

**CITY OF FRANKLIN, TENNESSEE
PROFESSIONAL SERVICES AGREEMENT
COF Contract No. 2019-0098**

THIS PROFESSIONAL SERVICES AGREEMENT ("Agreement") is by and between the City of Franklin, Tennessee, hereinafter referenced as City, and **ALFRED BENESCH & COMPANY** hereinafter referenced as Consultant, who mutually agree as follows:

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

Design of Southeast Park Bridge & Carothers Parkway Intersection Improvements

1. SCOPE OF SERVICES. Consultant shall provide survey, engineering, and related technical services for the Project in accordance with the Scope of Services ("Services") as found in Attachment A, which shall be considered as an integral part hereof.
2. Consultant shall submit as a part of Attachment A an individual Fee Schedule and a Completion Schedule for the Project based on the detailed Scope of Services.
3. In event of a conflict between this Agreement and the attached document(s), this Agreement shall supersede conflicting terms and conditions.
4. Consultant shall be paid on a monthly basis for work performed based on the Fee Schedule, as contained in Attachment A, in the Lump Sum Amount of **Three Hundred Fifty-Eight Thousand Six Hundred Fifty-Six and No/100 Dollars (\$358,656.00)**.

The Board of Mayor and Aldermen Approved this Agreement on the _____ Day of _____ 201____.

TERMS AND CONDITIONS FOR PROFESSIONAL SERVICES

ARTICLE 1. SERVICES. Consultant will:

- 1.1 Act for City in a professional manner, using that degree of care and skill ordinarily exercised by and consistent with standards of competent consultants using the standards in the industry:
- 1.2 Consider all reports to be confidential and distribute copies of the same only to those persons specifically designated by the City.
- 1.3 Perform all services under the general direction of a senior professional employee, licensed and/or registered in the State of Tennessee, when appropriate.
- 1.4 Designate, in writing, the sole Project representative to coordinate with City the Services to be provided, including all contact information.
- 1.5 Unless provided for in the Project Scope of Services (Attachment A), Consultant shall perform all Services with his own forces (employees). Should sub-consultants be proposed to be used in the Project, a listing of said sub-consultants with Services to be performed shall be provided. After approval of this Agreement, no substitute for sub-consultants shall be allowed unless approved by City.
- 1.6 Retain pertinent records relating to the services performed for a period of seven (7) years following the completion of the work; during this period the records shall be available for review by City at all reasonable times.

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

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

ARTICLE 3. GENERAL CONDITIONS.

- 3.1 Consultant, by the performance of services covered hereunder, does not in any way assume, abridge or abrogate any of those duties, responsibilities or authorities customarily vested in other professionals or agencies participating in the Project.
- 3.2 Consultant shall be responsible for the acts or omissions of any party involved in concurrent or subsequent phases of the Project acting upon written instruction issued by the Consultant.
- 3.3 Neither City nor Consultant may assign or transfer its duties or interest in this Agreement without written consent of the other party.
- 3.4 **ALLOCATION OF RISK AND LIABILITY; GENERAL.** Considering the potential liabilities that may exist during the performance of the services of this Agreement, the relative benefits and risks of the Project, and the Consultant's fee for the services rendered, and in consideration of the promises contained in this Agreement, the City and the Consultant agree to allocate and limit such liabilities in accordance with this Article.

- 3.5 INDEMNIFICATION. Consultant agrees to indemnify and hold City harmless from and against legal liability for all judgments, losses, damages, and expenses to the extent such judgments, losses, damages, or expenses are caused by Consultant's negligent act, error or omission in the performance of the services of this Agreement. In the event judgments, losses, damages, or expenses are caused by the joint or concurrent negligence of Consultant and City, they shall be borne by each party in proportion to its own negligence.
- 3.5.1 SURVIVAL. The terms and conditions of this paragraph shall survive completion of this services agreement.
- 3.6 LIMITATIONS OF RESPONSIBILITY. Consultant shall not be responsible for (a) construction means, methods, techniques, sequences, procedures, or safety precautions and programs in connection with the Project unless specifically undertaken in Attachment A, Scope of Services ; (b) the failure of any contractor, subcontractor, Consultant, or other Project participant, not under contract to Consultant, to fulfill contractual responsibilities to City or to comply with federal, state, or local laws, regulations, and codes; or (c) procuring permits, certificates, and licenses required for any construction unless such procurement responsibilities are specifically assigned to Consultant in Attachment A, Scope of Services.

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

- 4.1 Termination for Convenience. The City may, when in the interests of the City, terminate performance under this Agreement with the Consultant, in whole or in part, for the convenience of the City. The City shall give written notice of such termination to the Consultant specifying when termination becomes effective. The Consultant shall incur no further obligations in connection with the work so terminated, other than warranties and guarantees for completed work and installed equipment, and the Consultant shall stop work when such termination becomes effective. The Consultant shall also terminate outstanding orders and subcontracts for the affected work. The Consultant shall settle the liabilities and claims arising out of the termination of subcontracts and orders. The City may direct the Consultant to assign the Consultant's right, title and interest under termination orders or subcontracts to the City or its designee. The Consultant shall transfer title and deliver to the City such completed or partially completed work and materials, equipment, parts, fixtures, information and Contract rights as the Consultant has in its possession or control. When terminated for convenience, the Consultant shall be compensated as follows:
- (1) The Consultant shall submit a termination claim to the City specifying the amounts due because of the termination for convenience together with costs, pricing or other data required by the City. If the Consultant fails to file a termination claim within one (1) year from the effective date of termination, the City shall pay the Consultant the amount the City deems the Consultant is due.
 - (2) The City and the Consultant may agree to the compensation, if any, due to the Consultant hereunder.
 - (3) Absent agreement to the amount due to the Consultant, the City shall pay the Consultant the following amounts:
 - (a) Contract costs for labor, materials, equipment and other services accepted under this Agreement;

