAD
	70	134,385	GREASE	\$13,769
	21	29,650	DOMESTIC	\$3,079
	27	34,000	PORTABLE	\$2,903
	6	19,500	OTHER	\$1,674
LFUCG	No Report	Submitted	OTHER	\$0
NOVEMBER				
	46	95,768	GREASE	\$10,182
	13	20,700	DOMESTIC	\$1,899
	22	27,700	PORTABLE	\$2,365
	6	6,000	OTHER	\$518
LFUCG	No Report	Submitted	OTHER	\$0
DECEMBER				
	83	175,715	GREASE	\$17,356
	11	16,000	DOMESTIC	\$1,685
	15	19,000	PORTABLE	\$1,620
	6	21,000	OTHER	\$2,020
LFUCG	No Report	Submitted	OTHER	\$0
TOTALS:	1272	2,248,245		\$217,295

TOWN BRANCH WWTP YEARLY REPORT 2018 GREASE/SEPTIC FROM HAULERS

MONTHS	LOADS	GALLONS	HAULER TYPE	CHARGED
JANUARY				
	64	138,290	GREASE	\$14,221
	14	21,000	DOMESTIC	\$1,974
	4	8,700	OTHER	\$832
LFUCG	No Reports	Submitted	OTHER	
FEBRUARY				
	63	108,815	GREASE	\$1,156
	15	22,000	DOMESTIC	\$2,225
	3	4,500	OTHER	\$657
LFUCG	No Reports	Submitted	OTHER	
MARCH				
	81	162,535	GREASE	\$16,882
	16	23,500	DOMESTIC	\$2,419
	6	20,400	OTHER	\$1,752
LFUCG	No Reports	Submitted	OTHER	
APRIL				
	73	148,050	GREASE	\$15,925
	15	20,500	DOMESTIC	\$2,058
	6	4,800	OTHER	\$482
LFUCG	No Reports	Submitted	OTHER	
MAY				
	67	142,045	GREASE	\$14,979
	30	51,000	DOMESTIC	\$4,892
	6	19,898	OTHER	\$2,026
LFUCG	No Reports	Submitted	OTHER	
JUNE				
	76	152,245	GREASE	\$16,316
	28	44,200	DOMESTIC	\$4,174
	6	22,300	OTHER	\$1,904
LFUCG	No Reports	Submitted	OTHER	
JULY				
	72	152,050	GREASE	\$15,962
	27	42,150	DOMESTIC	\$4,036
	8	15,400	OTHER	\$220
LFUCG	No Reports	Submitted	OTHER	

TOWN BRANCH WWTP YEARLY REPORT 2018 GREASE/SEPTIC FROM HAULERS

AUGUST	Loads	Gallons	Hauler Type	Charge
	78	165,730	GREASE	\$16,942
	21	32,000	DOMESTIC	\$3,118
	9	21,900	OTHER	\$1,889
LFUCG	No Reports	Submitted	OTHER	
SEPTEMBER				
	71	133,660	GREASE	\$14,927
	28	48,500	DOMESTIC	\$4,805
	12	27,050	OTHER	\$2,529
LFUCG	No Reports	Submitted	OTHER	
OCTOBER				
	56	115,245	GREASE	\$12,173
	29	46,300	DOMESTIC	\$4,636
	7	15,300	OTHER	\$323
LFUCG	No Reports	Submitted	OTHER	
NOVEMBER				
	56	126,085	GREASE	\$13,344
	24	40,530	DOMESTIC	\$3,956
	7	20,900	OTHER	\$1,842
LFUCG	No Reports	Submitted	OTHER	
DECEMBER				
	71	154,710	GREASE	\$15,929
	17	28,000	DOMESTIC	\$2,767
	10	28,900	OTHER	\$1,888
LFUCG	No Reports	Submitted	OTHER	
TOTALS:	1176	2,329,188		\$226,160

EXHIBIT B

Certificate of Insurance

and

Evidence of Insurability



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 10/3/2019

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(les) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER		CONTACT NAME: Susan Simoneau			
Ansay & Associates, LLC. MSN 702 N High Point Road		PHONE (A/C, No, Ext): 800-643-6133	FAX (A/C, No): 608-83	No): 608-831-4777	
Suite 201		E-MAIL ADDRESS: sue.simoneau@ansay.com			
Madison WI 53717		INSURER(S) AFFORDING COVERAGE		NAIC#	
_		INSURER A : CNA Insurance Companies		35289	
INSURED	STRAASS-01	INSURER B:			
Strand Associates, Inc 910 W. Wingra Drive		INSURER C:			
Madison WI 53715		INSURER D :			
		INSURER E :			
		INSURER F:			
COVERAGES	CERTIFICATE NUMBER: 78266349	REV	ISION NUMBER		

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES, LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

		SICING AND CONDITIONS OF SUCIT							
INSR LTR		TYPE OF INSURANCE	ADDL INSR	SUBR	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMIT	S
Α	GEN	ERAL LIABILITY			5099170076	1/1/2019	1/1/2020	EACH OCCURRENCE	\$ 1,000,000
	Х	COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurrence)	\$ 900,000
		CLAIMS-MADE X OCCUR						MED EXP (Any one person)	\$ 15,000
								PERSONAL & ADV INJURY	\$ 1,000,000
	X	XCU Cov. Inc.						GENERAL AGGREGATE	\$ 2,000,000
	GEN'	L AGGREGATE LIMIT APPLIES PER:						PRODUCTS - COMP/OP AGG	\$ 2,000,000
		POLICY X PRO-							\$
Α	AUTO	OMOBILE LIABILITY	Υ		5099170062	1/1/2019	1/1/2020	COMBINED SINGLE LIMIT (Ea accident)	\$ 1,000,000
. 1		ANY AUTO						BODILY INJURY (Per person)	\$
		ALL OWNED SCHEDULED AUTOS						BODILY INJURY (Per accident)	\$
	X	HIRED AUTOS X NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	\$
								110711101111111111111111111111111111111	\$
Α	Х	UMBRELLA LIAB X OCCUR	Υ		5099170059	1/1/2019	1/1/2020	EACH OCCURRENCE	\$ 2,000,000
		EXCESS LIAB CLAIMS-MADE						AGGREGATE	\$ 2,000,000
		DED X RETENTION \$ 10,000						15	\$
Α		KERS COMPENSATION EMPLOYERS' LIABILITY			WC595126844	1/1/2019	1/1/2020	X WC STATU- OTH-	
	ANY	PROPRIETOR/PARTNER/EXECUTIVE	N/A					E.L. EACH ACCIDENT	\$ 1,000,000
	OFFICER/MEMBER EXCLUDED? (Mandatory In NH)		10.7.5	N/A		1		E.L. DISEASE - EA EMPLOYEE	\$ 1,000,000
	DESI	, describe under CRIPTION OF OPERATIONS below						E.L. DISEASE - POLICY LIMIT	\$ 1,000,000
A		ssional Liability rior Acts			AEH113974097	7/11/2019	7/11/2020	Each Claim Aggregate Full Prior Acts	2,000,000 2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required) PROJECT: Lexington Fayette Urban County Government Town Branch Scum Imrpovements

Lexington-Fayette Urban County is named as an additional insured on a primary and non-contributory basis as per written agreement.

Thirty (30) days advance written notice via certified mail, return receipt requested will be given to the Certificate Holder if policies are canceled or non-renewed.

CERT	IFICA	TF H	OLD	FR
	11 107		VLU	-

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

Lexington-Fayette Urban County Government 200 E. Main Street Lexington KY 40507

AUTHORIZED REPRESENTATIVE

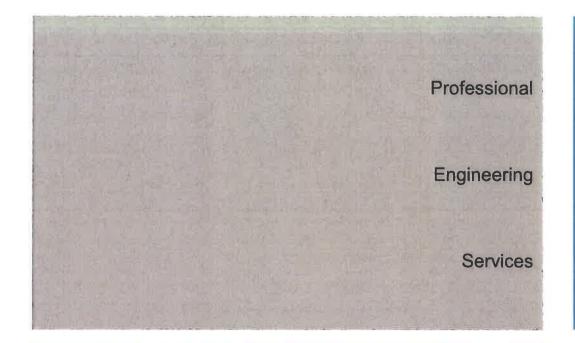
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EXHIBIT C

Proposal of Engineering Services

and

Related Matters



Engineering
Investigation/
Design
Services for
Town Branch
WWTP Scum
Handling and
Scum Facility
Improvements

RFP#32 - 2019

Proposal for

Lexington-Fayette Urban County Government

August 19, 2019

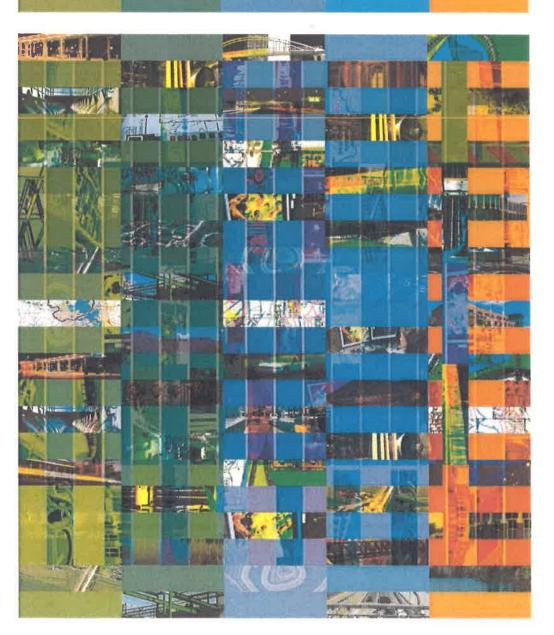






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Selecting Strand Associates, Inc.® for the Town Branch WWTP Scum Handling and
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General Provisions
Equal Opportunity Agreement
Strand Equal Employment Opportunity Policy Statement
MWDBE Participation Form
Good Faith Efforts Form
Work Force Analysis Form
Certificate of Insurance

Firm Submitting Proposal: Strand Associates, Inc.	
Complete Address: 1525 Bull Lea Road, Suite 100, Lexington, K Street City 2	<u>Y 405</u> 11 Zip
Contact Name: Michael Davis Title: Senior Associate	
Telephone Number:(859)225-8500 Fax Number:(859)225-	·8501
Email address: mike.davis@strand.com	



Scope/Fee

Strand's Unmatched Knowledge of Project Requirements and Existing Facilities Results in a Comprehensive Scope that Matches LFUCG's Needs

Strand has a long and successful history of providing design and contract administration services at Town Branch WWTP. PEH Engineers was a key player in design of the original scum facilities at Town Branch WWTP in the 1980s. PEH became a became a subsidiary of Strand in the 1990s and later was fully integrated into Strand's corporate structure and organization. Key design personnel involved in the original scum facility design are still on staff with Strand today!

