March 1, 2013 REVISED March 21, 2013

COF Contract No. 2013-0052 Attachment A

Mr. Paul Holzen, P.E., LEED AP Director of Engineering City of Franklin 109 3rd Avenue South Franklin, TN 37064

Dear Mr. Holzen:

Subject: Proposal for Professional Engineering Services

Ralston Creek at Cheswicke Farms

City of Franklin, Williamson County, Tennessee

CEC Project No. 130-479

Civil & Environmental Consultants, Inc. (CEC) is pleased to submit this proposal to the City of Franklin as requested under the COF Contract No. 2010-0155. Our preparation of this proposal is based on our meeting at the project site on February 8, 2013 including the email sent to us by Jeff Willoughby after the meeting of site specific information (the two figures are attached for reference) and our prior experience on similar projects (including Ralston Creek at Buckingham Park).

1.0 BACKGROUND

The City of Franklin evaluated Ralston Creek in 2010 and identified it as a stream to do restoration work on in order to keep it off the list of impaired streams in Tennessee. To date, Ralston Creek, a tributary of the impaired Harpeth River has not been assessed by the Tennessee Department of Environment and Conservation (TDEC). This particular reach of Ralston Creek was identified as a good segment on which to enhance the stream buffer since it is located within the common area of Cheswicke Farms. Upon further evaluation, the City decided that the stream was also in need of restoration work beyond the enhancement of the buffer. The stream has a concrete swale underneath portions of it and lacks definition, especially in the bend where another channel enters the stream from the west. Additional conditions for which mitigation is necessary include stream bank erosion, improper pattern and profile, improper elevation changes at the upper and lower tie-ins, trash and debris, and lack of riparian buffer.

Civil & Environmental Consultants, Inc.

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2.0 PURPOSE

The purpose of this project is to restore the subject stream to a more aesthetically pleasing and stable condition by incorporating natural stream design principles that will enhance the aquatic habitat. A secondary purpose of this project, should the City choose to do so, will be to add a permanent stream crossing to allow for maintenance and passive recreation. However, this task has not been included within this proposal but can be provided upon request.

3.0 SCOPE OF SERVICES

The following scope of services is based upon the three-page "Stream Restoration Projects - Consultant Contract Design Tasks and Construction Administration" given to CEC at the January 12, 2011 meeting and as modified during that meeting.

3.1 <u>Project Survey/Scoping/Functional Layout</u>

- Full Boundary and Topographic Survey of the project area including adjoining properties for which easements may be necessary to complete the restoration.
- 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 will be made available for CEC to 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 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 the following tasks.
- CEC will analyze the survey to determine a functional layout required for the stream restoration design and review with the City prior to continuing with the work.

3.2 Preliminary and ROW Plans preparation

CEC will perform the following tasks:

- Develop Initial Design(s)
- Meet with City Staff to go over initial project findings, so the design approach can be approved

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- Consultant to submit One Set of Preliminary Plans for City Review and Approval (Electronic Submittal acceptable)
- CEC will proceed with preparing the ROW plans after receiving comments back from City on the Preliminary Plans
- CEC will prepare draft permit applications for a City of Franklin grading permit and for coverage under the Tennessee Construction General Permit for Storm Water associated with Construction (this will include preparation of a preliminary Erosion Prevention and Sediment Control (EPSC) plan, Storm Water Pollution Prevention Plan (SWPPP), and Notice of Intent (NOI)), and a General Aquatic Resource Alteration Permit (ARAP) application and Corps of Engineers Nationwide Permit application
- Identify ROW/Easement Acquisition Needs
- Preliminary Hydraulic Design including analysis of the flow from the upstream concrete-lined trapezoidal channel in which Ralston Creek is located. The upper reaches of the restored stream will need to withstand the shear stresses and turbulence associated with the transition from a concrete-lined channel to a natural stream
- Preliminary Landscaping Design (CEC will attempt to use the City's current planting plan and may adjust it based on project constraints)
- Preliminary ROW Plan Review/Utility Coordination One Full-Size Set of ROW Plans for Each Utility's Use (Electronic Copies May be Accepted based on the Utility) and One Full-Size Set, One Half-Size Set, and an Electronic Copy of ROW Plans for City Review
- ROW Plan Sets may include, but are not limited to: Title Sheet, Typical Sections, Property Map with Acquisition Table, Present Layout, Proposed Layout, Proposed Profile, Utility Layout, X-Sections (Every 50')
- Hold/Attend one Preliminary Utility Coordination Meeting (CEC has estimated a cost of \$800 per utility coordination meeting)
- Prepare exhibits for Public Hearing
 - o Two Sets of ROW Plans, Display Boards, and Presentation
- Hold/Attend Public Hearing (CEC understands that the City will advertise and hold the meeting and that CEC will provide the exhibits and attend to answer questions posed by the public)
- Incorporate Comments and Changes into ROW Plans and Finalize ROW Plans,
- Consultant to submit One Full-Size Set, One Half-Size Set and an Electronic Copy (PDF and CADD) of Finalized ROW Plans
- Legal Descriptions and Exhibits
 - O Descriptions and Exhibits to be printed on 8 ½" x 11" paper (one tract per page)

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- Exhibits to show existing and proposed features, property lines, proposed ROW and easements
- o Prepare Preliminary Quantities and Cost Estimate.

