

RESOLUTION NO. R-2022-05

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BASTROP, TEXAS APPROVING AWARD OF A RESEARCH AGREEMENT WITH TEXAS A&M ENGINEERING EXPERIMENT STATION FOR THE GIS (GEOGRAPHIC INFORMATION SYSTEM) DATABASE PROJECT IN THE AMOUNT OF FIFTY-TWO THOUSAND TWO HUNDRED AND FIFTY-TWO DOLLARS (\$52,252.00); AUTHORIZING THE CITY MANAGER TO EXECUTE ALL NECESSARY DOCUMENTS; PROVIDING FOR A REPEALING CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE.

WHEREAS, The City of Bastrop is improving, organizing, updating and implementing its GIS data files; and

WHEREAS, The City Council understands that the ability to better understand City's current and future needs rely on having better data; and

WHEREAS, The City Council understands the importance of having accurate data to enable organization-wide mapping, analysis, data management, sharing, and collaboration capabilities; and

WHEREAS, The City of Bastrop in coordination with Texas A&M Engineering Experiment Station will also develop a roadmap to guide the City on implementing and maintaining the GIS data files.

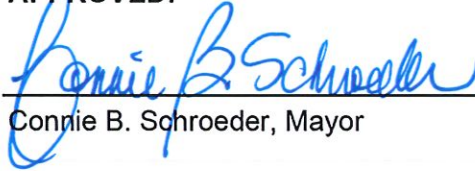
NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF BASTROP, TEXAS:

Section 1: That the City Manager is hereby authorized to execute a research agreement with Texas A&M Engineering Experiment Station in the amount of fifty-two thousand two hundred and fifty-two dollars (\$52,252.00).

Section 2: That this Resolution shall take effect immediately upon its passage.

DULY RESOLVED AND ADOPTED by the City Council of the City of Bastrop this 11th day of January 2022.

APPROVED:



Connie B. Schroeder, Mayor

ATTEST:



Ann Franklin, City Secretary

APPROVED AS TO FORM:



Alan Bojorquez, City Attorney

**RESEARCH AGREEMENT NO. M2201065
BETWEEN THE
TEXAS A&M ENGINEERING EXPERIMENT STATION
AND
CITY OF BASTROP**

This RESEARCH AGREEMENT ("Agreement") is between the Texas A&M Engineering Experiment Station, a member of The Texas A&M University System and an agency of the State of Texas, having a place of business at 400 Harvey Mitchell Parkway South, Suite 300, College Station, Texas 77845, ("TEES"), and the City of Bastrop, a Home Rule Municipal Corporation, duly incorporated and validly existing under the laws of the State of Texas, with address at 1311 Chestnut Drive, Bastrop, Texas 78602, ("SPONSOR"), each of the aforementioned being referred to individually as the "Party" or collectively as the "Parties";

TEES and Sponsor each desire to encourage and facilitate the discovery, dissemination and application of new knowledge, and Sponsor desires to support this research ("Research") which results are of public use and necessity. TEES will share its findings with SPONSOR. SPONSOR's findings are crucial for SPONSOR's infrastructure;

The Parties agree as follows:

1. **STATEMENT OF WORK.** TEES shall use its reasonable efforts to perform the Research entitled "Geographic Information System (GIS) Databases and Develop Asset Management Framework" as further described in the attached Appendix A. The statement of work shall not be changed except by written amendment to this Agreement signed by the Parties.

Nothing in this Agreement limits the freedom of researchers, whether as participants in this Agreement or not, to engage in similar inquiries made independently under other grants, contracts or agreements with parties other than SPONSOR.

