

AMENDMENT TO AGREEMENT FOR ENGINEERING SERVICES

THE STATE OF TEXAS §
 COUNTY OF HARRIS §

THIS AMENDMENT TO AGREEMENT is made, entered into, and executed by and between the **Harris County Flood Control District**, a body corporate and politic under the laws of the State of Texas, hereinafter called "District," and **Gauge Engineering, LLC**, a Texas limited liability company, hereinafter called "Engineer."

WITNESSETH, THAT

WHEREAS, the District and Engineer previously entered into an Agreement for Engineering Services ("the Agreement"), dated April 7, 2020, on Purchase Order No. P0000001101, to provide engineering services for a feasibility study to evaluate the drainage area of Panther Creek located in Galena Park, the City of Houston and unincorporated Harris County, Harris County Flood Control Unit G112-00-00; and

WHEREAS, the District requires additional engineering services to increase the scope to include an additional analysis to modify the flood reduction recommendations so that they are self-mitigating and constructible without added detention as provided under Section I, Character and Extent of Services and Appendix B incorporated herein; and

WHEREAS, the District and the Engineer now desire the addition of Appendix B, General Scope of Services to the Agreement; and

WHEREAS, the Engineer is willing to provide the necessary additional engineering services for further consideration; and

WHEREAS, the District and the Engineer now desire to increase the Limit of Appropriation by \$300,000.00, to \$850,000.00.

NOW, THEREFORE, the District and the Engineer, in consideration of the mutual covenants and agreements herein contained, do mutually agree as follows:

SECTION VII of the Agreement, entitled, "Limit of Appropriation," reading:

The Engineer clearly understands and agrees, such understanding and agreement being of the absolute essence to this Agreement, that the District shall have available the total maximum sum of \$550,000.00 specifically allocated to fully discharge any and all liabilities incurred by the District pursuant to the terms of this Agreement, and that the total maximum compensation the Engineer may become entitled to hereunder and the total maximum sum the District shall become liable to pay to the Engineer hereunder shall not under any conditions, circumstances, or interpretations hereof exceed the said total maximum sum provided for in this Section and certified as available therefor by the County Auditor as evidenced by the issuance of a purchase order from the Harris County Purchasing Agent.

is hereby amended to read:

The Engineer clearly understands and agrees, such understanding and agreement being of the absolute essence to this Agreement, that the District shall have available the total maximum sum of \$850,000.00 specifically allocated to fully discharge any and all liabilities incurred by the District pursuant to the terms of this Agreement, and that the total maximum compensation the Engineer may become entitled to hereunder and the total maximum sum the District shall become liable to pay to the Engineer hereunder shall not under any conditions, circumstances, or interpretations hereof exceed the said total maximum sum provided for in this Section and certified as available therefor by the County Auditor as evidenced by the issuance of a purchase order from the Harris County Purchasing Agent.

SECTION X of the Agreement, entitled, "Compliance and Standards," reading:

The Engineer agrees to perform the work hereunder in accordance with generally accepted standards applicable thereto and shall use that degree of care and skill commensurate with the Engineer's profession to comply with all applicable state, federal, and local laws, ordinances, rules, and regulations relating to the work to be performed hereunder and the Engineer's performance. The Engineer represents that, prior to performing hereunder, it has or shall obtain all necessary licenses, ownership, or permission for use of any and all proprietary information, materials, or trade secrets employed in the performance of work hereunder for the District and agrees that he shall not copy, reproduce, recreate, distribute, or use any such proprietary information, materials, or trade secrets of any third party, except to the extent permitted by such third parties, or as otherwise authorized by law.

In accordance with TEX. GOV'T CODE ANN. § 2270.002, the Engineer warrants and represents that it does not boycott Israel and agrees that it will not boycott Israel during the term of this contract.

The Engineer represents and certifies that, at the time of execution of this Agreement, the Engineer (including, in this provision, any wholly owned subsidiary, majority-owned subsidiary, parent company or affiliate of the same) is not listed by the Texas Comptroller of Public Accounts pursuant to Chapters 2252 or 2270 of the Texas Government Code, nor will the Engineer engage in scrutinized business operations or other business practices that could cause it to be listed during the term of this Agreement.

is hereby amended to read:

The Engineer agrees to perform the work hereunder in accordance with generally accepted standards applicable thereto and shall use that degree of care and skill commensurate with the Engineer's profession to comply with all applicable state, federal, and local laws, ordinances, rules, and regulations relating to the work to be performed hereunder and the Engineer's performance. The Engineer represents that, prior to performing hereunder, he has or shall obtain all necessary licenses, ownership, or permission for use of any and all proprietary information, materials, or trade secrets employed in the performance of work hereunder for the District and agrees that it shall not copy, reproduce, recreate, distribute, or use any such proprietary information, materials, or trade secrets of any third party, except to the extent permitted by such third parties, or as otherwise authorized by law.

