AMENDMENT NO. 2

TO

AGREEMENT BETWEEN THE CITY OF COLUMBIA, MISSOURI AND WEAVER CONSULTANT GROUP.

COLUMBIA SANITARY LANDFILL HORIZONTAL EXPANSION PERMITTING PROJECT – PHASE II

THIS AMENDMENT ("Amendment") by and between the City of Columbia, Missouri ("City") and **Weaver Consultants Group, LLC.**, ("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 landfill horizontal expansion permitting on August 7, 2019, and as first amended on February 5, 2020 ("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 E – "Supplemental No. 2 Scope of Additional Engineering Service," attached to Amendment No. 2 to the Agreement.

2. 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** \$1,711,337.00.

3. 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
В	Hourly Fee Schedule
C	Work Authorization Affidavit

D Supplemental No. 1 Scope of Additional Engineering Service
E Supplemental No. 2 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, E, D, B, C.

4. 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. $\scriptstyle\rm 1$ 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	_	
CERTIFICATION:	appropriation to which	it is cha encumbe	xpenditure is within the purpose of the rged, Account No. 55716588-604990 RF061 , ared balance to the credit of such appropriation
		By:	Director of Finance
			Director of Finance
		WEA	VER CONSULTANTS GROUP, LLC
		By:	mlach
		Date:	9/10/20
ATTEST:			
By:			
Name:			

Exhibit E: Supplemental No. 2 Scope of Additional **Engineering Service**



September 16, 2020

Mr. Adam White Landfill Superintendent – Acting Solid Waste Manager City of Columbia Landfill 5700 Peabody Road Columbia, Missouri 65202

Re:

Change Order Estimate

Columbia Sanitary Landfill Horizontal Expansion Permitting Project – Phase II (Agreement dated

February 6, 2020)

Dear Mr. White:

Weaver Consultants Group (WCG) has prepared this estimate of cost to cover additional drilling costs for the Detailed Site Investigation (DSI) occurring at the Columbia Landfill. The initial DSI Work Plan was approved by the MDNR-GSP on May 24, 2019. After the initial phase of drilling the MDNR-GSP required that borings be extended to the base of the bedrock containing the uppermost aquifer and deepening the planned bedrock borings based on a meeting in October 2019.

Since the request for the additional budget was submitted, the expansion site experienced a significant number of weather related lost or reduced drilling days and several test pits that were anticipated to be excavated were drilled and completed as piezometers. Approximately 51% of the planned work days were lost or shortened due to weather and site access conditions; however, equipment rental costs and crew travel expenses accrued. To reduce the budget loss, WCG and the drilling crew suspended drilling during March and April to allow for better weather and site drying conditions.

In addition to the lost drilling days, WCG had the drilling company drill 8 locations that were initially planned to be completed as test pits using the landfill excavator. The depth to bedrock at these locations (15 to 20 feet deep) made drilling the preferred method to investigate the unconsolidated deposits and groundwater at these locations. Test pits with 15 or more feet of overburden also required installation of a piezometer. Proper piezometer construction is impracticable in an excavated test pit. Additionally, after an on site meeting with the MDNR's Geological Support Program geologist in July 2020 where the geologic buffer layer was discussed, WCG noted a data gap in the testing of the upper confining layer that requires an additional 2 borings to complete the investigation of the geologic buffer layer. Initially, the overburden was anticipated to form the geologic buffer layer in that area, but the MDNR-GSP considers the shale above the limestone aquifer to be the continuous geologic buffer. Rock borings, piezometers, and packer testing range between \$10,000 to \$15,000 per additional boring depending on the depth and amount of rock to be drilled.

Exhibit E: Supplemental No. 2 Scope of Additional Engineering Service

Mr. Adam White September 16, 2020 Page 2

Although WCG attempted to alleviate budget impacts caused by weather delays by suspending drilling operations during the anticipated wetter part of the spring, we will deplete the budget for the field investigation prior to completing the investigation. WCG requested an estimate of costs from our drilling contractor to complete the remaining drilling. The estimated additional cost to complete the drilling phase is \$245,658.

Currently, there are several site investigation scope tasks budgeted under this engineering agreement that were fully funded based on anticipated detailed field investigations or mitigation plans. Based on completion of the archaeological survey, the determination from the Army Corps of Engineers of no jurisdictional wetlands, and an in-depth bat habitat study that is not required at this time, approximately \$100,000 can be reallocated from those scope tasks to offset the requested additional drilling funds. If the funds can be reallocated, then the budget increase to cover the drilling and investigation work needed for the DSI is \$145,658.

WCG appreciates the opportunity to work with the City of Columbia on this important project. Please contact us if you have any questions or need additional information.

Sincerely,

Weaver Consultants Group, LLC

Andrew Limmer, P.G. Senior Project Manager Dustin Thoenen, P.E.