2. **PRINCIPAL INVESTIGATOR.** The Research will be supervised by Dr. Francisco Olivera, Ph.D., P.E., F.ASCE of the Department of Civil Engineering to serve as Principal Investigator. If, for any reason, they are unable to continue to serve as Principal Investigator(s) and a successor acceptable to both TEES and the SPONSOR is not available, this Agreement shall be terminated for convenience as provided in Article 7. TEES will communicate with SPONSOR any change on the Principal Investigator or any other staff, within seven (7) days of the change.
3. **PERIOD OF PERFORMANCE.** The period of performance shall commence on the date last signed by the Parties (the "Effective Date") and, unless earlier terminated in accordance with this Agreement, ending one year from that date (the "Completion Date").
4. **PRICE AND PAYMENT.**
As compensation for the performance of this Agreement, SPONSOR shall pay TEES a cost-reimbursable not-to-exceed amount of \$52,252.00 in U.S. dollars excluding taxes or impost of any kind, in accordance with the budget in Appendix A. TEES shall submit monthly invoices to SPONSOR's address below and SPONSOR shall remit payment to TEES within 30 days of receipt of invoice.

Costs shall be incurred in accordance with TEES's current policies and procedures. Transfers between budget line items are allowable without SPONSOR prior approval.

Invoices for compensation shall be submitted to the following address:

City of Bastrop
Attn. Fabiola de Carvalho
Director of Engineering and Capital Project Management
1311 Chestnut Dr.
Bastrop, Texas 78602
engineering@cityofbastrop.org

Checks should be made to Texas A&M Engineering Experiment Station and payment forwarded to the following address:

TEES – Texas A&M Sponsored Research Services
400 Harvey Mitchell Parkway South, Suite 300
College Station, Texas 77845-4375
Attn: Deposits
srsdepositsach@tamu.edu

5. TITLE TO EQUIPMENT. TEES shall retain title to all equipment, supplies and other items purchased and/or fabricated with funds provided by SPONSOR under this Agreement except those expressly made part of a deliverable.
6. DELIVERABLES. The Principal Investigator shall furnish SPONSOR with deliverables and reports as specified in Appendix A.
7. TERMINATION.
 - A. Performance under this Agreement may be terminated for convenience by either Party upon 30 days written notice.
 - B. In addition to the termination right set forth above in 7A hereof, either Party may terminate this Agreement effective upon written notice to the other Party, if the other Party breaches any of the terms and conditions of this Agreement and fails to cure such breach within 30 days after receiving written notice thereof. In the event of an incurable breach, the non-breaching Party may terminate this Agreement effective immediately upon written notice to the breaching Party.
 - C. Upon termination, SPONSOR shall reimburse TEES as specified in Article 4 for all costs and non-cancelable commitments incurred in the performance of the Research up to the date of termination, such reimbursement not to exceed the total amount specified in Article 4. Upon early termination, TEES agrees to reimburse SPONSOR any funds that have been received but remain unexpended at the time of termination, except for those funds needed to pay for non-cancelable obligations.

8. INTELLECTUAL PROPERTY.

- A. "Intellectual Property" means all intellectual property, including without limitation, electronic or otherwise, technical information, know-how, copyrights, patents and trade secrets, ideas, thoughts, concepts, processes, techniques, data, development tools, models, drawings, specifications, prototypes, inventions and software.
- B. "Project IP" or "Project Intellectual Property" shall mean all Intellectual Property that is authored or conceived and reduced to practice in the performance of the Research.
- C. Ownership of Project IP shall be as follows:
 - (i) Title to any Project IP made or conceived solely by employees of TEES vests in TEES.
 - (ii) Title to any Project IP made or conceived solely by employees of SPONSOR vests in SPONSOR.
 - (iii) Title to any Project IP made or conceived jointly by employees of both TEES and SPONSOR (hereinafter called "Joint IP") vests jointly in TEES and SPONSOR.
- D. TEES shall promptly disclose all Project IP and Joint IP in sufficient detail as to allow SPONSOR's evaluation ("Invention Disclosure"), and SPONSOR shall have a time-limited option to negotiate a license to TEES's interests in such disclosed Project IP as set forth in Article 9. Any such Invention Disclosure shall be considered Confidential Information.
- E. For Joint IP conceived under this Agreement, TEES and SPONSOR will be independent owners of any corresponding patent rights under 35 USC 262 with no obligation of accounting to one another, in the absence of a written agreement to the contrary.

