

**SECOND AMENDMENT TO AGREEMENT BETWEEN
THE CITY OF LEAGUE CITY AND GFT**

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This Second Amendment (“Amendment”) is entered into between the City of League City (“City”) and GFT (“Professional”) on the date set forth below.

RECITALS

WHEREAS, the parties entered into an Agreement (“Agreement”) on or about January 12, 2023; whereby Professional agreed to provide Professional Engineering Services for the 2023 FEMA FIRM Update – Clear Creek and Dickinson Bayou, (DR2301); and

WHEREAS, the parties wish to amend the Agreement to increase the contract amount to \$590,704.75

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereby agree to the following terms:

TERMS:

1. The above-listed recitals are true and correct and hereby incorporated into this Amendment.
2. The contract value under the Agreement increased from \$523,980.00 to \$590,704.75
3. This increase will cover the proposed LiDAR Survey to support the project. Services include Ground Control Point Survey, FEMA Tie-In and UAS/Drone Aerial LiDAR Collection and Processing.
4. Except as expressly provided in this Amendment, all other terms, conditions, and provisions of the Agreement shall continue in full force and effect as provided therein.

GFT

Chris Sallese, PMP – Vice President and Division Manager

CITY OF LEAGUE CITY

Christopher Sims, Executive Director of Development Services

John Baumgartner, City Manager

April 4, 2026

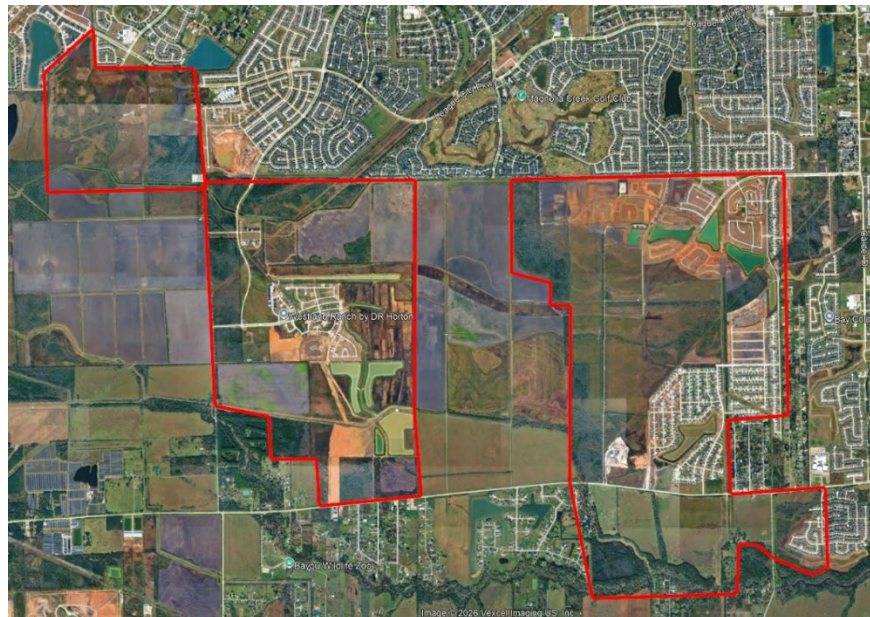
Mr. Christopher Sims, P.E.
Executive Director
City of League City
500 W Walker St
League City, TX 77573

RE: Proposal for Clear Creek and Dickinson Bayou Floodplain Update LiDAR Survey

Dear Mr. Sims:

GFT previously, DECorp, appreciates the opportunity to submit this proposal for LiDAR survey to support the Clear Creek and Dickinson Bayou Flood Insurance Rate Map (FIRM) Updates Project. The project was originally scoped in 2021 and did not include obtaining LiDAR survey. In recent years a large amount of development and dirt work has taken place in the Dickinson Bayou Watershed. The preliminary floodplain maps delivered to the City in February 2026 show a large portion of the recently developed areas in a shallow floodplain that is not present in the effective mapping. Obtaining Lidar Survey for approximately 5,000 acres of the recently developed areas depicted below will provide accurate floodplain information for these areas.

Area of Interest / Limits of Survey



Survey Limits outlined in red above

Design Survey

Project Control: Horizontal coordinates will be based upon NAD83(2011) / Texas South Central Zone (4204) (ftUS). Vertical Elevations will be based upon NAVD 88 with Geoid18. Tied to FEMA Benchmark.

Aerial Control Survey: Approximately 80 control points will be needed for the aerial LiDAR data collection, these points will be set and collected by GFT staff.

UAS (Drone) Aerial LiDAR Collection

With years of combined aerial and conventional data collection experience, the GFT team has a deep understanding of the challenges presented by rail environments. Compared to conventional survey methods, our proposal aims to improve safety and efficiency and reduce total time on site while providing superior survey data products.

