

**CITY OF FRANKLIN, TENNESSEE
PROFESSIONAL SERVICES AGREEMENT
COF Contract No. 2019-0286**

THIS PROFESSIONAL SERVICES AGREEMENT (“Agreement”) is by and between the City of Franklin, Tennessee, hereinafter referenced as City, and Civil Infrastructure Associates, LLC, hereinafter referenced as Consultant, who mutually agree as follows:

DECLARATIONS. City desires to retain Consultant to provide land surveying services in connection with City’s project hereinafter referenced as Project. The Project is described as follows:

**SURVEY OF CHURCH STREET IMPROVEMENTS PROJECT,
FROM COLUMBIA AVENUE TO 1st AVENUE SOUTH/HARPETH RIVER**

1. SCOPE OF SERVICES. Consultant shall provide land surveying 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 Amount Not-to-Exceed Eighty-Five Thousand Seven Hundred Sixty and NO/100 Dollars (\$85,760.00).

The Board of Mayor and Aldermen Approved this Agreement on the _____ Day of _____ 2019.

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 claims, judgments, losses, damages, and expenses to the extent such claims, 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. The City shall retain an ownership and property interest therein whether or not the Project is completed.

- 7.1.1 USE OF DATA SYSTEMS: The City maintains all rights to data systems and data (including derivative or hidden data such as metadata) created and used by Consultants though information supplied to the Consultant by the City.
- 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 any 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.

BY: _____
Consultant's Signature
TITLE: _____
Date: _____

BY: _____
Dr. Ken Moore
Mayor
Date: _____

Approved as to Form:

Maricruz R. Fincher, Staff Attorney

September 17, 2019

Mr. William Banks, PE
Engineering Department
City of Franklin
109 Third Avenue South, Ste 133
Franklin, TN 37064

**RE: Survey Proposal with Mobile LiDAR
Church Street Improvements
Downtown Franklin, Williamson County, Tennessee**

Civil Infrastructure Associates, LLC (CIA) is pleased to submit this proposal to provide land surveying services for the Church Street Improvements Project. CIA had previously completed a survey along Church St in 2018 for a water service improvement project and this survey will expand on the previously completed survey but will not duplicate or update that project.

Scope of Work

CIA will provide the services for the proposed survey limits (including backyards where shown within the provided limits) as specifically set forth below:

Task 1 – Survey Project Management

This task will consist of project coordination and administration. This project will require coordination with the Client to provide updates, coordinate field work, and other activities to help the Client keep the project stakeholders generally informed of the progress of the project. This project will also require a level of coordination with area property owners.

Task 2 – Survey Project Control

This task will consist of expanding the project control from the previous survey to cover this project area. This includes establishing horizontal positions and tying to the previously completed survey vertically.

Task 3 – Topographic Survey Field Work and Drawing Production

A topographic plan will be prepared to show the existing site conditions and will include the following:

- Survey shall meet the Tennessee Standards of Practice for Topographic Surveys.
- 1-foot contours will be shown, and spot elevations will be included at key locations where the contours are insufficient to model the surface.
- Generally, the topographic survey will be based on features and elevations extracted from a point cloud along with ground survey measurements taken generally at a 25-ft spacing.
- Existing features will be primarily based on the point cloud and CAD features will be created from point cloud measurements to produce a typical CAD linework deliverable.
- Features not visible from the point cloud will be collected using ground survey measurements and gaps or shadows in the point cloud may be augmented by ground survey data if determined necessary.

