

**CITY OF FRANKLIN, TENNESSEE
PROFESSIONAL SERVICES AGREEMENT
COF Contract No 2015-0356**

THIS PROFESSIONAL SERVICES AGREEMENT ("Agreement") is by and between the City of Franklin, Tennessee, hereinafter referenced as City, and **Civil & Environmental Consultants, Inc.**, hereinafter referenced as Consultant, who mutually agree as follows:

DECLARATIONS. City desires to retain Consultant to provide engineering related technical and survey services in connection with City's project hereinafter referenced as Project. The Project is described as follows:

Feasibility Study for Ralston Creek at Liberty Hills

1. **SCOPE OF SERVICES.** Consultant shall provide engineering related technical and survey services for the Project in accordance with the Scope of Work. The Scope of Work as found in **Attachment A** shall be considered as an integral part hereof.
2. Consultant shall be paid on an hourly basis for work performed based on the fee schedule as contained in **Attachment A** in the Amount Not To Exceed SIXTY-EIGHT THOUSAND SEVEN HUNDRED AND NO/100 DOLLARS (\$68,700.00)
3. In event of a conflict between this Agreement and the attached document(s), this Agreement shall supersede conflicting terms and conditions.

**The Board of Mayor and Aldermen Approved this Agreement on the
_____ Day of _____ 2015.**

BY: _____
Consultant's Signature
TITLE: _____
Date: _____

BY: _____
Dr. Ken Moore
Mayor
Date: _____

Approved as to form by:

Shauna R. Billingsley, City Attorney

TERMS AND CONDITIONS FOR PROFESSIONAL SERVICES

ARTICLE 1. SERVICES. Consultant will:

- 1.1 Act for City in a professional manner, using that degree of care and skill ordinarily exercised by and consistent with standards of competent consultants using the standards in the industry;
- 1.2 Consider all reports to be confidential and distribute copies of the same only to those persons specifically designated by the City.
- 1.3 Perform all services under the general direction of a senior professional employee, licensed and/or registered in the State of Tennessee, when appropriate.
- 1.4 Retain pertinent records relating to the services performed for a period of seven (7) years following the completion of the work; during this period the records shall be available for review by City at all reasonable times.

ARTICLE 2. CITY'S RESPONSIBILITIES. City, or its authorized representative, will:

- 2.1 Provide Consultant with all information regarding the Project, which is available to, or reasonably obtainable by, the City.
- 2.2 Furnish right-of-entry onto the Project site for Consultant's necessary field studies and surveys. Consultant will endeavor to restore the site to its original condition and shall remain solely liable for all damages, costs and expenses, including reasonable attorneys' fees, for failure to make such restoration.
- 2.3 Designate, in writing, the sole Project representative to coordinate with and direct the Consultant, including all contact information.
- 2.4 Guarantee to Consultant that it has the legal capacity to enter into this contract and that sufficient monies are available to fund Consultant's compensation.

ARTICLE 3. GENERAL CONDITIONS.

- 3.1 Consultant, by the performance of services covered hereunder, does not in any way assume, abridge or abrogate any of those duties, responsibilities or authorities customarily vested in other professionals or agencies participating in the Project.
- 3.2 Consultant shall be responsible for the acts or omissions of any party involved in concurrent or subsequent phases of the PROJECT acting upon written instruction issued by the Consultant.
- 3.3 Neither City nor Consultant may assign or transfer its duties or interest in this Agreement without written consent of the other party. However, nothing in this Article shall prevent Consultant from engaging

independent consultants, associates, and subcontractors to assist in the performance of the Services at Consultant's cost.

3.4 **ALLOCATION OF RISK AND LIABILITY; GENERAL.** Considering the potential liabilities that may exist during the performance of the services of this Agreement, the relative benefits and risks of the Project, and the Consultant's fee for the services rendered, and in consideration of the promises contained in this Agreement, the City and the Consultant agree to allocate and limit such liabilities in accordance with this Article.

