

RESOLUTION NO. _____

A RESOLUTION AUTHORIZING THE ADMINISTRATOR FOR THE DEPARTMENT OF TRANSPORTATION TO ENTER INTO AN AGREEMENT WITH ALFRED BENESCH & COMPANY RELATIVE TO CONTRACT NO. T-15-024-101 FOR PROFESSIONAL ENGINEERING SERVICES FOR THE DESIGN OF SHALLOWFORD ROAD IMPROVEMENTS (AIRPORT ROAD/JERSEY PIKE), IN THE AMOUNT OF ONE MILLION THREE HUNDRED NINETY-SEVEN THOUSAND NINE HUNDRED DOLLARS (\$1,397,900.00).

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF CHATTANOOGA, it is hereby authorizing the Administrator for the Department of Transportation to enter into an agreement with Alfred Benesch & Company relative to Contract No. T-15-024-101 for professional engineering services for the design of Shallowford Road Improvements (Airport Road/Jersey Pike), in the amount of \$1,397,900.00.

ADOPTED: _____, 2015

/mem

City of Chattanooga



Resolution/Ordinance Request Form

Date Prepared: October 26, 2015

Preparer: Bertran Kuyrkendall

Department: Transportation

Brief Description of Purpose for Resolution/Ordinance: _____ Res./Ord. # _____ Council District # 5

A resolution authorizing the Administrator of the Department of Transportation to enter into an agreement with Alfred Benesch & Company relative to Contract No. T-15-024-101 for professional engineering services for the design of Shallowford Road Improvements (Airport Road Jersey Pike), in the amount of \$1,397,900.00.

Name of Vendor/Contractor/Grant, etc.	<u>Alfred Benesch & Company</u>	New Contract/Project? (Yes or No)	<u>Yes</u>
Total project cost	\$ <u>1,397,900.00</u>	Funds Budgeted? (YES or NO)	<u>Yes</u>
Total City of Chattanooga Portion	\$ <u>279,580.00</u>	Provide Fund	<u>4022</u>
City Amount Funded	\$ <u>279,580.00</u>	Provide Cost Center	<u>P20206</u>
New City Funding Required	\$ <u>-</u>	Proposed Funding Source if not budgeted	_____
City's Match Percentage %	<u>20%</u>	Grant Period (if applicable)	_____

List all other funding sources and amount for each contributor.

<u>Amount(s)</u>	<u>Grantor(s)</u>
<u>\$1,118,320.00</u>	<u>TDOT - STP</u>
_____	_____
_____	_____

Agency Grant Number _____

CFDA Number if known _____

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

Approved by: *Bertran Kuyrkendall*

Reviewed by: FINANCE OFFICE

DESIGNATED OFFICIAL/ADMINISTRATOR

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

Revised: October, 2011



CITY OF CHATTANOOGA
STANDARD AGREEMENT FOR ENGINEERING SERVICES

S.O.P. 2003-10
 Date of Issue 10-16-03
 Rev. Date 10-16-14

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

Alfred Benesch & Company,

hereinafter called Engineer.

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

T-15-024-101 - Shallowford Road Improvements (Airport Rd to Jersey Pike),

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 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. Worker's Compensation Insurance and Employer's Liability Insurance, in accordance with statutory requirements, with a limit of \$500,000 for each accident.
- d. 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,



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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.



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- 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



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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: Alfred Benesch & Company - Thomas M. Clinard, PE
8 Cadillac Drive, Suite 250, Brentwood, TN 37027
Phone: (615) 370-6079; Fax: (615) 627-4066; Email: tclinard@benesch.com

Owner: City of Chattanooga
Department of Transportation
Design Engineering Division
Suite 3030, Development Resource Center
1250 Market Street
Chattanooga, TN 37402
(423) 643- 5950

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.



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



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subcontractors so employed.

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.