- Topographic survey will include natural ground elevations and noticeable terrain breaks.
- Survey will include existing features including curbing, pavement, pads, vegetation, walks, walls, signs, etc. along with existing utilities and drainage features within the survey limits, location & name of adjoining streets, etc.
- All survey areas will include visible above-ground evidence of utilities, including overhead power and communication lines, light poles, guy wires, transformers, & substations.
- Underground utility locations will be based on observable evidence and markings provided from 811 location request.
- Topographic survey will include any storm structures encountered within the area plus the next upstream and next downstream structures found outside of the area. Storm structures will include top elevations, invert elevations, opening type & size, and pipe size & material if pipe is accessible from the structure.
- Survey will include the necessary research and cursory field search for existing property corner monuments to prepare property boundaries for reference but will not necessarily include a full Category I boundary survey of the properties within the survey limits.
- Topographic survey will be merged with existing Church St. survey completed in 2018.

Task 4 – Survey Project Management

This task will consist of project coordination and administration. This project will require coordination with the Client to provide updates, coordinate field work, and other activities to help the Client keep the project stakeholders generally informed of the progress of the project. This project will also require a level of coordination with area property owners.

Task 5 – Mobile LiDAR Collection

This task will be performed by a sub-consultant at a lump sum fee. This task consists of mobilization, collection and processing of LiDAR data. LiDAR deliverable includes a geo-reference point cloud in a .las format along with geo-referenced images. LiDAR data will be geo-referenced to site control surveyed by CIA. LiDAR data will only include the Church St and intersecting road corridors.

Services Not Included

Any other services, including but not limited to the following, were not included in this estimate:

- Construction Layout
- Subsurface Utility Exploration (SUE) not specifically described in Task 3
- Hydrographic Surveying

Additional Services

Any other services not specifically provided for in the above scope will be billed as additional services and performed at our then current hourly rates.

Schedule

CIA will work to prepare a final deliverable within 12 weeks of a notice to proceed. Survey schedule assumes



no delays with gaining access to the project site, or delays caused by uncontrollable weather events.

Deliverables

CIA will provide survey information for the Client to use for design in a final AutoCAD DWG format to include all planimetric and topographic feature data. Survey coordinates will be delivered in an excel compatible format and a LandXML will be created of the surface/DTM file for each location. A point cloud will be delivered in a .las file format. If the Client wishes for the survey drawing to be included in a plan set or bid documents, CIA will provide sealed drawings in a pdf format with hardcopies available upon request. It is the Client's responsibility to provide CIA with any preferred file naming conventions, project sheet borders, or other project specific requirements. We will also provide a TDOT format Right-of-way acquisition table complete with property data.

Fee and Expenses

CIA will perform the above described services based on standard hourly rates. Field surveying can vary depending site conditions and access to areas to be surveyed. Please budget the following estimated amount to complete the requested survey using standard ground surveying techniques:

Estimated Budget **\$ 85,760.00**

Hourly fees will be invoiced upon completion of services performed. Payment will be due within 25 days of your approval of the invoice.

This project may benefit from remote mapping methods such as aerial photogrammetry or LiDAR combined with ground survey; however, the obstructed areas may require too much ground survey supplement for these methods to be cost effective. Prior to field work alternative solutions will be explored and the most cost-effective solution will be used with cost savings passed on to the client.

Closure

We appreciate the opportunity to provide these services to you. Please contact me if you have any questions.

