

RESOLUTION NO. _____

A RESOLUTION AUTHORIZING THE ADMINISTRATOR OF THE DEPARTMENT OF PUBLIC WORKS TO ENTER INTO AN AGREEMENT WITH HDR ENGINEERING, INC. FOR PROFESSIONAL SERVICES RELATIVE TO CONTRACT NO. W-12-018-101, SUPPLEMENTAL ENVIRONMENTAL PROJECT-AGAWELA DRIVE STREAM RESTORATION, FOR AN AMOUNT NOT TO EXCEED ONE HUNDRED FIFTY-NINE THOUSAND DOLLARS (\$159,000.00).

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF CHATTANOOGA, it is hereby authorizing the Administrator of the Department of Public Works to enter into an agreement with HDR Engineering, Inc. for professional services relative to Contract No. W-12-018-101, Supplemental Environmental Project-Agawela Drive Stream Restoration, for an amount not to exceed \$159,000.00.

ADOPTED: _____, 2013.

/mms

City of Chattanooga



Resolution/Ordinance Request Form

Date Prepared: 12/28/12

Preparer: **Dennis Malone**

Department: **Public Works**

Brief Description of Purpose for Resolution/Ordinance: _____

Res./Ord. # _____ Council District # **5**

A Council Action is requested for the Administrator of the Department of Public Works to enter into an agreement with HDR Engineering, Inc., for professional services, relative to Contract No. W-12-018-101, Supplemental Environmental Project - Agawela Drive Stream Restoration, in an amount not to exceed \$159,000.00.

Name of Vendor/Contractor/Grant, etc.	HDR Engineering, Inc.	New Contract/Project? (Yes or No)	<u>No</u>
Total project cost \$	<u>159,000.00</u>	Funds Budgeted? (YES or NO)	<u>Yes</u>
Total City of Chattanooga Portion \$	<u>159,000.00</u>	Provide Fund	<u>6011</u>
City Amount Funded \$	<u>159,000.00</u>	Provide Cost Center	<u>K37106</u>
New City Funding Required \$	<u>0</u>	Proposed Funding Source if not budgeted	<u>ISS - CD</u>
City's Match Percentage %	_____	Grant Period (if applicable)	_____

List all other funding sources and amount for each contributor.

<u>Amount(s)</u>	<u>Grantor(s)</u>
\$ _____	_____
_____	_____
_____	_____

Agency Grant Number _____

CFDA Number if known _____

Other comments: (Include contingency amount, contractor, and other information useful in preparing resolution)

Approved by: _____

Reviewed by: FINANCE OFFICE

DESIGNATED OFFICIAL/ADMINISTRATOR

Please submit completed form to @budget, City Attorney and City Finance Officer

Revised: 1/26/09



CITY OF CHATTANOOGA
STANDARD AGREEMENT FOR ENGINEERING SERVICES

SOP 2003-9 CD
Date of Issue 10-16-03
Rev. 11-14-12

THIS AGREEMENT, is between the City of Chattanooga, Tennessee, a municipal corporation in the state of Tennessee, hereinafter called Owner, and

HDR Engineering, Inc.,

hereinafter called Engineer.

The Owner wishes to employ the Engineer to perform professional engineering services for

Contract Number: W-12-018-101-Agawela Drive Stream Restoration Project,

hereinafter called Project.

In consideration of the provisions contained in this Agreement, the Owner and Engineer agree to the following:

1. **EFFECTIVE DATE**
The effective date of this Agreement shall be _____, 20_____.
2. **GOVERNING LAW**
This Agreement shall be governed by the laws of the State of Tennessee and the codes of the City of Chattanooga.
3. **SERVICES TO BE PERFORMED BY ENGINEER**
Engineer shall perform the Services described in Attachment A, Scope of Services, in accordance with applicable sections of the City of Chattanooga Design and Construction Standards in effect on the date of this agreement.
4. **COMPENSATION**
Owner shall pay Engineer in accordance with the Attachment B, Compensation.
5. **OWNER'S RESPONSIBILITIES**
Owner shall be responsible for all matters described in Attachment C, Owner's Responsibilities.
6. **SUPPLEMENTAL AGREEMENTS**
The provisions set forth in Attachment D, Supplemental Agreements, shall be incorporated into this Agreement
7. **PROJECT SCHEDULE**
The provisions set forth in the Attachment E, Project Schedule, shall be incorporated into this Agreement.
8. **RATE SCHEDULE**
The Engineer shall provide a schedule of standard hourly rates for all employees to be used in the performance of all contracts with a cost-not-to-exceed basis. This schedule shall be incorporated into the agreement as Attachment F.
9. **INVOICING**
The Engineer will use the format established in Attachment G, Standard Invoice, for all invoices submitted for services on the Project.



10. STANDARD OF CARE

Engineer shall exercise the same degree of care, skill, and diligence in the performance of Services as is ordinarily possessed and exercised by a professional engineer under similar circumstances in the same area of practice. Engineer makes no warranty or guarantee, either expressed or implied, as part of this agreement.

11. INDEMNIFICATION

Engineer hereby agrees to fully indemnify and hold harmless Owner and any of its departments, divisions, agencies, officers, employees and elected officials from all loss, damage, cost, or expenses specifically including attorneys' fees and other expenses of litigation incurred by or on behalf of the Owner and any of its officers, employees or elected officials to the extent caused by the arising out of Engineer's actual negligent performance of Services under this Agreement, including errors or omissions.

Owner hereby agrees to fully indemnify and hold harmless Engineer and any of its officers, employees, or designated agents from all loss, damage, cost, or expenses specifically including attorneys' fees and other expenses of litigation incurred by or on behalf of the Engineer and any of its officers, employees or designated agents arising out of Owner's negligence to the extent provided by the Tennessee Governmental Tort Liability Act, T.C.A. 29-20-201 et seq.