3.3 <u>Construction Plans preparations</u>

CEC will perform the following tasks:

- Finalize Design and Prepare Plan Specifications
 - o Incorporate Special Conditions from ROW/Easement Acquisition
 - Calculate Final Quantities and Cost Estimate
 - o Prepare Erosion Prevention and Sediment Control Plans
 - o Prepare General Notes
 - o Finalize Water Quality Permit Applications (this task will include water quality type permits such as the Aquatic Resource Alteration Permit application, the Corps of Engineer's permit applications, the NOI and SWPPP, and the Franklin Grading Permit application)
- Construction Plan Review One Full-Size Set of Construction Plans for Each Utility's
 Use (Electronic Copies May be Accepted based on the Utility) and One Full-Size Set,
 Two Half-Size Sets, and an Electronic Copy of Construction Plans for City Review
- Construction Plan Sets may include, but are not limited to: Title Sheet, Typical Sections,
 Quantities, Property Map with Acquisition Table, Present Layout, Proposed Layout,
 Proposed Profile, Utility Layout, Erosion Control, General Notes, X-Sections (Every 50')
- Final Utility coordination meetings (If Necessary)
- Incorporate Comments and Changes into Plans and Finalize Plans
- Finalize the City of Franklin grading permit application and a Notice of Intent (NOI) and SWPPP for coverage under the Tennessee Construction General Permit for Storm Water associated with Construction (applicable permit application fees are assumed to be waived for the City grading permit; State permit fees are assumed to be paid by the City of Franklin and have not been included in the costs for this proposal)
- Submit Permit Applications CEC assumes that the City will reimburse payment of the application fees)
- Consultant to submit One Full-Size Set, One Half-Size Set and an Electronic Copy (PDF and CADD) of Finalized Construction Plans and Specifications

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Note: CEC will attend Status Update and Other Necessary Meetings during the life of the Project and has estimated five meetings in addition to those specifically listed above in Tasks 3.1 through 3.3 for the purposes of providing a cost schedule with this proposal. CEC will maintain an updated schedule of project tasks and will submit this via email monthly (or as requested by the City).

3.4 Project Bidding Assistance

The purpose of this task is to administer the bidding process for the City of Franklin. This task will include the following subtasks:

- CEC will make necessary copies and sell bid documents and maintain a list of bidders(CEC assumes that the City will pay any costs associated with advertising the bid in the newspaper)
- CEC will conduct a Pre-bid Meeting
- CEC will conduct the Bid Opening at the City of Franklin offices
- CEC will certify the Bid tabulation and make a recommendation to the City of Franklin

3.5 Construction Administration

CEC will perform the following tasks:

- Conduct Pre-Construction Meeting
- CEC will conduct a Project Walk Through
- Review and Approve Shop Drawings
- Coordinate Utility Location and Relocation (If Necessary)
- Coordination with Testing companies (If Necessary)
- Conduct Site Visits Two Times per Week
- Conduct/Attend Bi-Weekly Progress Meeting
- Review Pay Requests and Make Recommendation to City
- Coordinate with City Inspector and Contractor
- Review and Make Recommendation on Change Orders
- Interpret/Clarify Plan or Specification Questions or Conflicts
- Conduct Substantial Completion Walk Through
- Prepare Punchlist
- Conduct Final Walk Through

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- Prepare Final Punchlist
- Prepare Final Change Order

3.6 Warranty Documentation Assistance

- Supply information to the City as to when materials are placed into service
- Conduct Warranty Walk Through Near the end of the warranty period to identify products or materials that may not be working properly

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. 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 above is provided below:

Task	Not-to-Exceed Cost
3.1 Project Survey/Scoping/Functional Layout	\$9,100
3.2 Preliminary & ROW Plans Preparation	\$20,200
3.3 Construction Plans Preparation	\$9,800
3.4 Project Bid Administration	\$3,250
3.5 Construction Administration	\$12,700
3.6 Warranty Documentation Assistance	\$2,000

Invoicing of professional services will be in accordance with the attached fee schedule. Reimbursable expenses, including subcontracted services, are included in our estimated costs and will be invoiced according to the attached fee schedule.

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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 333-7797.

Very truly yours,

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.

Steven E. Casey, P.E., CPESC

Project Manager

Jeff Duke, CPESC Vice President

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Cc: Crystal Piper, Stormwater Coordinator

Enclosures