Regards,
CIVIL INFRASTRUCTURE ASSOCIATES, LLC


Ryan W. Beasley, RLS
Survey Manager

attachments: Survey Limits
Fee Estimate

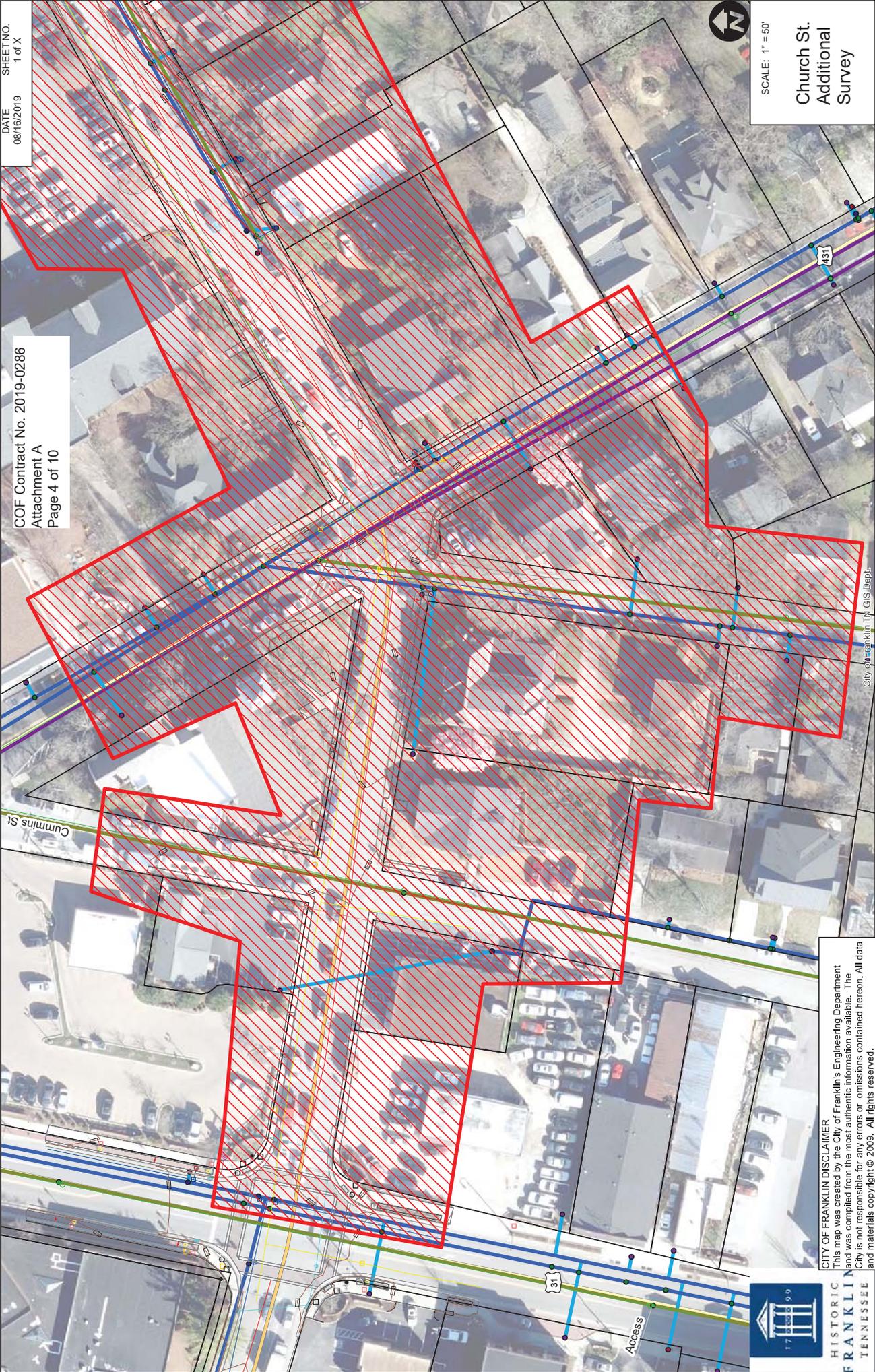


DATE 08/16/2019
SHEET NO. 1 of X

COF Contract No. 2019-0286
Attachment A
Page 4 of 10

SCALE: 1" = 50'

Church St. Additional Survey



City of Franklin, TN GIS Dept.