In accordance with TEX. GOV'T CODE ANN. § 2271.002, the Engineer warrants and represents that it does not boycott Israel and agrees that it will not boycott Israel during the term of this contract.

The Engineer represents and certifies that, at the time of execution of this Agreement, the Engineer (including, in this provision, any wholly owned subsidiary, majority-owned subsidiary, parent company or affiliate of the same) is not listed by the Texas Comptroller of Public Accounts

pursuant to Chapters 2252 or 2270 of the Texas Government Code, nor will the Engineer engage in scrutinized business operations or other business practices that could cause it to be listed during the term of this Agreement.

The Engineer warrants and represents, in accordance with Tex. Gov't Code Ann. § 2274.002, that unless the Engineer meets an exemption under subsection (c), then, as required by subsection (b), the Engineer's signature on this Agreement constitutes the Engineer's written verification that it does not boycott energy companies and will not boycott energy companies during the term of the contract.

The Engineer warrants and represents, in accordance with Tex. Gov't Code Ann. § 2274.002, that unless the Engineer meets an exemption under subsection (c) or section 2274.003, then, as required by subsection (b) of section 2274.002, the Engineer's signature on this Agreement constitutes the Engineer's written verification that it does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association and will not discriminate against a firearm entity or firearm trade association during the term of the contract.

Appendix B to the Agreement entitled "General Scope of Services," is hereby added, which is made a part thereof by reference for all purposes.

All other terms and provisions of the original Agreement shall remain in full force and effect as originally written.

EXECUTED on _____.

APPROVED AS TO FORM:

CHRISTIAN D. MENEFFEE
HARRIS COUNTY ATTORNEY

HARRIS COUNTY FLOOD CONTROL
DISTRICT

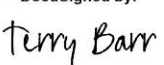
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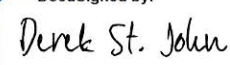
By 27D876F21B1047A...
Mitzi Turner
Assistant County Attorney

By _____
Lina Hidalgo
County Judge

ATTEST:

GAUGE ENGINEERING, LLC

DocuSigned by:

By 02DF05EB3CB8469...
Terry Barr
Name
Stormwater Practice Lead
Title

DocuSigned by:

By E0AE1A276BE24F6...
Derek St. John
Name
Principal
Title

APPENDIX B

SCOPE OF WORK PANTHER CREEK DRAINAGE STUDY G112-00-00-P001

STUDY PHASE AND DRAINAGE REPORT

Additional analysis is required to modify the flood reduction recommendations so that they are self-mitigating and constructible without added detention. The detention site that was considered is not attainable and, due to dense development of the area, other detention sites are also unlikely.

The following scope of services is organized into Basic and Additional Services. Basic Services are those assignments that are well defined and known to be necessary to accomplish the project goals. Additional Services are those tasks that are not known to be necessary at this time but may be determined as necessary through the course of the Basic Services.

BASIC SERVICES

1. Project Management and Coordination

- A. Project Management: The Engineer shall perform project management services necessary to complete the project including submitting monthly invoices with progress reports, developing and maintaining a detailed project schedule, and managing and monitoring sub-consultants.
- B. Quality Control: The Engineer shall perform a documented QA/QC process throughout the study. A quality plan will be developed that identifies designated reviewers with appropriate expertise for their review responsibility. All deliverables will be reviewed prior to submission.
- C. Meetings: The following meetings are anticipated for a 7-month project schedule.
 - 1) Coordination meetings with HCFCD: Attend bi-weekly status meetings (14 meetings, 7 months) to present work activities and results of the study and discuss project issues. The Engineer will prepare agendas for each meeting and will distribute meeting minutes within 5 days of each meeting.
 - 2) Stakeholders meetings: It is anticipated that the Engineer will attend two (2) meetings with varying stakeholders (City of Galena Park and/or City of Houston) throughout the course of the project to present study results and receive stakeholder input to be incorporated into the proposed improvements. This effort includes preparing for the stakeholder meetings with appropriate materials such as basic exhibits, or a small PowerPoint presentation slide decks, as well as attending and documenting the minutes of the meetings.
- D. Community Engagement: The Panther Creek Study is part of the HCFCD bond (Bond Project ID CI-60). The standard community engagement process for bond projects will be followed.
 - 1) Public Meeting Preparation: The Engineer shall prepare for up to two (2) community engagement meetings. The Engineer will develop written and illustrative materials (printed maps, slideshow, etc.) to inform the public about the projects.
 - 2) Public Meeting Preparation Meeting: The Engineer will prepare for and attend up to two (2) preparation meetings for the community engagement meetings. This effort includes a dry run of the presentation with HCFCD.
 - 3) Public Meeting Attendance: The Engineer will provide two (2) staff members for each of the two (2) anticipated public meetings.

