

AMENDMENT NO. 1 TO THE CONTRACT

BETWEEN

CITY OF MADISON (CITY)

AND

KL ENGINEERING, INC (CONTRACTOR)

FOR UNIVERSITY AVENUE FROM SHOREWOOD BLVD TO UNIVERSITY BAY DR

The contract made and entered into by and between the CITY and CONTRACTOR, executed on April 15, 2018, is hereby amended as set forth in the following pages.

IN WITNESS WHEREOF, the parties hereto have set their hands at Madison, Wisconsin.

**CONTRACTOR**

KL Engineering, Inc.  
(Type or Print Name of Contracting Entity)

By: Mike Bakalars  
(Signature)

Mike Bakalars, P.E., Vice President  
(Print Name and Title of Person Signing)

Date: June 5, 2019

**CITY OF MADISON, WISCONSIN**  
**A municipal Corporation**

By: Satya Rhodes-Conway, Mayor

Date: \_\_\_\_\_

**Approved:**

\_\_\_\_\_  
David P. Schmiedicke, Finance Director

Date: \_\_\_\_\_

By: Maribeth Witzel-Behl, City Clerk

Date: \_\_\_\_\_

**Approved as to Form:**

\_\_\_\_\_  
Eric T. Veum, Risk Manager

Date: \_\_\_\_\_

\_\_\_\_\_  
Michael P. May, City Attorney

Date: \_\_\_\_\_

1. Reason for Amendment No. 1

This amendment is necessary for providing a concept tunnel evaluation for a new storm sewer tunnel from the University Avenue/Midvale Boulevard intersection to Lake Mendota.

2. By this amendment, section E. of 3. SCOPE OF SERVICES in the CONTRACT FOR PURCHASE OF SERVICES is amended to read:

E. The CONTRACTOR will be compensated by the CITY for services provided under this contract on the following basis:

- (1) For Preliminary Design and Environmental Document, time and materials not to exceed \$336,300 (no change).
- (2) For Final Design, including PS&E Roadway Plans, time and materials not to exceed \$176,100 (no change).
- (3) Structural Design, including PS&E Bridge if authorized, time and materials not to exceed \$47,400 (no change).
- (4) Structural Design, including PS&E Tunnel if authorized, time and materials not to exceed \$38,500 (no change).
- (5) Storm water Box Culvert Design, including PS&E, time and materials not to exceed \$92,927 (increase \$74,427).
- (4) For Sanitary Sewer Design, PS&E, time and materials not to exceed \$11,800 (no change).
- (5) For Water Main Design, PS&E, time and materials not to exceed \$15,700 (no change).
- (6) Additional if authorized items, time and materials not to exceed \$47,500 (no change).

3. By this amendment the following paragraph is added to Section 2.4.K (6) STORM SEWER DESIGN of the SPECIAL PROVISIONS:

The CONTRACTOR shall provide a concept tunnel evaluation including opinion of probable cost for a new storm sewer line from the University Avenue/Midvale Boulevard intersection to Lake Mendota.

4. By this amendment the following is added to Section 2.4.R.(1) of the SPECIAL PROVISIONS:

(d) Advanced Engineering and Environmental Solutions (AE2S)  
7 North Pinkney Street, Ste 300  
Madison, WI 53715

**KL ENGINEERING, INC.**

Project ID 5992-11-30  
 City of Madison, University Avenue  
 (Shorewood Boulevard - University Bay Drive)  
 Dane County  
 Amendment #1

DATE:

	ESTIMATED PROJECT MANHOURS							MANHOURS PER TASK
	Project Manager	Project Engineer / Scientist	Engineer	Technician / Planner	Surveyor	Clerical / LTE		
<b>Estimate of Hours and Expenses</b>								
<b>778 Preliminary Design Drainage</b>								
Coordination & Survey for Concept Tunnel Evaluation	8	8	0	0	40	0		56
Subtotal - Acct Code 778	8	8	0	0	40	0		56
<b>TOTAL</b>	8	8	0	0	40	0		56