9. INTELLECTUAL PROPERTY RIGHTS.

- A. For a period of 90 days from the receipt by SPONSOR of an Invention Disclosure, or from the date of SPONSOR's identification of Project IP and disclosure of same to TEES, SPONSOR shall have, to the extent that TEES has the legal right to do so and in consideration of TEES's receipt of SPONSOR's funding of the Research, an exclusive option to negotiate a commercial license, to TEES's interests in the disclosed Project IP ("Option Period").
- B. At any time during the Option Period, SPONSOR may exercise its option by written notice to TEES. Upon exercise, the Parties shall negotiate diligently and in good faith, for a period not to exceed 90 days ("Negotiation Period"), an exclusive, sublicensable (or nonexclusive and non-sublicensable, at SPONSOR's option) royalty-bearing commercial license to TEES's interest in Project IP. The terms of such license shall be commercially reasonable and shall provide, in the case of an exclusive license, for diligent development of the Project IP towards commercialization by SPONSOR.
- C. During the Option Period or Negotiation Period, TEES may, at its sole election and expense, file for statutory intellectual property protection for the optioned Project IP. SPONSOR may also request that TEES file for statutory intellectual property protection

for the optioned Project IP, and in such case SPONSOR shall reimburse TEES for its patent expenses within 30 days of receiving an invoice for such expenses.

- D. If the Option Period elapses without exercise, or the Negotiation Period elapses without the execution of a license agreement, SPONSOR shall have no further rights to the Intellectual Property. However, the Parties may extend either the Option Period or Negotiation Period by written agreement.
- E. To the extent TEES has the legal right to do so and in consideration of TEES's receipt of SPONSOR's funding of the Research, TEES shall grant to SPONSOR a non-exclusive, royalty-free license with the right to sublicense to any TEES Project Intellectual Property developed under this Agreement for non-commercial research and development use only.

10. CONFIDENTIAL INFORMATION.

- A. Confidential Information. It is contemplated that the disclosing Party ("Disclosing Party") may be disclosing certain confidential and/or proprietary information to the receiving Party ("Receiving Party") unknown to the general public (hereinafter referred to as "Confidential Information"). The Parties agree the terms of this Article shall apply to any confidential and/or proprietary information that may be disclosed under this Agreement, and that such Confidential Information shall be used solely for the benefit of the Disclosing Party. Receiving Party acknowledges the above-described Confidential Information is confidential and/or proprietary to the Disclosing Party and is claimed to be a valuable, special, and unique asset of the Disclosing Party. Notwithstanding, the Parties acknowledge that SPONSOR if a public entity subject to the Texas Public Information Act. SPONSOR will notify TEES of any request for information regarding the scope of work on this Agreement.
- B. Subject to the limitations set forth in D below, all non-public information exchanged between the Parties shall be deemed to be Confidential Information. In order for the Parties to appreciate when non-public information is being conveyed, to the reasonable extent possible, information disclosed in tangible form shall be clearly identified at the time of disclosure as being Confidential Information by an appropriate and conspicuous marking. Similarly, to the reasonable extent possible, information disclosed in intangible form (e.g., oral or visual) shall be identified as being Confidential Information at the time of disclosure, and shall be confirmed as such in writing to the Receiving Party within 30 days after such disclosure.
- C. Confidential Information shall include as examples, without limitation: All information of a Disclosing Party which has been maintained as confidential, including draft publications, technical reports, research plans and results, processes, techniques, know-how, biological materials, computer source code, diagrams, electronic files, financial information, customer lists, trade secrets, invention disclosures, patent applications or test data; all existing and future plans of the Disclosing Party, which have been maintained as confidential, including plans relating to existing and planned products, research, development, engineering, manufacturing, marketing, servicing, or financing; all past, present and future business or commercial relationships of the Disclosing Party, which have been maintained as confidential, including suppliers, service providers, clients, customers, employees, or investors; or information that has

generally been considered and treated by the Disclosing Party as confidential prior to the time of disclosure and is clearly identified as "Confidential" or "Proprietary" when disclosed to the other Party.