Our approach to scum/septage/grease/vactor improvements at Town Branch WWTP will involve careful consideration of the benefits and drawbacks of the existing systems coupled with a broad understanding of available technologies that would likely perform well and simplify operations. We will also investigate future needs at the scum facility and in regard to hauled waste to ensure the improved facilities have capacity to meet the forecasted needs.

Strand's approach relies on long-term experience at Town Branch WWTP coupled with comprehensive understanding of proven treatment technologies.



Town Branch Wastewater Treatment Plant.

Background

Primary Clarifier Scum Facility

The existing scum facility accepts scum from several collection locations around the WWTP. The largest volume of scum is collected in scum decant pipes at the effluent of the primary clarifiers. Scum is also conveyed to the facility from the final clarifiers, gravity thickeners, and grease receiving well.



Scum Facility Discharge Chute and Hopper.



There are two banks of primary clarifiers, and two 16-inch scum pipes that connect the decant pipes at each bank to the scum facility. Several smaller diameter pipes from other collection points around the WWTP discharge into the facility. A chain and flight scum collector is installed in the facility's channel that scrapes the scum from the receiving area up the inclined channel toward the Scum Building. Scum is deposited into a hopper housed in the building. The clear water in the channel drains by gravity to the drain pump station, and a 6-inch suction pipe facilitates pumping water and sediment from the low point of the channel to the Primary Sludge Pumping Station.

The existing scum facility was constructed in the 1980s and is still performing well, but the equipment is in need of rehabilitation or replacement to continue performing reliably.

Grease Receiving

WWTP staff have fashioned a grease receiving structure in the dumpster storage area just north of the existing scum facility. Haulers discharge their grease to the grease well and rake the screenings off the bar screen into an adjacent waste bin. The well is piped into the 16-inch scum line from the north bank of primary clarifiers and this comingled grease and scum is then discharged to the scum facility at the receiving area.

The grease receiving well was not intended to be a long-term solution and is in need of replacement. WWTP staff would like to install an independent grease and septage receiving system. Continuing to dispose of grease via the scum facility is a maintenance concern for WWTP staff.

Septage Receiving

Town Branch WWTP has an existing septage receiving area where haulers discharge their septage through a screen and into the influent channel upstream of the Headworks. The wide range of waste constituents received from haulers has historically been problematic for the downstream processes. WWTP staff would like to eliminate the introduction of hauled septage to the forward flow without appropriate pretreatment.

Odor Control

The Scum Facility is served by a small carbon adsorption odor control unit. A ducted fan draws the foul air from the building and blows it through the carbon media vessel. The unit has a vertical stack discharge. Plant staff have been satisfied with the performance of this particular odor control unit and the carbon adsorption technology in general, but this system is aging and in need of rehabilitation or replacement.



Scum Facility Odor Control System.



Vactor Receiving

LFUCG Sanitary Sewers currently shares a dump pad with Streets and Roads for disposal of vactor waste from sewer cleaning. This facility is across Town Branch Creek near the old incinerator. Sanitary Sewers is interested in having a dedicated vactor dump pad at Town Branch WWTP. This would also free up some capacity at the sewage pump station across the Creek that serves part of the City's collection system as well as the dump pad. There may be potential to combine vactor receiving at Town Branch WWTP with other hauled waste receiving.

Electrical/SCADA & Instrumentation

The existing scum facility electrical system was originally constructed in the late 1980s. The electrical components have been replaced/repaired on an as-needed basis to continue facility operation. To improve future reliability and accommodate new scum and septage facilities, the electrical service will be replaced with new equipment and services to the new septage facilities will be provided. Equipment inside the existing scum facility will be replaced.

The facility SCADA system will be modified to reflect the new process equipment installed in this project. New SCADA inputs and outputs (I/O) will be determined based on new equipment installations and plant control algorithms will be developed. Development of 3-dimensional graphics will be included in the construction project. Hazardous gas monitoring and other instrumentation needs will be provided for new septage receiving facilities as required by NFPA 820.

Project Overview and Scope of Engineering Services

Strand's scope of services was developed with LFUCG's RFP as the basis and tailored based on our understanding of current needs and available scum/septage/grease/vactor disposal technologies. We recognize the need to isolate grease and septage receiving from WWTP forward flow to reduce the process impacts and maintenance burden caused by foreign materials and grease blinding. Our scope also includes an initial operations review and staff interview phase as requested, so there is flexibility to tailor the design to address feedback and trends identified at this stage.

Primary Clarifier Scum Facility

As discussed in the RFP, rehabilitating the existing scum facility to exclusively serve the primary clarifiers (and small scum loads from the final clarifiers and thickeners) is an economical solution to handling scum in the forward flow. We anticipate a rehabilitation would require replacement chain and flight equipment (including tracks and drive assembly), weir gates, discharge chute, and associated components. Building improvements including doors, roofing, and ventilation equipment will also be included.

Grease/Septage/Vactor Receiving

To simplify and optimize grease and septage handling, installation of a standalone, modular system may be ideal. Depending on the characteristics of the hauled waste, this type of receiving system could include piped or open conveyance acceptance, screening, screenings washing, grit removal, grit cleaning and dewatering, and grease removal. Instead of impacting the WWTP's existing screening, grit, and scum facilities, a receiving station independently processes hauled wastes and produces landfillable byproducts.

A cursory review of existing facilities and receiving needs indicates that currently some haulers require a piped discharge option while others open a truck hatch and dump liquid wastes. It would be advantageous for the proposed station to require a piped discharge to reduce the potential for odors. An open pad with a rock trap could be provided for vactor truck dumping because odor control with mostly inorganic waste from sewer



Project Goals

Strand's approach addresses the following project goals.

- 1. Compliance with Remedial Measures Plan scope and project schedule as mandated by the LFUCG Consent Decree.
- 2. Replacement of aging process equipment to improve reliability of the Scum Facility. Effective scum handling will prevent impacts at downstream processes due to scum.
- 3. Provision of grease and septage handling separate from the WWTP's main treatment train.
- 4. Design of a dedicated vactor dump station at the WWTP site.
- 5. Consideration of odor control needs at the existing scum facility and proposed hauled waste receiving facilities.

Task 1 - Existing Scum Handling and Scum Facility Review

The process and facilities review will build upon Strand's current knowledge and understanding of the scum, grease, and septage handling at Town Branch WWTP. Through several recent projects, the project team has a good understanding of the WWTP as a whole. Our expertise in all areas of wastewater treatment will provide a basis for evaluating the specific needs and challenges in regard to scum and hauled waste.

Strand will conduct a kick-off meeting followed by an interview with Town Branch WWTP operations and maintenance staff regarding the existing scum facility and current hauled waste acceptance strategies. This will also provide an opportunity for Strand to understand the acceptance and handling technologies that may interest the WWTP staff for septage, grease, and vactor waste. Our kick-off meeting will be attended by Mike Davis, Mark Sneve, and Emily Epperson. Troy Larson will attend by phone.

Task 2 – Develop Equipment/Process Replacement Concepts and Schedules

Strand will complete a Preliminary Engineering Report to consider three hauled waste acceptance and handling alternatives. The alternatives presented in the project overview and scope of services section as well as other technologies that emerge as potential solutions during the facilities and operations review will be narrowed down to the three that are discussed in the report. Our approach to the alternative evaluation will involve searching for the improvements that are the best fit for the WWTP but also cost-effective,

Construction sequencing will be considered to minimize construction impact on day-to-day operation. Life cycle costs, present worth analyses, preliminary cost estimates, and implementation schedules will be determined for proposed improvements and equipment replacement.

Results from these evaluations will be summarized in the Preliminary Engineering Report that is presented to LFUCG staff for review and acceptance prior to initiating detailed design.

Task 3 - Detailed Design

low maintenance, and energy efficient.

Design will be based on results from the previous evaluation. Detailed drawings and specifications will be provided for bidding and construction. Where possible, bid alternatives will be identified that will enhance competition among equipment suppliers resulting in lower project costs. Our approach to the Town Branch/West Hickman WWTP Electrical/SCADA/Blower project is a good example of structuring bid alternatives to maximize project funding.

We will meet with LFUCG at the 25%, 50%, and 90% stages of completion to review the design, solicit input, and discuss costs and schedule.

Attention to details and carefully crafted equipment alternatives minimize total project cost.



Drawings will be developed during the final design phase. We anticipate the drawing set will include approximately 40 sheets, addressing demolition and new construction for process, structural, electrical, and instrumentation disciplines.

Specifications will also be developed during the design phase. Strand will provide technical specifications, including



Existing Grease Receiving.

Divisions 1 through 46. Division 0, including Parts I through IX will be based on LFUCG standard specifications. Strand is familiar with LFUCG specification requirements and understands how these documents are interfaced with the technical specifications.

Our proposed fee includes the following components:

- Rehabilitation of the existing scum facility.
- Standalone vactor dump station with rock trap and overhead hoist for removing rock basket location to be determined.
- Combined grease/septage receiving station with modular treatment components location to be determined.
- Building design for grease/septage treatment components location to be determined. Geotechnical services included.

In the event the final design scope deviates from this assumed approach, an equitable fee adjustment will be required.

Task 4 - Bidding Services

Strand will assist LFUCG during the bidding phase of this project. Strand understands LFUCG's requirements and is experienced in providing these types of services for LFUCG projects. Bidding-phase services include all items contained in the RFP.

Task 5 - Contract Administration Services

Strand will support LFUCG during the construction phase of this project. Strand has recent experience providing these services to LFUCG on other wastewater improvements projects and has developed good working relationships with staff that complement our ability to provide these services. Construction-phase services include all items contained in the RFP.

We will provide regular site visits to monitor the progress of construction. The actual number of hours at the site will vary during construction depending on the contractor's activities. We anticipate being on site an average of 3 hours per week during the duration of construction, in addition to monthly progress meetings. The proximity of our office to the Town Branch WWTP site makes these visits very efficient and flexible.

Strand's overall fee is summarized in the following Fee Schedule. The total effort for all tasks represents approximately 1,200 staff hours.

Strand's construction-related services will be performed by people you know.

Investigation/Design Services for Town Branch WWTP Scum Handling and Scum Facility Improvements

Fee Schedule

(For a description of task refer to Section 2 of the RFP)

Section 2Scope of Work: Scum Handling and Scum Facility Improvements

A. Task 1: Existing Process Performance Review Cost Task 1: \$ 10,000 В. Task 2: Develop Equipment/Process Replacement Concepts Cost Task 2: \$ 22.000 C. Task 3: Detailed Desgin Cost Task 3: \$ 85,000 D. Task 4: Bidding Services Cost Task 4: \$ 10,000 E. Task 5: Construction Administration Services Cost Task 5: \$88,000 Details for Task 5.5 - The total cost should be included in Cost Task 5. Please provide the following breakdown. Estimated Weekly Inspection Hrs/Estimated Total Inspection Hrs/Hourly Rate. / 195 hours total Section 2 Total Cost: \$215,000

Task 3 Fee includes the services of a geotechnical sub-consultant.