CITY OF FRANKLIN DISCLAIMER
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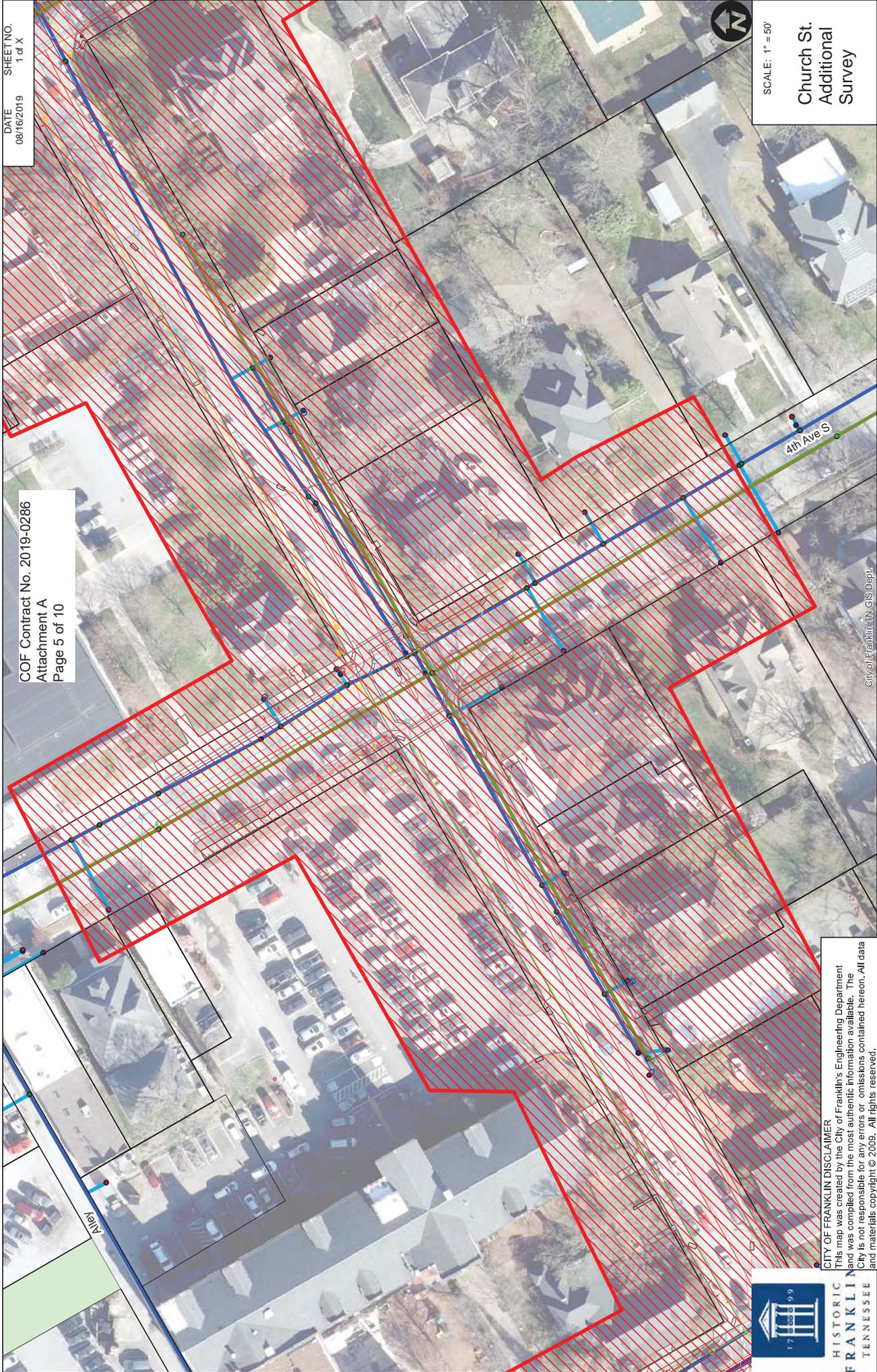
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SCALE: 1" = 50'

Church St. Additional Survey



City of Franklin TN GIS Dept.