**Summary of Staff Hours and Direct Labor Costs - KL Engineering, Inc.**

**PROJECT TOTAL**

**Project:**            **Project ID 5992-11-30**

**Amendment #1**

Classification		Project Manager		Project Engineer / Scientist		Engineer		Technician / Planner		Surveyor		Clerical / LTE		Total Direct Labor	
Avg. Hourly Wage		\$51.50		\$37.25		\$0.00		\$0.00		\$33.35		\$0.00			
Task	Activity Code	Hours	Dollars	Hours	Dollars	Hours	Dollars	Hours	Dollars	Hours	Dollars	Hours	Dollars	Hours	Dollars
Preliminary Design Drainage	778	8	\$412.00	8	\$298.00	0	\$0.00	0	\$0.00	40	#####	0	\$0.00	56	\$2,044.00
<b>TOTAL:</b>		8	\$412.00	8	\$298.00	0	\$0.00	0	\$0.00	40	#####	0	\$0.00	56	\$2,044.00

**Fee Computation Summary by Engineering Task - KL Engineering, Inc.**

**PROJECT TOTAL**

**Project:** Project ID 5992-11-30 **Amendment #1**

Task	Activity Code	Direct Labor Costs	Overhead Costs	Fixed Fee/Profit*	Direct Expenses	Total
Preliminary Design Drainage	778	\$2,044.00	\$3,372.40	\$511.00	\$0.00	\$5,927.40
<b>TOTAL:</b>		\$2,044.00	\$3,372.40	\$511.00	\$0.00	\$5,927.40

**Home Office Overhead Rate:** 1.6499 **Percent Profit:** 10.0%

\*Fixed Fee calculated using 1.5 multiplier

# Consultant Contract Total Fee Computation - KL Engineering, Inc.

Project ID	Project ID 5992-11-30 Amendment #1				Total for Contract
<b>Number of Staff Hours</b>	56				56
<b>Total Direct Labor</b>	\$2,044.00				\$2,044.00
<b>Total Overhead Costs</b>	\$3,372.40				\$3,372.40
<b>Fixed Fee/Profit</b>	\$511.00				\$511.00
<b>Direct Expenses</b>	\$0.00				\$0.00
<b>Subtotal</b>	<b>\$5,927.40</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$5,927.40</b>
<b>AE2S</b>	\$68,500.00				\$68,500.00
<b>Subcontract 2</b>					\$0.00
<b>TOTAL COST (Rows 5-8, Subs):</b>	<b>\$74,427.40</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$74,427.40</b>

**Negotiated Overhead Rate:** 1.6499

**Percent Profit:** 10.0%



www.ae2s.com

June 5, 2019

Mr. Mike Bakalars, PE  
5400 King James Way, Suite 200  
Madison, WI 53719

**Re: University Avenue Concept Flood Mitigation Tunnel Evaluation**

Dear Mr. Bakalars:

Advanced Engineering and Environmental Services, Inc. (AE2S) is pleased to provide this proposal to KL Engineering (CLIENT) for providing a concept tunnel evaluation.

AE2S is proposing to partner with Black and Veatch (BV) on this project, who we have teamed with on many past and ongoing large-scale infrastructure projects.

**Scope of Services**

AE2S and BV will perform the following tasks:

**Task 1 – Project Management and Meetings**

- Provide project management to keep project on schedule and budget
- Attend up to two progress meetings with CLIENT and OWNER. For the purposes of estimating the level of effort:
  - o AE2S Project Manager will attend both meetings in person
  - o Black and Veatch tunnel engineer will attend one meeting in person (occurring on the same trip as the site visit outlined in Task 2) and attend the other meeting via video / conference call.
- Prepare and present presentation outlining findings from this scope. Both AE2S Project Manager and Black and Veatch tunnel engineer will attend the presentation in person.

**Task 2 – Existing Data Review and Collection**

- Review current City of Madison LiDAR information to determine ridges / valleys between Midvale-University intersection and Lake Mendota, and the bluff topography along the Lake Mendota shoreline.

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**Advanced Engineering and Environmental Services, Inc.**