 Alfred Benesch & Company, Senior VP Date

 Administrator of Transportation Date

 Date

 Administrator of Purchasing Date

Reviewed by City Attorney Office _____
 Initial Date



ATTACHMENT A

Owner: City of Chattanooga, Tennessee

Engineer: Alfred Benesch & Company

Project Number & Name: T-15-024-101

Shallowford Road Improvements (Airport Rd to Jersey Pike)

SCOPE OF SERVICES

1. BASIC SERVICES

The project is specifically defined as: The Scope of Services as detailed below is to provide the City of Chattanooga complete Roadway and Bridge Construction Plans for the Proposed Shallowford Road improvements project between Airport Road and Jersey Pike. As part of the project development process and NEPA phase, determination of the number of travel lanes required through the corridor as well as desired intersection treatment will be determined. The roadway will accommodate all modes of transportation and shall include bike lanes, curb and gutter and sidewalks. Intersection lighting and roadway lighting will be included in the design. Two new bridges will be designed over CSX and the Vulcan Materials access road. The design will accommodate the Vulcan materials conveyor belt within a standard three or four sided box culvert. Improvements to the railroad grade crossing near Jersey Pike will be coordinated with the Tennessee Department of Transportation (TDOT) and included in the design.

The Engineer agrees to provide the following services: The services to be performed (hereinafter referred to as "Services") by Alfred Benesch and Company "CONSULTANT" shall be as follows:

Design Phase:

1.1 Project Administration and Coordination by the CONSULTANT will involve general project management, field inspections/site visits, attendance at progress meetings, agency coordination, railroad coordination and overall QA/QC of the deliverables.

1.2 Throughout the design phase the CONSULTANT will adhere to the TDOT Local Programs programmatic requirements as prescribed in the Local Government Guidelines for Management of Federal and State Funded Projects. Design plans for each phase of development (Preliminary, ROW, Construction) will be developed in accordance to the format; standards and specifications required by TDOT and further defined in the current version of the TDOT Roadway Design Division – Roadway Design Guidelines and other design guidance provided by TDOT.

1.3 The CONSULTANT shall develop PRELIMINARY PLANS for the project based upon the approved alignment. The roadway design parameters for the project will be based upon current versions of the following design guides; "A Policy on Geometric Design of Highways and Streets", American Association of State Highway and Transportation Officials; "TDOT Standards Specifications for Road and Bridge Construction"; City of Chattanooga Transportation & Street Technical Standards. These technical guidelines and specifications shall be followed unless superseded by the standard for the City of Chattanooga. During the PRELIMINARY PLANS phase of the project, the CONSULTANT will coordinate as necessary with the Tennessee Department of Transportation (TDOT).



This phase of plan development will run parallel with the Environmental Document phase. Additional tasks will include three traffic turning movement counts and tube counts within the project limits. This information will be utilized for traffic analysis required for the roundabout and/or signal intersection designs. Traffic simulations will be developed and utilized as part of the evaluation of the corridor travel lanes needed as well as the intersection concepts investigated. The project team will also use these simulations in the public involvement process/ public meetings.

1.4 The CONSULTANT shall develop BRIDGE PLANS for the project based upon the approved alignment. This work will include design of two (2) bridges on Shallowford Road. Bridge 1 will be over a CSX mainline and Bridge 2 will be over a Vulcan Materials Rock quarry access road.

Plans, Specifications and engineer's estimate of probable cost will be developed and submitted according to City of Chattanooga and Tennessee Department of Transportation (TDOT) guidelines. Plans will be created in MicroStation (.dgn) format. The following design guidelines and specifications will be used: 2010 AASHTO LRFD Bridge Design Specifications, Fifth Edition; TDOT's Standard Specifications for Road and Bridge Construction; TDOT's Structures Memoranda (SMO's); Design Loading, HL-93; Seismic Risk Category per TDOT Structures Memoranda (SMO 55). The Bridge over CSX will adhere to the CSX Guidelines noted in the current version of the CSX Transportation -- Public Project Information For Construction and Improvement Projects that May Involve the Railroad.