- (b) Reasonable costs incurred in preparing to perform and in performing the terminated portion of the work, and in terminating the Consultant's performance, plus a fair and reasonable allowance for direct job site overhead and earned profit thereon (such profit shall not include anticipated profit or consequential damages); provided however, that if it reasonably appears that the Consultant would have not profited or would have sustained a loss if the entire Agreement would have been completed, no profit shall be allowed or included and the amount of compensation shall be reduced to reflect the anticipated rate of loss, if any;

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

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

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

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

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

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

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

5.2 ENVIRONMENTAL RESPONSIBILITY.

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

ARTICLE 6. SCHEDULE.

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

6.2 Before executing this Agreement, the Consultant shall have prepared and submitted for approval to the City a Completion Schedule for the Project with milestones for the various stages (tasks) of the Services as outlined in the Scope of Services. The Consultant shall submit and obtain the City's approval for any proposed changes to the logic, durations, sequences, or timing of tasks as approved in the Completion Schedule.

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

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

ARTICLE 7. USE OF DOCUMENTS, DATA.

7.1 All Documents, including, but not limited to, reports, drawings, specifications, and computer software prepared by Consultant pursuant to this Agreement are instruments

of service in respect to the Project. Consultant shall retain an ownership and property interest therein (including the right of reuse at the discretion of the Consultant) whether or not the Project is completed.

- 7.1.1 USE OF DATA SYSTEMS: Ownership, property interests and proprietary rights in data systems used by Consultant do not extend to the data created by or supplied to Consultant by the City; all rights to that data (including derivative or hidden data such as metadata) shall vest solely in City at the moment of creation.
- 7.1.2 DISCLOSURE OF DOCUMENTS/DATA. City may be required to disclose documents or data under state or federal law. City shall notify Consultant if a request for data or documents has been made and shall give Consultant a reasonable opportunity under the circumstances to respond to the request by redacting proprietary or other confidential information. Consultant waives any right to confidentiality of any document, e-mail or file it fails to clearly mark on each page as confidential or proprietary. In exchange, Consultant agrees to indemnify, defend, and hold harmless City for any claims by third parties relating thereto or arising out of (i) the City's failure to disclose such documents or information required to be disclosed by law, or (ii) the City's release of documents as a result of City's reliance upon Consultant representation that materials supplied by Consultant (in full or redacted form) do not contain trade secrets or proprietary information, provided that the City impleads Consultant and Consultant assumes control over that claim.
- 7.2 By execution of this Agreement, Consultant and his sub-consultant(s) grant the City a royalty-free, perpetual, irrevocable, and assignable license to use any and all intellectual property interest Consultant or his sub-consultant(s) possess to any drawings, details, specifications, documents, and other information created before each of their first involvement with the Project and subsequently incorporated into the Project's documents. City-furnished data that may be relied upon by Consultant is limited to the printed copies that are delivered to the Consultant pursuant to Article 2 of this Agreement. Any copyrighted electronic files furnished by City shall be used by Consultant only for the Project as described herein. City's posting or publication of such documents created by Consultant for City shall constitute fair use and shall not constitute an infringement of Consultant's copyright, if any.
- 7.3 Documents that may be relied upon by City are limited to the printed copies (also known as hard copies) that are signed or sealed by the Consultant. Files in electronic media format of text, data, graphics, or of other types that are furnished by Consultant to City are only for convenience of City, unless the delivery of the Project in electronic media format has been dictated in Attachment A, Scope of Services. Any conclusion or information obtained or derived from electronic files provided for convenience will be at the user's sole risk.
- 7.4 Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within sixty (60) days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the party delivering the electronic files. Unless stated otherwise herein, Consultant shall not be responsible to maintain documents stored in electronic media format after acceptance by City.

- 7.5 When transferring documents in electronic media format, Consultant makes no representations as to long term compatibility, usability, or readability, of documents resulting from the use of software application packages, operating systems, or computer hardware differing from that as required of, and used by, Consultant at the beginning of this Project.
- 7.6 City may make and retain copies of Documents for information and reference in connection with use on the Project by the City, or his authorized representative. Such Documents are not intended or represented to be suitable for reuse by City or others on extensions of the Project or on any other project. Any such reuse or modifications without written verification or adaptation by Consultant, as appropriate for the specific purpose intended, will be at City's sole risk and without liability or legal exposure to the Consultant or to Consultant's sub-consultants.
- 7.7 If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.
- 7.8 Any verification or adaptation of the Documents for extensions of the Project or for any other project will entitle Consultant to further compensation at rates to be agreed upon by City and Consultant.

ARTICLE 8. INSURANCE.

- 8.1 During the performance of the Services under this Agreement, Consultant shall maintain the following minimum insurance:
- a) General Liability Insurance with a combined single limit of \$1,000,000 per occurrence and \$2,000,000 annual aggregate.
 - b) Automobile Liability Insurance with a combined single limit of \$1,000,000 for each person and \$1,000,000 for each accident.
 - c) Workers' Compensation Insurance Coverage A in accordance with statutory requirements and Coverage B, Employer's Liability Insurance, with a limit of \$500,000 for each occurrence.
 - d) Professional Liability Insurance with a limit of \$1,000,000 annual aggregate.
- 8.2 Consultant shall add the City an additional insured on all policies unless otherwise prohibited.
- 8.3 Consultant shall, upon execution of this Agreement, furnish City certificates of insurance, which shall include a provision that such insurance shall not be canceled without at least thirty (30) days' written notice to City.
- 8.4 No insurance, of whatever kind or type is to be considered as in any way limiting other parties' responsibility for damages resulting from their activities in the execution of the Project. City agrees to include, or cause to be included, in the Project's construction contract, such requirements for insurance coverage and performance bonds by the Project's construction contractor as City deems adequate to indemnify City, Consultant, and other concerned parties against claims for damages and to insure compliance of work performance and materials with Project requirements.

