

EXHIBIT
"A"

STATE OF TEXAS

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COUNTY OF WILLIAMSON

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**SUPPLEMENTAL CONTRACT NO. 1
TO CONTRACT FOR ENGINEERING SERVICES
FOR CHISHOLM VALLEY DRAINAGE ASSESSMENT
WORK AUTHORIZATION**

FIRM: HALFF ASSOCIATES, INC. ("Engineer")
ADDRESS: 9500 Amberglen Boulevard, Building F, Suite 125, Austin, TX 78729

This Supplemental Contract No. 1 to Contract for Engineering Services is made by and between the City of Round Rock, Texas, hereinafter called the "City" and Halff Associates, Inc., hereinafter called the "Engineer".

WHEREAS, the City and Engineer executed a Contract for Engineering Services, hereinafter called the "Contract", on the 7th day of December, 2017 for the Chisholm Valley Drainage Assessment Work Authorization Project in the amount of \$75,000.00; and

WHEREAS, it has become necessary to amend the Contract to modify the provisions for the scope of services and to increase the compensation by \$39,482.00 to a total of \$114,482.00;

NOW THEREFORE, premises considered, the City and the Engineer agree that said Contract is amended as follows:

I.

Article 1, City Services and Exhibit A, City Services shall be amended as set forth in the attached Addendum To Exhibit A.

II.

Article 2, Engineering Services and Exhibit B, Engineering Services shall be amended as set forth in the attached Addendum to Exhibit B.

III.

Article 4, Compensation and Exhibit C, Fee Schedule shall be amended by increasing by \$39,482.00 the maximum amount payable under the Contract for a total of \$114,482.00, as shown by the attached Addendum to Exhibit C.

IN WITNESS WHEREOF, the City and the Engineer have executed this Supplemental Contract in duplicate.

[signature pages follow]

HALFF ASSOCIATES, INC.

By: _____

Date

CITY OF ROUND ROCK

APPROVED AS TO FORM:

By: _____
Craig Morgan, Mayor

Stephan L. Sheets, City Attorney

Date

ADDENDUM TO EXHIBIT A

City Services

The City will provide the following information and other assistance to the Engineer that the City deems appropriate and necessary:

1. Any readily available pertinent existing information relating to the services to be performed by the Engineer; the City will provide one copy of such information in a format chosen by the City. This may include plans, as-built data, GIS data, or previous studies in or adjacent to the project area.
2. Clear direction and/or response to questions or requests made by the Engineer in the course of the Engineer's performance of services.
3. Timely review of deliverables that have been properly completed and submitted by the Engineer; and timely provisions of comments, if any, to the Engineer resulting from said reviews.
4. Provide access to property required to perform any field investigations required as part of the Engineer's scope of work.
5. City will conduct field observations and gather measurements as needed for the project.

ADDENDUM TO EXHIBIT B

Engineering Services

WORK AUTHORIZATION NO. 2

Chisholm Valley Drainage Assessment Project – Flood Reduction Alternative Study

1. PROJECT PURPOSE

The purpose of the project is to identify and quantify flood risk areas within the Chisholm Valley neighborhood project limits. Work involves developing solutions and a plan to implement necessary drainage improvements. The tasks under this contract may require unusually complex analysis of storm drains, overland flow, and creek interactions.

At the request of the CORR Stormwater Staff, Halff Associates, Inc. (Engineer) has developed this scope and fee proposal to further evaluate flood mitigation options in the Chisholm Valley neighborhood. Work Authorization No. 1, which is completed, focused on data collection, development of a preliminary 2D hydraulic model, and identification of five (5) flood problem areas within the Chisholm Valley neighborhood. This Work Authorization No. 2 will develop flood mitigation solutions for the flood risk areas that were identified in Work Authorization No. 1: Areas 1 through 5. See map below for each area's specific locations.

The Chisholm Valley neighborhood is approximately 540 acres with Lake Creek Tributary 1 flowing from north to south on the eastern side of the neighborhood and Lake Creek Tributary 1A flowing from the south west area. Halff has conducted detailed hydrology and hydraulic modeling for Lake Creek Tributary 1 and 1A which includes the *Engineering Evaluation for Chisholm Valley Drainage Modeling Project*, dated June 2015, and *Preliminary Engineering Report for Frontier Trail Culvert and Downstream Channel Improvements Project*, dated May 2016. It should be noted that subsequent FEMA analysis and the 2017 Preliminary Flood Insurance Rate Maps refer to the two streams as Lake Creek Tributary 1 (previously Tributary 6) and 1A (previously Tributary 6A).

2. SCOPE OF WORK

The scope of work for the services to be provided under this work authorization may include the following tasks:

Chisholm Valley Drainage Assessment

- Task 1: Project Management
- Task 2: Data Collection and Review
- Task 3: Local Flood Mitigation Solutions
- Task 4: Prepare Documentation

Task 1: Project Management

Perform general Project Management and coordination during the course of the project including the following:

- a. Conduct and attend project kick-off and data gathering meeting with the City to discuss any additional information not gathered during WA #1.

- b. Prepare meeting minute summaries for applicable meetings during the project.
- c. Create and submit monthly invoices in required city format.
- d. Prepare monthly progress reports that will be submitted to the City with invoices to provide a written account of the progress made to date on the project.

Task 2: Data Collection and Review

Halff will collect and review the following data of the project area provided by the City to conduct the analysis. Additional ground survey, geotechnical investigations, subsurface investigations will not be performed for the phase of the project but may be needed in subsequent phases. Any field reconnaissance necessary for this project will be performed by City staff.