3.5 **INDEMNIFICATION.** Consultant agrees to indemnify and hold City harmless from and against legal liability for all judgments, losses, damages, and expenses to the extent such judgments, losses, damages, or expenses are caused by Consultant's negligent act, error or omission in the performance of the services of this Agreement. In the event judgments, losses, damages, or expenses are caused by the joint or concurrent negligence of Consultant and City, they shall be borne by each party in proportion to its own negligence.

3.5.1 **SURVIVAL.** The terms and conditions of this paragraph shall survive completion of this services agreement.

3.6 **LIMITATIONS OF RESPONSIBILITY.** Consultant shall not be responsible for (a) construction means, methods, techniques, sequences, procedures, or safety precautions and programs in connection with the Project unless specifically undertaken in Attachment A, **SCOPE OF SERVICES**; (b) the failure of any contractor, subcontractor, Consultant, or other Project participant, not under contract to Consultant, to fulfill contractual responsibilities to City or to comply with federal, state, or local laws, regulations, and codes; or (c) procuring permits, certificates, and licenses required for any construction unless such procurement responsibilities are specifically assigned to Consultant in Attachment A, **SCOPE OF SERVICES**.

ARTICLE 4. TERMINATION BY THE CITY. The City may terminate this Agreement in accordance with the following terms and conditions:

4.1 **Termination for Convenience.** The City may, when in the interests of the City, terminate performance under this Agreement with the Consultant, in whole or in part, for the convenience of the City. The City shall give written notice of such termination to the Consultant specifying when termination becomes effective. The Consultant shall incur no further obligations in connection with the work so terminated, other than warranties and guarantees for completed work and installed equipment, and the Consultant shall stop work when such termination becomes effective. The Consultant shall also terminate outstanding orders and subcontracts for the affected work. The

Consultant shall settle the liabilities and claims arising out of the termination of subcontracts and orders. The City may direct the Consultant to assign the Consultant's right, title and interest under termination orders or subcontracts to the City or its designee. The Consultant shall transfer title and deliver to the City such completed or partially completed work and materials, equipment, parts, fixtures, information and Contract rights as the Consultant has in its possession or control. When terminated for convenience, the Consultant shall be compensated as follows:

- (1) The Consultant shall submit a termination claim to the City specifying the amounts due because of the termination for convenience together with costs, pricing or other data required by the City. If the Consultant fails to file a termination claim within one (1) year from the effective date of termination, the City shall pay the Consultant the amount the City deems the Consultant is due.
- (2) The City and the Consultant may agree to the compensation, if any, due to the Consultant hereunder.
- (3) Absent agreement to the amount due to the Consultant, the City shall pay the Consultant the following amounts:
 - (a) Contract costs for labor, materials, equipment and other services accepted under this Agreement;
 - (b) Reasonable costs incurred in preparing to perform and in performing the terminated portion of the work, and in terminating the Consultant's performance, plus a fair and reasonable allowance for direct job site overhead and earned profit thereon (such profit shall not include anticipated profit or consequential damages); provided however, that if it reasonably appears that the Consultant would have not profited or would have sustained a loss if the entire Agreement would have been completed, no profit shall be allowed or included and the amount of compensation shall be reduced to reflect the anticipated rate of loss, if any;

The total sum to be paid the Consultant under this Section shall not exceed the total Agreement Price, as properly adjusted, reduced by the amount of payments otherwise made, and shall in no event include duplication of payment.

- 4.2 Termination for Cause. If the Consultant does not perform the work, or any part thereof, in a timely manner, supply adequate labor, supervisory personnel or proper equipment or materials, or if it fails to timely discharge its obligations for labor, equipment and materials, or proceeds to disobey applicable law, or otherwise commits a violation of a material provision of this Agreement, then the City, in addition to any other rights it may have against the Consultant or others, may terminate the performance of the Consultant, in whole or in part at the City's sole option, and assume possession of the Project Plans and materials and may complete the work.

In such case, the Consultant shall not be paid further until the work is complete. After Completion has been achieved, if any portion of the Contract Price, as it may be modified hereunder, remains after the cost to the City of completing the work, including all costs and expenses of every nature incurred, has been deducted by the City, such remainder shall belong to the Consultant. Otherwise, the Consultant shall pay and make whole the City for such cost. This obligation for payment shall survive the termination of the Agreement.