ARTICLE 9. PAYMENT.

- 9.1 City will pay Consultant for services and expenses in accordance with the Fee Schedule proposal submitted for the Project as part of the Scope of Services. Consultant's invoices will be presented at the completion of the work or monthly and will be payable upon receipt. Payment is due upon presentation of invoice and is past due thirty (30) days from

- invoice date. City shall give prompt written notice of any disputed amount and shall pay the remaining amount.
- 9.2 Consultant shall be paid in full for all services under this Agreement, including City authorized overruns of the Project budget or unforeseen need for Consultant's services exceeding the original Scope of Services.
- 9.3 TRAVEL; EXPENSES
City shall reimburse reasonable expenses, including travel and meals, when specified in the Scope of Services, but only in accordance with the City's Travel and Expense Policy and Procedures Manual. The maximum amount will be applied as of the date of travel and as listed in the per diem reimbursement rates on the "CONUS" website developed by the United States General Services Administration, located at www.gsa.gov [click on 'per diem rates' under the 'etools' category].

ARTICLE 10. MISCELLANEOUS PROVISIONS

- 10.1 EQUAL EMPLOYMENT OPPORTUNITY. In connection with this Agreement and the Project, City and Consultant shall not discriminate against any employee or applicant for employment because of race, color, sex, national origin, disability or marital status. City and Consultant will take affirmative action to ensure that the contractor used for the Project does not discriminate against any employee and employees are treated during employment without regard to their race, age, religion, color, gender, national origin, disability or marital status. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination, rates of pay or other forms of compensation; and selection for training, including apprenticeship.
- 10.1.1 Consultant shall insert the foregoing provision in all contracts relating to this Project.
- 10.2 TITLE VI – CIVIL RIGHTS ACT OF 1964. City and Consultant shall comply with all the requirements imposed by Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d), 49 C.F.R., Part 21, and related statutes and regulations.
- 10.2.1 Consultant shall insert the foregoing provision in all contracts relating to this Project.
- 10.3 NO THIRD PARTY RIGHTS CREATED. City and Consultant each binds itself and its successors, executors, administrators, permitted assigns, legal representatives and, in the case of a partnership, its partners, to the other party to this Agreement and to their successors, executors, administrators, permitted assigns, legal representatives and partners of such other party in respect to all provisions of this Agreement. The Services provided for in this Agreement are for the sole use and benefit of City and Consultant. Nothing in this Agreement shall be construed to give any rights or benefits to anyone other than City and Consultant.
- 10.4 WARRANTIES/LIMITATION OF LIABILITY/WAIVER. City reserves all rights afforded to local governments under law for all general and implied warranties. City does not waive any rights it may have to all remedies provided by law and therefore any attempt by Consultant to limit its liability shall be void and unenforceable.

ARTICLE 11. EXTENT OF AGREEMENT:

- 11.1 APPLICABLE LAW/CHOICE OF FORUM AND VENUE. This Agreement is made under and will be construed in accordance with the laws of the State of Tennessee without giving effect to that state's choice of law rules. The parties' choice of forum and venue shall be

exclusively in the courts of Williamson County, Tennessee. Any provision of this Agreement held to violate a law or regulation shall be deemed void, and all remaining provisions shall continue in force.

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

ARTICLE 12. DISPUTE RESOLUTION, BREACH.

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

ARTICLE 13. SURVIVAL.

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

CONSULTANT

By: _____
Name: _____
Title: _____
Date: _____

CITY OF FRANKLIN, TENNESSEE

By: **Dr. Ken Moore**
Mayor
Date: _____

Approved as to form:

Tiffani M. Pope
Staff Attorney



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March 4, 2018

Mr. Paul Holzen, PE
City of Franklin
109 Third Avenue South, Suite 142
Franklin, TN 37064

RE: Scope and Design Proposal
Carothers Parkway Modification and SE Park Entrance Road
Including a new bridge over the Harpeth River
Franklin, TN

Dear Mr. Holzen:

In response to your request I have attached a design scope for completing the roadway and bridge design for the new SE Park Entrance Road in Franklin, TN. Included with this scope is a separate scope from Terracon for the completion of the geotechnical exploration required for the project. The proposed design fee assumes that a 600 feet long bridge will be constructed.

As part of this estimate we will coordinate with Barge Design Solutions for the completion of the hydraulic model for the park and this new entrance road. We will also coordinate the location of the entrance road to fit within their design for the remainder of the park project.

If you have any questions or need additional information, please let me know. Thanks for the opportunity to serve the City of Franklin.

Sincerely,

A handwritten signature in blue ink, appearing to read "Sammie McCoy".

Sammie McCoy, PE
Vice President
TN Division Manager



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Southeast Park Entrance Road– City of Franklin

Proposed Scope of Work: Roadway and Structural Design Tasks

Park Entrance Road over the Harpeth River

The overall park plans are being developed by Barge Design services (Barge). As part of their work they will be providing the survey and hydraulic modeling for the entire site which includes the roadway entrance and new bridge. Benesch will work closely with Barge for the development of the plans.