- D. Exclusions from Confidential Information: Confidential Information shall not be deemed to include information that the Receiving Party can demonstrate by competent written proof:
- (i) is now, or hereafter becomes, publicly known or available through no act or failure to act on the part of the Receiving Party;
 - (ii) was known by the Receiving Party at the time of receipt of such information as evidenced by its records;
 - (iii) is hereafter furnished to the Receiving Party by a third party as a matter of right and without violating any confidentiality obligation to the Disclosing Party; or
 - (iv) was independently developed by employees of the Receiving Party without use or knowledge of the Confidential Information of the Disclosing Party.
- E. Use of Confidential Information: Each Party agrees it will use the Confidential Information of the other solely for the Purpose and for no other purpose whatsoever. In particular, the Receiving Party shall not file any patent application containing any claim to subject matter derived in whole or in part from the Disclosing Party's Confidential Information. The Confidential Information, including any documents, drawings, sketches, designs, materials or samples supplied hereunder, shall remain the property of the Party disclosing the same and no rights or licenses are granted to the other Party in the same, whether patented or not, except the limited right to use the Confidential Information as set forth above.
- F. Confidential Obligations: For a period of 3 years from the date any such Confidential Information is disclosed, the Parties agree to exert reasonable efforts to maintain each other's Confidential Information in confidence and to take all necessary and reasonable precautions to prevent its unauthorized disclosure and to ensure it does not fall into the public domain or the possession of unauthorized third parties. Each Party shall restrict access to the Confidential Information of the other Party to those officers, employees, consultants, agents, and students (in the case of TEES) of the Receiving Party having a need to know the Confidential Information to fulfill the Purpose, provided that, each Party shall ensure that any individual having access to the Confidential Information is made expressly aware of the obligation of confidence according to the terms hereof prior to gaining access to the Confidential Information. To the extent that a Party perceives a need for disclosure of the Confidential Information it receives from the other Party to any third party, such third party shall be prospectively identified and written permission to disclose shall be obtained from Disclosing Party. A written non-disclosure agreement shall be obtained from the third party contractor and a copy shall be promptly provided to the Party whose Confidential Information is being disclosed.
- G. Required Disclosure: If a Receiving Party is legally required by court order, law, or other governmental regulation or authority to disclose certain Confidential Information

received from a Disclosing Party, such disclosure may be made only after giving written notice to the Disclosing Party and providing a reasonable opportunity for pursuit of appropriate process to prevent or limit such disclosure. In any event, required disclosure shall be limited to only that portion of the Confidential Information which is legally required to be disclosed. The Receiving Party is not however, required to pursue any claim, defense, cause of action, or legal process or proceeding on the Disclosing Party's behalf.

- H. Return of Documents: It is understood that the Confidential Information disclosed by each Party shall remain the property of the Disclosing Party. All material or documents furnished by the Disclosing Party, including all copies, shall upon request of the Disclosing Party, or in any event at the termination of this Agreement, be promptly returned to the Disclosing Party or destroyed, except the Receiving Party may securely retain one copy in its files solely for record purposes of its obligations under this Agreement.
11. PUBLICATIONS. TEES may publish the results of the Research, except for SPONSOR's Confidential Information, after providing the SPONSOR with a 30-day period in which to review each publication to identify patentable subject matter and to identify any inadvertent disclosure of Confidential Information. If necessary to permit the preparation and filing of U.S. patent applications, TEES may agree to an additional review period not to exceed 60 days. Such delay shall not, however, be imposed on the filing or publication of any student thesis or dissertation. Failure to respond within 30 days shall constitute de facto agreement of SPONSOR that no delay in publication is necessary. Any further extension will require agreement between the SPONSOR and TEES.
12. NOTICES/COMMUNICATIONS. All notices to Parties under this Agreement shall be in writing and sent to the names and addresses stated below under NOTICES. Either Party to the Agreement may change such name and address by notice to the other in accordance herewith, and any such change shall take effect immediately upon receipt of such notice. Other communications between the Parties can be addressed as stated below under COMMUNICATIONS.