In the event the employment of the Consultant is terminated by the City for cause pursuant to this Section and it is subsequently determined by a Court of competent jurisdiction that such termination was without cause, such termination shall thereupon be deemed a Termination for Convenience under this Section and the provisions of Section 4.1 shall apply.

- 4.3 Termination for Non-Appropriation. The City may also terminate this Agreement, in whole or in part, for non-appropriation of sufficient funds to complete or partially complete the Project, regardless of the source of such funds, and such termination shall be on the terms of Section 4.1.
- 4.4 The City's rights under this Section shall be in addition to those contained elsewhere herein or provided by law.

ARTICLE 5. SCOPE OF SERVICES. Consultant shall provide the Services as described in Attachment A, SCOPE OF SERVICES.

5.1 By mutual agreement, this contract and scope can be amended by the parties. The scope and fee for any additional tasks or services under such amendment shall be mutually negotiated and agreed to in writing prior to beginning such additional tasks or services.

5.2 ENVIRONMENTAL RESPONSIBILITY.

Where drilling/sampling services are involved, the samples obtained from the Project site are the property of the City. Should any of these samples be recognized by the Consultant to be contaminated, the City shall remove them from the Consultant's custody and transport them to a disposal site, all in accordance with applicable government statutes, ordinances, and regulations. For all other samples, the Consultant shall retain them for a sixty (60)-day period following the submission of the drilling/sampling report unless the City directs otherwise; thereafter, the Consultant shall discard the samples in accordance with all federal, state and local laws.

ARTICLE 6. SCHEDULE.

6.1 **TIME OF THE ESSENCE.** The parties agree that TIME IS OF THE ESSENCE with respect to the parties' performance of all provisions of the Agreement.

6.2 **FORCE MAJEURE.** Neither party will be liable to the other for any delay or failure to perform any of the services or obligations set forth in this Agreement due to causes beyond its reasonable control, and performance times will be considered extended for a period of time equivalent to the time lost because of such delay plus a reasonable period of time to allow the parties to recommence performance of their respective obligations hereunder. Should a circumstance of force majeure last more than ninety (90) days, either party may by written notice to the other terminate this Agreement. The term "force majeure" as used herein shall mean the following: acts of God; strikes, lockouts or other industrial disturbances; acts of public enemies; orders or restraints of any kind of the government of the United States or of the State or any of their departments, agencies or officials, or any civil or military authority; insurrections, riots, landslides, earthquakes, fires, storms, tornadoes, droughts, floods, explosions, breakage or accident to machinery, transmission pipes or canals; or any other cause or event not reasonably within the control of either party.

6.3 Should City request changes in the scope, extent, or character of the Project, the fee and the time of performance of Consultant's services as indicated in Attachment A shall be adjusted equitably.

ARTICLE 7. USE OF DOCUMENTS, DATA.

7.1 All Documents, including, but not limited to, reports, drawings, specifications, and computer software prepared by Consultant pursuant to this Agreement are instruments of service in respect to the Project. Consultant shall retain an ownership and property interest therein (including the right of reuse at the discretion of the Consultant) whether or not the Project is completed.

7.1.1 **USE OF DATA SYSTEMS:** Ownership, property interests and proprietary rights in data systems used by Consultant do not extend to the data created by or supplied to Consultant by the City; all rights to that data (including derivative or hidden data such as metadata) shall vest solely in City at the moment of creation.

7.1.2 **DISCLOSURE OF DOCUMENTS/DATA.** City may be required to disclose documents or data under state or federal law. City shall notify Consultant if a request for data or documents has been made and shall give Consultant a reasonable opportunity under the circumstances to respond to the request by redacting proprietary or other confidential information. Consultant waives any right to confidentiality of any document, e-mail or file it fails to clearly mark on each page as confidential or proprietary. In exchange, Consultant agrees to indemnify, defend, and hold harmless City for any claims by third parties relating thereto or arising out of (i) the City's failure to disclose such documents or information required to be disclosed by law, or (ii) the City's release of documents as a result of City's reliance upon Consultant representation that materials supplied by Consultant (in full or redacted form) do not contain trade secrets or proprietary information, provided that the City impleads Consultant and Consultant assumes control over that claim.