12. INSURANCE

Engineer shall purchase and maintain during the life of this Agreement, insurance coverage which will satisfactorily insure him against claims and liabilities which arise because of the execution of this Agreement, with the minimum insurance coverages as follows:

- a. Commercial General Liability Insurance, with a limit of \$1,000,000 for each occurrence and \$2,000,000 in the general aggregate.
- b. Automobile Liability Insurance, with a limit of \$1,000,000 for each accident, combined single limit for bodily injury and property damage.
- c.
- d. Worker's Compensation Insurance and Employer's Liability Insurance, in accordance with statutory requirements, with a limit of \$500,000 for each accident.
- e. Professional Liability Insurance, with a limit of \$1,000,000 for each claim and aggregate.

Prior to issuance of the Notice to Proceed by Owner, Engineer shall have on file with Owner certificates of insurance acceptable to Owner. Said certificates of insurance shall be filed with Owner in January of each year or may be submitted with each agreement. Upon completion of all Services, obligations, and duties provided for in this Agreement, or if this Agreement is terminated for any reason, the terms and conditions of this section shall survive.

Notwithstanding any other provision of the Agreement, Owner waives any claim against Engineer and, to the maximum extent permitted by law, agrees to defend, indemnify, and hold Engineer harmless from any claim, liability, and/or defense costs for injury or loss arising from Engineer's discovery of unanticipated hazardous materials or suspected hazardous materials, including, but not limited to, any costs created by delay of the project and any cost associated with possible reduction of the property value.

13. LIMITATIONS OF RESPONSIBILITY

Engineer shall not be responsible for: (1) construction means, methods, techniques, sequences,



procedures, or safety precautions and programs in connection with the Project, (2) the failure of any contractor, subcontractor, vendor, or other Project participant, not under contract to Engineer, to fulfill contractual responsibilities to the Owner or to comply with federal, state or local laws, regulations, and codes; or (3) procuring permits, certificates, and licenses required for any construction unless such responsibilities are specifically assigned to Engineer in Attachment A, Scope of Services.

14. OPINIONS OF COST AND SCHEDULE

Since Engineer has no control over the cost of labor, materials, or equipment furnished by others, or over the resources provided by others to meet Project construction schedules, Engineer's opinion of probable construction costs and of construction schedules shall be made on the basis of experience and qualifications as a professional engineer. Engineer does not guarantee that costs will not vary from Engineer's cost estimates or that actual construction schedules will not vary from Engineer's projected schedules.

15. REUSE OF DOCUMENTS

All documents, including, but not limited to calculations, drawings, specifications, and computer software prepared by Engineer pursuant to the Agreement are instruments of service in respect to the Project. They are not intended or represented to be suitable for reuse by Owner or others on extensions of the Project or on any other project. Any reuse without prior written verification or adaptation by Engineer for the specific purpose intended will be at Owner's sole risk and without liability or legal exposure to Engineer. Any verification or adaptation requested by Owner shall entitle Engineer to compensation at rates to be agreed upon by Owner and Engineer.

16. OWNERSHIP OF DOCUMENTS AND INTELLECTUAL PROPERTY

Except as otherwise provided herein, engineering documents, calculations, drawings, specifications, and other documents prepared by Engineer as part of the Services shall become and be the sole property of Owner. However, both Owner and Engineer shall have the unrestricted right to their use. Engineer shall retain its rights in its standard drawing details, specifications, databases, computer software, and other proprietary property protected under the copyright laws of the United States. Rights to intellectual property developed, utilized, or modified in the performance of services shall remain the property of Engineer.

17. RECORDS RETENTION AND AUDIT PROVISION

The term "Engineer" is used interchangeably to describe signatories to contracts, grants, and agreements with the City and applies to reflect the relationship with the City (Engineer, Contractor, Licensee, Supplier, Vendor, Consultant, Grant Recipient, etc.).

- a. All records relating in any manner whatsoever to the Project, or any designated portion thereof, which are in the possession of the Engineer or the Engineer's consultants, shall be made available for inspection and copying upon written request to the Owner. Additionally, said records shall be made available, upon request by the Owner, to any state, federal or other regulatory authorities and any such authority may review, inspect and copy such records. Said records include, but are not limited to, all plans, specifications, submittals, correspondence, minutes, memoranda, tape recordings, videos, or other writings or things which document the Project, its design and its construction. Said records expressly include those documents reflecting the time expended by the Engineer and its personnel to perform the obligations of this Agreement and the records of expenses incurred by the Engineer in its performance under said Agreement. The Engineer shall maintain and protect these records for no less than seven (7) years after the completion of the Project, or for any longer period of time as may be required by applicable law, good engineering practice, and upon notice during the pendency of any claims or litigation arising from the Project.



- b. The Owner or its assign may audit all financial and related records (including digital) associated with the terms of the contract or agreement including timesheets, reimbursable out of pocket expenses, materials, goods, and equipment claimed by the Engineer. The Owner may further audit any of Engineer's records to conduct performance audits (to identify waste and abuse or to determine efficiency and effectiveness of the contract or agreement) or to identify conflicts of interest.
- c. The Engineer shall at all times during the term of the contract or agreement and for a period of seven years after the end of the contract, keep and maintain records of the work performed pursuant to this Contract or Agreement. This shall include proper records of quotations, contracts, correspondence, invoices, vouchers, timesheets, and other documents that support actions taken by the Engineer. Documents shall be maintained by the Engineer, which are necessary to clearly reflect all work and actions taken. All such records shall be maintained in accordance with generally accepted accounting principles. The Engineer shall at its own expense make such records available for inspection and audit (including copies and extracts of records as required) by the Owner at all reasonable times and without prior notice.
- d. The obligations of this Section shall be explicitly included in any subcontracts or agreements formed between the Engineer and any subcontractors or suppliers of goods or services to the extent that those subcontracts or agreements relate to fulfillment of the Engineer's obligations to the Owner.
- e. Costs of any audits conducted under the authority of this section and not addressed elsewhere will be borne by the Owner unless the audit identifies significant findings that would benefit the Owner. The Engineer shall reimburse the Owner for the total costs of an audit that identifies significant findings that would benefit the Owner.
- f. This Section shall not be construed to limit, revoke, or abridge any other rights, powers, or obligations relating to audit which the Owner may have by Federal, State, or Municipal law, whether those rights, powers, or obligations are express or implied.

