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Attachment A
COF 2015-0287

July 7, 2015

Patricia Proctor
City of Franklin
Engineering Department
109 Third Avenue South
Franklin, TN 37065

**Subject: City of Franklin, TN – Ecology and Archaeology Scope of Work
for the Spencer Creek and South Prong Drainage Basin Gravity Sewer
Projects, Williamson County, Tennessee**

Dear Ms. Proctor:

TRC Environmental Corporation (TRC) has developed this Scope of Work in response to a request to conduct ecological and archaeological studies to support activities associated with the Spencer Creek Gravity Sewer Rehab Project and South Prong Drainage Basin Sewer Project. For this Scope of Work, TRC's understanding of the project and its limits come from those described in the information provided in the emails from Michael Orr of Hazen and Sawyer to Jared Barrett of TRC dated June 16-18, 2015. The proposed Spencer Creek Project consists of the planned installation of 1,622 linear feet of 36-inch gravity sewer line to replace an existing sewer section. The South Prong Drainage Basin Project consists of the planned installation of approximately 636 linear feet of 36-inch gravity sewer line to replace an existing sewer section. TRC's scope for natural resources and archaeological permitting support for the planned sewer improvements is described below:

Scope of Work

TRC's Scope of Work for the proposed Project includes the following tasks and assumptions.

Task 1 – Initial correspondence with USFWS and WRD

Prior to conducting the field assessment, TRC will conduct inquiries to the US Fish and Wildlife Service (USFWS) and Tennessee Department of Environment & Conservation (TDEC), Tennessee Natural Heritage Inventory Program to determine the federal and state listed species which could potentially be within the Project Study Area. TRC will consult the USFWS Information, Planning, and Conservation System (IPaC) to determine what federally listed species could occur in Williamson County, Tennessee. TRC will also review the TDEC Rare Species online Database to determine what state listed species could occur in Williamson County. TRC will also request a Project review by the TDEC and request a list of all tracked elements within three (3) miles of the Project Study Area.

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Task 2 – Environmental Field Assessment

TRC environmental scientists will conduct a field assessment of the 1,622 linear foot Spencer Creek project route and the 636 linear foot South Prong Drainage Basin project route.

The field assessment will include the identification of potential waters of the United States (US) and/or the state of Tennessee. Identification of waters of the US will be conducted in accordance with the 1987 US Army Corps of Engineers (USACE) *Wetland Delineation Manual* and the 2012 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region Version 2.0*. If found, limits of waters of the US and the state of Tennessee will be recorded using a Global Positioning System (GPS) unit capable of at least sub-meter accuracy. Unless requested, numerically and sequentially labeled flags denoting the location of waters of the US and/or the state of Tennessee will not be left in the field.

The field assessment will also include an evaluation of habitats within the Project Study Area for use by federal and/or state listed species. During the field assessments, ecologists will note habitat types available within the Study Area on field datasheets and by hand on aerial imagery. Only essential habitats for federally listed species will be recorded using a unit capable of sub-meter accuracy GPS. Unless requested, numerically labeled flags denoting the location of essential habitats will not be left in the field.

Assumptions for the field assessment are as follows:

- Prior to the field assessment, the City of Franklin or Hazen and Sawyer will provide TRC with current GIS shape files, to-scale aerial imagery, and plot plans detailing the proposed Project.
- The Spencer Creek Survey Area will not exceed ~1,622 linear feet.
- The South Prong Drainage Basin Survey Area will not exceed ~636 linear feet.
- The field survey for each project will not require more than a single visit conducted over the course of one (1) 10-hour day for two environmental scientists.

Task 3 – Waters of the United States and State of Tennessee Delineation Report

Based on the results of the Environmental Field Survey, TRC will prepare a Waters of the United States and State of Tennessee Delineation Report for each project site. Each report will include standard USACE Field Datasheets. The reports will be sufficient to support an Expanded Preliminary Jurisdictional Determination from the USACE-Nashville District.

Assumptions for the Reports are as follows: All features identified as potentially jurisdictional Waters of the United States (e.g., wetlands, streams, waterbodies, drainages) will be treated as jurisdictional Waters of the United States. (Assertion that these features are isolated/non-jurisdictional requires analysis of significant nexus and coordination with the USACE and US Environmental Protection Agency, which is beyond this scope.)

