DESIGN PROFESSIONAL SERVICES
CONTRACT AMENDMENT NO. 2
PROJECT/CONTRACT NO. 2015 FEDERAL TA PROJECTS
CONTRACT NO. CS 140003
PUBLIC WORKS DEPARTMENT

This amendment is between KANSAS CITY, MISSOURI, a constitutionally chartered municipal corporation (City), and VEENSTRA & KIMM, Inc., an Iowa entity, (Design Professional). The parties amend the Agreement entered into on January 28, 2015 and amended on May 5, 2016 as follows:

Sec. 1. Sections Amended. The Agreement is amended as follows:

A. Delete and replace the following section(s):
   a. Delete Sec. 2, Subparagraph A and replace with the following Sec. 2, Subparagraph A:
   Sec. 2. Services to be performed by Design Professional. Design Professional shall perform the following Scope of Services:
      A. See Attachment A – Scope of Services
      A. See Attachment A1 – Scope of Services for Amendment No. 1
      A. See Attachment A1 – Scope of Services for Amendment No. 2

B. Delete Sec. 4, Subparagraphs A and A.1 and replace with the following Sec. 4, Subparagraphs A and A.1:
   Sec. 4. Compensation and Reimbursables.
      A. The maximum amount that City shall pay Design Professional under this Agreement is **$602.052.59,** as follows:
         i. **$292,628.00** for the services performed by Design Professional under the original Agreement and Amendment No. 1.
         $44,950.00 for Floodplain Letter of Map Revision for **Project No. 89020295 (Big Shoal Creek Trail)** performed by Design Professional under Amendment No. 2.
         $118,570.00 for final design for **Project No. 89020267 (US 169 Overpass/Route 152 Trail Segment 10)** performed by Design Professional under Amendment No. 2.
         $84,270.00 for final design of the prefabricated pedestrian bridge for **Project No. 89020370 (Shoal Creek Trail Segment 3)** performed by Design Professional under Amendment No. 2
         $11,649.59 for geotechnical borings for **Project No. 89020253 (Second Creek Trail Segment 1)** performed by Design Professional under Amendment No. 2.
         $49,985.00 for conceptual trail planning for **Project No. 64019002 (Missouri River Bridges Trail Connections)** performed by Design Professional under Amendment No. 2
         ii. City is not liable for any obligation incurred by Design Professional except as approved under the provisions of this Amendment.

Sec. 2. Sections not Amended. All other sections of the Agreement shall remain in full force and effect.

Sec. 3. Authorization. If the amount of the original Agreement plus the amount of any amendments to the original Agreement total over $400,000.00, then this amendment requires City Council or Park Board authorization. Notwithstanding the foregoing, City Council or Park Board authorization is not required if (1) the total amount of the original Agreement plus the amount of any amendments to the original Agreement are within ten percent (10%) of the maximum amount authorized by the City Councilor the Park Board or (2) a previous ordinance or Resolution authorized amendments without further City Council or Park approval.

Sec. 4. Effectiveness; Date. This amendment will become effective when the City's Director of Finance has signed it. The date this amendment is signed by the City's Director of Finance will be deemed the date of this amendment.

Each party is signing this amendment on the date stated opposite that party's signature.

CONTRACTOR
I hereby certify that I have authority to execute this document on behalf of Contractor

Date:_____ By:_____
Name: David H. McDonald
Title: Office Manager

KANSAS CITY, MISSOURI

Date:_____ By:_____
Name: Sherri McIntyre
Title: Director of Public Works

Approved as to form:

_____
Assistant City Attorney

I hereby certify that there is a balance, otherwise unencumbered, to the credit of the appropriation to which the foregoing expenditure is to be charged, and a cash balance, otherwise unencumbered, in the Treasury, to the credit of the fund from which payment is to be made, each sufficient to meet the obligation hereby incurred.

_____
Director of Finance (Date)

ATTACHMENT A2

Task 89020267
Scope of the Engineer's Services
Pedestrian Bridge over Route 169 and Trail Approaches
Route 152 Trail – Segment 10

Project No. CS140003 - 2015 Federal TA Projects
(February 11, 2020)

Services will include tasks for a pedestrian bridge for the Route 152 Trail Segment 10. This will be part of the services for Amendment No. 2 for the 2015 Federal TA Projects.

Three team member firms will perform work for this task. Each firm's Scope of Services is noted separately.

TSi ENGINEERING, INC.

The field exploration will consist of two (2) borings, one near each bridge abutment. The borings will be continued to auger refusal on bedrock or to 80 feet, whichever is encountered first. Standard Penetration Test (ASTM D 1586) samples will be obtained and Shelby Tube (ASTM D 1587) samples will be obtained at 5-foot intervals in each boring. When bedrock is encountered, 10 feet of the rock will be sampled using "N" series coring tools to determine the rock mass rating.

A laboratory test program will be performed on samples recovered from the borings to determine their engineering characteristics. Laboratory tests will include, but are not limited to, visual classification, natural moisture content, dry unit weight, Atterberg limit, and unconfined compression tests.

Determine allowable bearing pressure at location of walls. Determine if structural fill is required for bearing. Evaluate the suitability of material for backfill for the MSE walls or other type of wall if required from a nearby stockpile. If the stockpile is unsuitable, suggest required soil properties (angle of internal friction, PI, etc.) for Contractor Obtained Borrow. The MSE walls will most likely follow MoDOT standards.

OLSSON

Provide 16 easements consisting of an exhibit and description for the Route 152 Trail System 10. The linework associated with these easements will be provided by the client. Verify key boundary points to establish horizontal control and review title reports as needed.