Benesch will develop plans for the entrance road into the new SE Park off Carothers Parkway in Franklin. The new road will tie as a fourth leg to the Carothers and Lockwood Way intersection. Carothers and the current intersection are only partially constructed so the plans will include development of crossovers on each Carothers approach so that the full intersection can be constructed to accommodate the future widening of Carothers. This work will include the design of the full width intersection for Carothers. The intersection will be developed to accommodate all future lanes but in the interim Carothers through traffic will remain in a single lane in each direction vs. the future two lanes. The intersection will not be signalized at this time. Carothers will be free flowing, and the side roads will be under stopped condition.

On Carothers, Benesch will design the crossovers which are anticipated to be a total of approximately 1800 feet of widened roadway. This includes building the full length of intersection turn lanes, so the intersection will not require additional work in the future widening of Carothers. These cross overs will be designed to meet the original design speed of Carothers. The design will coordinate with the original design plans for Carothers and modify the drainage as necessary to accommodate the widening. If existing lighting along Carothers is impacted by the widening the poles will either be removed or temporarily relocated to a nearby location, so no redesign of lighting is anticipated. Our understanding is MTEM developed the lighting design for the previous Carothers Parkway Project. Currently the median light poles contain only one light head but were designed and installed so a second head can be installed with minimal work. The addition of the second head will be incorporated into the plans within the limits of the work on Carothers.

The new park entrance designed by Benesch is estimated at 1150 feet long from the center of Carothers Parkway and will meet the internal roadway designed by Barge. This leg of the intersection will include one inbound lane and 2 outbound lanes (**left turn and a thru-right turn**). All tapers will occur on the east side of the river bridge to avoid extra widening on the bridge. Gates to control access to the park are required and these will either be accommodated on the east end of the bridge if adequate room is available for turnaround or shortly after crossing the bridge.

This portion of the roadway will be curb and gutter. Lanes will be 12' wide with 2' shoulders to provide additional width between parapets across the bridge. Along the south side of the roadway a 6' grass strip will provide separation for a 12' concrete multiuse path. Across the bridge a pedestrian parapet will be constructed within the 6' grass strip. Closed drainage will be designed for the curb and gutter sections of roadway and this will discharge near the bridge. Design of water quality units or other water quality items are not included for this portion of closed drainage system.

The entrance road and bridge will accommodate the following items to be designed by others: a Milcrofton waterline, a Franklin reclaimed water line, lighting conduits/foundations, Franklin fiber optic, ATMOS gas line

and future multi-use paths under each bridge approach. For purposes of this estimate these lines are all assumed to be less than 12" diameters and can be versatile (i.e. internal bay is acceptable) in where they can be located.

Fill material will be required to construct the approaches to the bridge. Should the Benesch plans be bid separately our plans will coordinate with the Barge mass grading plan to provide access to adequate borrow material within the park boundary.

The roadway plans will be developed as a standard Preliminary 30% set of plans that can be used by Barge for coordination with FEMA. Following FEMA approval development of a 60% Utility set will occur. Right of Way is not anticipated as all the property is owned by the City of Franklin, but this 60% set can be used for coordination with utility companies. The 100% construction documents will be produced for bidding. Probable construction costs will be estimated at the 60% and 100% stages of plans production. The plans will be developed 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 Franklin Street Standards. These technical guidelines and specifications shall be followed unless superseded by the standard for the City of Franklin.

The scope includes plans to attend a Public Meeting should this be deemed necessary to inform the public about the project. Benesch will assist city staff through-out the bidding phase of the project. This will include supplying all required documents in Portable Document Format (PDF) suitable for printing. Benesch will assist the city in producing the bid book. Benesch can organize and lead the pre-bid meeting and assist the city as necessary with opening and evaluating the bids once received.

The roadway design scope includes production of erosion control plans and a SWPPP for this portion of roadway and bridge construction. This will be used to apply for initial NPDES Permit coverage which can be amended by Barge for the larger site project. ARAP and USACE permits will be applied for by Benesch to cover the bridge construction over the Harpeth River.

Proposed New Bridge

The proposed structure has yet to be determined. It will be assumed for this scope that a 600-foot-long, three to five span, prestressed concrete beam bridge will be constructed. This crossing of the Harpeth River lies within a FEMA designated Zone AE floodplain. A hydraulic study will be required for this project to demonstrate that the proposed design will not increase the water surface elevation (No Rise). It is our understanding that another consultant will perform the hydrologic analysis and develop hydraulic models for existing and proposed conditions. Benesch will coordinate preliminary structural design with the other consultant performing the hydraulic analysis. Once a bridge configuration is confirmed by the hydraulic engineer and the City of Franklin, Benesch will develop final design and construction plans for the structure.

Structural Design Scope of Work

1. General Bridge Design: Assumed 600', maximum five span, prestressed concrete girder bridge, concrete deck, concrete substructures with H-Pile foundations or spread footings on sound bedrock.