Task 4 – USFWS Informal Consultation

Based on the results of the Environmental Field Survey, TRC will prepare a Federal and/or State Listed Species Report (letter report). The letter report will provide a summary of the habitats



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identified within the Project Study Area and state whether or not these habitats could support federally and/or state listed species. A suggested effects determination for each species will also be included as part of the report.

Upon client approval of the Report, TRC will forward the Report to the USFWS for concurrence, thus concluding informal consultation under the Endangered Species Act, Migratory Bird Treaty Act, and the Bald and Golden Eagle Protection Act.

Assumptions for the USFWS Informal Consultation are as follows:

- No essential habitat or designated critical habitat for federally listed species are located within the Project Study Area and therefore, species specific surveys are not required.
- The USFWS will not request a field visit to verify the results of the Federal and/or State Listed Species Report.
- If habitat for federally listed species is found, the Project can be designed, constructed, and operated in such a manner as to support a “*may affect, not likely to adversely affect*” determination.

Task 5 – Archaeological Survey and Reporting

The Phase I archaeological survey of the Spencer Creek and South Prong Drainage Basin Gravity Sewer Projects will be conducted in compliance with Section 106 of the National Historic Preservation Act (as amended) and its implementing regulations at 36 CFR 800 in association with federal permit requirements for the Project. The archaeological Area of Potential Effects (APE) for the proposed Spencer Creek sewer improvements is approximately 1622 linear feet in length and 70 feet wide. The archaeological APE for the proposed South Prong Drainage Basin sewer improvements is approximately 636 linear feet in length and 70 feet wide.

The survey will closely follow and meet all guidelines for Phase I investigations as defined by the Tennessee State Historic Preservation Office (SHPO). The assessment will include the following:

- A review and search of the archaeological site records for the general project area;
- A field inspection to determine the presence, density, and distribution of archaeological resources within the direct APE, including an evaluation of the potential for buried sites;
- An evaluation of previously identified and newly discovered archaeological resource locations, including recommendations on whether or not the resources are eligible for inclusion on the National Register of Historic Places (NRHP).

Background Research

As an initial step in the project, TRC will carry out a systematic background and records search using the resources of the Tennessee Division of Archaeology (TDOA). This work will review state files on previously recorded archaeological sites in the project vicinity, as well as additional pertinent documentation such as NRHP nomination forms, reports on relevant archaeological investigations, and published and unpublished historical studies of the area. This research will help project staff predict what archaeological resources might be encountered in the study and



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help place all finds within a proper context for interpretation. The results of the literature and records search will be fully documented in the project report.

Archaeological Survey

The in-field archaeological survey will combine systematic pedestrian examination of all exposed ground surfaces and shovel testing of land having poor surface visibility. Those areas with greater than 50 percent ground visibility and/or greater than 20 percent slope (e.g. recently plowed agricultural fields and other areas cleared of vegetation) will be visually inspected for cultural materials. Areas that are relatively level and contain less than 50 percent ground surface visibility will require systematic shovel testing at 100-foot intervals. Shovel tests will consist of 12 x 12 inch excavations into subsoil. All soil will be screened through ¼-inch mesh hardware cloth to insure uniform artifact recovery. Notes will be maintained on each shovel test excavated.

Once an archaeological site is identified, shovel testing will be conducted in a cruciform pattern (north-south, east-west) across the site within the APE at 32-foot intervals, in order to define the site boundaries and gather data on horizontal and vertical artifact distributions. All excavated dirt from those tests will be screened through ¼-inch mesh hardware cloth, and all artifacts will be segregated by provenience. All identified sites will be photographed with digital cameras, and standardized notes will be taken on the site and landscape. Sites will be mapped using hand-held submeter GPS equipment. TDOA Site Survey Forms will be completed for all sites identified during the survey.

Following the fieldwork, all artifacts, notes, maps, photographs, and other project materials will be returned to the TRC laboratory in Nashville for analysis. Laboratory analysis will include a complete catalog of all recovered material, with special attention paid to materials that are temporally diagnostic or can help determine the function of the site at discrete points in time. The analyses will proceed following established laboratory protocols for Southeastern Archaeology. Upon completion of the analysis, TRC will prepare all records, maps, photographs, artifacts, and other recovered materials for permanent curation according to the standards of the TDOA.