The Preliminary bridge design scope of work is as follows:

PRELIMINARY ENGINEERING

- Hold value planning session and prepare bridge type study to optimize span arrangement, determine most cost-effective bridge type.
- Prepare Preliminary Layout (develop Type, Size & Location Plans (TS&L)) – Plans detail the bridge type (super & sub structures), deck section, bridge location and geometry (vertical & horizontal), features crossed, design criteria, and CSX clearances.
- Make initial engineering review submittal to CSX and TDOT Structures.
- Finalize Preliminary Layout based on Comments received from CSX and TDOT.

1.5 Upon review and approval of the PRELIMINARY PLANS by the CLIENT, the CONSULTANT shall assist and attend Public Meetings and stakeholder meetings with the CLIENT to inform local citizens of the proposed improvement project. Public meeting displays and a PowerPoint presentations shall also be developed by the CONSULTANT for use in these meetings.

1.6 The CONSULTANT shall develop RIGHT-OF-WAY PLANS for the project at the direction of the CLIENT. As part of the RIGHT-OF-WAY PLANS development, geotechnical engineering will be performed to determine slope recommendations for cut and embankment areas within the project limits as well as for determining foundation design criteria for both bridge locations. Geotechnical engineering is further defined in the attached scope from the geotechnical sub consultant.

1.7 The CONSULTANT shall develop the Deeds and Exhibits and Engineers Opinion of Appraisal Values necessary for use by the CLIENT in acquiring the additional right-of-way needed for the proposed project. Will include development of CSX Easement Exhibit if required by CSX.

1.8 The CONSULTANT shall develop CONSTRUCTION PLANS for the project as directed by the CLIENT. In addition to the development of the final roadway plans, the CONSULTANT shall develop the required documents to obtain the required environmental permits for the project. All



permit fees required will be paid directly by the CLIENT. Upon substantial completion (95%) of the project CONSTRUCTION PLANS by the CONSULTANT, the plans will be submitted for review by the CLIENT. Following receipt of all comments, final CONSTRUCTION PLANS will be completed and submitted for final review by the CLIENT.

1.9 The CONSULTANT shall develop FINAL BRIDGE PLANS for both bridge locations. For both bridges this task includes structural analysis and design of bridge elements, preparation of final bridge plans, specifications and an engineer's estimate of probable cost, preparation of bridge design and quantity calculations, Quality Control/Quality Assurance and coordination with the CLIENT and appropriate agencies. The final design plans for Bridge 1 will be submitted to CSX and to TDOT for both bridges for their review and comment. Plans will be revised based on comments from both agencies. Once approved by the CLIENT final plans will be provided to both CSX and TDOT for their records.

1.10 The CONSULTANT shall assist the CLIENT through-out the BIDDING phase of the project. This will include supplying the CLIENT with all required documents in Portable Document Format (PDF) suitable for printing. The CONSULTANT shall also assist in answering any questions from bidders, attend the bid opening as well as assist the CLIENT in evaluating the bids once received.

1.11 The CONSULTANT shall assist the CLIENT through the Construction Phase of the project. For the purposes of this scope the anticipated construction duration is estimated at 2 years. This work is anticipated to include attendance of 1 Professional Engineer at the Preconstruction Meeting, attendance at bi weekly Progress Meetings and up to 6 hours per month of Engineering Design effort. The Construction Phase Bridge Engineering Service will include review of shop drawings and up to 2 field visits per bridge during the duration of construction.

1.12 The CONSULTANT shall provide the CLIENT with final CADD documents for the project. These documents will be the final design documents utilized for Bidding unless CONSULTANT is involved with the day to day operations during construction or provided specific markups or field changes that have been verified by the CLIENT during the construction phase.