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**HISTORIC
FRANKLIN
TENNESSEE**

DATE 08/16/2019
SHEET NO. 1 of X

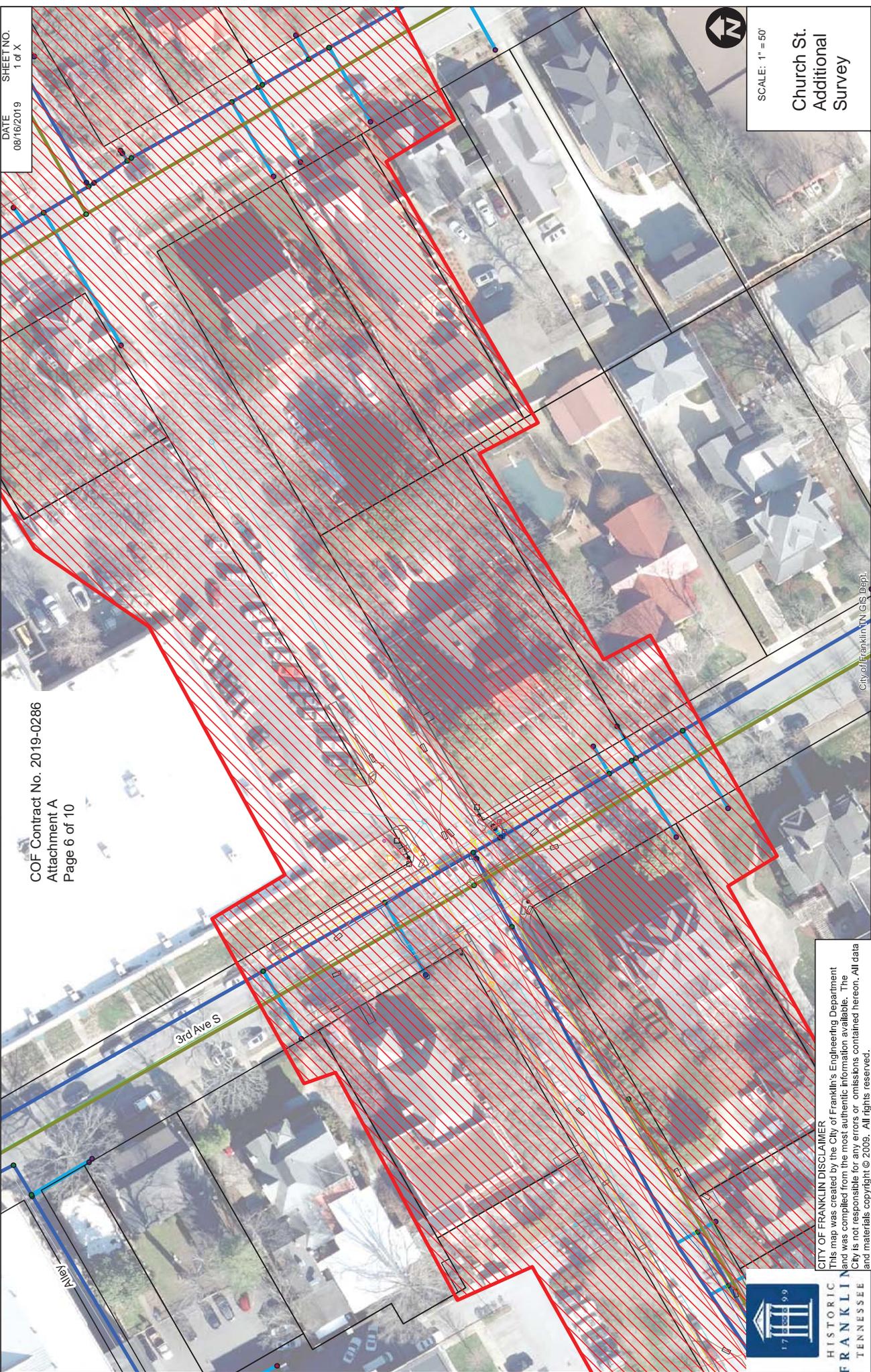
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SCALE: 1" = 50'

Church St. Additional Survey

City of Franklin TN GIS Dept.