2. Preliminary bridge design

- a. Coordination with hydraulic design to size the structure opening for the Harpeth River.
- b. Coordination with roadway design to set centerline, profile, bridge width, approach limits, and phasing requirements. As noted in the section above the proposed width for the bridge will be 52.5' wide to accommodate 2-12' lanes, 2' shoulders, C&G on both sides, on the south side a 6' grass strip and 12' multi use path. A pedestrian safety rail will be constructed within the 6' grass strip.
- c. Development of utility conveyance needs and incorporation into proposed bridge design.
- d. Coordination with environmental requirements regarding stream impact and substructure locations.
- e. Develop a preliminary structural design for:
 - i. Substructures: Abutments, piers, and foundation types
 - ii. Superstructure: Prestressed concrete girder size and configuration, expansion joint location if required, location of deck drains
- f. Coordination with utility requirements to avoid conflicts and incorporate conveyance with the structure.
- g. Coordination with Geotechnical Engineer for foundation recommendations
- h. Development of preliminary plans including:
 - i. Preliminary Layout of Bridge
 - ii. Preliminary Bridge Cross Section
 - iii. Preliminary Bridge Phasing
 - iv. Accommodations for the utilities noted above
 - v. Accommodations for lighting conduits and foundations for the lighting design by Barge

3. Final bridge design

- a. Develop final design for all structural elements as required
- b. Develop final plans for the structure in accordance with TDOT standards
- c. Incorporation of utility conveyance loads in design
- d. Tabulation of required quantities and assistance with cost estimates
- e. Submit all CAD files as required

Bridge Geotechnical

1. See the attached scope and fee from Terracon to provide the necessary geotechnical exploration and report for construction of the bridge over the Harpeth River.

Items not included in the Benesch Scope

1. Survey to be provided by Barge
2. Hydraulic engineering and FEMA coordination to be completed by Barge
3. Stormwater quality design
4. Signal design or traffic studies
5. Landscape or irrigation design
6. Roadway and under bridge lighting will be designed by Barge for the park entrance road
7. Utility Coordination or design
8. Environmental boundary determinations will be provided by Barge for the entire site.
9. Mitigation design for impacted environmental features.
10. Permit fees will be paid for by the City **as a reimbursable item(s) under this contract.**
11. Construction phase services or full TDOT level Construction Engineering and Inspection (CEI)
12. Printing of review or bid plans

Compensation:

The following is the compensation to be paid to Benesch for the scope items noted above:

Fee Summary		
Item	Fee Type	Amount
Roadway Design	Lump Sum	\$ 124,548.00
Bridge Design	Lump Sum	\$ 202,908.00
SWPPP and Permitting	Lump Sum	\$ 7,800.00
Bid Administration	Lump Sum	\$ 3,900.00
Geotechnical (By Terracon)	Lump Sum	\$ 19,500.00
Total Lump Sum		\$ 358,656.00



March 1, 2019

Alfred Benesch & Company
8 Cadillac Drive, Suite 250
Brentwood, TN 37027

Attn: Jake Williams – Project Manager II
P: (615) 370-3079
E: jwilliams@benesch.com

Re: Proposal for Geotechnical Engineering Services Revised
SE Municipal N Access Approach and Bridge
Carothers Parkway
Franklin, Williamson County, TN
Terracon Proposal No. P18185215 R1

Dear Mr. Williams:

We appreciate the opportunity to submit this proposal to Alfred Benesch & Company (Benesch) to provide Geotechnical Engineering services for the above referenced project. The following are exhibits to the attached Agreement for Services. Our proposal was revised to provide alternate scope and pricing for additional spans.

Exhibit A	Project Understanding
Exhibit B	Scope of Services
Exhibit C	Compensation and Project Schedule
Exhibit D	Site Location and Nearby Geotechnical Data
Exhibit E	Anticipated Exploration Plan

Our base fee to perform the scope of services described in this proposal is \$11,500.00.
See Exhibit C for more details of our fees and consideration of additional services.

Your authorization for Terracon to proceed in accordance with this proposal can be issued by signing and returning a copy of the attached Agreement for Services to our office.

Sincerely,
Terracon Consultants, Inc.

John E. Agee, P.E.
Regional Manager

David A. Been, P.E.
Geotechnical Department Manager

Proposal for Geotechnical Engineering Services Revised

SE Municipal N Access Approach and Bridge ■ Franklin, Williamson County, TN

March 1, 2019 ■ Terracon Proposal No. P18185215 R1

**EXHIBIT A - PROJECT UNDERSTANDING**

Our scope of services is based on our understanding of the project as described by Benesch and the expected subsurface conditions as described below. We have not visited the project site specifically to confirm the information provided. Aspects of the project, undefined or assumed, are highlighted as shown below. We request the design team verify this information prior to our initiation of field exploration activities.

Site Location and Anticipated Conditions

Item	Description
Parcel Information	The project is located at Carothers Parkway in Franklin, Williamson County, TN. 35.8887404, -86.8228464
Existing Improvements	Agricultural uses
Current Ground Cover	Earth and grass covered areas, wooded areas,
Existing Topography (from Williamson County GIS)	Surface elevations vary from about 640 feet to 635 feet, MSL, and generally slopes down from west to east and east to west towards the Harpeth River.
Site Access	We expect the site, and all exploration locations, are accessible with our ATV-mounted drilling equipment. Dozer clearing is anticipated and budgeted to move trees from desired exploration locations.
Expected Subsurface Conditions	Our experience near the vicinity of the proposed development indicates subsurface conditions consist of 15 to 20 feet of lean to fat clay overlying limestone bedrock.

Planned Construction

Item	Description
Information Provided	Bridge layout drawing and requested borings locations were provided by Benesch via email from Mr. Jake Williams to Terracon's John Agee on November 15, 2018. An alternate 600-foot, 6-span request was made via email March 1, 2019.
Project Description	The project is the construction of a bridge across the Harpeth River to connect the planned recreational complex to Carothers Parkway.
Proposed Structure	The project includes a 300-foot long, three span bridge, with an alternate for a 600-foot long, six span bridge. The new spans would progress south into the park from the original layout.
Building Construction	Concrete bridge with steel pile supported abutments and bents supported on cast foundations or drilled shafts.