7.2 City-furnished data that may be relied upon by Consultant is limited to the printed copies that are delivered to the Consultant pursuant to Article 2 of this Agreement. Any copyrighted electronic files furnished by City shall be used by Consultant only for the Project as described herein. City's posting or publication of such documents created by Consultant for City shall constitute fair use and shall not constitute an infringement of Consultant's copyright, if any.

7.3 Documents that may be relied upon by City are limited to the printed copies (also known as hard copies) that are signed or sealed by the Consultant. Files in electronic media format of text, data, graphics, or of other types that are furnished by Consultant to City are only for

- convenience of City, unless the delivery of the Project in electronic media format has been dictated in Attachment A, SCOPE OF SERVICES. Any conclusion or information obtained or derived from electronic files provided for convenience will be at the user's sole risk.
- 7.4 Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the party delivering the electronic files. Unless stated otherwise herein, Consultant shall not be responsible to maintain documents stored in electronic media format after acceptance by City.
- 7.5 When transferring documents in electronic media format, Consultant makes no representations as to long term compatibility, usability, or readability, of documents resulting from the use of software application packages, operating systems, or computer hardware differing from that as required of, and used by, Consultant at the beginning of this Project.
- 7.6 City may make and retain copies of Documents for information and reference in connection with use on the Project by the City, or his authorized representative. Such Documents are not intended or represented to be suitable for reuse by City or others on extensions of the Project or on any other project. Any such reuse or modifications without written verification or adaptation by Consultant, as appropriate for the specific purpose intended, will be at City's sole risk and without liability or legal exposure to the Consultant or to Consultant's Consultants.
- 7.7 If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.
- 7.8 Any verification or adaptation of the Documents for extensions of the Project or for any other project will entitle Consultant to further compensation at rates to be agreed upon by City and Consultant.

ARTICLE 8. INSURANCE.

- 8.1 During the performance of the Services under this Agreement, Consultant shall maintain the following minimum insurance:
- a) General Liability Insurance with a combined single limit of \$1,000,000 per occurrence and \$2,000,000 annual aggregate.
 - b) Automobile Liability Insurance with a combined single limit of \$1,000,000 for each person and \$1,000,000 for each accident.
 - c) Workers' Compensation Insurance Coverage A in accordance with statutory requirements and Coverage B, Employer's Liability Insurance, with a limit of \$500,000 for each occurrence.

- d) Professional Liability Insurance with a limit of \$1,000,000 annual aggregate.
- 8.2 Consultant shall add the City an additional insured on all policies unless otherwise prohibited.
- 8.3 Consultant shall, upon execution of this Agreement, furnish City certificates of insurance, which shall include a provision that such insurance shall not be canceled without at least thirty days' written notice to City.
- 8.4 No insurance, of whatever kind or type is to be considered as in any way limiting other parties' responsibility for damages resulting from their activities in the execution of the Project. City agrees to include, or cause to be included, in the Project's construction contract, such requirements for insurance coverage and performance bonds by the Project's construction contractor as City deems adequate to indemnify City, Consultant, and other concerned parties against claims for damages and to insure compliance of work performance and materials with Project requirements.

ARTICLE 9. PAYMENT.

- 9.1 City will pay Consultant for services and expenses in accordance with the Fee Schedule proposal submitted for the Project as part of the Scope Of Services. Consultant's invoices will be presented at the completion of the work or monthly and will be payable upon receipt. Payment is due upon presentation of invoice and is past due thirty (30) days from invoice date. City shall give prompt written notice of any disputed amount and shall pay the remaining amount.
- 9.2 Consultant shall be paid in full for all services under this Agreement, including City-authorized overruns of the Project budget or unforeseen need for Consultant's services exceeding the original Scope Of Services.
- 9.3 **TRAVEL; EXPENSES**
The City shall reimburse reasonable expenses, including travel and meals, when specified in the Scope Of Services, but only in accordance with the City's Travel and Expense Policy and Procedures Manual. The maximum amount will be applied as of the date of travel and as listed in the per diem reimbursement rates on the "CONUS" website developed by the United States General Services Administration, located at www.gsa.gov [click on 'per diem rates' under the 'etools' category].