Task 5 Fee reflects 15 month (65 week) construction contract duration.



Estimated Schedule

Strand's Project Schedule and Staffing Plan Provide Engineering Support to Meet December 2021 Consent Decree Completion Date

DEGREE OF LOCAL EMPLOYMENT

Our Lexington-Based Project Team Will Maximize Local Employment Selection of Strand for this project will maximize local employment utilizing our Lexington office staff to manage and deliver the project. We anticipate approximately 94% of total staff hours expended, will be staff permanently located in our Lexington office. Our Project Team is local and invested in many aspects of our community. We have established working relationships with LFUCG DWQ engineering and plant operations personnel. The following illustrates that our Lexington office and Project Team is local with team members that live in Lexington and have supported LFUCG initiatives

Strand project schedule meets EPA Remedial Measures Plan completion schedule with 3 months of float.



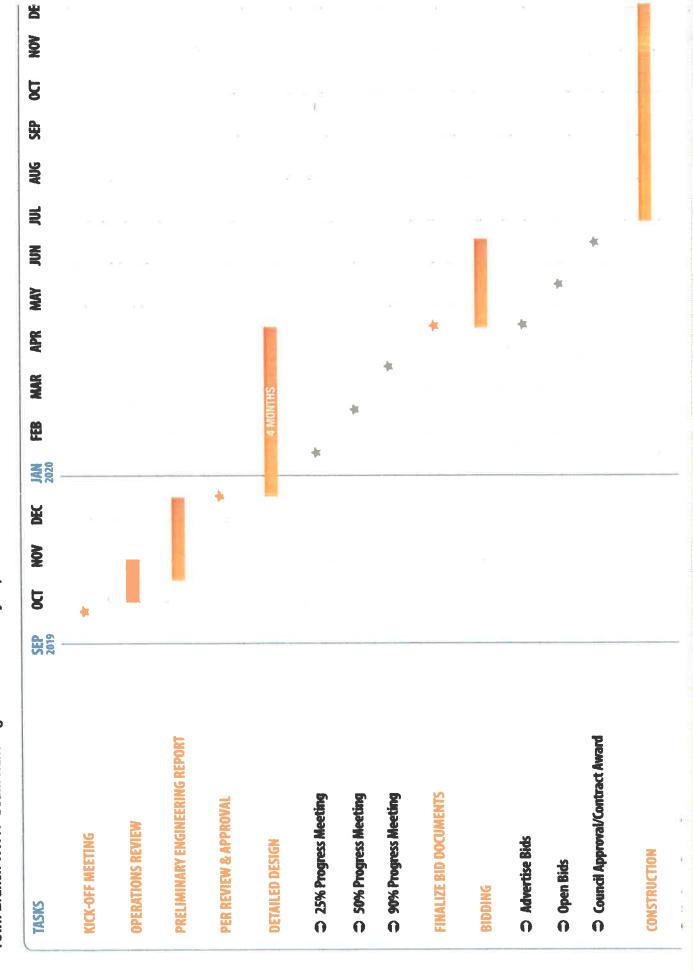
- Founded in 1968 (Six Years before Lexington and Fayette County Governments merged).
- Provided continuous record of service to Lexington since 1968.
- Local Design Team members have over 35 years of project experience serving LFUCG on major wastewater treatment projects.
- Five miles separate our Lexington Office and the Town Branch Wastewater Treatment Plant.

The schedule on the following page shows project final completion by December 31. 2021, with engineering evaluation beginning in late September 2019. The schedule allows two months to complete the operations review and the preliminary engineering report. The schedule allows four months for design. We have included KDOW review and approval in the implementation schedule. Our recent experience with KDOW indicates the review process will take approximately one month. (Based on the project's nature, KDOW approval may not be required if no process modifications result.) Bid documents will be issued to solicit bids from contractors. The bid process will take approximately three months to receive bids and obtain LFUCG Council approval. Once awarded, the construction contract duration is expected to be 15 months. The construction duration will be impacted by actual equipment delivery times, and may need to be adjusted during design.

We have prepared a construction phase Gantt chart showing reasonable schedules for shop drawings and equipment fabrication and delivery. Our 15-month construction schedule predicts an early completion and three months of float before reaching the Consent Decree deadline.



Town Branch WWTP Scum Handling and Scum Facility Improvements Schedule





Strand's Project Approach Seeks to Engage MWDBE/VOB Participation

As a firm that supports initiatives of our local government, we endeavor where practical to incorporate MWDBE/VOB participation goals in our contracting opportunities. Based on defined project scope, we did not identify services for MWDBE/VOB consultant.

CAPACITY TO PERFORM WORK

Our Team is Available to Start Work Immediately and has Capacity to Meet LFUCG's Schedule

Strand coordinates staff assignments corporate-wide through a scheduling system. This allows us to make sure the right staff are available at the right time for each of our projects. The following table shows staff availability and project requirements for the next 8 months beginning in September 2019, which corresponds with design completion.

Our Project Team can start work immediately and has the capacity to complete this important project on time.

8-MONTH CAPACITY		*Mike Davis		Randy Wirtz		Mark Sneve		* Emily Epperson		Troy Larson		* Liz Dienst	
	REQ'D	AVL	REQ'D	AVL	REQ'D	AVL	REQ'D	AVL	REQ'D	AVL	REQ'D	AVL	
SEPTEMBER-19	1	20	1	52		131		13	1	36	1	45	
OCTOBER-19		18		36		75		61		50		100	
NOVEMBER-19		68		60		19		103		16		134	
DECEMBER-19		60		105		33		88		11		123	
JANUARY-20		130		130		59		81		14		122	
FEBRUARY-20		114		139		79		98		19		150	
MARCH-20		134		170		101		144		87		169	
APRIL-20		130		154		97		140		129		165	
TOTAL	80	674	8	846	40	594	300	728	8	362	40	1,00	

Lexington-based staff are noted with an asterisk in the table above. Based on these projected hours, we anticipate Strand's Lexington-based staff will provide approximately 89% of required services through design. For bidding, contract administration and RFP, we anticipate Lexington staff will provide 100% of these services. In aggregate, we anticipate Lexington staff will provide 94% of all services.



Project Team

Strand's Project Team Understands The Town Branch WWTP Scum Facility and Septage Receiving Operational Requirements and Flexibilities that are to be Incorporated Into the Improvements Project

Our Project Team is assembled to provide all the technical expertise necessary to upgrade the secondary digester complex. During design, the project team will evaluate existing conditions and potential impacts from other on-going and future treatment plant construction projects. Our Team includes individuals who have extensive wastewater treatment experience, intimate familiarity with the Town Branch Wastewater Treatment Plant (WWTP), and lengthy professional careers successfully providing wastewater treatment design services for Lexington-Fayette Urban County Government (LFUCG) and other municipal utilities.

In addition to technical expertise, our Team Members have availability to provide the level of service required in the available project time schedule. Our organization chart is structured to take advantage not only of expertise, but available time. Our Project Team is organized to share tasks in an efficient manner, resulting in project delivery to meet the Consent Decree deadline. One-page resumes of key team members, contributing more than 10% of the total man hours, follow at the end of this section.

Our Team has the commitment and requisite design experience to successfully complete this project.



Qualifications of Key Project Team Members

Michael Davis, P.E. - Project Manager/Bidding & Construction/Electrical

Mike has over 36 years of experience serving LFUCG on numerous wastewater treatment projects. He has served as Project Manager for many of these projects, including the Town Branch/West Hickman WWTP Electrical/SCADA Improvements project and the Town Branch WWTP Primary Digester Complex Improvements project. He provides a historical understanding of operations and improvements at Town Branch WWTP, and he will also provide electrical design services as he has on many LFUCG projects since the late 1980s.





Randall Wirtz, Ph.D., P.E., Env SP - Quality Control

Randy will be responsible for the Quality Control of this project. Randy is a licensed professional engineer with 25 years of project experience. He has extensive experience in planning and design of biological treatment facilities, nutrient removal, odor control facilities, chemical treatment systems, sludge dewatering systems, biosolids stabilization facilities, disinfection facilities, hauled waste receiving, and pumping and conveyance facilities. Randy has recent experience with LFUCG as the principal author of the completed Town Branch Digester Gas Master Plan. Randy brings the perspective of dozens of similar projects to his role as Quality Control reviewer.



Mark Sneve, P.E., BCEE - Technical Advisor

Mark will serve as a Technical Advisor to Mike and Emily during all phases of the project. Mark is a licensed professional engineer, with 30 years of project experience. Mark has extensive experience providing engineering services for major wastewater plant expansions. He is very familiar with the Town Branch WWTP from previous studies and the on-going Primary Digester Complex renovation. Mark was involved with the West Hickman Remedial Measures Scum project.



Emily Epperson, P.E. – Assistant Project Manager/Bidding & Construction/Process & Design

Emily will serve as Assistant Project Manager and Process Engineer through design, bidding, and construction on this project. Emily has 6 years of experience, which includes recent LFUCG wastewater experience providing design for the Town Branch Aeration Improvements Projects, Town Branch Primary Digester Complex Improvements project and RPR services for the West Hickman Blower Improvements project. She has also completed several studies to evaluate operation and treatment efficiencies of water and wastewater treatment facilities and has worked on wastewater collection and treatment design projects for several other municipalities.



Troy Larson - Operations

Troy will be the Plant Operations Specialist for this project. Troy received his B.S. in Biology and has 23 years of broad experience in the wastewater operations field, including plant operations. He has operated treatment facilities, worked as a soils technician, and currently works to support our wastewater treatment facility planning, design, and construction-related projects with input from the operator's perspective. Troy has an extensive background in the optimization and control of wastewater treatment processes. He has performed in a similar role for LFUCG projects, providing operator-focused input for wastewater system design, and providing follow-up services to help optimize treatment operation.



Liz Dienst, P.E. – Structural Design

Liz will be the Structural Engineer on this project. Liz is a graduate of the University of Dayton and is a licensed professional engineer with 17 years of experience. From our Lexington, KY office, Liz has a variety of project management experiences covering municipal, water, wastewater, and structural design and construction administration projects. Liz's design capabilities include structural design, architectural-related tasks, waterline and sanitary sewer line design. She has served LFUCG on every waste management project Strand has been hired for over the past 17 years.





Character, Integrity, Reputation, Judgment, Experience and Efficiency Strand's History of Success is Fostered by Helping Our Clients Succeed through Excellence in Engineering

We are proud of our reputation for quality work, technical expertise, and efficiency of production, which is complemented by the character and integrity of our respective employees. Strict adherence to an attitude of professionalism and objectivity toward all our clients has brought us success over the years, as evidenced by the longstanding history of our firm. Our record of success is firmly supported by this history and the volume of work we have been entrusted to administer on behalf of our clientele, many of whom we have maintained continuous relationships spanning decades.