NOTICES to TEES:

Sponsored Research Services
400 Harvey Mitchell Parkway, South, Suite 300
College Station, TX 77845-4375
Telephone: 979-862-6777
Facsimile: 979-862-3250
Email: awards@tamu.edu

NOTICES to SPONSOR:

City of Bastrop
Attn. Fabiola de Carvalho
Director of Capital Projects
1311 Chestnut Dr.
Bastrop, Texas 78602
fdecarvalho@cityofbastrop.org

COMMUNICATIONS to TEES:

CONTRACT NEGOTIATIONS/ADMINISTRATION:

Sponsored Research Services
400 Harvey Mitchell Parkway, S, Suite 300
College Station, TX 77845-4375
Attn: Mercy Muyia
Telephone: 979-862-6777
Facsimile: 979-862-3250
Email: awards@tamu.edu

TECHNICAL:

Texas A&M Engineering Experiment Station
Department of Civil Engineering
Attn: Francisco Olivera
Telephone: 979-845-1404
Email: folivera@tamu.edu

COMMUNICATIONS to SPONSOR:

ADMINISTRATION:

City of Bastrop
1311 Chestnut Drive, Bastrop, Texas 78602
Attn: Trey Job – Assistant City Manager for Development
Telephone: 512-332-8800
Facsimile: 512-3328819
Email: tjob@cityofbastrop.org

TECHNICAL:

City of Bastrop
1311 Chestnut Drive, Bastrop, Texas 78602
Attn: Fabiola M. de Carvalho
Telephone: 512-332-8840
Facsimile: 512-332-8847
Email: fdecarvalho@cityofbastrop.org

13. EXPORT ADMINISTRATION. The results of the Research obtained by TEES are expected to be ordinarily published and shared broadly with the scientific community, and therefore are expected to constitute "fundamental research" as defined under the International Traffic in Arms Regulations (ITAR, 22 CFR Sections 120-130) and the Export Administration Regulations (EAR, 15 CFR Sections 730-774). If SPONSOR discloses to TEES any Confidential Information that is subject to export control, SPONSOR will alert TEES in writing at the time of disclosure, at which time TEES will advise SPONSOR if it desires to take receipt of the export-controlled materials. Neither Party shall export or re-export any United States-origin technology, software, or products, or the direct products of that technology, software or products under this Agreement, in violation of United States export control regulations.
14. INDEPENDENT CONTRACTOR. For the purposes of this Agreement and all services to be provided hereunder, the Parties shall be, and shall be deemed to be, independent contractors and not agents or employees of the other Party. Neither Party may make any statements,

representations, or commitments of any kind, or to take any action which are binding on the other Party, except as may be explicitly provided for herein or authorized in writing.

15. SEVERABILITY. If any of the provisions of this Agreement is rendered or declared illegal for any reason, or shall be invalid or unenforceable, the remainder of this Agreement shall remain in full force and effect if the essential terms of this Agreement remain, valid, legal, and enforceable.
16. ASSIGNMENT. This Agreement may not be assigned in whole or in part by any of the Parties without prior written consent of the other Party.
17. PUBLICITY. Neither Party may use the names of the other Party, nor of any of its employees or members, nor any adaptation thereof, in any advertising, promotional or sales literature or news release without the prior written consent obtained from the other Party, as applicable in each case. Any advertising referring to the research results of this Agreement shall be worded as not to imply endorsement by any member of The Texas A&M University System of a specific product or producer and shall reflect credit on TEES, its personnel and activities under this Agreement.
18. HEADINGS. The headings used herein are for reference and convenience only and shall not enter into the interpretation hereof.
19. DISPUTE RESOLUTION. SPONSOR shall use the dispute resolution process provided in Chapter 2260 of the Texas Government Code to attempt to resolve a dispute arising under this contract and such process is a required prerequisite to suit in accordance with Chapter 107, Texas Civil Practice and Remedies Code. SPONSOR must submit written notice of a claim of breach of contract under this chapter to TEES Deputy Director.
20. INDEMNITY. RESERVED
21. MISCELLANEOUS.
 - A. This Agreement is binding upon and shall inure to the benefit of the Parties, their representatives, successors and permitted assigns. No failure or successive failures on the part of SPONSOR, its successors or assigns, to enforce any covenant or agreement, and no waiver or successive waivers on its or their part of any condition of this Agreement shall operate as a discharge of such covenant, agreement, or condition, or render the same invalid, or impair the right of SPONSOR, its successors and assigns, to enforce the same in the event of any subsequent breach or breaches by TEES, its successors or assigns.
 - B. This Agreement is the entire agreement between the Parties relative to the subject matter, and may only be modified or amended by a written agreement signed by both Parties. This Agreement and all of the transactions that it contemplates shall be governed and construed in accordance with the laws of the State of Texas. Each Party shall comply with all laws, regulations and other legal requirements applicable to that Party in connection with this Agreement, including but not limited to any legal requirements applicable to SPONSOR's use of the results of the Research, any intellectual property of TEES or the research results, laws and regulations involving human subjects, animals (including animals delivered to SPONSOR), and hazardous agents and materials.