ARTICLE 10. MISCELLANEOUS PROVISIONS

- 10.1 **EQUAL EMPLOYMENT OPPORTUNITY.** In connection with this Agreement and the Project, the City and the Consultant shall not discriminate against any employee or applicant for employment because

of race, color, sex, national origin, disability or marital status. The City and Consultant will take affirmative action to ensure that contractor used for the Project does not discriminate against any employee and employees are treated during employment without regard to their race, age, religion, color, gender, national origin, disability or marital status. 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 apprenticeship.

10.1.1 The Consultant shall insert the foregoing provision in all contracts relating to this Project.

- 10.2 TITLE VI – CIVIL RIGHTS ACT OF 1964. The City and the Consultant shall comply with all the requirements imposed by Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d), 49 C.F.R., Part 21, and related statutes and regulations.

10.2.1 The Consultant shall insert the foregoing provision in all contracts relating to this Project.

- 10.3 NO THIRD PARTY RIGHTS CREATED. City and Consultant each binds itself and its successors, executors, administrators, permitted assigns, legal representatives and, in the case of a partnership, its partners, to the other party to this Agreement and to their successors, executors, administrators, permitted assigns, legal representatives and partners of such other party in respect to all provisions of this Agreement. The Services provided for in this Agreement are for the sole use and benefit of City and Consultant. Nothing in this Agreement shall be construed to give any rights or benefits to anyone other than the City and the Consultant.

- 10.4 WARRANTIES/LIMITATION OF LIABILITY/WAIVER. The City reserves all rights afforded to local governments under law for all general and implied warranties. The City does not waive any rights it may have to all remedies provided by law and therefore any attempt by Consultant to limit its liability shall be void and unenforceable.

ARTICLE 11. EXTENT OF AGREEMENT:

- 11.1 APPLICABLE LAW/CHOICE OF FORUM AND VENUE. This Agreement is made under and will be construed in accordance with the laws of the State of Tennessee without giving effect to that state's choice of law rules. The parties' choice of forum and venue shall be exclusively in the courts of Williamson County, Tennessee. Any provision of this Agreement held to violate a law or regulation shall be deemed void, and all remaining provisions shall continue in force.

- 11.2 **ENTIRE AGREEMENT.** This Agreement, including these terms and conditions, represent the entire Agreement between City and Consultant for this Project and supersedes all prior negotiations, representations or agreements, written or oral. This Agreement may be amended only by written instrument signed by City and Consultant.

ARTICLE 12. DISPUTE RESOLUTION, BREACH.

- 12.1 If a dispute should arise relating to the performance of or payment for the services under this Agreement, the aggrieved party shall notify the other party of the dispute within a reasonable time after such dispute arises. During the pendency of any dispute, the parties shall continue diligently to fulfill their respective obligations hereunder. No arbitration or mediation shall be required as a condition precedent to filing any legal claim arising out of or relating to the Contract. No arbitration or mediation shall be binding.
- 12.2 **BREACH.** Upon deliberate breach of the Contract by either party, the non-breaching party shall be entitled to terminate the Contract with notice, with all of the remedies it would have in the event of termination, and may also have such other remedies as it may be entitled to in law or in equity.

ARTICLE 13. SURVIVAL.

The provisions contained in this Professional Services Agreement shall survive the completion of or any termination of the Contract, agreement or other document to which it may accompany or incorporate by reference or which subsequently may be modified, unless expressly excepted from this Article upon consent of both parties.