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**HISTORIC
FRANKLIN
TENNESSEE**

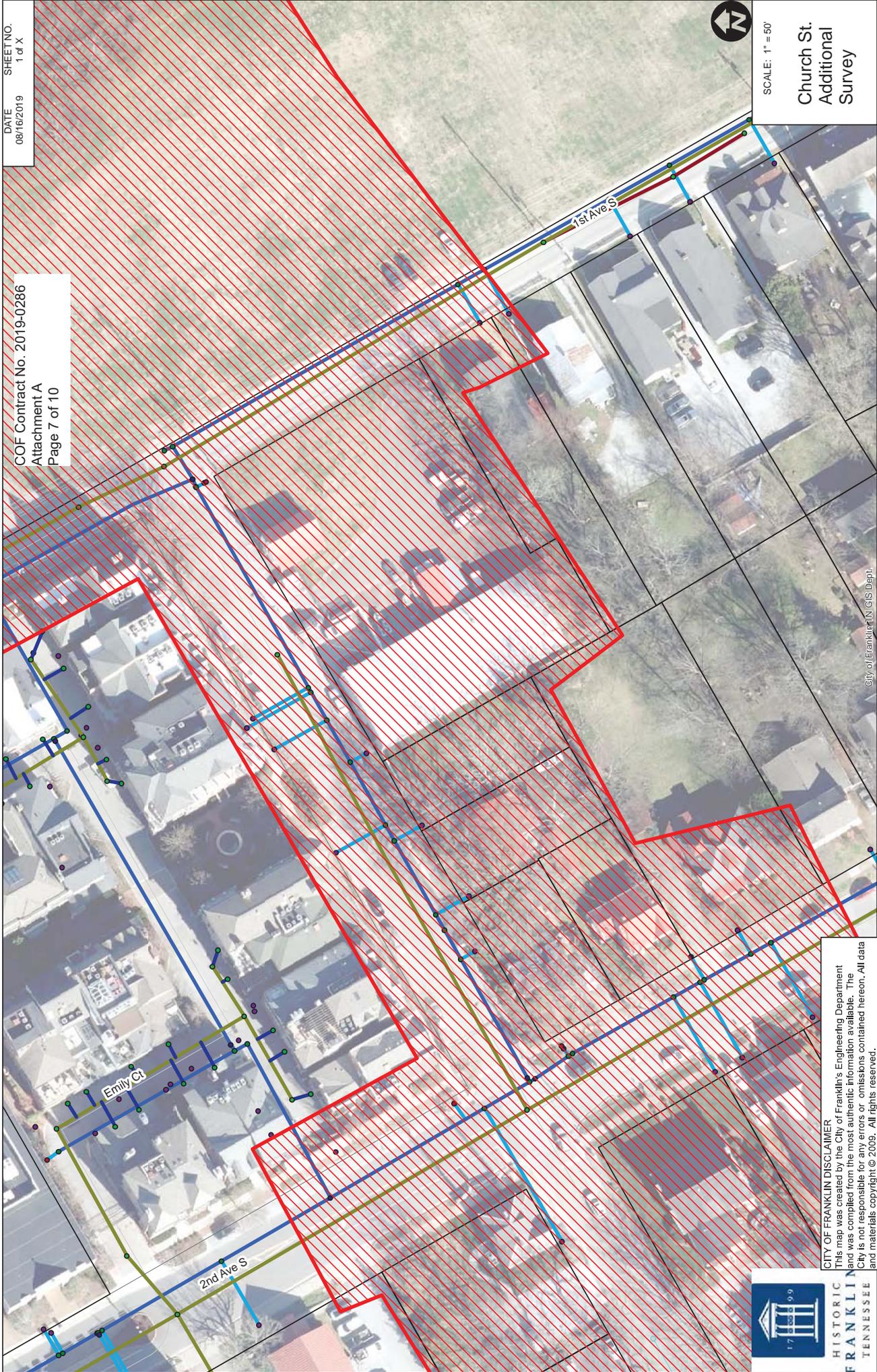
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SCALE: 1" = 50'