- a. Evaluate results of existing conditions ICM model developed in Work Authorization #1.
- b. Review previous studies, as-built plans, existing survey data, LiDAR data, relevant GIS data, preliminary FEMA models and floodplains in coordination with City staff. If additional ground or storm drain survey is needed, then a supplemental will be submitted to the City at that time.
- c. Assess newly obtained data collected to further refine the ICM model for flood mitigation solutions as needed.
- d. Conduct an evaluation comparison between the 2012 to 2017 LiDAR and make a determination on which terrain to use for the ICM model. If the 2017 is selected for use in the model, a supplemental will be requested at that time to update the model.

Task 3: Local Flood Mitigation Solutions

Halff will utilize the ICM 2D model developed in the previous phase to develop flood mitigation solutions for the flood problems areas identified. Limited, if any, changes will be made to the existing conditions 2D model made in the previous phase. Tasks will include the following:

- a. Develop one (1) flood mitigation solution for Flood Problem Areas 1, 3, 4, and 5 identified in the previous phase and by the City. This includes all the flood problem areas seen in Figure 1 below except for Area 2.
- b. Assess effectiveness of each proposed flood mitigation solution by comparing existing and proposed conditions results.
- c. Conduct internal quality assurance-quality control (QA/QC) reviews of proposed alternatives hydrologic and hydraulic modeling.
- d. Prepare probable cost estimate for each flood mitigation solution developed based on unit costs provided by the City.
- e. Develop an exhibit of the flood problem areas with 25-year design storm inundation areas mapped, potential flooded habitable structures identified, and flood inundation areas outside of public ROW identified for each proposed alternative. Finished floor elevations (FFE) will be based on the LiDAR determination above and field observations where actual FFE survey is not available.

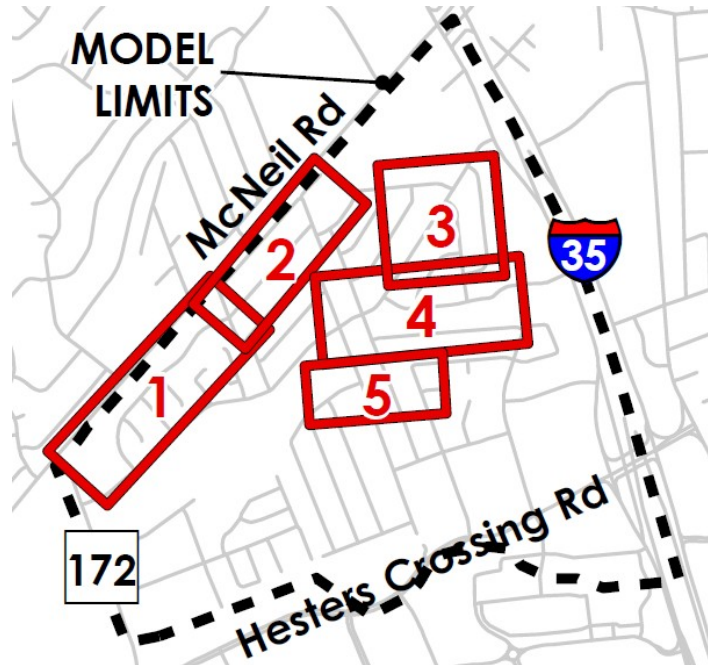


Figure 1. Flood Problem Areas

Task 4: Prepare Documentation

- a. Conduct and attend one (1) meeting to present and discuss data findings with the City and discuss scoping for the subsequent Preliminary Engineering study phase.
- b. Prepare a brief memorandum to document the flood mitigation solutions developed. This memorandum will build off the memorandum written in the previous phase.

Work Schedule

Halff anticipates completing Work Authorization No. 2 within fifteen (15) weeks after receiving a Notice to Proceed (NTP).

ADDENDUM TO EXHIBIT C
Fee Schedule

Attached Behind This Page

ATTACHMENT C

Fee Schedule

Hourly rates to be billed on a time and materials basis per the following Rate Schedule attached
(behind this page):

*Rates may be amended once between Nov. 1, 2018 and Nov. 1, 2019, not to exceed a 3% increase.

Chisholm Valley Drainage Assessment

**Exhibit C
Fee Schedule**

Task	Total Labor Hours	Total Loaded Labor Cost	Other Direct Costs	Subconsultants	TOTALS
Work Authorization No. 1					
Task 1: Project Management	28	\$4,720.00	\$0.00	\$0.00	\$4,720.00
Task 2: Data Collection and Assessment	100	\$12,800.00	\$0.00	\$0.00	\$12,800.00
Task 3: Existing Hydrologic & Hydraulic Assessment	270	\$35,784.00	\$0.00	\$0.00	\$35,784.00
Task 4: Prepare Documentation	62	\$8,948.00	\$145.00	\$0.00	\$9,093.00
WORK AUTHORIZATION NO.1 TOTAL:	460	\$ 62,252.00	\$ 145.00	\$0.00	\$ 62,397.00
Work Authorization No. 2					
Task 1: Project Management	32	\$4,620.00	\$0.00	\$0.00	\$4,620.00
Task 2: Data Collection and Review	16	\$1,880.00	\$0.00	\$0.00	\$1,880.00
Task 3: Local Flood Mitigation Solutions	314	\$41,040.00	\$0.00	\$0.00	\$41,040.00
Task 4: Prepare Documentation	28	\$4,400.00	\$145.00	\$0.00	\$4,545.00
WORK AUTHORIZATION NO.2 TOTAL:	390	\$ 51,940.00	\$ 145.00	\$0.00	\$ 52,085.00
TOTAL PROJECT COST:					\$ 114,482.00