October 9, 2015

Mr. Jeff Willoughby
Stormwater Coordinator
City of Franklin
109 3rd Avenue South
Franklin, TN 37064
Delivered via email: jeff.willoughby@franklinton.gov

Dear Mr. Willoughby:

Subject: Revised Proposal for Professional Engineering Services
Feasibility Study for Ralston Creek at Liberty Hills
City of Franklin, Williamson County, Tennessee
CEC Project 153-050

Civil & Environmental Consultants, Inc. (CEC) is pleased to submit this **REVISED** proposal to the City of Franklin (City). The previously submitted scope of work proposed performing survey work that would be beneficial for the feasibility phase, while picking up additional information that would be required for the future design phase. The City has indicated that it would prefer to only perform the survey work at this time that is necessary for the feasibility phase and perform the additional work at the time that design is approved and begun.

1.0 BACKGROUND

CEC understands that the City has received a number of recent complaints from residents in the Royal Oaks Subdivision regarding flooding due to stormwater from Ralston Creek overtopping the stream banks. There are also certain areas along Ralston Creek that are experiencing bank failure, some of which the City has attempted to temporarily address until a permanent solution can be determined and installed. The stream originates between Huffines Ridge Drive and I-65 near Centennial High School and flows in a southwesterly direction before entering into the Liberty Hills Subdivision Retention Pond. It also receives flow from an eastern channel along Liberty Pike which is listed as the headwater area for Ralston Creek. After leaving the retention pond through its outlet structure, the stream flows through the Royal Oaks Subdivision, where the previously mentioned flooding and bank failures have occurred.

Access to the stream in the Royal Oaks Subdivision is limited. Preliminary investigations also indicate that creating additional area for storage along the stream to reduce flooding may be difficult.

2.0 PURPOSE

The purpose of this project is to prepare a feasibility study to determine potential ways to address flooding in the Royal Oaks Subdivision along Ralston Creek and to mitigate the eroding stream channel. Several stakeholders will need to be involved in the process of determining a solution including, but not limited to: the City of Franklin, the Royal Oaks subdivision Home Owner's Association, the Liberty Hills subdivision Home Owner's Association, the stream's adjacent property owners, TDEC, and the Corps of Engineers. It may be necessary to include the Cheswicke Farms subdivision Home Owner's Association and the Royal Oaks Apartments as stakeholders, depending on impacts that may be proposed when looking at the overall drainage basin.

3.0 SCOPE OF SERVICES

CEC proposes the following scope of services:

3.1 Project Survey

- Topographic survey of the project area (depicted in Figure 1 centered around Ralston Creek from Victoria Court upstream to Liberty Hills pond) are included as part of this scope. The primary focus of the survey will be to accurately represent the current alignment of Ralston Creek and the properties that lie directly adjacent to the stream through cross sections of the stream surveyed approximately every 75 feet. Back yard topographical information, fences, other residential structures, utilities and back of house corners that fall in the cross sections will be collected to ascertain the impact of bank grading. CEC assumes the City will provide utility information that CEC will use to anticipate where to verify utility locations at cross-sections. The scope of survey work will not include the delineation of property corners and assumes that sufficient boundary information for the feasibility study is provided when combined with the plat and City GIS data. The finished floor elevations of homes immediately adjacent to the Liberty Hills pond will also be surveyed.

- A spot check of topographic information provided to CEC by the City for Liberty Hills pond will be performed including collecting as-built elevations of the outlet structure. Should the verification survey of the pond reveal discrepancies, CEC will discuss this with the City and provide a proposal for additional survey in this area, as necessary.



Figure 1. Site Map

- CEC will perform a topographic field survey of the project area using Tennessee state plane coordinates, NAD 83, NAVD 88, zone 4100/5301 for incorporation into the Franklin GIS database. CEC understands that GIS data of this area from the Franklin database will be made available for use on this project. The purpose of this initial survey is to gather information for developing a current and comprehensive drawing of the existing stream channel and immediate surrounding area. This drawing will be used in developing and graphically depicting the proposed restoration design. This topographic survey is a prerequisite for all of the following tasks.