Church St. Additional Survey



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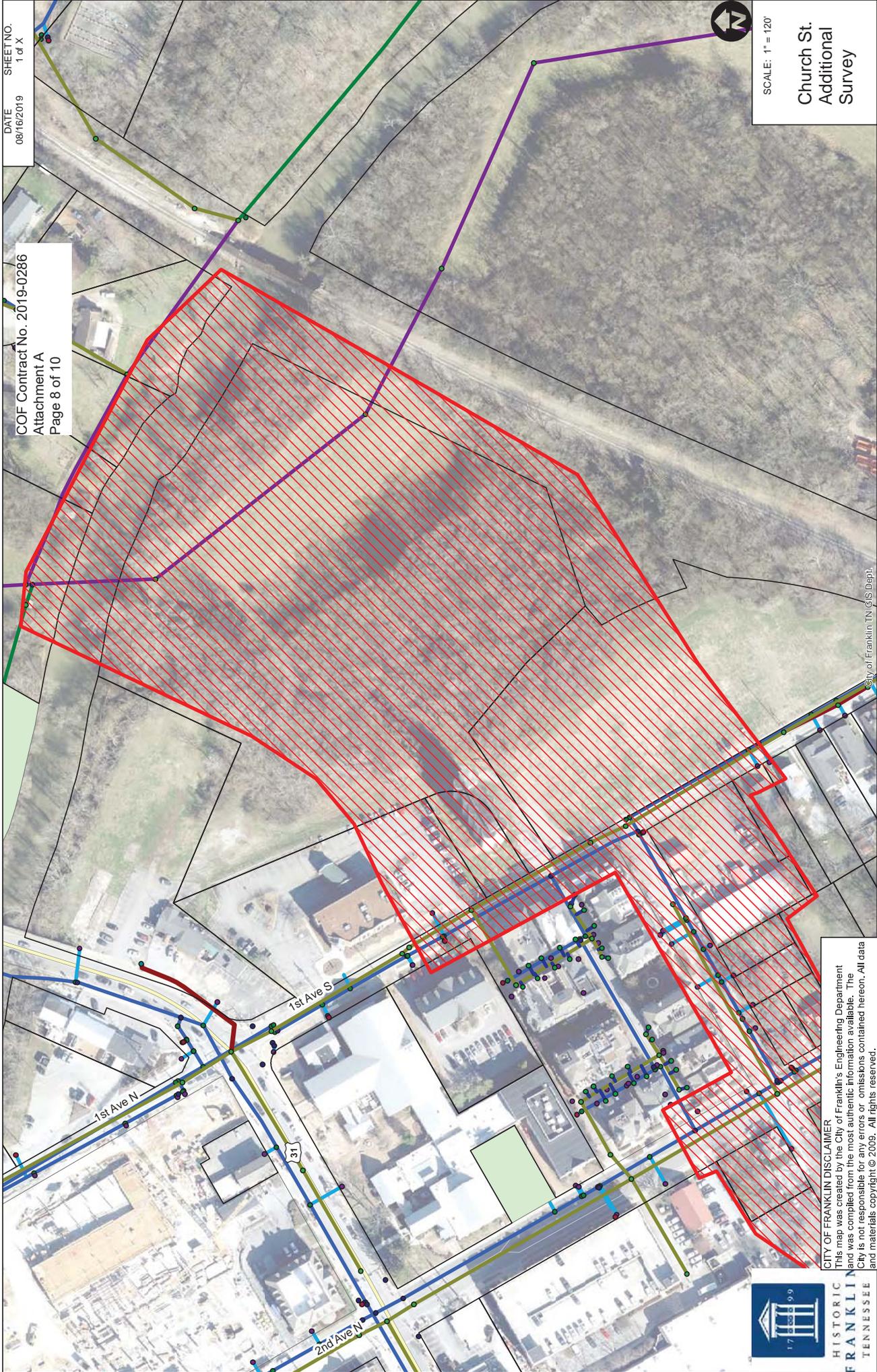
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COF Contract No. 2019-0286
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SCALE: 1" = 120'