18. TERMINATION

This Agreement may be terminated by either party upon written notice in the event of substantial failure by the other party to perform in accordance with the terms of this Agreement. The nonperforming party shall have fifteen calendar days from the date of the termination notice to cure or to submit a plan for cure acceptable to the other party. Owner may terminate or suspend performance of this Agreement for Owner's convenience upon written notice to Engineer. If termination or suspension is for Owner's convenience, Owner shall pay Engineer for all Services performed prior to the date of the termination notice. Upon restart, an adjustment acceptable to Owner and Engineer shall be made to Engineer's compensation.

19. DELAY IN PERFORMANCE

Neither Owner nor Engineer shall be considered in default of the Agreement for delays in performance caused by circumstances beyond the reasonable control of the nonconforming party. For purposes of this Agreement, such circumstances include abnormal weather conditions; floods; earthquakes; fire; epidemics; war, riots, or other civil disturbances; sabotage; judicial restraint; discovery of unanticipated hazardous wastes; and inability to procure permits, licenses, or authorizations from any local, state, or federal agency for any of the supplies, materials, accesses, or services required to be provided by either Owner or Engineer under this Agreement. Should such circumstances occur, the nonconforming party shall, within a reasonable time of being prevented from performing, give written notice to the other party describing the circumstances



preventing continued performance and the efforts being made to resume performance of the Agreement. If the Engineer is delayed in the performance of the services for more than 365 calendar days, either by the Owner or circumstances beyond his control, an equitable adjustment to the contract amount can be made to compensate for additional costs incurred.

For delays in performance by Engineer, as set forth in Attachment E, Project Schedule, caused by circumstances which are within its control, such delays shall be documented on the Engineer's Project Performance Evaluation form. Said form shall be completed at the conclusion of Project and acknowledged by both Owner and Engineer. Completed form shall be retained by Owner for a period of seven years and reviewed prior to consultant selection for City projects. In the event Engineer is delayed in the performance of Services because of delays caused by Owner, Engineer shall have no claim against Owner for damages or contract adjustment other than an extension of time.

20. HAZARDOUS MATERIALS

Hazardous materials may exist at a site where there is no reason to believe they could or should be present. The Owner and Engineer agree that the discovery of unanticipated hazardous materials constitutes a changed condition mandating a renegotiation of the scope of work or termination of services. Owner and Engineer also agree that the discovery of unanticipated hazardous materials may make it necessary for the Engineer to take immediate measures to protect health and safety. Owner agrees to compensate Engineer for any equipment decontamination or other costs incident to the discovery of unanticipated hazardous materials.

Engineer agrees to notify Owner when unanticipated hazardous materials or suspected hazardous materials are encountered. Owner agrees to make any disclosures required by law to the appropriate governing agencies, and agrees to hold Engineer harmless for any and all consequences of disclosures made by Engineer which are required by governing law. In the event the project site is not owned by Owner, the Owner agrees to inform the property owner of the discovery of unanticipated hazardous materials or suspected hazardous materials.

21. COMMUNICATIONS

Any communication required by this Agreement shall be made in writing to the address specified below:

Engineer: **HDR Engineering, Inc.**
1201 C Market Street, Chattanooga, TN 37402-2714
Shane R. Womack, P.E., Phone: 423-414-3554; Email: shane.womack@hdrinc.com

Owner: City of Chattanooga
Department of Public Works
Engineering Division
Suite 2100, DevelopmentResourceCenter
1250 Market Street
Chattanooga, TN37402
(423) 643- 6033

Nothing contained in the Article shall be construed to restrict the transmission of routine communications between representatives of Engineer and Owner.

22. WAIVER

A waiver by either Owner or Engineer of any breach of this Agreement shall be in writing. Such a waiver shall not affect the waiving party's rights with respect to any other or further breach.



CITY OF CHATTANOOGA
STANDARD AGREEMENT FOR ENGINEERING SERVICES

SOP 2003-9 CD
Date of Issue 10-16-03
Rev. 11-14-12



23. DISPUTE RESOLUTION

Claims, disputes or other matters in question between the parties to this Agreement arising out of or relating to this Agreement or breach thereof shall be subject to mediation in Chattanooga, Tennessee, in accordance with the following provisions:

- a. The mediation shall be conducted by a mediator mutually acceptable to both parties.
- b. The parties agree to share equally in the expenses of mediations.
- c. Such mediation may include the Engineer or any other person or entity who may be affected by the subject matter of the dispute.
- d. Unless the parties agree otherwise, mediation shall be a condition precedent to the exercise of any legal remedy other than a proceeding seeking an immediate injunction or restraining order to protect the rights of a party pending litigation. Notwithstanding the issuance of an injunction or restraining order or the refusal of a court to issue such an order, the dispute shall continue to be subject to mediation.

24. SEVERABILITY

The invalidity, illegality, or unenforceability of any provision of this Agreement or the occurrence of any event rendering any portion or provision of this Agreement void shall in no way affect the validity or enforceability of any other portion or provision of this Agreement. Any void provision shall be deemed severed from this Agreement, and the balance of this Agreement shall be construed and enforced as if this Agreement did not contain the particular portion or provision held to be void. The parties further agree to amend this Agreement to replace any stricken provision with a valid provision that comes as close as possible to the intent of the stricken provision. The provisions of this Article shall not prevent this entire Agreement from being void should a provision which is of the essence of this Agreement be determined void.

25. INTEGRATION

This Agreement represents the entire and integrated agreement between Owner and Engineer. All prior and contemporaneous communications, representations, and agreements by Engineer, whether oral or written, relating to the subject matter of this Agreement, as set forth in Attachment D, Supplemental Agreements, are hereby incorporated into and shall become a part of this Agreement.

26. SUCCESSORS AND ASSIGNS

Owner and Engineer each binds itself and its directors, officers, partners, successors, executors, administrators, assigns, and legal representatives to the other party of this Agreement and to the directors, officers, partners, successors, executors, administrators, assigns, and legal representatives of such other party in respect to all provisions of this Agreement.

