

**AMENDMENT NO. 1
TO
AGREEMENT BETWEEN THE CITY OF COLUMBIA, MISSOURI
AND INTUITION & LOGIC ENGINEERING, INC.**

**FLOODPLAIN ANALYSIS OF MILL CREEK
EAST OF BETHEL STREET
COLUMBIA, MISSOURI**

THIS AMENDMENT (“Amendment”) by and between the City of Columbia, Missouri (“City”) and **Intuition & Logic Engineering, Inc.**, (“Engineer”) is entered into on the date of the last signatory noted below (the “Effective Date”).

Whereas, The City and Engineer entered an agreement for certain specified flood plain mapping services on February 6, 2019 (“Agreement”);

Whereas, the City and Engineer agree that certain additional services not contemplated at the time the Agreement was entered are necessary for completion of the mapping;

Therefore, the City and Engineer agree to amend the Agreement as indicated herein.

1. Paragraph 2.1.1 of the Agreement is amended to add the following sentence:

In addition, perform professional engineering services set forth in Attachment D – “Supplemental No. 1 Scope of Additional Engineering Service,” attached to Amendment No. 1 to the Agreement.

2. Paragraph 5.3 of the Agreement is amended to read as follows:

5.3 Services shall be completed within 560 calendar days from the issuance of the original Notice to Proceed, which was issued on February 14, 2019. CITY shall have the right to establish performance times for individual phases or elements of the PROJECT by delivering a written schedule setting out the performance times to the ENGINEER.

3. Paragraph 6.1.1.6 of the Agreement is amended to read as follows:

6.1.1.6 Total payment for Scope of Basic Services and all other expenses and costs to CITY under this Agreement and described herein **shall not exceed \$36,125.00.**

4. Paragraph 7.16 of the Agreement is amended to read as follows:

7.16 Agreement Documents

This Agreement includes the following exhibits, which are incorporated herein by reference:

Exhibit	Description
A	Scope of Work
B	Hourly Fee Schedule
C	Work Authorization Affidavit
D	Supplemental No. 1 Scope of Additional Engineering Service

In the event of a conflict between the terms and conditions of this Agreement and any attachment hereto, the terms contained in this Agreement shall prevail and the terms contained in any attachment shall subsequently prevail in the following order: A, D B, C.

5. The terms and conditions of the Agreement are modified as specifically set forth above. All other provisions of the Agreement, to the extent not inconsistent with this Amendment, remain in full force and effect.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, City and Engineer have executed this Amendment No. 1 on the day and year first above written.

City OF COLUMBIA, MISSOURI

By: _____
John Glascock, City Manager

Date: _____

ATTESTED BY:

Sheela Amin, City Clerk

APPROVED AS TO FORM:

Nancy Thompson, City Counselor *JAM*

CERTIFICATION: I hereby certify that the above expenditure is within the purpose of the appropriation to which it is charged, Account No. **55816688 604023 SS136**, and that there is an unencumbered balance to the credit of such appropriation sufficient to pay therefor.

By: _____
Director of Finance

**INTUITION & LOGIC ENGINEERING,
INC.**

By: *Timothy Dew* _____

Date: *7/29/19* _____

ATTEST:

By: *John Feugerhut* _____
Name: JOHN FEUGERHUT

Exhibit D

City of Columbia, Engineering Services Agreement – Floodplain Mapping of Mill Creek Upstream of Bethel Road, Columbia, MO
Supplemental No. 1 Scope of Additional Engineering Service

Additional Services Request

1.0 Hydrology Development

Additional engineering services are required to develop hydrology and stormwater runoff flowrates for the extended model limits. The additional hydrology development will yield more representative flood inundation mapping within the extended model area, particularly near Valencia Drive.

Drainage area delineation and flowrate development will be for the contributing area up to Bethel Street. The total drainage area to Bethel Street will be subdivided at Valencia Drive to better reflect the total flowrate at Valencia Drive.

The additional services needed are as follows:

- Drainage Area delineation using LIDAR contours.
- Flowrate development using the Curve Number Method and TR-55 for the Time of Concentration. GIS data will be used for the soils data and land use information.
- Storm intensity, distribution and precipitation amounts (rainfall hyetograph) will be taken from the Boone County Insurance Study Hydrology report for Mill Creek.
- Calculated flowrates will be compared to the effective model flowrates to verify that the total flow at Bethel is the same.

2.0 Public Engagement Services

Attend a public information meeting at the City to be available for questions related to the proposed map revisions. Assist the City in developing responses to public comments.

The total additional funds being requested is broken down by task as follows:

TASK	BUDGET
1.0 Hydrology Development	\$2,985.00
2.0 Public Engagement Services	\$2,360.00
Total	\$5,345.00

CO-1 West Alhambra Drive Flood Mapping											
		Personnel Type/Title	PRINCIPAL	PROJECT MANAGER	EIT / GIS / CADD	ECOLOGIST / WETLAND SCIENTIST	Subtotal Hours	Subtotal Personnel Cost	Direct Expenses	Sub Consultant Expenses	Subtotal
Personnel Billing Rate			165.00	135.00	95.00	95.00					
1.0 Hydrology Development											
						0	\$ -				\$ -
		Drainage Area Delineation		2	8	10	\$ 1,030.00				\$ 1,030.00
		Hydrology - Curve Number Method, TR-55		2	16	18	\$ 1,790.00				\$ 1,790.00
		QAQC review	1			1	\$ 165.00				\$ 165.00
						0	\$ -				\$ -
		Subtotal =	1	4	24	29	\$ 2,985.00	\$ -	\$ -		\$ 2,985.00
2.0 Public Engagement Services											
						0	\$ -				\$ -
		Attend Public Information Meeting		4		4	\$ 540.00				\$ 540.00
		Travel to/from City		4		4	\$ 540.00				\$ 540.00
		Respond to public comments as requested by the City		8		8	\$ 1,080.00				\$ 1,080.00
						0	\$ -				\$ -
1	\$ 150	Hotel per diem, 1 room - 1 night				0	\$ -	\$ 150.00			\$ 150.00
1	\$ 50	Meals per diem, 1 person				0	\$ -	\$ 50.00			\$ 50.00
						0	\$ -				\$ -
						0	\$ -				\$ -
		Subtotal =	0	16	0	16	\$ 2,160.00	\$ 200.00	\$ -		\$ 2,360.00
Subtotal Hours			1.00	20.00	24.00	-	29.00	\$ 5,145.00	\$ 200.00	\$ -	\$ 5,345.00
Subtotal Personnel Cost			\$165	\$2,700	\$2,280	\$0	CHECK \$ 5,145.00				
TOTAL = \$ 5,345.00											