Our work experience includes a wide variety of engineering projects, including wastewater treatment, stormwater management, environmental regulatory compliance, water supply projects, municipal engineering, transportation, structural, electrical, surveying and mechanical projects. As a full-service engineering firm, it is our practice to follow our projects through to construction completion and beyond, providing the necessary staff to perform office and field activities alike.

The table below highlights the volume of construction projects designed and bid by Strand. In addition, Strand provides a large volume of client service that does not result in construction for studies and other related field activities. We remain firm believers that the growth of this volume is indicative of our commitment to meeting client needs. For calendar year 2019, Strand was ranked in the Engineering News Record as 187th of the Top 500 Design Firms nationally and ranked 21st in the Nation as a Wastewater Design Firm by Engineering News Record Midwest.

The adjacent list shows, for our designs, the annual value and number of our construction contracts in each of the last 10 years. Strand has been a part of the Lexington community for more than 50 years. During this time, we have served LFUCG on numerous major wastewater treatment projects. Our *Character, Integrity, Reputation, Judgment, Experience and Efficiency* are demonstrated by our long-standing working relationship with LFUCG, and the interaction of our Project Team members with DWQ and Town Branch WWTP staff.

Stra	Strand-Designed Construction Contracts								
Year	No. of Contracts	Bid Amount							
2018	215	\$220,000,000							
2017	169	\$320,000,000							
2016	125	\$365,000,000							
2015	128	\$320,900,000							
2014	84	\$144,900,000							
2013	120	\$193,000,000							
2012	126	\$161,900,000							
2011	126	\$193,600,000							
2010	84	\$218,800,000							
2009	122	\$238,300,000							

Our Character, Integrity, Reputation, Judgment, Experience and Efficiency are demonstrated by our years of consistent services to LFUCG.

21st

Randall A. Wirtz, Ph.D., P.E., ENV SP

Senior Associate

AREAS OF EXPERTISE

- Biological Wastewater Treatment
- Chemical/Physical Treatment
- Municipal/Industrial Wastewater
 Treatment

- Solids Stabilization and Management
- Disinfection Odor Control
- Nutrient Removal

PROFESSIONAL EXPERIENCE

Municipal Wastewater Treatment experience includes planning and design of biological treatment facilities, odor control facilities, chemical treatment systems, sludge dewatering systems, biosolids stabilization facilities, disinfection facilities, and pumping and conveyance facilities.

Industrial Wastewater Treatment experience includes anaerobic and aerobic biological treatment processes, pH control, equalization, flotation/clarification, chemical processes, residuals/solids stabilization and management, odor control, and permitting assistance. Industrial wastewater experience includes dairy and cheese processing, meat processing, vegetable processing, snack food production, bakeries, dessert and candy processing, pharmaceutical, and chemical production.

Water Treatment experience includes design of pumping facilities, granular media filtration units, chlorination, fluoridation, and sludge dewatering and handling facilities.

PRESENTATIONS (Partial Listing)

- Codigestion Evaluation and Implementation presented at the 97th IAWEA Annual Conference, June 2015.
- Codigestion Evaluation and Implementation Case Studies presented at the 88th CSWEA Annual Conference, May 2015.
- Dubuque's Nutrient Reduction Strategy Wastewater Treatment & Watershed Approaches presented at the 96th IAWEA Annual Conference, June 2014.
- Estimating Codigestion/Cogeneration
 Capacity at Your WWTP presented at the

87th CSWEA Annual Conference, May 2014.

- Dubuque's Anaerobic Digestion and Cogeneration Facilities presented at the 95th IAWEA Annual Conference, June 2013.
- Moving Towards Net Zero Energy at WWTPs presented at the 95th IAWEA Annual Conference, June 2013.

PUBLICATIONS (Partial Listing)

- "Dubuque Water Pollution Control Plant –
 Conversion from Sludge Incineration to
 Anaerobic Digestion," with Tom Foltz and
 Jonathan Brown, presented at the Iowa
 Water Pollution Control Association Annual
 Technical Conference, Clinton, Iowa, June
 10-12, 2009.
- "Effluent Phosphorus Limits Impact on Plant Design and Operations," presented at the Ohio Water Environment Association Plant Operations Seminar, Columbus, Ohio, September 25-26, 2007.
- "Managing and Projecting a Significant Industrial Load Increase at an Enhanced Nutrient Removal POTW" with D. Ward and R. Javier, presented at the Industrial Water Quality 2007 Conference, Providence, Rhode Island, July 30-August 1, 2007.
- "Modern Concepts in Anaerobic Digestion," Contemporary Wastewater Treatment Plant Design and Operation, UW-Madison Extension Course, Madison, Wisconsin, 2002, 2001, 2000, and 1999.

YEARS OF EXPERIENCE

24

YEARS WITH FIRM

2

EDUCATION

Ph.D. Civil/Environmental Engineering – Iowa State University, Ames, 1994

M.S. Civil/Environmental Engineering – Iowa State University, Ames, 1992

B.S. Civil/Environmental Engineering – University of Wisconsin-Platteville, 1990

REGISTRATION

Professional Engineer in Wisconsin, Ohio, Missouri, Iowa, Illinois, and Arizona

AWARDS

2016 WEF Schroepfer Innovative Facility Design Medal for the Dubuque Water & Resource Recovery Center Upgrade



Mark A. Sneve, P.E., BCEE

Senior Associate

AREAS OF EXPERTISE

- Wastewater Collection and Treatment Facilities
- Solids Handling Processes
- Biological Processes
- Combined Sewer System Studies
- Advanced Nutrient Removal
- Infiltration and Inflow Studies

PROFESSIONAL EXPERIENCE

Consulting experience in the field of environmental engineering with emphasis on wastewater treatment process selection, planning, treatment system design, construction coordination, startup and operator training

Wastewater Treatment experience includes serving as project engineer, assistant project manager, or project manager for efforts in facilities planning of major additions and upgrades for municipal wastewater treatment plants, process design for wastewater treatment facilities, additions to wastewater treatment plants with high industrial flows, activated sludge process, coordinator of construction efforts, serving as resident project representative, contributing to operation and maintenance manuals for various municipal wastewater treatment facilities, instructing staff on wastewater facility operation, and user charge system studies.

Combined Sewer Systems experience includes preparing CSO Operational Plans, Long-Term Control Plans, investigating solids and floatable control, water quality sampling, monitoring and data evaluation, Citizen Advisory Committees and negotiating Enforcement Actions with Agencies.

Specialized Field Service experience includes efforts in the area of litigation support, managing compliance with enforcement actions, industrial pretreatment permitting, industrial discharge monitoring, groundwater investigations, solids processing equipment evaluations, industrial sampling auditing, priority pollutant sampling, and coordination of WWTP effluent biomonitoring.

Laboratory experience includes serving as Director of Technical Activity for private laboratory. Responsible for laboratory quality assurance plan, troubleshooting, personnel, and financial aspects.

PUBLICATIONS (Partial Listing)

- Phosphorus Effluent Limits with Randy Wirtz, Ph.D., P.E., presented at Ohio WEA 87th Annual Meeting, June 2013.
- Phosphorus Removal Planning and Operational Strategies for Biological and Chemical Phosphorus Removal Facilities with Scott Stearns and Troy Larson, presented as a Webinar for Ohio WEA, September 2013.
- West Hickman Creek WWTP Blower Upgrade Reduces Power Consumption with Tiffany Rank, Jane Worton, and Mike Davis, presented at the Water Professional Conference, July 2013.
- Phosphorus & Nitrogen Removal in Wastewater, presented at the Kentucky Rural Water33rd Annual Conference, August 2012, and the Central Kentucky Water & Wastewater Operators Association Fall Conference, September 2012.
- Existing Water Quality Standards and Wet Weather Compliance Are Mutually Exclusive, Why? presented at the Water Professionals Conference, July 2011.

YEARS OF EXPERIENCE

YEARS WITH FIRM

EDUCATION

M.S. Civil/Environmental Engineering – University of Iowa, 1989

B.S. Civil/Environmental Engineering – University of Iowa, 1987

REGISTRATION

Professional Engineer in Kentucky, Indiana, Ohio, Alabama, Mississippi, and Wisconsin

Board Certified Environmental Engineer, American Academy of Environmental Engineers and Scientists



Emily L. Epperson, P.E.

AREAS OF EXPERTISE

- Water Distribution Systems
- Wastewater Collection Systems
- Wastewater Treatment

- Municipal Stormwater Programming
- Construction Observation Services
- Streetscape

PROFESSIONAL EXPERIENCE

Wastewater Treatment experience includes design for equipment upgrades and structural and mechanical improvements at the Primary Digester Complex at LFUCG's Town Branch Wastewater Treatment Plant. Other projects involve studies and/or design of industrial and package wastewater treatment plants for the Job Corps, Nestle USA, and Mercer County Sanitation District.

Water Distribution experience includes hydraulic evaluation, tank design, and water main extensions for the City of Maysville, Kentucky, and main extensions and interconnects for Jackson Energy Authority in Jackson, Tennessee and Kentucky American Water.

Wastewater Collection experience includes design for Mercer County Sanitation District in Mercer County, Kentucky. She was responsible for preliminary engineering studies as well as plan and profile design of low pressure and gravity sewer line installations. Additional experience includes condition assessments and repair recommendations of portions of the wastewater collection system in Frankfort, Kentucky.

Municipal Stormwater Programming experience includes work with the City of Georgetown, Kentucky's Phase II permit program. Staff training, public outreach, water quality sampling, facility inspections, and illicit discharge detection and elimination plan updates are components of her scope of experience.

Construction Observation experience includes RPR for water tank construction and water main installation in Maysville, aeration improvements at West Hickman Wastewater Treatment Plant, and gravity sewer installation in Mercer County, Kentucky.

Streetscape experience includes grading, sidewalk design, and landscaping layout for the City of Maysville and preliminary sidewalk and site design work for a multiuse development in downtown Lexington, Kentucky.

PROFESSIONAL AFFILIATIONS

- American Society of Civil Engineers
- Kentucky Stormwater Association

CONTINUING EDUCATION AND SEMINARS

- Confined Space Awareness Training –
 Confined Space Regulation and Equipment
 Familiarization Course Received
 information and training requirements as set
 forth in Subpart J-Confined Spaces, 29 CFR
 Part 1910.146 July 2017
- Four-Hour Fall Protection Training Fall Protection Regulation and Equipment Familiarization Course – Received information and training requirements as set forth in Subpart M-Fall Protection, 29 CFR Parts 1910 and 1926 specifically part 1926.503 – July 2017

YEARS OF EXPERIENCE

6

YEARS WITH FIRM

6

EDUCATION

B.S. Civil Engineering – Tennessee Tech University, Cookeville, Tennessee, 2013

REGISTRATION

Professional Engineer in Kentucky



Troy A. Larson

AREAS OF EXPERTISE

- Wastewater Operations Specialist
- Wastewater Process Control
- Wastewater Treatment Plant Operator Training
- Wastewater System Date Management
- Wastewater Laboratory Analysis
- Biological Wastewater Treatment

PROFESSIONAL EXPERIENCE

Operations Specialist experience includes startup services, operator training, microscopy evaluations, and troubleshooting.