7 North Pinckney Street, Suite 300 • Madison,  
WI 53715 • 608-225-5787 •  
Amber.Lefers@ae2s.com



Mr. Mike Bakalars

**RE: Letter Proposal for University Avenue Concept Flood Mitigation Tunnel Evaluation**

June 5, 2019

Page 2 of 3

- Review Dane County parcel / land ownership data to determine publicly-owned property boundaries for routing tunnel to the lake.
- Review available underground utility information provided by OWNER to determine potential major utility conflicts (such as MMSD sewer lines).
- Review available geologic / geotechnical information to determine areas of bedrock and unconsolidated material, including:
  - o Information that may be available from the Wisconsin Geological and Natural History Survey. For the purposes of this scope and level of effort, we have assumed up to 8 hours for this task, as the amount of data available is unknown at this time.
  - o Well logs
  - o Construction borings for other infrastructure projects
  - o Quarry information
- Coordinate with CLIENT on first floor and lowest opening elevations survey for commercial structures along University Avenue from just west of Midvale Boulevard just east of Shorewood Boulevard (survey to be completed by CLIENT). Flood mitigation alternatives to date have been based on LiDAR estimates of first floor elevations, and survey data is needed to confirm / refine performance objectives.
- Complete one site visit by both an AE2S representative and Black & Veatch tunnel engineer.

Task 3 – Concept Tunnel Alignment, Profile, and Outlet Options

- Develop up to two conceptual tunnel alignments and profiles from the University Avenue / Midvale Boulevard intersection area to Lake Mendota based on available information gathered in Task 2.
- Evaluate two potential outlet configurations and develop list of key design considerations.

Task 4 – Concept Inlet / University-Midvale Layout

- Based on the collected first floor elevation data, update the performance evaluation and conceptual hydraulic design of Alternative P (including tunnel diameter) as previously provided by AE2S to OWNER.
- Based on the updated performance evaluation and conceptual hydraulic design completed as part of this Task, develop a draft schematic layout for the small storage areas / overflow weirs that would feed the tunnel system.
- Refine draft schematic layout and profile based on OWNER review and comment.

Task 5 – Tunneling Options

- Provide summary of geologic and groundwater conditions anticipated along the tunnel alignments based on information gathered in Task 2.
- Review available tunneling options and provide a recommendation on approach based on available information.
- Provide draft schematic layout of tunnel, shaft location(s) and lake outfall for both tunnel alignment options.

Mr. Mike Bakalars

**RE: Letter Proposal for University Avenue Concept Flood Mitigation Tunnel Evaluation**

June 5, 2019

Page 3 of 3

- Prepare geotechnical / geologic investigation plan, including locating borings and depths to be implemented by others.

**Task 6 – Concept Opinion of Probable Costs**

- Develop a Class 4 or 5 Opinion of Probable Cost for the two tunnel alignment options, as defined by AACE International. The class level will depend on the availability of existing geotechnical / geologic information.

**Fees**

AE2S shall render services under this Agreement on an hourly basis, not to exceed \$68,500 without written authorization from CLIENT. Exhibit A summarizes the hours and fees associated with each task.

**Performance Schedule**

AE2S shall use commercially reasonable efforts to complete the Scope of Services within a reasonable time period.

If this proposal is acceptable, please provide a Notice to Proceed in writing along with an Agreement for our review and signature.

Thank you for the opportunity to assist in this project, and we look forward to working with you.

Sincerely,

A handwritten signature in cursive script, appearing to read "Amber Lefers".

Amber Lefers, PE

## University Avenue Tunnel Evaluation - Phase 1

Task	AEZS										B&V					Total Per Task (including expenses)
	Jeff	Amber	Zach	Travis	Perry	Jason G	Sheryl	Cary	Brian	Kayla	Admin					
Task 1 - Project Management and Progress Meetings	3	28	0	0	0	0	0	2	6	0	24	6	0	2	\$ 16,700.00	
Task 2 - Existing Data Review and Collection	0	18	4	0	0	6	0	0	14	0	6	14	0	0	\$ 8,100.00	
Task 3 - Concept Tunnel Alignment Options	0	11	0	0	0	28	0	4	13	0	4	21	0	0	\$ 12,700.00	
Task 4 - Concept Inlet Layout at University/Midvale	2	5	0	16	6	4	0	0	4	0	4	0	0	0	\$ 6,400.00	
Task 5 - Tunnel Boring Options	0	8	0	0	0	0	0	6	22	0	22	52	0	0	\$ 15,000.00	
Task 6 - Concept Opinion of Probable Costs	0	4	8	11	6	0	0	2	12	0	12	12	0	0	\$ 9,600.00	
<b>Total Engineering</b>	<b>5</b>	<b>74</b>	<b>12</b>	<b>27</b>	<b>12</b>	<b>38</b>	<b>2</b>	<b>20</b>	<b>81</b>	<b>105</b>	<b>2</b>	<b>68,500.00</b>				