- E. Subconsultant Management: The Engineer shall not subcontract any part of its Contract without approval by HCFCD. The Engineer shall evaluate and be responsible for subconsultant proposals and deliverables to the same extent as if they services were performed by the engineer.

2. Data Collection

- A. Survey: Survey services are necessary to determine the Right of Way and ownership of the existing channel, and to collect topographic information to assist in the drainage study. Deed abstract work performed by HCFCD prior to the start of the survey task will be accounted for in the survey fee and utilized to the extent possible.

- 1) Right of Way Survey
- 2) Utility Survey

3. Solution Development - Proposed Conditions

- A. Improvement Option and Mitigation Evaluation: Two (2) interim options and up to three (3) ultimate condition improvement concepts will be evaluated in the rain on grid 1D/2D model Infoworks ICM model. Mitigation for each alternative will be sized for the 100-year Atlas 14 storm event, and each alternative will be run with the 2-year, 10-year, 50-year, 100-year, and 500-year Atlas 14 Storm Events. While these may change as the study develops, the following options are planned to be investigated in this study.

- 1) It is anticipated that the first interim option will include an off-line weir on Panther Creek that will divert flow to an underground system that will run parallel to Panther Creek and outfall at Main St. downstream of the existing drop structure. It is anticipated that one or more restrictors will be used to mitigate conveyance increases at the downstream end of the underground system. The potential for linear detention in Panther Creek between Center Dr. and Main St. will also be evaluated.
- 2) It is anticipated that the second interim option will consist of limited improvements to drainage west of Leggett Drive along Panther Creek and enclosed tributaries. The improvements will be paired with a potentially available mitigation option. The mitigation volume and detention layout assumptions will consider the physical parameters and multi-use requirements at the assumed location.
- 3) Development of Additional Options:
 - a. Should land becomes available, the first interim option will be expanded by removing or increasing the size of the restrictor(s) and pairing this solution with available detention.
 - b. Combine the improvement from the step above (3.A.3)a.) with the second interim option, check that they are still successfully mitigated, and report the total flood reduction benefit. The mitigation volume and detention layout assumptions will consider the physical parameters and multi-use requirements at the assumed location.
 - c. If the option from the prior step (3.A.3)b.) is successfully mitigated, additional checks will be performed to determine the feasibility of additional future drainage improvements by the City of Houston. This task item will aim to conceptually identify the span and the benefit of any potential improvements that may be constructed in the City of Houston if the anticipated detention volume becomes available. The conceptual analysis is for the purpose of sizing downstream trunklines and estimating the detention requirements. The mitigation volume and detention layout assumptions will consider the physical parameters and multi-use requirements at the assumed location.

- B. High Level Conflict Evaluation: Using available record drawings and survey data, an evaluation of potential utility conflicts with each interim proposed alternative will be performed. If improvements are analyzed outside of the surveyed extent, such as in the City of Houston problem area, the conflict evaluation will be based on the best available data.
- C. Proposed ROW: Using available data (HCFCD ROW data and survey data), an analysis of the available ROW and any additional ROW needed to construct each alternative will be performed. The proposed interim alternatives will attempt to minimize the need for ROW acquisition where possible.
- D. Cost Estimates: A planning level opinion of probable cost will be developed for each alternative, including ROW acquisition and utility conflict resolution.
- E. Schematic Level Project Worksheets: Schematic level project worksheets will be developed for each alternative developed. These will include a plan view map showing each project layout and its associated planning level cost estimate.
- F. Schematic Level Drainage Profile and Typical Sections for Interim Option
 - 1) Schematic Level Project Profile: For the interim option, a schematic level project profile will be developed. The profile will include the 100-year HGL and potential utility conflicts and resolutions. The profile drawing will be based on the software profile with additional annotation for clarity. An AutoCAD profile drawing will not be developed for this effort. Profile stationing will be shown on a schematic level plan view project worksheet.
 - 2) Schematic Level Typical Sections: For the interim option, schematic level typical sections will be developed at strategic locations determined to be important for the project. Potential utility conflicts and resolutions will be shown on the typical sections.
- G. Project Assessments
 - 1) Proposed Structure Flooding Inventory: The HCFCD Structure Inventory Tool will be used to determine the number of potential flooded structures for the 10% (10-year), 2% (50-year), 1% (100-year), and 0.2% (500-year) exceedance probability storm events utilizing the results from the proposed conditions 1D/2D Models. For each problem area, the total probable annual structural flooding over a 50-year period will be calculated based on the HCFCD Guidance Document for Problem Area Definition and Evaluation.
 - 2) Project Prioritization: The structure inventory will be combined with HCFCD flooding data and be utilized to rank each project alternative using the HCFCD Prioritization Scoring Ranking Worksheet. Flood damage estimates will not be calculated.