Wastewater Treatment Operator experience includes operating, monitoring, and controlling a high-rate anaerobic and aerobic wastewater treatment system for a high-strength dairy wastewater.

Wastewater Treatment Plant Start-Up and Operator Training experience includes monitoring and controlling a wastewater treatment plant during major upgrades.

Lab Analysis experience includes performing an analysis on wastewater and groundwater including quality control, and reporting of the data following the analysis.

Waste Removal experience includes safe and proper application of wastewater treatment sludge and industrial and crop wastes to farmland.

Wastewater System Data Management experience includes assistance with the organization and set up of data management databases.

Utility Construction Observation on various municipal projects.

Project Management experience related to planning studies, wastewater operations, and groundwater monitoring-related services.

Industrial Wastewater Characterization experience includes evaluation of products, raw materials, cleaning chemicals, and other factors that might impact wastewater treatment and pretreatment systems.

Pollutant Minimization Project experience includes industry and community involvement in mercury source control projects.

PRESENTATIONS (Partial Listing)

- Delivered presentation on Energy
 Optimization in activated sludge at the 2000
 WWOA Annual Conference in Green Bay,
 Wisconsin.
- Presented an overview of the phosphorous rule updates and the impact expected at municipal wastewater treatment plants to the League of WI Municipalities 2010 Annual Conference.
- Presented Succession Planning at the 2010 WWOA Annual Conference. Wrote an article for the organizations magazine (The Clarifer) at the request.
- Presented an overview of the phosphorus rule updates and he impact expected at municipal wastewater treatment plant to the League of Wisconsin Municipalities 2010 annual conference.
- Presented succession planning presentation at the 2010 WWOA Annual Conference.

CONTRIBUTING AUTHOR

 Biological Nutrient Removal Operation in Wastewater Treatment Plants. Published as Manual of Practice 29 by the Water Environmental Federation (WEF), American Society of Civil Engineers (ASCE) and Environmental and Water Resources Initiative (EWRI).

PROFESSIONAL AFFILIATIONS

- Water Environment Federation
- Central States Water Environment Association (Wisconsin Section Operations Chair)
- Wisconsin Wastewater Operators
 Association (Technical Committee Member)

YEARS OF EXPERIENCE

YEARS WITH FIRM

YEARS WITH FIRM

EDUCATION

B.S. Biology – University of Wisconsin-Whitewater, 1995

REGISTRATION

Certified Wastewater Operator in Wisconsin



Elizabeth A. Dienst, P.E.

AREAS OF EXPERTISE

- Project Management
- Structural Design of Commercial Buildings
- Structural Design of Wastewater Treatment Facilities
- Structural Design of Educational and Industrial Buildings
- Structural Design of Retaining Structures
- Design of Water Supply and Design of Wastewater Collection

PROFESSIONAL EXPERIENCE

Elizabeth is a licensed professional engineer in Kentucky with more than 14 years of experience. She has a variety of project management experience covering municipal, water, wastewater, and structural design and construction administration projects. Her project management experience has ranged from small, short-term projects up to multiyear construction administration projects with construction budgets up to \$26 million. Elizabeth's design capabilities include structural design, architectural related tasks, as well as sanitary sewer design and studies. Her structural project assignments have given her experience with steel framed buildings, reinforced concrete structures of all shapes and sizes, reinforced masonry structures, retaining structures in a variety of materials, and precast structures. Through the variety of projects she has worked on she has gained the ability to analyze buildings in a variety of situations and geographical locations, for compliance to building codes, including buildings in Hazardous occupancies.

Municipal Wastewater experience includes structural design of wastewater treatment facilities utilizing cast-in-place concrete, precast concrete, reinforced masonry, and structural steel for both new facilities and modifications to existing facilities for communities in Kentucky, West Virginia, Ohio, Indiana, and Wisconsin. Design and construction project management and resident observation experience for wastewater treatment facilities and sanitary sewer collection, conveyance, and pump stations in Kentucky.

Municipal Water experience includes structural design of potable water reservoirs, pumping stations, and water treatment facilities for communities in Kentucky, West Virginia, and Wisconsin. Experience includes hazardous occupancy code review and compliance. Design

and construction project management and resident observation experience for water treatment plant, water storage, and water main projects in Kentucky.

Industrial Building experience includes new facilities as well as modifications to existing structures for food processing plants, distillery buildings and warehouses, and manufacturing warehouses.

Project Management experience with design and construction administration projects. Successful in managing large or small design teams on site-civil design, facilities design and water and wastewater design projects. Effective manager of construction administration projects of all types and disciplines. Experience includes large and small site-civil contracts, water supply and wastewater treatment facilities, sanitary sewer systems, water mains and structural facilities.

CONTINUING EDUCATION AND SEMINARS

 Leadership PE Graduate, Class of 2008 – 2009.

PROFESSIONAL AFFILIATIONS

- Kentucky Society of Professional Engineers (Past President, Bluegrass Chapter)
- National Society of Professional Engineers

YEARS OF EXPERIENCE

17

YEARS WITH FIRM

17

EDUCATION

B.C.E. Civil Engineering – University of Dayton, Ohio, 2002

REGISTRATION

Professional Engineer in Kentucky





Similar Projects

Strand's Proven Service and Commitment to LFUCG Demonstrates Our Ability to Serve LFUCG Effectively on this Project

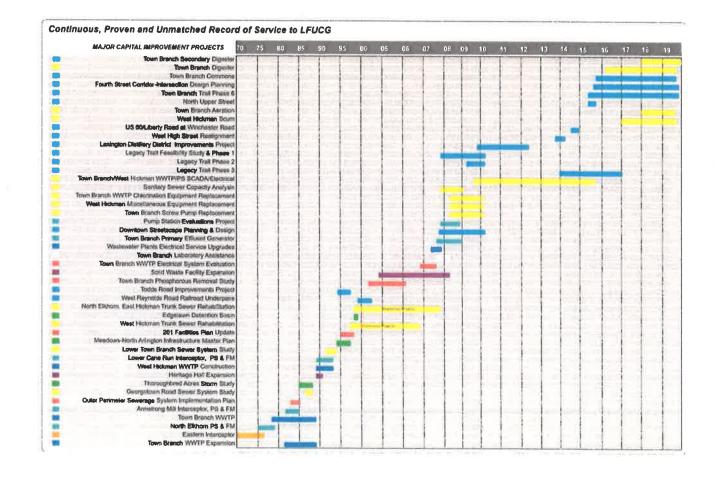
Strand has been providing consistent and dependable engineering services for public and private sector clients since 1946. To serve our national client base, we have nearly 435 staff in 11 offices throughout the country, including our office in Lexington, Kentucky. Our Lexington-based staff have an established track record serving LFUCG since 1968. Wastewater is a major area of specialized experience for our company. After 73 years of success, we have grown into a significant wastewater engineering firm that is ranked among Engineering News Record Midwest as a Top Wastewater Firm, of which we were ranked 21st in 2019. Our Project Team provides the capabilities of a nationally recognized firm, with service from our local Lexington staff. Our Project Team brings the following key attributes to this important LFUCG project.

Strand has provided engineering services for LFUCG WWTP projects for over 41 years.

PAST RECORD OF PERFORMANCE

Strand has served LFUCG continuously and successfully since 1968. We are proud of our record of performance and the privilege to be of service to the Urban County Government and to the community. Strand has provided a broad range of wastewater engineering services from initial planning through design and construction. More recently, we provided engineering services for the West Hickman Scum Improvements, Town Branch Secondary Digester Improvements, Town Branch Primary Effluent Pump Station Improvements (Screw Pump Replacement) project, Town Branch Electrical and SCADA Improvements project, and the Town Branch Primary Digester Complex Improvements.

Strand's working knowledge of Town Branch WWTP treatment facilities and operations results in custom solutions for specific needs.





SPECIALIZED EXPERIENCE

Strand's Understanding of Town Branch Treatment Process Systems Results in Operator-Friendly Scum and Septage Receiving Facilities that Meets Current and Future Needs

For a project of this nature to be successful, it must incorporate input from LFUCG staff that are responsible for these facilities on a daily basis. Strand's approach to project development emphasizes owner input. Beginning with the project kick-off meeting and continuing through all phases of project development, Strand will engage LFUCG operations and engineering staff to obtain input regarding equipment and process upgrades. This input, combined with Strand's engineering expertise, will result in efficient, cost-effective systems. Strand has demonstrated this approach through prior projects completed with the LFUCG Division of Water Quality.

Strand's working knowledge of Town Branch Treatment facilities and operations results in solutions customtailored to specific needs.

Strand's Experience Incorporating Scum Handling and Septage Facilities in Wastewater Treatment Design Results in Operator-Friendly and Efficient Systems Strand-designed treatment facilities anticipate the need to manage and remove scum produced during treatment. Designing basins and channels to minimize the collection of scum at inconvenient locations, and removing scum at strategic locations results in reduced operation and maintenance, and reduces the negatives of scum collection, such as odor production and detriment to mechanical process equipment. The following table shows similar experience for selected Strand projects, along with contact information for references.

Location	Contact Information	Approximate Year	Facility Description
LFUCG, KY Town Branch WWTP	Tiffany Rank, PE (859) 425-2406	1990	Scum concentrating facility to dewater scum collected in the primary clarifiers. Facilities include a scum beach and rake system that discharges scum and grease materials into container for transport to nearby roll-off dumpsters.
LFUCG, KY West Hickman WWTP	Tiffany Rank, PE (859) 425-2406	2019	Rotating scum pipes added to phosphorus removal tanks. Scum pumped and directed to central location for concentration and removal. PER evaluated wide range of automatic and manual scum processing systems.
LaGrange KY WWTP	Zak Yates, WWTP Superintendent (502) 396-6734	2015	Install a full-width scum removal system on their oxidation ditch to trap and remove floating debris. Scum is pumped for further processing at the plant.
Brooklyn, WI	Leif Spilde, Utility Superintendent, (608) 455-1842	2016	Install a full-width scum removal system on their oxidation ditch to trap and remove floating debris. Scum is pumped for further processing at the plant.
New Glarus, WI WWTP	Scott Jelle, DPW, (608) 558-5771	1991, 2008	Scum collected at final clarifier scum beaches and piped to scum decant manhole. Decant is piped to plant sewer and scum pumped to sludge storage tanks. Second final clarifier added in 2008.
KRMA, IL	Richard Simms, Executive Dir. (815) 936-1462	2016	Rehabilitated each of the existing six rectangular primary clarifiers with new rotating scum pipe with actuators to periodically collect scum, which is collected in a common scum pit and pumped to dissolved air flotation thickening prior to anaerobic digestion.
			Rehabilitated each of the existing four 120-ft diameter secondary clarifiers with new scum blade/skimmer assembly, stationary anti-rotation scum baffle, scum trough/beach, and automatic flushing device. Scum from each secondary clarifier is pumped to a common force main with WAS that goes to dissolved air flotation thickening prior to anaerobic digestion.