3.2 Drainage Basin Study

- CEC will delineate the contributing drainage basin for Ralston Creek downstream of the Liberty Hills retention pond where the flooding has been reported.
- CEC will perform hydrologic (likely using HEC-HMS) and hydraulic (likely using HEC-RAS) calculations to assess the contributing drainage area and water surface profile (including velocity and shear stress) in the channel during the 2- through 500-Year, 24-hour design storms. The hydraulic model of the project reach (~4,800 feet) will be used

to determine the water surface profile of the stream under the various options discussed below. The reach is planned to extend from near Victoria Court to the Cheswicke Farms project in Ralston Creek. CEC plans to use previously collected field survey information for Cheswicke Farms.

- CEC will analyze the Liberty Hills retention pond and develop options to reduce the peak flow from the pond. Options will include:
 - Creating additional detention volume in the Liberty Hills open space lot where the retention pond is located without modifying the existing outlet structure.
 - Creating additional detention by draining the retention pond and designing a natural channel within the Liberty Hills open space lot.
 - Creating additional detention by draining the retention pond and designing a natural channel within the Liberty Hills open space lot and decreasing the size of the existing cross-drain under Liberty Hills Drive.

3.3 Pond Response to Rainfall Events

- CEC recommends monitoring of the pond to gauge the pond's response to rain events. In this way, the hydrological model (likely HEC-HMS) can be calibrated with field data versus preparing a more comprehensive hydrological model in which field survey would be required in the contributing watershed. CEC proposes to install pressure transducers equipped with data loggers in the pond and each of the two outlet pipes and a rain gauge bucket and associated data logger. The monthly cost of equipment rental, downloading, and maintaining these devices is included in the estimated costs below. The initial cost includes six months of data monitoring and device rental and maintenance. CEC recommends that the monitoring begin as soon as possible and continue through the feasibility study and possibly design phase to collect as much data as possible. For example, having a full 12 months of data would be advantageous to quantify seasonal variations; however, a sufficient spectrum of rainfall depths may be obtained within six months of monitoring and the monitoring may not need to continue.
- CEC will update the hydrology model as data is obtained. CEC will regularly communicate with the City regarding the process of updating the model to mutually agree on the appropriate time to end data collection. The goal will be to obtain a spectrum of rainfall events in order to more fully understand the pond's response to a variety of storm events.

3.4 Project Map/H&H/Collaboration Meeting with City/Presentation Development

- CEC proposes to develop a working map of the site based on the survey performed and the GIS information obtained from the City and a proposed typical cross section(s) for improvements to be made. This map and cross section(s) will be used to aid in communicating with the stakeholders during the feasibility study process.
- CEC will meet with the City staff to collaborate about the known issues and potential solutions. A summary of the discussions during this meeting will be prepared and sent to the City.
- CEC will develop a presentation (e.g. PowerPoint) defining the problems with the stream (using several photos) and incorporating information gathered from the City. The presentation will also include a preliminary list of project constraints. The purpose of this presentation will be to communicate the issues to the stakeholders.

3.5 Stakeholder Meetings

CEC will perform the following tasks:

- CEC will organize a meeting (possibly two if TDEC and Corps are not available at the same time) at the site with the regulatory agencies (i.e. TDEC, Corps) to review the existing condition of the stream and the constraints. One of the goals of this meeting will be to convey to the regulatory agencies the impaired state of the stream and the permitting approach to various mitigation options. CEC will prepare meeting minutes and distribute to the participants. CEC will update the presentation developed in Task 3.4 as appropriate based upon the outcomes of this meeting.
- CEC will present the presentation prepared in Task 3.4 at a public meeting organized by the City and will be available to answer questions and discuss potential mitigation solutions. CEC will summarize the public comments and send the comments to the City to document the meeting.

Meetings in support of Tasks 3.4 & 3.5

Meeting Description	Purpose of Meeting	Deliverable
Collaboration with City staff	Prepare for meeting with regulators and stakeholders	Meeting minutes
Meeting (possibly two) on site with regulatory agencies (i.e. TDEC, Corps)	Discuss project constraints and permitting options	Meeting minutes and follow up collection of agency responses
Public meeting	Communicate project goals and constraints and elicit comments	Meeting minutes and assistance in responding to public comments

3.6 Feasibility Study Report and Recommendations

The purpose of this task will be to document and consider information gathered during the feasibility study process and develop recommendations for the next steps toward resolving the erosion problems with the stream. Planning level design and construction costs may be included; however, the cost of permitting may be a significant but unknown cost at this time. The permitting cost may be better understood after meeting with the permitting agencies, or they may not be known until an application is submitted.