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Item	Description
Finished Floor Elevation	Unknown
Maximum Loads	<ul style="list-style-type: none"> ■ Bents: 1,500 kips ■ Abutments: 500 kips
Grading/Slopes	<p>We anticipated up to 3 feet of cut and 3 feet of fill will be required to develop final grades.</p> <p>Final slope angles of as steep as 4H:1V (Horizontal: Vertical) are expected.</p>
Below Grade Structures	None anticipated
Free-Standing Retaining Walls	Abutment walls are expected to be constructed as part of site development to achieve final grades.
Pavements	<p>Paved driveway will be constructed on the approach to the bridge from Carothers Parkway.</p> <p>We assume both rigid (concrete) and flexible (asphalt) pavement sections should be considered. Please confirm this assumption.</p> <p>Anticipated traffic is as follows:</p> <ul style="list-style-type: none"> ■ Autos/light trucks: 1,000 vehicles per day ■ Light delivery and trash collection vehicles: 10 vehicles per week ■ Tractor-trailer trucks: <1 vehicle per week <p>The pavement design period is 20 years.</p>
Estimated Start of Construction	Q3 2019

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**EXHIBIT B - SCOPE OF SERVICES**

Our proposed scope of services consists of field exploration, laboratory testing, and engineering/project delivery. These services are described in the following sections.

Field Exploration

The field exploration program consists of the following:

Number of Borings	Planned Boring Depth (feet) ¹	Planned Location
8	Auger refusal	Planned bridge supports
1	10 or refusal	Approach drive

¹. Below ground surface

The alternate field exploration program for the 600-foot, 6-span bridge consists of the following:

Number of Borings	Planned Boring Depth (feet) ¹	Planned Location
14	Auger refusal	Planned bridge supports
1	10 or refusal	Approach drive

¹. Below ground surface

Boring Layout and Elevations: For improved accuracy, we request Benesch have the corners of the planned bridge staked in the field for our use in locating our borings. Field measurements from existing site features may be utilized. If available, approximate elevations are obtained by interpolation from a site specific, surveyed topographic map.

Subsurface Exploration Procedures: We advance soil borings with an ATV-mounted drill rig using continuous flight augers (solid stem and/or hollow stem, as necessary, depending on soil conditions). Four samples are obtained in the upper 10 feet of each boring and at intervals of 5 feet thereafter. Soil sampling is typically performed using thin-wall tube and/or split-barrel sampling procedures. In the thin-walled tube sampling procedure, a thin-walled, seamless steel tube with a sharp cutting edge is pushed hydraulically into the soil to obtain a relatively undisturbed sample. In the split barrel sampling procedure, a standard 2-inch outer diameter split barrel sampling spoon is driven into the ground by a 140-pound automatic hammer falling a distance of 30 inches. The number of blows required to advance the sampling spoon the last 12 inches of a normal 18-inch penetration is recorded as the Standard Penetration Test (SPT) resistance value. The SPT resistance values, also referred to as N-values, are indicated on the boring logs at the test depths. The samples are placed in appropriate containers, taken to our soil laboratory for testing, and classified by a geotechnical engineer. In addition, we observe and record groundwater levels during drilling and sampling.

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Six of the exploration borings will use rock core methods to collect at least 10-feet of sample of the auger refusal material. For the 600-foot, 6-span alternate; 12 of the exploration borings will use rock core methods to collect at least 10-feet of sample of the auger refusal material.

Our exploration team prepares field boring logs as part of standard drilling operations including sampling depths, penetration distances, and other relevant sampling information. Field logs include visual classifications of materials encountered during drilling, and our interpretation of subsurface conditions between samples. Final boring logs, prepared from field logs, represent the geotechnical engineer's interpretation, and include modifications based on observations and laboratory tests.

Property Disturbance: Based on aerial images, we anticipate clearing is required on both sides of the river in order to access the requested boring locations. Felled trees will be windrowed and we anticipate not felling anything into the river.

We backfill borings with auger cuttings after completion. Our services do not include repair of the site beyond backfilling our boreholes. Excess auger cuttings are dispersed in the general vicinity of the borehole. Because backfill material often settles below the surface after a period, we recommend boreholes are checked periodically and backfilled, if necessary. We can provide this service, or grout the boreholes for additional fees, at your request.

Laboratory Testing

The project engineer reviews field data and assigns various laboratory tests to better understand the engineering properties of various soil strata. Exact types and number of tests cannot be defined until completion of field work. Procedural standards noted below are for reference to methodology in general. In some cases, local practices and professional judgement require method variations. Standards noted below include reference to other related standards. Such references are not necessarily applicable to describe the specific test performed.

- ASTM D2216 Standard Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass
- ASTM D4318 Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils
- ASTM D7012 Standard Test Method for Compressive Strength of Intact Rock Core Specimens

Our laboratory testing program often includes examination of soil samples by an engineer. Based on the material's texture and plasticity, we describe and classify soil samples in accordance with the Unified Soil Classification System (USCS).

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Safety

Terracon is currently not aware of environmental concerns at this project site that would create health or safety hazards associated with our exploration program; thus, our scope considers standard OSHA Level D Personal Protection Equipment (PPE) appropriate. Our scope of services does not include environmental site assessment services, but identification of unusual or unnatural materials encountered while drilling will be noted on our logs and discussed in our report.

Exploration efforts require borings (and possibly excavations) into the subsurface, therefore Terracon complies with local regulations to request a utility location service through Tennessee 811. We consult with the owner/client regarding potential utilities, or other unmarked underground hazards. Based upon the results of this consultation, we consider the need for alternative subsurface exploration methods, as the safety of our field crew is a priority.