27. ASSIGNMENT

Neither Owner nor Engineer shall assign any rights or duties under this Agreement without the prior written consent of the other party. Unless otherwise stated in the written consent to an assignment, no assignment will release or discharge the assignor from any obligation under this Agreement. Nothing contained in this Article shall prevent Engineer from employing independent consultants, associates, and subcontractors to assist in the performance of the Services; however, other agreements to the contrary notwithstanding, in the event Engineer employs independent consultants, associates, and subcontractors to assist in performance of the Services, Engineer shall be solely responsible for the negligent performance of the independent consultants, associates, and subcontractors so employed.



CITY OF CHATTANOOGA
STANDARD AGREEMENT FOR ENGINEERING SERVICES

SOP 2003-9 CD
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Rev. 11-14-12

28. THIRD PARTY RIGHTS

Nothing in this Agreement shall be construed to give any rights or benefits to anyone other than Owner and Engineer.

29. RELATIONSHIP OF PARTIES

Nothing contained herein shall be construed to hold or to make the Owner a partner, joint venturer, or associate of Engineer, nor shall either party be deemed the agent of the other, it being expressly understood and agreed that the relationship between the parties is and shall at all times remain contractual as provided by the terms and conditions of this Agreement.

30. NON-DISCLOSURE

Engineer agrees not to disclose or to permit disclosure of any information designated by the Owner as confidential, except to the engineer's employees and subcontractors who require such information to perform the services specified in this agreement.

31. NON-DISCRIMINATION

Engineer agrees to comply with all federal, state, and local non-discrimination laws and regulations. Engineer agrees not to discriminate against any participant in this Agreement on the basis of race, color, religion, sex, age or national origin. Engineer further agrees to comply with all federal, state and local laws regarding treatment and accommodations for individuals with disabilities.

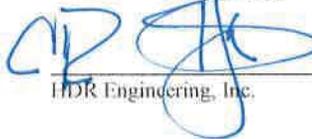
32. DRUG FREE WORKFORCE

Engineer certifies that it will provide a drug-free workplace and agrees to comply with the applicable requirements of the Drug-Free Workplace Act of 1988.

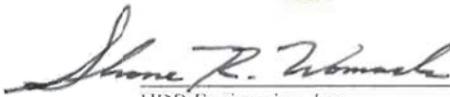
33. FEDERAL OR STATE FUNDING

In the event that the Project is funded in whole or in part by Federal or State grants, Engineer agrees to abide by all applicable Federal and State laws, regulations, grant conditions and procedures.

IN WITNESS WHEREOF, Owner and Engineer have executed this Agreement.

 1/3/13
HDR Engineering, Inc. Date

Administrator of Public Works Date

 1/3/13
HDR Engineering, Inc. Date

Director of Purchasing Date

Reviewed by City Attorney Office _____
Initial Date



ATTACHMENT A

Owner: City of Chattanooga, Tennessee

Engineer: **HDR Engineering, Inc.**
Project Number & Name: **W-12-018-101**
Agawela Drive Stream Restoration

SCOPE OF SERVICES

1. BASIC SERVICES

The project is specifically defined as:

The City of Chattanooga (City) desires to initiate a bank stabilization and stream improvement of an un-named tributary to the South Chickamauga Creek near Agawela Drive. This stream is currently on the 303(d) list for habitat alteration and sediment and a Total Daily Maximum Load (TMDL) for sediment has been developed for the South Chickamauga Creek. This project is a Supplemental Environmental Project (SEP) as described in the City of Chattanooga’s Consent Decree by EPA. This project involves the improvements of approximately 1,500 LF of stream located near the 3800 block of Agawela Drive, downstream of Wilcox Drive, using natural channel design principles and bio-engineering techniques for stabilization and habitat enhancement, and the establishment of a greenway trail alignment near the stream corridor. The stream immediately downstream of the Shallowford Road culvert to the confluence with the tributary downstream of the Agawela Drive culvert is not included in the scope of work. The construction of the proposed greenway trail is yet to be confirmed, therefore only a concept design is included in the scope of this project at this time.

The City desires to establish development restrictions through the creation of conservation easements along both stream banks. Mitigation credit will not be sought, and is not included in this scope of work. The City will be responsible for all communication with EPA, including the development of the SEP Final Report, and obtaining EPA approval.

The Engineer agrees to provide the following services:

See the following Scope of Work:

HDR Engineering Inc. (HDR) has outlined the following scope of work at the request of the City in performing engineering and environmental services for design, permitting, bidding assistance, easement acquisition assistance, and construction administrative and construction observation services.

Task 1-Data Collection, Preliminary Engineering Report and Project Management

Task 1.2 Project Management

- a. Project Initiation – HDR will include internal and client kick off meetings, development of Quality Management and Safety Management plans, and project accounting and filing set up. Creation of a list of information/records will be requested.
- b. Project Monitoring/Reporting – HDR will develop monthly reports using standard formats, development of invoicing, and regular PM oversight and communication with client.



- c. Progress Meetings – HDR will prepare and attend progress meetings during the duration of the design contract, and prepare meeting minutes within 7 working days of the meeting. For the purpose of budgeting it is assumed there will be up to 6 progress meetings.
- d. Public Involvement Assistance – not included.