4. Study Report

- A. Draft Study Report: A comprehensive drainage study report will be prepared to provide quantification of the hydrologic and hydraulic analysis results with a detailed narrative and supporting tables, exhibits and appendices. This report is to be an addendum to the Panther Creek Watershed Study, dated August 2021. The draft drainage study report shall be signed and sealed with an interim stamp by a Licensed Professional Engineer in the state of Texas. The draft drainage study report shall be provided in electronic PDF format as required by HCFCD for review and approval.
- B. Final Study Report: The draft drainage study report will be revised based on comments received from HCFCD. The drainage study report shall be signed and sealed by a Licensed Professional Engineer. The study report shall be provided in electronic PDF format as required by HCFCD for review and approval.

5. **Environmental Services:** The HCFCD in-house environmental team will provide basic environmental services for this study including desktop environmental and cultural assessments. This additional services line item represents effort for a 3rd party consultant to assist with more complex environmental issues, should they arise.

6. **Revisions**

The Engineer shall make requested revisions to documents and materials prepared under this Agreement. The Engineer also shall provide such engineering services necessary for such revision, when they are not necessitated by any fault of the Engineer and such revisions are inconsistent with approvals or instructions previously given by the District, or are made necessary by the enactment or revision of codes, laws, or regulations issued subsequent to the preparation of such documents.

THE STATE OF TEXAS §
§
COUNTY OF HARRIS §

The Commissioners Court of Harris County, Texas, convened at a meeting of said Court at the Harris County Administration Building in the City of Houston, Texas, on _____, with the following members present, to-wit:

Lina Hidalgo	County Judge
Rodney Ellis	Commissioner, Precinct No. 1
Adrian Garcia	Commissioner, Precinct No. 2
Tom S. Ramsey, P.E.	Commissioner, Precinct No. 3
R. Jack Cagle	Commissioner, Precinct No. 4

and the following members absent, to-wit: _____, constituting a quorum, when among other business, the following was transacted:

**ORDER AUTHORIZING EXECUTION OF AN AMENDMENT TO
 AGREEMENT FOR ENGINEERING SERVICES
 BETWEEN THE HARRIS COUNTY FLOOD CONTROL DISTRICT
 AND GAUGE ENGINEERING, LLC**

Commissioner _____ introduced an order and made a motion that the same be adopted. Commissioner _____ seconded the motion for adoption of the order. The motion, carrying with it the adoption of the order, prevailed by the following vote:

		Yes	No	Abstain
AYES:	Judge Lina Hidalgo	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NAYS:	Comm. Rodney Ellis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ABSTENTIONS:	Comm. Adrian Garcia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Comm. Tom S. Ramsey, P.E.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Comm. R. Jack Cagle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The County Judge thereupon announced that the motion had duly and lawfully carried and that the order had been duly and lawfully adopted. The order thus adopted follows:

WHEREAS, the District and Engineer previously entered into an Agreement for Engineering Services ("the Agreement"), dated April 7, 2020, on Purchase Order No. P0000001101, to provide engineering services for a feasibility study to evaluate the drainage area of Panther Creek located in Galena Park, the City of Houston and unincorporated Harris County, Harris County Flood Control Unit G112-00-00; and

WHEREAS, the District requires additional engineering services to increase the scope to include an additional analysis to modify the flood reduction recommendations so that they are self-mitigating and constructible without added detention as provided under Section I, Character and Extent of Services and Appendix B incorporated herein; and