Private utilities should be marked by the owner/client prior to commencement of field exploration. Terracon will not be responsible for damage to private utilities that are not made aware to us. If the owner/client is not able to accurately locate private utilities, Terracon can assist the owner/client by coordinating or subcontracting with a private utility locating services. Fees associated with the additional services are not included in our current scope of services and will be forwarded to our client for approval prior to initiating. The detection of underground utilities is dependent upon the composition and construction of the utility line; some utilities are comprised of non-electrically conductive materials and may not be readily detected. The use of a private utility locate service would not relieve the owner of their responsibilities in identifying private underground utilities.

Site Access: Terracon must be granted access to the site by the property owner. By acceptance of this proposal, without information to the contrary, we consider this as authorization to access the property for conducting field exploration in accordance with the scope of services.

Engineering and Project Delivery

Results of our field and laboratory programs are evaluated by a professional engineer. The engineer develops a geotechnical site characterization, performs the engineering calculations necessary to evaluate foundation alternatives, and develops appropriate geotechnical engineering design criteria for earth-related phases of the project.

Your project is delivered using our **GeoReport** system. Upon initiation, we provide you and your design team the necessary link and password to access the website (if not previously registered). Each project includes a calendar to track the schedule, an interactive site map, a listing of team members, access to the project documents as they are uploaded to the site, and a collaboration portal. A typical delivery process includes three basic stages:

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- Stage 1: Project Planning
- Stage 2: Site Characterization
- Stage 3: Geotechnical Engineering

When utilized, a collaboration portal documents communication, eliminating the need for long email threads. This collaborative effort allows prompt evaluation and discussion of options related to the design and associated benefits and risks of each option. With the ability to inform all parties as the work progresses, decisions and consensus can be reached faster. In some cases, only minimal uploads and collaboration will be required, because options for design and construction are limited or unnecessary. This is typically the case for uncomplicated projects with no anomalies found at the site.

When services are complete, we upload a printable version of our completed final geotechnical engineering report, including the professional engineer's seal and signature, which documents our services. Previous submittals, collaboration, and final report are maintained in our system indefinitely. This allows future reference and integration into subsequent aspects of our services, as the project goes through final design and construction.

The final geotechnical engineering report provides the following:

- Boring logs with field and laboratory data
- Stratification based on visual soil (and rock) classification
- Groundwater levels observed during and after completion drilling
- Site and Boring location plans
- Subsurface exploration procedures
- Description of subsurface conditions
- Recommended foundation options and engineering design parameters, including L-Pile material parameters
- Estimated settlement of foundations
- Seismic site classification
- Subgrade preparation/earthwork recommendations
- Recommended pavement options and design parameters

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Additional Services

In addition to basic services noted above, the following services are often associated with geotechnical engineering services. Fees for basic services noted above do not include the following:

Review of Plans and Specifications: Our geotechnical report and associated verbal and written communications will be used by others in the design team to develop plans and specifications for construction. Review of the project plans and specifications is a vital part of our geotechnical engineering services. This consists of review of project plans and specifications related to site preparation, foundation, and pavement construction. Our review includes a written statement, which conveys our opinions, related to the plans and specifications' consistency with our geotechnical engineering recommendations.

Observation and Testing of Pertinent Construction Materials: Development of our geotechnical engineering recommendations and report relies on an interpretation of soil conditions. This is based on widely spaced exploration locations, and assuming construction methods will be performed in a manner sufficient to meet our expectations and is consistent with recommendations made at the time the geotechnical engineering report is issued. We should be retained to conduct construction observations, and perform/document associated materials testing, for site preparation, foundation, and pavement construction. This allows a more comprehensive understanding of subsurface conditions and necessary documentation of construction, to confirm and/or modify (when necessary) the assumptions and recommendations made by our engineers.

Perform Environmental Assessments: Our scope for this project does not include, either specifically or by implication, an environmental assessment of the site intended to identify or quantify potential site contaminants. If the client/owner is concerned about potential for such conditions and/or contamination, an environmental site assessment should be conducted. We can provide a proposal for an environmental assessment, if desired.

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**EXHIBIT C - COMPENSATION AND PROJECT SCHEDULE****Compensation**

Based upon our understanding of the site, the project as summarized in **Exhibit A**, and our planned scope of services outlined in **Exhibit B**, our base fee is shown in the following table:

Task	Lump Sum Fee
Clearing, Subsurface Exploration, Laboratory Testing, Geotechnical Consulting & Reporting	\$11,500

Additional services not part of the base fee include the following:

Additional Services (see Exhibit B)	Lump Sum Fee	Initial for Authorization
Private Utility Locate Service ¹	\$1,000.00	
Additional scope for Alternate 6-Span Bridge	\$6,500.00	
Plans and Specifications Review	\$500.00	
Construction Materials Testing Services	TBD	

1. If the owner/client is unable to accurately locate private utilities, we can subcontract a private utility locating firm and/or utilize geophysical equipment, if necessary. The detection of underground utilities is dependent upon the composition and construction of utility lines. Some utilities are comprised of non-electrically conductive materials and may not be readily detected. The use of a private locate service does not relieve the owner of their responsibilities in identifying private underground utilities.

Our scope of services does not include services associated with site clearing, wet ground conditions, tree or shrub clearing, or repair of/damage to existing landscape or crops. If such services are desired by the owner/client, we should be notified so we can adjust our scope of services. If borings are performed when crops are planted, a crop damage agreement should be established between the Client and crop owner prior to subsurface exploration.