C. If either Party fails to fulfill its obligations hereunder (other than an obligation for the payment of money), when such failure is due to an act of God, or other circumstance beyond its reasonable control, including but not limited to fire, flood, civil commotion, riot, war (declared and undeclared), revolution, acts of foreign or domestic terrorism, or embargos, then said failure shall be excused for the duration of such event and for such a time thereafter as is reasonable to enable the Parties to resume performance under this Agreement, provided however, that in no event shall such time extend for period or more than 30 days.

D. *TEES makes no warranties, express or implied, as to any matter, including, without limitation, warranties as to the conduct, completion, success or particular results of the research, or the condition, ownership, merchantability, or fitness for a particular purpose of the research results or any intellectual property or that the use of any intellectual property or research results will not infringe any intellectual property right of a third party. TEES shall not be liable for any direct, indirect, consequential, punitive or other damages suffered by sponsor or any other person resulting from the research or the use of any intellectual property or research results.*

E. To the degree that either or both of the Parties find it convenient to employ their standard forms of purchase order or acknowledgment of order in administering the terms of this Agreement, it or they may do so but none of the terms and conditions printed or otherwise appearing on such form shall be applicable except to the extent that it specifies information required to be furnished by either Party. The terms proposed by any such form are specifically objected to and shall not be used as a basis for any contract.

F. All representations, warranties, covenants and agreements made in this Agreement and which by their express terms or by implication are to be performed after the execution and/or termination hereof, or are prospective in nature, shall survive such execution and/or termination, as the case may be.

G. TEES is an agency of the State of Texas and nothing in this Agreement waives or relinquishes the right of TEES to claim any exemptions, privileges and immunities as may be provided by law. Likewise, SPONSOR is a municipality of the State of Texas and nothing in this Agreement waives or relinquishes the right of (SPONSOR) to claim any exemptions, privileges and immunities as may be provided by law.

22. ORDER OF PRECEDENCE. In the event of an inconsistency between the provisions of this Agreement, the inconsistency shall be resolved by giving precedence in the following order:

- A. Research Agreement;
- B. Appendix A-Statement of Work;
- C. Other provisions, documents and/or specifications which are attached to and expressly incorporated by reference into this Agreement.

23. COUNTERPARTS. This Agreement may be executed in duplicate counterparts, which taken together shall constitute one single representation between the Parties.

The Parties have caused this Agreement to be executed by their authorized representative.

Texas A&M Engineering Experiment Station

Lester L.

By: Crenwelge

Digitally signed by Lester L.
Crenwelge
Date: 2021.12.22 17:02:21
-06'00'

M/S

Name: Lester L. Crenwelge *acc.*

Title: Associate Director, Contracts and Grants

Date: 12/22/2021

City of Bastrop

By: 

Name: Paul A. Hofmann

Title: City Manager

Date: 1/14/22

APPENDIX A
STATEMENT OF WORK

Update Geographic Information System (GIS) Databases and Develop Asset Management Framework for the City of Bastrop

Francisco Olivera and Ivan Damnjanovic, Texas A&M University

Budget Justification

Trip to Bastrop. During the project, two trips to Bastrop will be conducted. The cost of mileage of each trip is estimated in \$100.