Task 1.2 Data Gathering and Assessment

- a. Data Research and Requests – HDR will obtain data from city and other agencies, review and evaluate the information for completeness and if additional information may be needed, and request additional data/information to support the evaluation of the project area and creation of the concept design. The focus of this effort will be related to stream assessment data, hydraulic/hydrology data, utility data, and biological data.
- b. Data Collection – Surveying – HDR will meet with the City’s Surveyor to confirm extent of boundary surveys, topographic, planimetric, utility, and tree surveys along stream corridor out to 150 feet on each side of the existing stream centerline. Surveying effort will include recording thalweg, toe of channel, top of bank, overbank (sufficient for one foot contours). Trees 6 inch diameter and larger will be located and labeled. The Surveyor will set two horizontal/vertical benchmarks (one on each end of project). Surveyor will perform topographic surveys and tree surveys on receiving stream 100 feet upstream and downstream of confluence. Research will be performed on property ownership and easements on all properties that contain the stream within the project area, and surrounding properties. Delivery of the survey data will be in AutoCAD Release 11, conforming to City CADD standards. All surveying, including the deliverable of a completed survey base map will be contracted by the City. HDR will coordinate with and manage the City’s Survey Consultant, and will incorporate the survey information into the design.
- c. Data Collection – On-site Engineering/Environmental – A site visit by HDR Water Resources and Environmental Science staff will be conducted for the project corridor. Also visits of other city stream projects with city staff will be conducted during the same site visit to obtain knowledge from city staff on past stream construction experiences.
 - i. Natural, Cultural, and Archeological – Site data collection will be conducted by HDR Environmental staff using readily available desktop data. Deliverable will be a biological assessment to support Section 404 permitting. Field delineation of Waters of the U.S. is not anticipated to be needed based on initial field investigations, and therefore acquisition of a Jurisdictional Determination (JD) by HDR is not included. In the event the USACE requests a JD, supplemental scope and fee will be required.
 - 1. HDR’s subconsultant will perform a cultural resources and archeological assessment for the project corridor. Deliverables will be an archeological site survey report, and a report of investigations.
- d. Data Collection – Reference Reach –HDR will use regional curves for establishment of stream design parameters. Deliverable will be a technical memo outlining the results of the analysis, and its applicability to the project. The intent of the design approach in using the regional curve data and the existing site conditions will be to establish a stable, yet natural stream with limited floodplain benching, creation of a bankfull channel, and limited meandering of the alignment. The design will not attempt to create a Priority I or II stream.
- e. Design Meetings – City Waste Resources, City Water Quality, City Park & Recreation – the purpose of meetings will be to discuss findings of the stream assessments, stream



design analysis findings, result of records review, and greenway trail design objectives. Also HDR will discuss condition of sanitary sewer and requirements for protection during construction. This meeting will occur immediately following the initial site visits.

- f. Permit Requirement Evaluation – HDR will research and communicate with permitting agencies, in coordination with City Staff, to identify permitting requirements. Potential permits include USACE 404, TDEC/ ARAP 401, City sediment/erosion control, and floodplain development permits. A FEMA “no-rise” analysis is not included in this scope, nor is it anticipated that FEMA map revisions will be required for this project.

Task 1.3 Preliminary Design Development and Concept Cost Estimate

- a. Analysis – HDR will develop Hydrology & Hydraulic models, HEC-RAS models (existing/proposed conditions).
- b. Plans – HDR will establish plan/profile sheets, typical cross-sections, limits of easements, and a cover sheet with a list of other sheets anticipated. HDR will include a centerline alignment and typical section of the greenway trail as part of the stream plan/profile sheets and typical sections.
- c. Cost Estimate – HDR will prepare a concept level estimate of construction, and then put allowances on other key construction items. Include contingency for others.
- d. Preliminary Design Report – HDR will package and submit the Concept Design Submittal to the City for review. Up to 5 copies of the Concept Design Submittal will be printed and delivered to the City for distribution to the other city departments.

Task 2-Detailed Design Services

Task 2.1 60% Design Phase

- a. HDR will conduct a review meeting to evaluate concept design comments – meeting with client to be attended by HDR Project Manager, and Stream Designer.
- b. Easement Development Services
 - i. Easement Plats – HDR to prepare CADD file showing the easement lines, submit to the City’s Survey Consultant for preparation of easement plats. HDR to review initially and then submit to city for review.
 - ii. Coordination for final plats – HDR anticipates revisions from initial city review and then one more time after input from property owners are obtained.
 - iii. HDR will coordinate with and manage the City’s Survey Consultant, and will incorporate the City approved easement information into the design
 - iv. Acquisition Assistance – HDR will not be involved in meetings associated with property owners.
- c. Geotechnical Investigation – HDR will meet with the City’s Geotechnical Consultant ahead of the proposal submittal, then coordinate approval with city on review of the proposed on-site investigation/review of findings. All geotechnical investigation including the development of a geotechnical report will be contracted by the City. HDR will coordinate with and manage the City’s Geotechnical Consultant, and will incorporate the geotechnical investigation findings into the design.
- d. Preliminary Design Development and Preliminary Cost Estimate
 - i. Analysis – HDR will refine the modeling of the stream design.
 - ii. Plans – HDR will advance the plan/profiles, create general notes, erosion control plan/sequencing, sewer protection details, typical sections, construction details,



- and bank vegetation plans to support a 60% completion stage. Traffic control plans or stream cross sections are assumed not needed and not included in plan set.
- iii. Specifications – HDR will establish technical specifications only. It is assumed that the City does not have stream technical specifications, and HDR will use in-house specs.
- iv. Cost Estimate – HDR will conduct take-offs for all items, and include 10% contingency.
- e. Preliminary Design Submittal – HDR will package and submit the Preliminary Design Submittal to the City for review. Up to 5 copies of the Preliminary Design Submittal will be printed and delivered to the City for distribution to the other city departments.

Task 2.2 Final Design/Bid Document Phase (100%)

- a. HDR will conduct a review meeting to evaluate preliminary design comments - meeting with client attended by Project Manager, and Stream Designer.
- b. Final Design Development and Preliminary Cost Estimate
 - i. Plans – final development of all plans will be completed addressing review comments. It is assumed modifications to H&H modeling is not needed.
 - ii. Project Manual/Specifications – HDR will complete full development of all documents to be included in project manual, using city front end documents.
 - iii. Cost Estimate – HDR will update the detailed estimate from Preliminary phase and establish a 5% contingency. This estimate will become the basis of the bid proposal forms to be used in the Project Manual.
- c. Permitting Submittal and Coordination – HDR will prepare an application and supporting documents (including construction drawings prepared elsewhere), and calculations package for the permits listed below. A Jurisdictional Determination is not anticipated to be developed. Permit fees will be estimated and provided within HDR's fees. Work for this task includes initial submittal, follow up communication with agencies, and one revision to application documents for resubmittal.
 - i. USACE 404 – includes coordination and submittal to USFWS, and SHPO. It is anticipated that a Nationwide 27 permit will be obtained.
 - ii. TDEC – ARAP 401 (Permit for Stream Restoration and Habitat Enhancement Aquatic Resource Alteration Permit). The scope anticipates permit conditions will not require mitigation or post-construction monitoring.
 - iii. TDEC – NPDES Construction General Permit (CGP) – Stormwater Pollution Prevention Plan (SWPPP)
 - iv. City Land Disturbance Permit - Sediment/Erosion Control Plan and AS-Built Drawings. AS-Built Drawings to be provided by Construction Contractor.
 - v. City Floodplain Development – HDR assumes this work is limited to an assessment to confirm no net increase in fill in floodway, and coordination with city/county agencies for approval. No-rise certification and FEMA map revisions are not included.