Reporting

Two separate draft reports for the Spencer Creek and South Prong Drainage Basin Sewer Projects will be submitted to you within three weeks of the completion of field work. The reports will include USGS maps depicting the locations of all recorded resources color-coded as to their NRHP eligibility recommendation, other appropriate maps and graphics, the environmental background and regional cultural history of the project area, the results of the literature and records search, the results of the fieldwork, and analysis of the results. Each report will include sufficient information for assessing the nature and extent of any resources located within the project areas, and evaluate the need for further investigations to determine or confirm NRHP eligibility. Recommendations for further work relative to Phase II testing programs will be provided at this time.

The project deliverables for the archaeological survey portion of the project will consist of three (3) copies of a draft technical report, and three (3) bound copies of the final technical report. Digital copies of the reports in pdf format will also be supplied to you on CDs. The client will be



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responsible for submitting the draft reports to the USACE and the TN-SHPO for their formal review of our findings and recommendations. We will revise the draft reports and issue the final versions promptly as requested in agency comments.

Our budget for this Scope of Work is **\$22,500** (i.e., \$11,250 for each project). Note that preparation of permit applications (e.g., for a USACE Nationwide Permit for a TDEC Aquatic Resource Alteration Permit) is beyond this scope. The budget is offered on a fixed price basis, and payment terms are net 30 days in accordance with TRC's Standard Terms and Rate Schedule (attached). We are prepared to begin mobilization on the project immediately upon receipt of a signed authorization to proceed. We estimate that the proposed Scope of Work can be completed within one month of authorization.

TRC would not undertake out-of-scope work without prior authorization from the City of Franklin, including authorization for out-of-scope activities, level of effort, and costs. Our project services will be billed as a single invoice for the project.

If you would like us to proceed with the work described above, please sign the authorization line below and return it to me via email (HGuidry@trcsolutions.com) or fax (615.884.4431). Feel free to contact me at 615.884.4430 (ext 23) if you have questions about this proposal, and thank you for the opportunity to team with you on this project.

Sincerely,



Hannah Guidry
Project Manager
TRC Environmental Corporation

Andy Lydick
Office Practice Leader – Norcross/Nashville
TRC Environmental Corporation

cc: Jason Lancaster -TRC

Authorization:

The City of Franklin authorizes TRC to carry out the work described above for an estimated price of **\$22,500**, to be billed on a fixed price basis in accordance with TRC's Standard Terms and Rates (attached).

Signature	Printed Name	Title	Date
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2015 TRC Environmental Standard Rate Schedule

CODE	TRC Labor Classification/Category	Hourly Labor Rate
	Principal/Princ. Sci./Princ. Eng.	
A4	Level IV	\$278
A3	Level III	\$241
A2	Level II	\$214
A1	Level I	\$198
	Project Manager	
B4	Level IV	\$193
B3	Level III	\$171
B2	Level II	\$150
B1	Level I	\$132
	Senior Scientist/Planner/Engineer	
C4	Level IV	\$182
C3	Level III	\$164
C2	Level II	\$141
C1	Level I	\$117
	Scientist/Planner/Engineer	
D4	Level IV	\$112
D3	Level III	\$97
D2	Level II	\$85
D1	Level I	\$74
	Designer/Technician/Inspectors	
E4	Level IV	\$97
E3	Level III	\$84
E2	Level II	\$64
E1	Level I	\$43
	Drafting/CADD/GIS	
F4	Level IV	\$112
F3	Level III	\$97
F2	Level II	\$75
F1	Level I	\$64
	Project Support/Clerical	
G4	Level IV	\$102
G3	Level III	\$80
G2	Level II	\$64
G1	Level I	\$54

A 15% ODC Mark-up will be added to non-labor costs and expenses/ODCs to address client insurance, AP processing, procurement, contracting and client warrantee of performance.

A 6% Communication Fee will be applied to all labor charges in lieu of separate reimbursement for routine photocopying, faxing, computer usage, telephone charges and routine postage costs.

Overtime rates will apply to non-exempt (hourly) staff in conformance with applicable law.

All TRC Rates are subject to an annual calendar year escalation.

All invoicing will apply TRC billing rates in conformance with the rate schedule in effect at the time of the services.

This rate table is not to be used for Litigation or Litigation Support Services.