Location	Contact Information	Approximate Year	Facility Description
Confidential Client, Coshocton, OH	Provided upon request and permission of confidential client	2010	Bacon processing plant with 210,000 gpd DAF and 100 mg/L FOG and 700 mg/L effluent limits. Design included screening, dissolved air floatation for FOG and TSS removal, and thermal phase separation of DAF float to concentrate prior to disposal.
Columbus IN WWTP	Randy Duckworth (812) 372-8861	2011	Secondary scum is collected with scum beaches and sent to a submersible pumping station. Scum is pumped from the scum pumping station to an aerated solids holding tank.
Columbus IN WWTP	Randy Duckworth (812) 372-8861	2011	Installed septage and hauled waste receiving station (JWC) with full automatization and key card access. Installed vacter dump Station and associated pump station.
Frankfort, KY WWTP	Kenny Hogsten (502) 875-2448	2016	Installed Septage and hauled waste receiving station (Huber) in an existing building.
Ashland, KY WWTP	Mark Hall (606) 327-2008	2019	Evaluating hauled waste receiving at their existing WWTP. Site access, equipment metering, and equalization will all be considered. Project is underway.
Athens, OH	Lisa Agriesti, WWTP Superintendent (740) 592-3346	2016	Primary and secondary scum is collected on scum beaches and sent to a scum concentrating tank. Subnatant is sent to the head of the plant and concentrated scum is intermittently pumped to the digesters.
Parkersburg Utility Board, Parkersburg, WV	Eric Bennett, General Manager (304) 424-8536 x 102	2016	Primary and secondary scum is collected on scum beaches and sent to a scum concentrating tank. Subnatant is sent to the head of the plant and concentrated scum is intermittently pumped to the digesters.
Morgantown Utility Board, Morgantown, WV	Greg Shellito, Manager of Treatment and Production (304) 599-2111	2016	Primary and secondary scum is collected on scum beaches and sent to a scum concentrating tank. Subnatant is sent to the head of the plant and concentrated scum is intermittently pumped to the digesters.
Clay Township Regional Waste District WWTP (Zionsville, IN)	Wes Merkle, P.E. or Scot Watkins (317) 844-9200	2013	Secondary scum is collected with scum beaches and sent to a submersible pumping station. Scum is pumped from the scum pumping station to aerobic digesters.
Fontana/ Walworth WPCF, WI	Doug York, Superintendent (262) 736-4473	2010	Secondary scum is collected with on scum beaches and sent to a scum concentrating tank. Subnatant is sent to the head of the plant and concentrated scum is intermittently pumped to the digesters.

Detailed descriptions for selected projects utilizing scum or septage receiving are detailed on the following pages.



Town Branch WWTP Scum Facility - Lexington, KY

The Town Branch facility is one of two wastewater treatment plants serving the Lexington-Fayette Urban County Government (LFUCG). In joint venture with another Lexington firm, we provided planning, design, and general and resident engineering services during construction for the upgrading and expansion of this facility from 17 mgd to 30 mgd.

Strand prepared a phosphorus removal study and plant rerating assessment for LFUCG in 2005. The assessment evaluated hydraulic and process limitations to increase the average daily flow to 36 mgd. The challenges of processing more flow on a tight site footprint while adding phosphorus removal were overcome. For phosphorus removal, we recommended a conversion of the existing aeration tanks to the A20 process with RAS denitrification. The project should advance to the design phase when EPA finalizes their TMDL.

We also provided technical assistance to internal LFUCG engineering staff as they replaced their current bar screening with fine screens. We continue to provide on-call plant consultant services such as recent assistance provided on their laboratory operations and Quality Assurance Plan. We also helped LFUCG implement a computer operations program to manage laboratory data and operational data. We evaluated the control and emergency power requirements for the Town Branch Plan in 2007. Strand also provided design, bidding, construction administration and RPR services for seven major facility upgrades for Town Branch WWTP over the part 15 years that included many of the major treatment units.

West Hickman WWTP Scum Removal - Lexington, KY

In 2017, LFUCG retained Strand Associates to complete a scum removal and ASH tank cover project. There was no central processing facility for scum at the West Hickman site once the former primary clarifiers were converted to BPR tanks. Scum and foam were collecting and being trapped at many locations throughout the facility. Strand completed a Preliminary Engineering Report (PER) that evaluated several alternatives from the simple, low cost solution to a more elaborate mechanical processing facility. One complication on the project was the shear number of locations where scum could collect within the plant site and the separation distance between these sources.

The PER identified that the fully mechanical system required much more capital investment to install and LFUCG opted for a less-capital intensive solution. The design and construction project included:

- New scum decant pipes in the BPR tanks for removal of trapped scum and foam,
- A new scum decant tank for collection of scum from around the plant to allow decanting and concentration of the material. Scum and foam will be vactored out when the decant structure is full to the underflow baffle,
- New access hatches at multiple locations where scum and foam are trapped to allow for vactor truck removal,
- Extension of an existing force main from the secondary scum pump stations to the new scum decant box to centralize scum and foam management,
- Addition of scum release plates in the final clarifier splitter boxes.

The project also included improvements to the ASH tank odor control structure and a new ASH tank cover.

Construction is now complete and the new facilities are being placed into service.

Client/Contact: Lexington-Fayette Urban County Government Tiffany Rank, P.E. (859) 425-2406



LFUCG's 30-mgd Town Branch WWTP

Client/Contact: Lexington-Fayette Urban County Government Tiffany Rank, P.E. (859) 425-2406



Wastewater Treatment Plant Design - Columbus, IN

Columbus City Utilities owns and operates a 14 mgd wastewater treatment facility constructed in 2011 that receives a significant amount of daily flow from septage and leachate haulers. To accommodate these flows and provide an efficient, secure and automated septage receiving system, Columbus City Utilities installed a septage receiving station in their headworks facility. The equipment including a septage receiving station to receive, meter and screen septage. The equipment was supplied by JWC Environmental and included the following features:

- A 4-inch cam lock connection for septage dumping.
- A control panel with a card reader, a keypad for entering a customer access code prior to dumping, to record dumping volumes and to generate customer receipts after dumping.
- An actuated plug valve that opens to allow septage flow once the customer access code is correctly entered and the proper piping connections are made.
- A rock trap assembly to remove dense non-organic materials that could damage the downstream grinder and conveyor assembly.
- A flowmeter to measure and totalize flow into the system.
- A grinder mechanism.
- A 1/4 inch perforated plate scoop auger bar screen with a screenings washing system.

The septage receiving equipment is located inside the headworks structure and is adjacent to a single dumpster that receives screenings from the septage receiving station, the influent screens at the WWTP and the Grit Removal System. The influent structure is equipped with an odor control system that confines foul air to the process equipment and treats it with a biological odor control unit. The septage receiving system is completely enclosed to accommodate the odor control system. All components of the septage receiving system are constructed of stainless steel or ductile iron for corrosion resistance and are suitable for Class I, Division 1 rated areas.

Wastewater Treatment Plant Upgrades - Dubuque, IA

As part of major upgrades to the City of Dubuque Water & Resource Recovery Center (W&RRC), we designed a Septage Receiving Station to collect and to perform preliminary treatment on waste hauled to the W&RRC. The station was placed into service in 2013. The Septage Receiving Station is capable of accepting septage and other hauled wastes from trucks. The Septage Receiving Station is equipped with a septage receiving system that includes a metal rock trap, motorized control valve, flow meter, tank, auger, and motor controller. Waste processed by the septage receiving system flows by gravity to the In Plant Waste Pump Station.

The septage receiving system is automated to provide efficient transfer and treatment of hauled waste. Two connections are available for septage trucks, one of which is equipped with a truck loading arm to facilitate connections. The septage hauler inputs a PIN user number and swipes a magnetic card prior to unloading to provide information usable for billing. Septic waste is discharged to the septage receiving system with heavy objects captured by a metal trap. A motorized plug valve and an associated ultrasonic level transducer in the receiving tank provide flow regulation to the system. A magnetic flow meter installed between the motorized plug valve and the receiving tank provides flow measurement for plant process records and billing purposes.

Hauled waste flows to the stainless steel receiving tank which contains an inclined auger assembly. Solids are captured in a screened portion of the auger and are transported to the dewatering segment of the auger. Prior to dewatering, two spray wash assemblies rinse organic material from the solids back into the waste stream. Spray wash motorized ball valves are automatically energized whenever the auger is in operation. Dewatering occurs as the rotating auger conveys washed screenings to the discharge segment of the auger. The discharge segment of the auger is equipped with a bagging device to hold screenings for landfill disposal.

Client/Contact: Columbus City Utilities Randy Duckworth (812) 372-8861



Septage Receiving Equipment - Columbus, IN



Hauler Access Station Columbus, IN

Client/Contact: City of Dubuque, IA Willie O'Brien, Plant Manager (563) 589-4169

AFFIDAVIT

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6. Proposer has not knowingly violated any provision of Chapter 25 of the

Lexington-Fayette Urban County Government Code of Ordinances, known as "Ethics Act."

Continued on next page

7. Proposer acknowledges that "knowingly" for purposes of this Affidavit means, with respect to conduct or to circumstances described by a statute or ordinance defining an offense, that a person is aware or should have been aware that his conduct is of that nature or that the circumstance exists.

Further, Affiant sayeth naught.

Just M Busher	
STATE OF Wisconsin	i
COUNTY OF Dane	
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The foregoing instrument was subscribed, sworn to and	acknowledged before me
byJoseph M. Bunker	on this the day
of August, 2019	
My Commission expires: 1202021	Manual Ma
NOTARY PUBLIC, STATE AT LARGE	O NOTAP THE

GENERAL PROVISIONS

1. Each Respondent shall comply with all Federal, State & Local regulations concerning this type of service or good.

The Respondent agrees to comply with all statutes, rules, and regulations governing safe and healthful working conditions, including the Occupational Health and Safety Act of 1970, 29 U.S.C. 650 et. seq., as amended, and KRS Chapter 338. The Respondent also agrees to notify the LFUCG in writing immediately upon detection of any unsafe and/or unhealthful working conditions at the job site. The Respondent agrees to indemnify, defend and hold the LFUCG harmless from all penalties, fines or other expenses arising out of the alleged violation of said laws.