Task 3-Bidding Phase

- a. Advertisement/Distribution Assistance – HDR assumes City will pay and place ads in appropriate locations. HDR will prepare advertisement, and print/distribute bid documents. Bid deposit to be paid to HDR. Up to 25 copies are assumed to be printed for distribution to bidders, plan rooms, and city departments.



- b. Pre-Bid Conference – This task assumes HDR’ Project Manager attends but does not lead/conduct meeting, rather HDR will present project elements and answer questions.
- c. Addendums – HDR will prepare pre-bid meeting minutes, and up to two addendums.
- d. Bid Opening/Evaluation of Bids – HDR’s Project Manager to attend bid opening, City to conduct opening. HDR to compile bid tab, and evaluate low bidder and prepare recommendation of award. HDR will perform limited research into low bidder’s qualifications through discussions with their references, other consultants, city staff, and their surety, and prepare a letter of recommendation for project award.

Task 4-Construction Administration Services

- a. Pre-construction services
 - i. Contract preparation – HDR will update plans with any addendum change (up to two addendums budgeted), include bidders proposal into project manual, and make 3 copies to send to contractor.
 - ii. Pre-construction conference – HDR to share in the lead of this meeting, prepare agenda, create meeting minutes afterward. Attended by Project Manager, Water Resources Designer, Senior Water Resources Engineer.
- b. Construction Administration/Observation Services
 - i. Submittal Review – HDR will perform up to 6 submittal reviews and provide comments to the Contractor and copy the City.
 - ii. Progress meetings – HDR will assume up to 6 progress meetings.
 - iii. On-site Engineering visits – Water Resources Designer to perform one site visit during stream construction to observe installation of grade control structures.
 - iv. Coordination during Construction – HDR will act on Requests for Information (RFIs), assuming up to 6 RFIs, and issuing up to 2 Field Orders (FOs) for design clarifications/revisions. HDR Project Manager will maintain regular communication with City Staff who support on-site observations, and with the Contractor’s Project Manager on an as needed basis to monitor progress.
 - v. Final Inspection services –HDR’s Project Manager will attend the pre-final inspection to develop the punch list.

2. SUPPLEMENTAL SERVICES

Any work requested by the Owner that is not included in the Basic Services will be classified as Supplemental Services. Supplemental Services shall include, but are not limited to the following:

Task 5 Cultural Resources Services

Alexander Archaeological Consultants, Inc. (AAC) will conduct a Background and Literature Search and limited Archaeological Survey of the areas to be impacted by the proposed improvements associated with the Agawela Drive Stream Restoration Project. See the attached detailed Scope of Work as provided by AAC.

HDR will coordinate with and manage AAC, and will incorporate the cultural resources findings into the design.



Task 6 Resident Project Representative Services

- a. On-site Services – HDR will provide an inspector for up to 8 hours per week, depending on activity (approximately twice per week) for construction observation during the course of the project duration. It is assumed for budgeting purposes that the construction will be for 6 months.
- b. Pay Request coordination – HDR will review and process up to 6 monthly pay requests, reviewing contractor quantities and reconciling differences prior to submittal to the City’s Program Manager for processing.
- c. Final Inspection services – HDR will conduct pre-final and final inspections to prepare final “punch list”, and to verify punch list items are complete.

Task 7-Additional Services

Additional unspecified services may be requested by the City as a part of the project work. As such, an amount of money has been set aside to be used at the City’s discretion for such services. The specific scope of work and fee for such services will be mutually agreed upon in writing by the City and HDR prior to beginning any work. The value of the additional services shall not exceed the value of the amount of money that has been set aside for said additional services unless authorized by the City.

3. REIMBURSABLE EXPENSES:

Project specific reimbursable expenses and charges shall include the following:

- Permit Fees
 - Section 401 ARAP
 - Erosion Control Permit Fee
- Plan and Bid Document Reproduction
- Travel Expenses
- Postal and Delivery
- Teleconference



ATTACHMENT B

Owner: City of Chattanooga, Tennessee

Engineer: **HDR Engineering, Inc.**
Project Number & Name: **W-12-018-101**
Agawela Drive Stream Restoration

COMPENSATION

For the services covered by this Agreement, the Owner agrees to pay the Engineer as follows:

- For the Basic Services described in Attachment A, a cost based on billing rates and expenses with a not to exceed limit of **\$130,488.00** using the Rate Table in Attachment F . Payments shall be made monthly in amounts which are consistent with the amount of engineering services provided, as determined by the Engineer.

Task 1 - Data Collection, Prelim. Eng. Report, Project Mgmt	\$45,850.00
Task 2 - Detailed Design Services	\$62,258.00
Task 3 - Bidding Services	\$8,600.00
Task 4 - Construction Administration Services	\$13,780.00
Subtotal	<u>\$130,488.00</u>

- Compensation for Supplemental Services shall be made as defined below, when authorized in writing by the Owner. The maximum limit for each item of additional service shall be established individually and specifically agreed to by the Owner as stated below, unless the service is included in a subsequent agreement.