4.0 SCHEDULE

CEC can begin work within two weeks of receiving your authorization to proceed.

5.0 COST

Our not-to-exceed costs are based on the scope of services described above and will be billed on a Time & Materials (T&M) basis and include reimbursable expenses. If CEC encounters conditions that require additional services and costs beyond what is presented in the proposal, CEC will provide a written revised scope of services and revised costs for the City of Franklin's approval prior to proceeding. The estimated cost to perform the scope of services outlined in this letter is provided below:

Task	Not-to-Exceed Cost
3.1 Project Survey	\$21,400
3.2 Drainage Basin Study	\$13,500
3.3 Pond Response to Rainfall Events	\$11,600*
3.4 Project Map/H&H/Collaboration Meeting with City/Presentation Development	\$9,200
3.5 Stakeholder Meetings	\$7,000
3.6 Feasibility Study Report and Recommendations	\$6,000
Total	\$68,700

*Includes the initial set up cost and six months of data monitoring and analysis and maintenance of the devices. If the City requests the data monitoring to continue beyond the initial six month monitoring period, ongoing costs will be on a time and materials basis not to exceed \$1,250/month. CEC recommends 12 months of data gathering to obtain seasonal variations, but a sufficient spectrum of rainfall depths over a six month period may provide an acceptable representation of events.

Invoicing of professional services will be in accordance with the attached fee schedule. CEC will maintain the 2015 rates through the end of the 2016 calendar year. Reimbursable expenses, including subcontracted services, are included in our estimated costs and will be invoiced according to the attached fee schedule.

Our Schedule of Terms and Conditions, which apply to the proposed work, is attached. Any changes to our Terms and Conditions must be agreed to in writing by both parties prior to your authorization to proceed. Your oral or written authorization to proceed will form a binding contract and indicates your acceptance of our Terms and Conditions.

6.0 CLOSING

CEC appreciates the opportunity to submit this proposal to you. We believe the scope of services outlined will address the City of Franklin's needs in a cost effective manner. If you have any questions or comments, please call me at (615) 979-4382.

Very truly yours,

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.



Eric J. Gardner, P.E., CPESC
Project Manager



Jeff Duke, PWS, CPESC
Vice President

Cc: Paul Holzen, Director of Engineering paul.holzen@franklintn.gov

Enclosures

Fee Schedule

January 1, 2015 through December 31, 2015

PROFESSIONAL SERVICES

Classification	Rate/Hour
Vice President.....	\$220
Principal	\$205
Senior Project Manager	\$180
Project Manager III	\$155
Project Manager II	\$145
Project Manager I	\$135
Assistant Project Manager	\$110
Project Consultant / Geologist / Hydrogeologist / Biologist / Scientist	\$100
Staff Consultant / Geologist / Hydrogeologist / Environmental Specialist	\$95
CAD Designer.....	\$90
Draftsperson / CADD Operator.....	\$65
Senior Field Technician.....	\$80
Construction Observer / Environmental Technician	\$78
Senior Land Surveyor	\$140
Project Land Surveyor / GPS Specialist.....	\$100
Survey Technician IV	\$83
Survey Technician III	\$78
Survey Technician II.....	\$70
Survey Technician I	\$63
Administrative Assistant	\$65
Administrative Manager	\$73

DIRECT EXPENSES

Direct expenses are included in the cost estimates.

Company or Personal Automobile Mileage	\$0.56 /mile*
Computer / CADD Usage	\$15/hour
Other Travel Related Expenses	Cost plus 10%
Printing and Reproduction	Cost plus 10%
Telephone and Shipping	Cost plus 10%
Miscellaneous Services.....	Cost plus 10%

SUBCONTRACT SERVICES

Services @ Cost Plus 12%

* Will be modified to current IRS Rate