The core concept of our approach is to systematically fly the designated area of interest with an aerial payload capable of capturing an approximate 250-foot swath of LiDAR and photogrammetric RGB imagery with each pass of the drone. Preprogrammed flight paths allow for precise automated patterns specifically designed for the LiDAR sensor and camera onboard this aircraft. This collection plan provides sufficient overlap of both the LiDAR and RGB to generate a 3D point cloud, digital surface model, and aerial imagery. Multiple take-off and landing zones will be required to maintain Line-of-Sight to the aircraft and maintain compliance with the regulations set forth under FAA Part 107 rules.

Survey control will be set by the field crew ahead of the LiDAR flights. These photo-identifiable targets (PIDs) are used for quality control for both the LiDAR and photogrammetry collection and also serve as permanent survey control for future construction efforts. After the surveyed PIDs have been set, flight operations will be conducted during a single good weather day in the field to collect the aerial data.

Data Collection

Project Control: Horizontal coordinates will be based upon NAD83(2011) / Texas South Central Zone (4204) (ftUS). Vertical Elevations will be based upon NAVD 88 with Geoid18. Tied to FEMA Benchmark.

Deliverables

Topographic Surface File – A surface file will be generated and delivered in TIN/LandXML and/or Bentley ORD DGN formats

Planimetrics – No planimetric feature extraction is included in this scope.

Aerial Imagery – Imagery will be collected simultaneously with the LiDAR data for future use if needed, but will not be processed or delivered as an orthoimage as part of this scope.

Accuracy of collected LiDAR data and derived elevation DEM will be reported per ASPRS Guidelines:

- ASPRS accuracy statement per ASPRS Positional Accuracy Standards:
 - Reporting Non-Vegetated Vertical Accuracy “This data set was tested to meet ASPRS Positional Accuracy Standards for Digital Geospatial Data, Edition 2, Version 2 (2024) for a __ (cm) RMSEV Vertical Accuracy Class. The Non-Vegetated Vertical Accuracy (NVA) was found to be RMSEV = __ (cm)”.
 - Reporting Vegetated Vertical Accuracy American Society for Photogrammetry and Remote Sensing Edition 2, Version 2 (2024) ASPRS Positional Accuracy Standards for Digital Geospatial Data 31 “This data set was tested to meet ASPRS Positional Accuracy Standards for Digital Geospatial Data, Edition 2, Version 2 (2024) for a __ (cm) RMSEV Vertical Accuracy Class. The Vegetated Vertical Accuracy (VVA) was found to be RMSEV = __ (cm).”
- An accuracy spreadsheet comparison of LiDAR <> Check Points will be provided
- The DEM surface will be a bare-earth, non-hydroflattened DEM
- Patrick Jordan (TX RPLS #5525) will certify the LiDAR and DEM.

Assumptions & Exclusions

- **Weather** – This project requires one (1) day of good weather for aerial (no precipitation, winds less than 15mph). No snow on ground. Conventional survey work can be completed in less ideal weather conditions.
- **Access** -The survey team will have access to the site and will receive client contact information for any site coordination prior to mobilization.
- **Airspace** – This project is in clear airspace. Temporary Flight Restrictions (TFRs) will be monitored ahead of time to prevent any delays.
- **NO ALTA/Boundary Survey** – ground survey efforts are for Ground Control Point installation only to validate LiDAR/DEM accuracy report – no boundary/ALTA work is included in this scope.
- **NO SUE/Utility or other Survey collection** – this project does not include location of any ground features other than the Ground Control Points. This combined LiDAR and ground survey effort is only in support of DEM / wide-area topographic documentation of the sites.

Project Pricing

Task	Price
Ground Control Point Survey, FEMA Tie-In	\$ 26,850.00
UAS/Drone Aerial LiDAR Collection & Processing	\$ 60,026.20
Total	\$ 86,876.20

The scope of the project has changed since it was awarded. GFT is no longer submitting the project to FEMA but to Halff who is contracted by the TWDB to finalize and submit the preliminary FIRMs. To date GFT has expended \$435,398.55 of the \$523,980 project budget, \$88,581.45 is remaining. GFT anticipates \$68,430 is needed for the remaining tasks that will need to be completed and/or revised to include the new LiDAR data: updates the draft Dickinson Bayou HEC-RAS model, report and floodplain exhibits, two rounds of comments from Halff on behalf of the TWDB and attending one



public meeting. An additional \$66,724.75 is required to complete the LiDAR survey and make the updates to the deliverables. If additional tasks are required GFT will notify the City for an amendment and authorization prior to proceeding.

If you have any questions or comments concerning this proposal, please feel free to contact me at (713) 527-6328.

Sincerely yours,

GFT

A handwritten signature in black ink that reads "Amy E. Dziuk". The signature is written in a cursive style.

Amy E. Dziuk, P.E., CFM
H&H Project Manager

Cc: Christopher W. Sallese, PMP