For clarification and information the following services are specifically not included as part of the SCOPE OF SERVICES as previously described: utility design or relocation plan development, right-of-way negotiation/acquisition services, offsite analysis of the existing drainage system, flood studies, mitigation design, pavement design, Construction Engineering and Inspections (CEI) to TDOT standards, utility permit coordination with CSX, payment of CSX Construction Agreement Force Account Fee for Construction Phase Flagging, CSX Right-of-Way Easement Fee, other CSX Fees not specifically noted as reimbursable, bid advertisement fees, printing of City review plans or bid documents, retaining wall design, geotechnical work for retaining walls, landscape design and NEPA Document for Environmental Assessment (EA) Preparation if required by TDOT and FHWA .

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:



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Supplemental services included as part of the scope shall include; field surveying services, geotechnical engineering services, right-of-way and easement document preparation, environmental permitting and SWPPP preparation, record drawings and reimbursable expenses as described below.

3. REIMBURSABLE EXPENSES:

Project specific reimbursable expenses and charges shall include the following:

Reimbursable expenses include various fees and permits as required by CSX for replacement of the existing bridge over their facilities.



ATTACHMENT B

Owner: City of Chattanooga, Tennessee

Engineer: Alfred Benesch & Company
Project Number & Name: T-15-024-101
Shallowford Road Improvements (Airport Rd to Jersey Pike)

COMPENSATION

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

1. For the Basic Services described in Attachment A, \$1,397,900.00. Payments shall be made monthly in amounts which are consistent with the amount of engineering services provided, as determined by the Engineer.

1. Project Administration and Coordination	a Lump Sum Fee of	\$ 47,500.00
2. NEPA Document Preparation (Basic CE)	a Cost Not to Exceed	\$ 93,500.00
3. Preliminary Phase Roadway Design Documents	a Lump Sum Fee of	\$225,040.00
4. Right-of-Way/Utility Phase Design Documents	a Lump Sum Fee of	\$159,080.00
5. Construction Phase Design Documents	a Lump Sum Fee of	\$159,080.00
6. Bridge Design Services	a Lump Sum Fee of	\$303,800.00
7. Bid/Award Phase Engineering Services	a Lump Sum Fee of	\$ 18,000.00
8. Construction Phase Engineering Services	a Lump Sum Fee of	\$ 42,500.00
9. Construction Phase Bridge Engineering Services	a Lump Sum Fee of	\$ 12,500.00
	Subtotal	<u>\$1,061,000.00</u>

2. 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.

1. Field Survey Services	a Cost Not to Exceed	\$136,000.00
2. Geotechnical Engineering Services	a Cost Not to Exceed	\$138,500.00
3. Right-of-way Easement Documents and Appraisals	a Cost Not to Exceed	\$ 14,200.00
4. Environmental Permitting and SWPPP Preparation	a Lump Sum Fee of	\$ 15,700.00
5. Reimbursable Expenses (CSX Fees - Estimated)	a Cost Not to Exceed	\$ 24,500.00
a) Right of Entry Permit and Flagging		\$4,500
b) Preliminary Engineering Agreement Fee		\$20,000
6. Record Drawings	a Lump Sum Fee of	\$ 8,000.00
	Subtotal	<u>\$336,900.00</u>

Grand Total \$1,397,900.00

3. 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).
4. Reimbursable charges will be considered the amount of actual costs of project related expenses or charges times a markup of 0%. 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.



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5. The entire amount of each statement shall be due and payable 30 days after receipt by the Owner.
6. The Engineer shall keep records on the basis of generally accepted accounting practice of costs 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: Alfred Benesch & Company
Project Number & Name: T-15-024-101
Shallowford Road Improvements (Airport Rd to Jersey Pike)

OWNER'S RESPONSIBILITIES

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

1. Make available to the Engineer the current City of Chattanooga Design and Construction Standards, all records, reports, maps, and other data pertinent to provision of the services required under this contract.
2. Examine all plans, specifications and other documents submitted by the Engineer and render decisions promptly to prevent delay to the Engineer.
3. Designate one City of Chattanooga employee as the Owner representative with respect to all services to be rendered under this agreement. This individual shall have the authority to transmit instructions, receive information and to interpret and define the Owner's policies and decisions pertinent to the Engineer's services.
4. Issue Notice(s) to Proceed to the Engineer for each phase of the design services.
5. Owner will grant or obtain free access to the project site for all equipment and personnel necessary for the Engineer to perform the work set forth in this Agreement. Owner will notify any and all possessors of the project site that Engineer has been granted free access to the site. Engineer will take reasonable precautions to minimize damage to the site.
6. Owner will acquire all lands, rights-of-way, and easements necessary for the construction of the project.
7. 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.