Workshop. A workshop at Bastrop will be held. Expenses include two trips to Bastrop as well as supplies needed for conducting the event.

Graduate Student. Student worker appointed for 12.5 hours per week, for one year, at a rate of \$20 per hour.

Francisco Olivera. One month of summer salary or equivalent.

Ivan Damnjanovic. One quarter of a month of summer salary or equivalent.

Item	Approximate cost
Trip to Bastrop	\$200
Workshop	\$1,500
Graduate student	\$13,550
Francisco Olivera	\$15,162
Ivan Damnjanovic	\$4,078
Direct cost	\$34,490
Indirect cost (51.5%)	\$17,762
Total	\$52,252

Update Geographic Information System (GIS) Databases and Develop Asset Management Framework for the City of Bastrop

Francisco Olivera and Ivan Damnjanovic, Texas A&M University

1. Goals and Requirements

The goal of this project is to update the City of Bastrop's infrastructure spatial database and make it suitable for the future use in asset management applications.

The updating of the infrastructure spatial database will be conducted in the most recent Geographic Information System (GIS) software platform, ArcGIS Pro. It will consist of digitizing spatial data and entering their corresponding attributes provided by the City. From interactions with the City, it is understood that there are complete areas that lack spatial data. Spatial features will be attributed with information provided by the City but also, as part of the development of the asset management framework, recommendations will be made to include additional attributes that are deemed to help asset management in the future.

2. Scope of Work

Task 1. Asses the Status of the Existing Infrastructure Spatial Database

In this task, we will survey the City's existing infrastructure database. This survey will pay particular attention to: (1) consistency in the file format of the different datasets; (2) consistency in the naming of the datasets, and in the naming of the attributes; (3) consistency in the spatial accuracy; and (4) assessment of the area covered by the current datasets.

Task 2. Develop a Consistent Database Schema for the Infrastructure Spatial Database

In this task, and depending on the findings of Task 1, we will propose a database schema consisting of a geodatabase and, if needed, feature datasets to store all the infrastructure data. Additionally, feature class and attributes names, and suggested relationships between classes, will be proposed.

Task 3. Populate the Proposed Infrastructure Spatial Database

In this task, we will import all existing spatial data to the proposed geodatabase and organize them according to the database schema of Task 2. Feature classes and attributes will/might-need-to be renamed to match the database schema.

Task 4. Digitize Spatial Data

In this task, we will digitize spatial data in dwg or pdf format provided by the City of Bastrop. Once digitized, they will be imported to the proposed geodatabase and organize them according to the database schema of Task 2. Feature class and attribute names will match the geodatabase schema.

Task 5. Training Workshop

In this task, we will organize a one-day workshop to present the details of the database schema. This presentation will include a discussion on the relevance of each attribute and on how they can be used for asset management. We will also provide guidelines for updating it as future data becomes available. Finally, tips for transitioning to ArcGIS Pro from ArcGIS and learning materials will be provided.

Task 6. Prepare Final Report

In this task, we will prepare a final report documenting Tasks 1 through 5.

3. Schedule and Budget

The proposal is structured as a 1 year project.

Task\Month	Hrs	1	2	3	4	5	6	7	8	9	10	11	12
Task 1	150												
Task 2	190												
Task 3	190												
Task 4	300												
Task 5													
Task 6	40												

The estimated resources required to complete the project scope as listed below:

Item	Approximate cost
Trip to Bastrop	\$200
Workshop	\$1,500
1 Graduate student (hourly)	\$13,550
1.5 months Francisco Olivera salary	\$15,162
0.5 months Ivan Damnjanovic salary	\$4,078
Direct cost	\$34,490
Indirect cost (51.5%)	\$17,762
Total	\$52,252