- 2. Failure to submit ALL forms and information required in this RFP may be grounds for disqualification.
- 3. Addenda: All addenda and IonWave Q&A, if any, shall be considered in making the proposal, and such addenda shall be made a part of this RFP. Before submitting a proposal, it is incumbent upon each proposer to be informed as to whether any addenda have been issued, and the failure to cover in the bid any such addenda may result in disqualification of that proposal.
- 4. Proposal Reservations: LFUCG reserves the right to reject any or all proposals, to award in whole or part, and to waive minor immaterial defects in proposals. LFUCG may consider any alternative proposal that meets its basic needs.
- 5. Liability: LFUCG is not responsible for any cost incurred by a Respondent in the preparation of proposals.
- 6. Changes/Alterations: Respondent may change or withdraw a proposal at any time prior to the opening; however, no oral modifications will be allowed. Only letters, or other formal written requests for modifications or corrections of a previously submitted proposal which is addressed in the same manner as the proposal, and received by LFUCG prior to the scheduled closing time for receipt of proposals, will be accepted. The proposal, when opened, will then be corrected in accordance with such written request(s), provided that the written request is contained in a sealed envelope which is plainly marked "modifications of proposal".
- 7. Clarification of Submittal: LFUCG reserves the right to obtain clarification of any point in a bid or to obtain additional information from a Respondent.
- 8. Bribery Clause: By his/her signature on the bid, Respondent certifies that no employee of his/hers, any affiliate or Subcontractor, has bribed or attempted to

bribe an officer or employee of the LFUCG.

- 9. Additional Information: While not necessary, the Respondent may include any product brochures, software documentation, sample reports, or other documentation that may assist LFUCG in better understanding and evaluating the Respondent's response. Additional documentation shall not serve as a substitute for other documentation which is required by this RFP to be submitted with the proposal,
- 10. Ambiguity, Conflict or other Errors in RFP: If a Respondent discovers any ambiguity, conflict, discrepancy, omission or other error in the RFP, it shall immediately notify LFUCG of such error in writing and request modification or clarification of the document if allowable by the LFUCG.
- 11. Agreement to Bid Terms: In submitting this proposal, the Respondent agrees that it has carefully examined the specifications and all provisions relating to the work to be done attached hereto and made part of this proposal. By acceptance of a Contract under this RFP, proposer states that it understands the meaning, intent and requirements of the RFP and agrees to the same. The successful Respondent shall warrant that it is familiar with and understands all provisions herein and shall warrant that it can comply with them. No additional compensation to Respondent shall be authorized for services or expenses reasonably covered under these provisions that the proposer omits from its Proposal.
- 12. Cancellation: If the services to be performed hereunder by the Respondent are not performed in an acceptable manner to the LFUCG, the LFUCG may cancel this contract for cause by providing written notice to the proposer, giving at least thirty (30) days notice of the proposed cancellation and the reasons for same. During that time period, the proposer may seek to bring the performance of services hereunder to a level that is acceptable to the LFUCG, and the LFUCG may rescind the cancellation if such action is in its best interest.

A. Termination for Cause

- (1) LFUCG may terminate a contract because of the contractor's failure to perform its contractual duties
- (2) If a contractor is determined to be in default, LFUCG shall notify the contractor of the determination in writing, and may include a specified date by which the contractor shall cure the identified deficiencies. LFUCG may proceed with termination if the contractor fails to cure the deficiencies within the specified time.
- (3) A default in performance by a contractor for which a contract may be terminated shall include, but shall not necessarily be limited to:

- (a) Failure to perform the contract according to its terms, conditions and specifications;
- (b) Failure to make delivery within the time specified or according to a delivery schedule fixed by the contract;
- (c) Late payment or nonpayment of bills for labor, materials, supplies, or equipment furnished in connection with a contract for construction services as evidenced by mechanics' liens filed pursuant to the provisions of KRS Chapter 376, or letters of indebtedness received from creditors by the purchasing agency;
- (d) Failure to diligently advance the work under a contract for construction services;
- (e) The filing of a bankruptcy petition by or against the contractor; or
- (f) Actions that endanger the health, safely or welfare of the LFUCG or its citizens.

B. At Will Termination

Notwithstanding the above provisions, the LFUCG may terminate this contract at will in accordance with the law upon providing thirty (30) days written notice of that intent, Payment for services or goods received prior to termination shall be made by the LFUCG provided these goods or services were provided in a manner acceptable to the LFUCG. Payment for those goods and services shall not be unreasonably withheld.

- 13. Assignment of Contract: The contractor shall not assign or subcontract any portion of the Contract without the express written consent of LFUCG. Any purported assignment or subcontract in violation hereof shall be void. It is expressly acknowledged that LFUCG shall never be required or obligated to consent to any request for assignment or subcontract; and further that such refusal to consent can be for any or no reason, fully within the sole discretion of LFUCG.
- 14. No Waiver: No failure or delay by LFUCG in exercising any right, remedy, power or privilege hereunder, nor any single or partial exercise thereof, nor the exercise of any other right, remedy, power or privilege shall operate as a waiver hereof or thereof. No failure or delay by LFUCG in exercising any right, remedy, power or privilege under or in respect of this Contract shall affect the rights, remedies, powers or privileges of LFUCG hereunder or shall operate as a waiver thereof.
- 15. Authority to do Business: The Respondent must be a duly organized and authorized to do business under the laws of Kentucky. Respondent must be in good standing and have full legal capacity to provide the services specified under this Contract. The Respondent must have all necessary right and lawful authority to enter into this Contract for the full term hereof and that proper corporate or

other action has been duly taken authorizing the Respondent to enter into this Contract. The Respondent will provide LFUCG with a copy of a corporate resolution authorizing this action and a letter from an attorney confirming that the proposer is authorized to do business in the State of Kentucky if requested. All proposals must be signed by a duly authorized officer, agent or employee of the Respondent.

- 16. Governing Law: This Contract shall be governed by and construed in accordance with the laws of the Commonwealth of Kentucky. In the event of any proceedings regarding this Contract, the Parties agree that the venue shall be the Fayette County Circuit Court or the U.S. District Court for the Eastern District of Kentucky, Lexington Division. All parties expressly consent to personal jurisdiction and venue in such Court for the limited and sole purpose of proceedings relating to this Contract or any rights or obligations arising thereunder. Service of process may be accomplished by following the procedures prescribed by law.
- 17. Ability to Meet Obligations: Respondent affirmatively states that there are no actions, suits or proceedings of any kind pending against Respondent or, to the knowledge of the Respondent, threatened against the Respondent before or by any court, governmental body or agency or other tribunal or authority which would, if adversely determined, have a materially adverse effect on the authority or ability of Respondent to perform its obligations under this Contract, or which question the legality, validity or enforceability hereof or thereof.
- 18. Contractor understands and agrees that its employees, agents, or subcontractors are not employees of LFUCG for any purpose whatsoever. Contractor is an independent contractor at all times during the performance of the services specified.
- 19. If any term or provision of this Contract shall be found to be illegal or unenforceable, the remainder of the contract shall remain in full force and such term or provision shall be deemed stricken.
- 20. Contractor [or Vendor or Vendor's Employees] will not appropriate or make use of the Lexington-Fayette Urban County Government (LFUCG) name or any of its trade or service marks or property (including but not limited to any logo or seal), in any promotion, endorsement, advertisement, testimonial or similar use without the prior written consent of the government. If such consent is granted LFUCG reserves the unilateral right, in its sole discretion, to immediately terminate and revoke such use for any reason whatsoever. Contractor agrees that it shall cease and desist from any unauthorized use immediately upon being notified by LFUCG.

Signature Signature

8/20/19 Date

EQUAL OPPORTUNITY AGREEMENT

Standard Title VI Assurance

The Lexington Fayette-Urban County Government, (hereinafter referred to as the "Recipient") hereby agrees that as a condition to receiving any Federal financial assistance from the U.S. Department of Transportation, it will comply with Title VI of the Civil Rights Act of 1964, 78Stat.252, 42 U.S.C. 2000d-4 (hereinafter referred to as the "Act"), and all requirements imposed by or pursuant to Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, (49 CFR, Part 21) Nondiscrimination in Federally Assisted Program of the Department of Transportation – Effectuation of Title VI of the Civil Rights Act of 1964 (hereinafter referred to as the "Regulations") and other pertinent directives, no person in the United States shall, on the grounds of race, color, national origin, sex, age (over 40), religion, sexual orientation, gender identity, veteran status, or disability be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which the Recipient receives Federal financial assistance from the U.S. Department of Transportation, including the Federal Highway Administration, and hereby gives assurance that will promptly take any necessary measures to effectuate this agreement. This assurance is required by subsection 21.7(a) (1) of the Regulations.

The Law

- Title VII of the Civil Rights Act of 1964 (amended 1972) states that it is unlawful for an employer to discriminate in employment because of race, color, religion, sex, age (40-70 years) or national origin.
- Executive Order No. 11246 on Nondiscrimination under Federal contract prohibits employment discrimination by contractor and sub-contractor doing business with the Federal Government or recipients of Federal funds. This order was later amended by Executive Order No. 11375 to prohibit discrimination on the basis of sex.
- Section 503 of the Rehabilitation Act of 1973 states:

The Contractor will not discriminate against any employee or applicant for employment because of physical or mental handicap.

- Section 2012 of the Vietnam Era Veterans Readjustment Act of 1973 requires Affirmative Action on behalf of disabled veterans and veterans of the Vietnam Era by contractors having Federal contracts.
- Section 206(A) of Executive Order 12086, Consolidation of Contract Compliance Functions for Equal Employment Opportunity, states:

The Secretary of Labor may investigate the employment practices of any Government contractor or sub-contractor to determine whether or not the contractual provisions specified in Section 202 of this order have been violated.

The Lexington-Fayette Urban County Government practices Equal Opportunity in recruiting, hiring and promoting. It is the Government's intent to affirmatively provide employment opportunities for those individuals who have previously not been allowed to enter into the mainstream of society. Because of its importance to the local Government, this policy carries the full endorsement of the Mayor, Commissioners, Directors and all supervisory personnel. In following this commitment to Equal Employment Opportunity and because the Government is the benefactor of the Federal funds, it is both against the Urban County Government policy and illegal for the Government to let contracts to companies which knowingly or unknowingly practice discrimination in their employment practices. Violation of the above mentioned ordinances may cause a contract to be canceled and the contractors may be declared ineligible for future consideration.

Please sign this statement in the appropriate space acknowledging that you have read and understand the provisions contained herein. Return this document as part of your application packet.

Bidders

I/We agree to comply with the Civil Rights Laws listed above that govern employment rights of minorities, women, Vietnam veterans, handicapped and aged persons.

Signature Strong Ass Name of B





1525 Bull Lea Road, Suite 100 Lexington, KY 40511 (P) 859 225-8500 (F) 859-225-8501

Equal Employment Opportunity Policy Statement

Strand Associates, Inc.® is committed to a policy of equal opportunity for all employees. It is our policy to seek and employ the best qualified personnel in all positions, to provide equal opportunity for advancement to all employees, including upgrading, promotion and training, and to administer these activities in a manner which will not discriminate against or give preference to any person because of race, color, religion, age, sex, national origin, handicap, marital status, or any other discriminatory basis prohibited by state or federal law.