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ATTACHMENT D

Owner: City of Chattanooga, Tennessee

Engineer: Alfred Benesch & Company

Project Number & Name: T-15-024-101

Shallowford Road Improvements (Airport Rd to Jersey Pike)

SUPPLEMENTAL AGREEMENTS

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.

N.A.



ATTACHMENT E

Owner: City of Chattanooga, Tennessee

Engineer: Alfred Benesch & Company

Project Number & Name: T-15-024-101

Shallowford Road Improvements (Airport Rd to Jersey Pike)

PROJECT SCHEDULE

Owner and Engineer recognize that time is of the essence of the Agreement and that Owner will suffer financial loss if the work is not completed within the times stipulated herein, plus any extensions thereof. Accordingly, Engineer has established time intervals, in calendar days, for submittals at various stages of the project as detailed below. As each actual submittal date occurs, Engineer shall meet with Owner to discuss the progress of the work and the actual submittal date shall be documented. If project is behind schedule, the reason shall be recorded. Engineer shall not be responsible for the time required by Owner's representative to review Engineer's submittal. When review is complete, Owner shall, in writing, authorize Engineer to proceed to the next submittal date. After final submittal date, Engineer and Owner shall meet to evaluate Engineer's performance with regard to design schedule. An Engineer's Project Performance Evaluation form shall be completed 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. Past performance shall be accounted for on the evaluation sheet used to rank consultants during the interview process.

Schedule: Engineer will make plan submittals to Owner based on the following schedule:

1. Concept Drawings - Engineer will submit concept drawings within 300 calendar days after Notice to Proceed by Owner.
2. Field Check - Engineer will submit field check drawings within 60 calendar days after Notice to Proceed by Owner.
3. Right-of-Way Drawings - Engineer will submit right-of-way drawings within 270 calendar days after the Notice to Resume Work is given by Owner following Field Check.
4. Office Check - Engineer will submit office check drawings and specifications within 60 calendar days after the Notice to Resume Work is given by Owner following Field Check.
5. Bid Documents - Engineer will submit bid documents within 240 calendar days after the Notice to Resume Work is given by Owner following Office Check.
6. Bid / Award Services – 60 calendar days.
7. Construction Administration Services and/or CEI – N/A calendar days.
8. 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.



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ATTACHMENT F

Owner: City of Chattanooga, Tennessee

Engineer: Alfred Benesch & Company
Project Number & Name: T-15-024-101
Shallowford Road Improvements (Airport Rd to Jersey Pike)

RATE SCHEDULE

Classification	Rate
Technologist I	\$48.00
Technologist II	\$70.00
Senior Technologists	\$84.00
Resident Project Representative	\$76.00
Code Official I	\$60.00
Code Official II	\$68.00
Senior Code Official	\$92.00
Designer I	\$72.00
Designer II	\$78.00
Senior Designer	\$88.00
Project Engineer I	\$92.00
Project Engineer II	\$108.00
Senior Project Engineer	\$120.00
Project Manager I	\$114.00
Project Manager II	\$128.00
Senior Project Manager II	\$180.00
Principal	\$190.00



ATTACHMENT G

STANDARD INVOICE

☐ Indicates MANDATORY Item

CONSULTANT LETTERHEAD

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

 INVOICE

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

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

Must be Sequential Number

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	Fee Basis	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.



Shallowford Rd.

Jersey Pike

Airport Rd.

Shallowford Rd

Flea Branch

Airport Rd