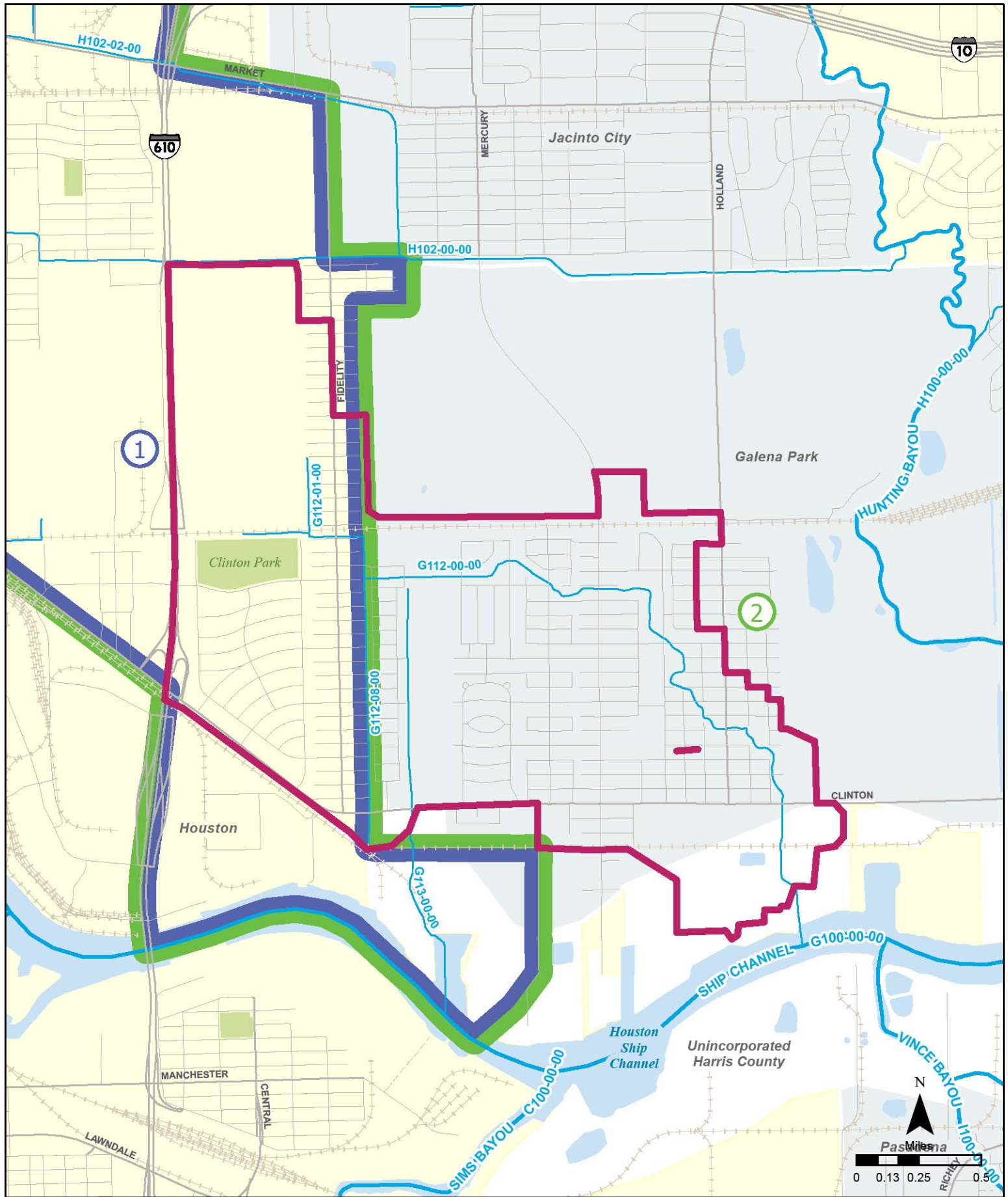
WHEREAS, the District and the Engineer now desire the addition of Appendix B, General Scope of Services to the Agreement; and

WHEREAS, the Engineer is willing to provide the necessary additional engineering services for further consideration; and

WHEREAS, the District and the Engineer now desire to increase the Limit of Appropriation by \$300,000.00, to \$850,000.00.

NOW, THEREFORE, BE IT ORDERED BY THE COMMISSIONERS COURT OF HARRIS COUNTY, TEXAS THAT:

- Section 1: The recitals set forth in this order are true and correct.
- Section 2: Exemption from the County Purchasing Act under Texas Local Government Code § 262.024(a)(4) is hereby granted.
- Section 3: County Judge Lina Hidalgo is hereby authorized to execute for and on behalf of the Harris County Flood Control District, an Amendment to Agreement for Engineering Services by and between the Harris County Flood Control District and Gauge Engineering, LLC, for additional engineering services in support of the drainage area of Panther Creek located in Galena Park, the City of Houston and unincorporated Harris County, for a fee increase of \$300,000.00, raising the maximum fee to be paid by the District to \$850,000.00, said Amendment to Agreement being incorporated herein by reference for all purposes as though fully set forth verbatim herein.



Project ID: G112-00-00-P001

Watershed: San Jacinto River

Precinct: 1,2