Strand is further committed to providing a work environment in which employees are treated with courtesy, respect, and dignity. As part of this commitment, we will not tolerate any form of harassment, verbal or physical, with regard to an individual's race, sex, national origin, or any other protected characteristics Therefore, all employees are encouraged to bring forth any concerns or complaints in this regard to the attention of management by contacting Human Resources, Shawn Cannon, or Ted Richards.

All complaints of sexual harassment, or harassment of any kind, will be investigated promptly and, where necessary, immediate and appropriate action will be taken to stop and remedy any such conduct. Any employee found in violation of this policy will be subject to disciplinary action which could include discharge.



LFUCG MWDBE PARTICIPATION FORM

Bid/RFP/Quote Reference #_RFP #32-2019 Engineering Investigation/Design Services for Town
Branch WWTP Scum Handling & Scum Facility Improvements

The MWDBE and/or veteran subcontractors listed have agreed to participate on this Bid/RFP/Quote. If any substitution is made or the total value of the work is changed prior to or after the job is in progress, it is understood that those substitutions must be submitted to Central Purchasing for approval immediately. Failure to submit a completed form may cause rejection of the bid.

MWDBE Company, Name, Address, Phone, Email	MBE WBE or DBE	Work to be Performed	Total Dollar Value of the Work	% Value of Tota Contract		
1.* see note below	* see note below	* see note below	*see note below	*see note below		
2.				-		
3.						
4.						
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The undersigned company representative submits the above list of MWDBE firms to be used in accomplishing the work contained in this Bid/RFP/Quote. Any misrepresentation may result in the termination of the contract and/or be subject to applicable Federal and State laws concerning false statements and false claims.

Strand Associates, Inc.	Deep M. Bushe
Company	Company Representative
8/20/19	Corporate Secretary
Date	Title

* Note: Strand strives to achieve LFUCG's DBE and VOB participation goals. We regularly utilize DBE and VOB subconsultants as part of our project team. The base scope of this project offers limited opportunities for DBE and VOB participation. Strand is committed to identifying opportunities for DBE and VOB businesses as the project scope is finalized.

LFUCG STATEMENT OF GOOD FAITH EFFORTS

Bid/RFP/Quote # RFP #32-2019 Engineering Investigation/Design Services for Town Branch
WWTP Scum Handling & Scum Facility Improvements

By the signature below of an authorized company representative, we certify that we have utilized the following Good Faith Efforts to obtain the maximum participation by MWDBE and Veteran-Owned business enterprises on the project and can supply the appropriate documentation. Advertised opportunities to participate in the contract in at least two (2) publications of general circulation media; trade and professional association publications; small and minority business or trade publications; and publications or trades targeting minority, women and disadvantaged businesses not less than fifteen (15) days prior to the deadline for submission of bids to allow MWDBE firms and Veteran-Owned businesses to participate. Included documentation of advertising in the above publications with the bidders good faith efforts package ____ Attended LFUCG Central Purchasing Economic Inclusion Outreach event Attended pre-bid meetings that were scheduled by LFUCG to inform MWDBEs and/or Veteran-Owned Businesses of subcontracting opportunities Sponsored Economic Inclusion event to provide networking opportunities for prime contractors and MWDBE firms and Veteran-Owned businesses Requested a list of MWDBE and/or Veteran subcontractors or suppliers from LFUCG and showed evidence of contacting the companies on the list(s). Contacted organizations that work with MWDBE companies for assistance in finding certified MWBDE firms and Veteran-Owned businesses to work on this project. Those contacted and their responses should be a part of the bidder's good faith efforts documentation. Sent written notices, by certified mail, email or facsimile, to qualified, certified MWDBEs soliciting their participation in the contract not less than seven (7) days prior to the deadline for submission of bids to allow them to participate effectively. Followed up initial solicitations by contacting MWDBEs and Veteran-Owned businesses to determine their level of interest. Provided the interested MWBDE firm and/or Veteran-Owned business with adequate and timely information about the plans, specifications, and requirements of the contract. Selected portions of the work to be performed by MWDBE firms and/or Veteran-Owned businesses in order to increase the likelihood of meeting the contract goals. This includes, where appropriate, breaking out contract work

Date	Title
8/20/19	Corporate Secretary
Company	Company Representative
Strand Associat	
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false statemen	,
_	of the contract and/or be subject to applicable Federal and State laws concerning
The undersion	ned acknowledges that all information is accurate. Any misrepresentations may result
	participation Goal is not met.
	relevant to this requirement which is subject to approval by the MBE Liaison. Documentation of Good Faith Efforts must be submitted with the Bid, if the
	cause for rejection of bid. Bidders may include any other documentation deemed
	NOTE: Failure to submit any of the documentation requested in this section may be
	bidder has made reasonable good faith efforts to include MWDBE and Veteran participation.
	Otherany other evidence that the bidder submits which may show that the
	businesses beyond the usual geographic boundaries.
	Made efforts to expand the search for MWBE firms and Veteran-Owned
	insurance and or conding to satisfy the work requirements of the old proposal
	Veteran-Owned businesses to obtain the necessary equipment, supplies, materials, insurance and/or bonding to satisfy the work requirements of the bid proposal
	Made an effort to offer assistance to or refer interested MWDBE firms and
	order to build in 11 DDD und 1 owner gould.
	provision shall be construed to require the bidder to accept unreasonable quotes in order to satisfy MWDBE and Veteran goals.
	rejecting a MWDBE and/or Veteran-Owned business's quote. Nothing in this
	contract work with its own forces will not be considered a sound reason for
	unacceptable. The fact that the bidder has the ability and/or desire to perform the
	Bidder has to submit sound reasons why the quotations were considered
	indicating that they would not be submitting a bid.
	pricing or were rejected as unacceptable and/or copies of responses from firms
	firms and Veteran-Owned businesses which were not used due to uncompetitive
	Included documentation of quotations received from interested MWDBE
	in writing with a description as to why an agreement could not be reached.
	on a thorough investigation of their capabilities. Any rejection should be so noted
	Owned businesses not rejecting them as unqualified without sound reasons based
	Negotiated in good faith with interested MWDBE firms and Veteran-
	items with its own workforce
	participation, even when the prime contractor may otherwise perform these work
	items into economically feasible units to facilitate MWDBE and Veteran

WORKFORCE ANALYSIS FORM

Name of Organization: Strand Associates, Inc.

Categories	Total	White (Not Hispanic or Latino)		Hispanic or Latino		Black or African- American (Not Hispanic or Latino		Haw and (Pac Islan (N Hisp	Hawaiian and Other Pacific Islander (Not Hispanic or Latino		Hispanic or Latino		Indian or Alaskan Native (not Hispanic or Latino		o or ore ces lot panic atino	Тс	Total	
		М	F	M	F	M	F	М	F	М	F	М	F	М	F	М	F	
Administrators	11	9	1-						1							9	2	
Professionals	295	230	50	4		1				8					2	243	52	
Superintendents	-															-	-	
Supervisors	-															-	-	
Foremen	-															-	-	
Technicians	62	46	10	4		2										52	10	
Protective Service	-															-	-	
Para-Professionals	-															-	-	
Office/Clerical	51	9	36	1	2		1		1	1						11	40	
Skilled Craft	-															-	-	
Service/Maintenance	4	1				3										4	-	
Total:	423	295	97	9	2	6	1	_	2	9	-	-		-	2	319	104	

Prepared By: Justine Sanchez, HR Assistant Date: 08/16/19

(Name and Title)

Revised 2015-Dec-15



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 12/20/2018

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Ansay & Associates, LLC.	(A. f.	CONTACT NAME: Susan Simoneau						
702 N High Point Road		PHONE (A/C, No, Ext): 800-643-6133 FAX (A/C, No): 60						
Suite 201		E-MAIL ADDRESS: sue.simoneau@ansay.com						
Madison WI 53717		INSURER(S) AFFORDING COVERAGE		NAIC#				
		INSURER A: CNA Insurance Companies						
INSURED Strand Associates, Inc	STRAASS-01	INSURER B :						
910 W. Wingra Drive		INSURER C :		4				
Madison WI 53715		INSURER D :						
	8	INSURER E :						
		INSURER F:						
COVERAGES	CERTIFICATE NUMBER: 1276961432	PEVI	SION NUMBER:					

	A PROPERTY OF THE PARTY OF THE										
COVERAGES CERTIFICATE NUMBER: 1276961432 REVISION NUMBER:											
IN	THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIC INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THE										
E	CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.										
NSR TR	TYPE OF INSURANCE		SUBR		POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMIT	rs			
Α	GENERAL LIABILITY			5099170076	1/1/2019	1/1/2020	EACH OCCURRENCE	\$ 1,000,000			
	X COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurrence)	\$ 900,000			

	Company and a second of the Company				Total Control of the		
Α	X COMMERCIAL GENERAL LIABILITY		5099170076	1/1/2019	1/1/2020	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence)	\$ 1,000,000 \$ 900,000
	CLAIMS-MADE X OCCUR					MED EXP (Any one person)	\$ 15,000
	X XCU cov. incl.					PERSONAL & ADV INJURY	\$ 1,000,000
	X Blkt.Contractual					GENERAL AGGREGATE	\$ 2,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PRO-					PRODUCTS - COMP/OP AGG	\$ 2,000,000
		_					\$
A	AUTOMOBILE LIABILITY		5099170062	1/1/2019	1/1/2020	COMBINED SINGLE LIMIT (Es accident)	\$ 1,000,000
	X ANY AUTO					BODILY INJURY (Per person)	\$
	ALL OWNED SCHEDULED AUTOS					BODILY INJURY (Per accident)	\$
	X HIRED AUTOS X NON-OWNED AUTOS					PROPERTY DAMAGE (Per accident)	\$
					,		\$
A	X UMBRELLA LIAB X OCCUR		5099170059	1/1/2019	1/1/2020	EACH OCCURRENCE	\$ 2,000,000
	EXCESS LIAB CLAIMS-MADE					AGGREGATE	\$ 2,000,000
	DED X RETENTION \$ 10,000						\$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y/N		WC595126844	1/1/2019	1/1/2020	X WC STATU- OTH- TORY LIMITS ER	
	PROPRIETOR/PARTNER/EXECUTIVE	N/A				E.L. EACH ACCIDENT	\$ 1,000,000
	(Mandatory in NH) If yes, describe under					E.L. DISEASE - EA EMPLOYEE	\$ 1,000,000
	DESCRIPTION OF OPERATIONS below					E.L. DISEASE - POLICY LIMIT	\$ 1,000,000
Α	Professional Liability Full Prior Acts		AEH113974097	7/11/2018	7/11/2019	Each Claim Aggregate Full Prior Acts	2,000,000 2,000,000
				1			

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

CERTIFICATE HOLDER	CANCELLATION
Certificate Holder	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
Continuate Florides	AUTHORIZED REPRESENTATIVE

EXHIBIT D

Further Description of Basic Engineering Services

and

Related Services

NOT USED