Unless instructed otherwise, we will submit our invoice(s) to the address shown at the beginning of this proposal. If conditions are encountered that require scope of services revisions and/or result in higher fees, we will contact you for approval, prior to initiating services. A supplemental proposal stating the modified scope of services as well as its effect on our fee will be prepared. We will not proceed without your authorization, as evidenced by your signature on the Supplemental Agreement for Services form.

Proposal for Geotechnical Engineering Services RevisedSE Municipal N Access Approach and Bridge ■ Franklin, Williamson County, TN
March 1, 2019 ■ Terracon Proposal No. P18185215 R1**Project Schedule**

We developed a schedule to complete the scope of services based upon our existing availability and understanding of your project schedule. However, this does not account for delays in field exploration beyond our control, such as weather conditions, permit delays, or lack of permission to access the boring locations. In the event the schedule provided is inconsistent with your needs, please contact us so we may consider alternatives.

GeoReport Stage	Posting Date from Notice to Proceed^{1, 2}
Project Planning	3 days
Site Characterization	15 days ³
Geotechnical Engineering	25 days ³

1. Upon receipt of your notice to proceed we will activate the schedule component of our **GeoReport** website with specific, anticipated calendar dates for the three delivery points noted above as well as other pertinent events such as field exploration crews on-site, etc.
2. We will maintain a current calendar of activities within our **GeoReport** website. In the event of a need to modify the schedule, the schedule will be updated to maintain a current awareness of our plans for delivery.
3. Add 5 days for the Alternate 6-Span Bridge

EXHIBIT D - SITE LOCATION and NEARBY GEOTECHNICAL DATA

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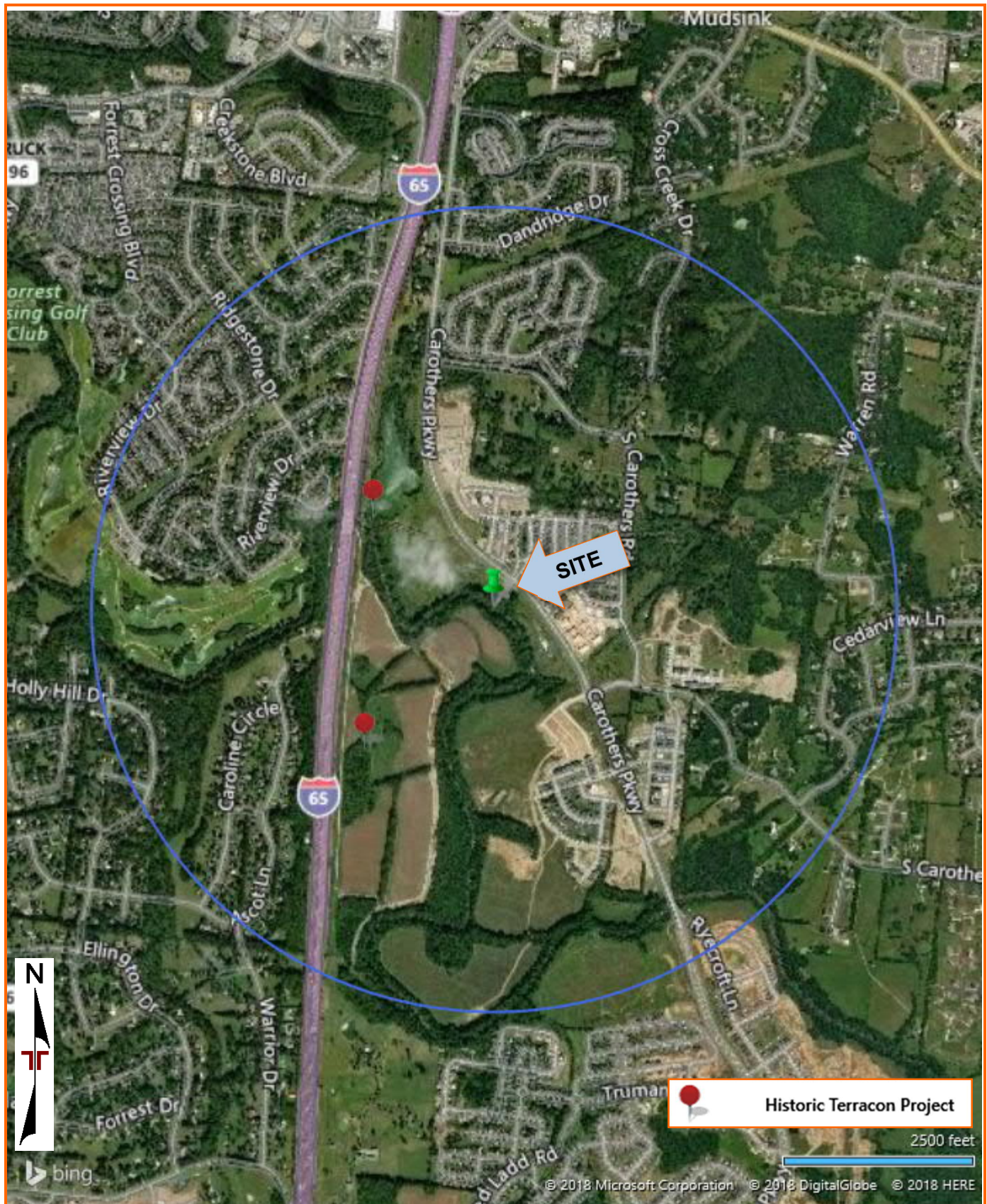


EXHIBIT E - ANTICIPATED EXPLORATION PLAN

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