Task 5 - Cultural Resources Services	\$4,400.00
Task 6 - Resident Project Representative Services	\$14,112.00
Task 7 - Additional Services	\$10,000.00
Subtotal	<u>\$28,512.00</u>

Grand Total **\$159,000.00**

- Hourly rates for each classification as defined by the Engineer's rate schedule, see Attachment F. Overtime, when authorized by the Owner, will be billed at **1.5**times the rates listed (non-engineer time only).
- Reimbursable charges will be considered the amount of actual costs of project related expenses or charges times a markup of **10%**. Charges for use of computer equipment or software, local travel, local telephone, project photographs, miscellaneous supplies, and reproduction are not considered reimbursable charges. Allowable project-specific reimbursable expenses shall be outlined in Attachment A.
- The entire amount of each statement shall be due and payable 30 days after receipt by the Owner.
- The Engineer shall keep records on the basis of generally accepted accounting practice of costs



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and expenses which records shall be available for inspection at all reasonable times.

7. Invoices shall be submitted using the Standard Invoice form, Attachment G.



ATTACHMENT C

Owner: City of Chattanooga, Tennessee

Engineer: **HDR Engineering, Inc.**
Project Number & Name: **W-12-018-101**
Agawela Drive Stream Restoration

OWNER'S RESPONSIBILITIES

The Owner will furnish, as required by the work and not at the expense of the Engineer, the following:

1. The Owner will provide the Engineer copies of all current and necessary permits and approvals from all federal, state and local regulatory agencies. These include air quality, water quality, storm water quality, solid waste, special wastes, and other regulatory permits that may be required.
2. The Owner will provide Engineer access to all of available NPDES reports as required.
3. The Owner will coordinate and facilitate meetings or the exchange of information between any other interested parties that may also prospectively participate in the project as required.
4. The Owner will coordinate for the Engineer the acquisition of future population and employment figures from regional planning institutions as required for the project as required.
5. The Owner will provide the Engineer copies of all available sewer reports related to sewer facility planning as required.
6. The Owner will provide access to the system wide hydraulic model outputs as required.
7. The Owner will provide the Engineer the most up-to-date GIS data available for all sewer system components as required.
8. The Owner will provide the Engineer access to all its pump station and CSOTF sites as required.
9. The Owner will provide Engineer access to all available plans and specifications for the facilities as required.
10. The Owner will provide the Engineer with documentation of existing O&M procedures related to the operation of the treatment works that may be relative to the project as required.
11. The Owner will provide the Engineer with documentation of existing standards and procedures related to the sewer system development and expansion as required.
12. The Owner will provide the Engineer with documentation of existing standards and procedures related to the treatment works as required.
13. The Owner will arrange for facilities for the Engineer and attend public information meetings as required. The Owner will prepare and mail invitations for public information meetings as



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required. The Owner and the Engineer will conduct monthly project progress meetings as required.

14. The Owner will designate a project representative to be the liaison between the Engineer and the Owner on the project.
15. Owner will make a reasonable effort to evaluate if hazardous materials are on or near the project site, and will inform Engineer of findings relative to the possible presence of such materials.



ATTACHMENT D

Owner: Owner of Chattanooga, Tennessee

Engineer: **HDR Engineering, Inc.**
Project Number & Name: **W-12-018-101**
Agawela Drive Stream Restoration

SUPPLEMENTAL AGREEMENTS

A. Engineers Responsibilities:

1. During Contract negotiation, the Engineer shall describe in detail its overall approach that will be used by its Engineer's Project Team to perform the scope of work described herein for the development of the project for the Owner.
2. The Engineer shall provide all labor, benefits, equipment, materials, fuel, utilities, insurance, out-of-pocket expenses, and other related services required in connection with development of the project.
3. The Engineer shall obtain all necessary permits and approvals from all federal, state, and local regulatory agencies related to development of the project as required. Furnish copies of all required permits and approvals to the Owner.
4. The Engineer shall provide and submit reports and certifications as required by all applicable EPA and/or State regulations of development of the project as required. Furnish a copy of all required reports to the Owner in a timely manner.
5. The Engineer shall coordinate its work with the operating schedule of the Owner as required.
6. The Engineer shall conduct the work for the development of the project in compliance with all applicable federal, state, and local laws, regulations, permits, and approvals.
7. The Engineer shall provide adequate supervision and technical and managerial oversight of the Engineer's employees, subcontractors, and agents
8. The Engineer shall support and utilize the Owner's Standard Operating Procedures developed for the Consent Decree (CD) Program. Specifically, the design of each project shall comply with CADD standards, standardized specifications, or approved design guidelines, cost estimating guidelines, and materials and functional layout and operation of equipment and systems as required.
9. The Engineer shall administer the project to comply with the scheduling goals established by the Program Manager (PM) to ensure that the CD milestones are being met. The Engineer shall timely report project information as prescribed by the PM.
10. The Engineer shall prepare an initial and minimum monthly update to its project schedule; updates can be more frequent or as significant activities change.



11. The Engineer shall prepare, implement and execute a project quality management plan which complies with quality program guidelines and requirements and goals to be established by the PM, and the Engineer's own internal quality procedures/program requirements. The Engineer shall be fully responsible for the quality of their products and associated quality assurance and quality control activities.
12. The Engineer shall prepare, implement and execute a written project safety management plan which following the Engineer's own internal safety procedures/program requirements and which will also reflect the goals of the safety program to be established by the PM for the CD program project. **Engineer's observation or monitoring portions of the work performed under construction contracts shall not relieve construction contractor(s) from responsibility for performing work in accordance with applicable contract documents. Engineer shall not control or have charge of, and shall not be responsible for, construction means, methods, techniques, sequences, procedures of construction, health or safety programs or precautions connected with the work and shall not manage, supervise, control or have charge of construction. Engineer shall not be responsible for the acts or omissions of construction contractor(s) or other parties on the project**
13. The Engineer shall provide all documents in a timely manner and format prescribed by the PM to support a document management/imaging repository. All documents shall be maintained in this manner for general and financial record keeping, contract compliance, claims and litigation, warranty issues, and related purposes.
14. The Engineer may assist the PM in reviewing the preliminary project budget and provide recommendations relative to project updates for design, construction contract administration and inspection, contracting costs, and industry appropriate level of contingency as required. The Engineer shall assist the PM in coordinating the program budget with the plan schedule in order to provide compliance with the CD needs and constraints regarding the overall budget as required. Engineer shall maintain and input pertinent information to account for all costs of the project in a form and manner prescribed by the PM as required.
15. The Engineer shall assist the PM with the preparation of project progress reports as required. Reports shall include, but not be limited to, all reports required to satisfy requirements of the CD.
16. The Engineer may be asked to provide technical support to the CD Public Relations Plan.
17. The Engineer shall utilize the Owner's standardized Division 00 and 01 specifications as in developing project specific specifications- In addition the PM will provide to the Engineer certain technical specifications, details and minimum design guidelines intended to provide consistency across the design deliverables from various Engineers on similar types of work as required.
18. The Engineer shall submit all Requests for Information (RFIs) and change order for their professional services agreement to the PM first for approval.
19. The Engineer shall submit all pay requests/invoices to PM first for approval.
20. Engineer shall identify any and all permits during the first month of project activity from Notice to Proceed (NTP). Likely easements and permanent real estate acquisitions shall be