Church St. Additional Survey



City of Franklin TN (GIS Dept)

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HISTORIC
FRANKLIN
TENNESSEE

SURVEY SCOPE & FEE ESTIMATE
2019 Church St Improvements
 City of Franklin, Tennessee
 Contract No. _____

SUMMARY TOTALS		Total Hours	Fee
TOTALS ACTUAL ==>	572.0	\$	85,760

FEE	TOTAL HOURS	PM/RLS	Survey Crew	Senior Technician	Lump Sum - Subconsultant
PERCENT OF TIME ==>	100%	27.62%	33.22%	39.16%	
TOTAL HOURS ==>	572.0	158.0	190.0	224.0	
Task 1.0 Pre-Survey Preparation	18.0	18.0			
Task 2.0 - Project Control	38.0	8.0	30.0		
Task 3.0 - Fieldwork & Production	452.0	92.0	160.0	200.0	
Task 4.0 - Project Management	64.0	40.0		24.0	
Task 5.0 - LIDAR Collection					\$8,470.0
TOTAL COST==>	\$	85,760	\$	22,400	\$
					8,470

Project Level Scope & Labor - Breakdown

Task Number	DESCRIPTION	TOTAL HOURS	PM/RLS	Survey Crew	Survey/CAD Technician
	Boundary & Topographic Survey - BUDGET	572.0	158.0	190.0	224.0
1.0	Pre-Survey Research & Reconnaissance				
1.1	Research and review record deeds and plats for properties and adjoiners as well as utilities and adjoining roadway plans	12.0	12.0		
1.2	Submit 811 Utility Location Requests	6.0	6.0		
2.0	Establish Horizontal & Vertical Control				
2.1	Establish Survey Control for the project with NAD83 TNSPC Horizontal & NAVD88 Vertical values.	38.0	8.0	30.0	
3.0	Survey Fieldwork & Production Scope:				
3.1	Boundary References: Recon/Recover/Locate existing property boundary evidence for the subject parcels and/or adjoining or nearby parcels; resolve property boundary fronts & sides based on evidence and record deed information obtained.	150.0	60.0	90.0	
3.2	Topographic Survey: Collect existing features including curbing, pavement, pads, vegetation, walks, walls, signs, etc. along with existing utilities and drainage features within the survey limits, and existing ground elevation data at intervals sufficient to produce 1' contours.	70.0		70.0	
3.3	Survey Map/Plat: Process survey data and produce an AutoCAD base map of the Topographic Survey in accordance with the Standards of Practice of the Tennessee State Board of Examiners for Land Surveyors. Prepare ROW acquisition table.	232.0	32.0		200.0
4.0	Management & Coordination				
4.1	Coordinations with Client and Area Property Owners	8.0	8.0		
4.2	Quality Control	48.0	24.0		24.0
4.3	Project Management	8.0	8.0		
5	Mobile LiDAR Collections				
5.1	Sub-consultant for Mobile LiDAR Collections Lump Sum Fee	\$8,470.0			

Notes:

Full topographic survey shall extend to faces of buildings and front yards within the survey limits as provided by the City of Franklin and will exclude but be merged with previous survey data collected for the 2018 Church St. survey project. Limits will exclude the river from top of bank to top of bank. Limits were provided by the City of Franklin in pdf format. Utility locations will be based on observable evidence and markings provided from 811 location request. Proposal includes deliverable of a Point Cloud resulting from the Mobile LiDAR. Existing conditions will be extracted from the point cloud to create CAD features and field survey will be included to ensure a complete data set for any features not visible from the scan.

Schedule:

Please allow 12 complete weeks for project delivery from written notice to proceed.