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identified with special purpose survey exhibits depicting areas needed based on a schedule to be developed by the Engineer within the first month of project activity from NTP.

21. The PM may conduct monthly progress meetings, value engineering (VE) reviews and constructability review as required and include Owner and PM staff as needed.

B. Owner and Engineer agree that the following communications, representations, and agreements by Engineer relating to the subject matter of the Agreement are hereby incorporated into and shall become a part of the Agreement.



ATTACHMENT E

Owner: Owner of Chattanooga, Tennessee

Engineer: **HDR Engineering, Inc.**
Project Number & Name: **W-12-018-101**
Agawela Drive Stream Restoration

PROJECT SCHEDULE

Owner and Engineer recognize that time is of the essence of the Agreement and that Owner may suffer financial loss if the work is not completed within the times stipulated herein, plus any extensions thereof. However, it is understood and agreed that Engineer must use sound Professional practices. Accordingly, Engineer will develop for this Agreement a preliminary schedule based on the schedule requirements specified in the Specific Scope of Work for this project and either provide it below or as Attachment E1.

A detailed schedule (project schedule) will be required as one of the Project Management deliverables as specified in the Specific Scope of Work for this project once the Agreement is executed. The Engineer will produce the project schedule using industry accepted scheduling software approved by the Owner.

It is understood and agreed that the Engineer shall start the performance of Services within 10 days of receipt of a written Notice to Proceed and shall complete the work in accordance with the contract times set forth herein.

Please see attached Schedule in E1



ATTACHMENT F

Owner: Owner of Chattanooga, Tennessee

Engineer: **HDR Engineering, Inc.**
Project Number & Name: **W-12-018-101**
Agawela Drive Stream Restoration

RATE SCHEDULE

Please see the following rate schedule:

Rate Ranges supplied are hourly billing rates for calendar year 2013. Rates may be increased annually upon mutual agreement of the parties. However, such adjustment shall not exceed a three percent (3%) annual adjustment.

<u>Labor Category</u>	<u>2013 Hourly Rate Range (\$/hour)</u>	
	<u>Minimum</u>	<u>Maximum</u>
• Principal Engineer	\$200.00	\$245.00
• QA/QC	\$200.00	\$245.00
• Senior Project Manager	\$190.00	\$205.00
• Senior Engineer	\$175.00	\$195.00
• Senior Landscape Architect	\$165.00	\$175.00
• Senior Environmental Professional	\$155.00	\$165.00
• Project Engineer / GIS	\$130.00	\$150.00
• Environmental Scientist	\$110.00	\$130.00
• Senior CADD	\$110.00	\$130.00
• Designer	\$95.00	\$115.00
• EIT	\$100.00	\$120.00
• Landscape Architect	\$110.00	\$130.00
• Administrative	\$80.00	\$100.00



ATTACHMENT G

STANDARD INVOICE

Indicates MANDATORY Item

CONSULTANT LETTERHEAD

ATTN: City Project Manager
REF: Project Name
CODE: Consultant Project Number
PO: City Project Number **in format S-02-001-101**

Provided by City

TERMS: Net 25 days
DUE: 08/01/03

INVOICE

Must be Sequential Number

City Project Manager
 City Project Manager Title
 City of Chattanooga
Engineering Division/DRC
1250 Market Street, Suite 2100
Chattanooga TN 37402

Invoice Number 5
 Dated 07/07/03

Invoice Must show Billing Period.

For Professional Services from May 31 to June 27, 2003

This Breakdown must list each item of the Contract.

Consultant Project No.	Description	Fee	Percent Work to Date	Amount Billed	Previous Billed	This Invoice Billed
C03009-01	01 - Design	\$51,500.00	LS 55%	\$28,325.00	\$18,540.00	\$9,785.00
	02 - Survey	\$15,700.00	LS 0%	\$0.00	\$0.00	\$0.00
C03009-02	Barton Avenue and Brown Acres Golf Course Design	\$20,000.00	CP 12%	\$2,391.02	\$2,033.00	\$358.02
C03009-03	Permitting/Easement Assistance	\$5,000.00	CP 6%	\$291.08	\$0.00	\$291.08
C03009-04	Bidding/Construction Assistance	\$10,000.00	CP 0%	\$0.00	\$0.00	\$0.00
C03009-05	Misc. As-Requested Services	\$5,000.00	CP 7%	\$363.85	\$0.00	\$363.85
Total Contract Amount		\$107,200.00		\$31,370.95	\$20,573.00	
TOTAL THIS INVOICE						\$10,797.95

Must Match Contract Amount

Prior Invoices	\$20,573.00
This Invoice	\$10,797.95
Payments	-\$20,573.00
Balance on Account	\$10,797.95

NOTE:

- There shall be only one invoice per contract per billing period.
- Any necessary details should be attached as backup.

City of Chattanooga - Agawela Stream Restoration Project
 Design and Construction Schedule
 3-Jan-13

Attachment E-1