ATTACHMENT A2

VEENSTRA & KIMM, INC.

TASKS (Design Phase Only):

1. Hold coordination and progress meetings and prepare minutes. It is assumed that these meetings will be held jointly with the Public Works Department, MoDOT and any stakeholders as necessary. Assume four (4) meetings.

2. Gather data from the City including, but not limited to any proposed vertical and horizontal alignments of the trail that may have been developed, control points, benchmarks, utilities, property lines and any existing topographical data in digital form. Collect adjacent ownership boundaries and plats from the City.

3. Perform topographical surveys for areas that have not been previously surveyed. Verify critical tie-ins at the trail ends and the points of vertical clearance for Route 169. Implement existing control points and benchmarks supplied by the City.

4. Research structure types and locations for the best functional solution. The selection of the structure type will also be based on economy and aesthetics but will most likely be a single span prefabricated steel truss. Location of the structure will take into account any existing utilities noted in the data supplied by the City.

5. Determine the trail horizontal and vertical alignment based on schematic plans provided by the City. Provide adequate clearance over Route 169 and avoid conflict with the Magellan Pipeline near the east approach. Determine length of bridge, and location and extent of walls.

6. Coordinate with a geotechnical firm to perform a geotechnical investigation for the bridge and wall structures. The geotechnical data will be used to determine type and depth of foundations.

7. Develop Type, Size and Location (TSL) drawings for review by the Public Works Department and MoDOT for the bridge and wall structures. Address comments and resubmit.

8. Prepare preliminary plans for the trail approaches including trail alignments, typical sections, cross sections, and cover sheet. Submit to the Public Works Department. Address comments and resubmit.

9. Finalize the geometrics of the bridge and walls, and perform the structural design for the structures. The load carrying capacity of the bridge structure will be that required for the accepted pedestrian/bicycle loadings.

10. Prepare erosion control drawings.

11. Prepare the construction drawings and calculate bid quantities for the trail and structures. Submit to the Public Works Department and MoDOT. Address comments and resubmit.

12. Develop the technical specifications for Division 2 and subsequent divisions that pertain to the trail and structures. Assist the City with Division 1 specifications if requested.

13. Prepare an opinion of costs for the trail and structures based on the best available current data.

14. Submit the Plans, Specifications and Estimate (PS&E) for the trail and structures to the Public Works Department for review. Address all comments and resubmit.

15. Provide supporting data as requested for the City's use in preparing permits, preparing Right-of-Way plans, obtaining Right-of-Way, coordinating with utilities and finalizing bid documents. This would include copies of the proposed plans and survey data.

DELIVERABLES:

1. Paper copy of the geotechnical investigations and/or calculations noted in the TASKS if requested by the City.

2. Paper copy (11" x 17") of the TS&L plans (maximum five (5) copies) and/or Adobe PDF digital copy.

3. Paper copy and/or Word DOC digital copy of meeting minutes.

4. Paper copy (11" x 17") of the Preliminary and Final Plans (maximum five (5) copies) and/or Adobe PDF or TIF digital copies.

5. Paper copy and/or Word DOC digital copy of the applicable specifications.

6. Paper and Microstation/Geopak copies of the topographical survey.

THIS SCOPE OF THE ENGINEER'S SERVICES DOES NOT INCLUDE:

1. Legal surveys and other surveys not associated with the trail and structures unless specifically noted in TASKS.

2. All permits for controlling and governing agencies including MoDOT.

3. All work associated with Right-of-Way Plans, Deeds, Easements, and other documents, Right of Way Acquisition, utility location and coordination, and traffic control except as noted in the TASKS.

4. All services associated with the Bidding Phase of the project including attendance and minutes of pre-bid conferences and bid openings, addendum preparation and award analyses.

5. Attendance to preconstruction conferences; site visits for construction observation or "Special Inspections" including specific observations and measurements for compliance with the plans and final inspections; shop drawing review; and material submittal reviews.

6. All material, soils and rock field and laboratory testing during construction (unless specifically noted).

7. Construction surveys.

8. Construction documentation including but not limited to Notice to Proceed, Project Design, Subcontractor and Supplier Approvals, Pay Applications, Change Orders, Payrolls and other Labor Documentation.

9. Preparation, warranty or certification of any As-Constructed Drawings.

Task 89020370
Scope of the Engineer's Services
Pedestrian Bridge over Shoal Creek
Shoal Creek Trail – Segment 3
Project No. CS140003 - 2015 Federal TA Projects
(February 11, 2020)

Services will include tasks for a pedestrian bridge for the Shoal Creek Trail Segment 3. This will be part of the services for Amendment No. 2 for the 2015 Federal TA Projects.

Two team member firms will perform work for this task. Each firm's Scope of Services is noted separately.

TSi ENGINEERING, INC.

The field exploration will consist of two (2) borings, one near each abutment. The borings will be continued to auger refusal on bedrock or to 80 feet, whichever is encountered first. Standard Penetration Test (ASTM D 1586) samples will be obtained and Shelby Tube (ASTM D 1587) samples will be obtained at 5-foot intervals in each boring. When bedrock is encountered, 10 feet of the rock will be sampled using "N" series coring tools to determine the rock mass rating.

A laboratory test program will be performed on samples recovered from the borings to determine their engineering characteristics. Laboratory tests will include, but are not limited to, visual classification, natural moisture content, dry unit weight, Atterberg limit, and unconfined compression tests.

VEENSTRA & KIMM, INC.

TASKS (Design Phase Only):

1. Hold coordination and progress meetings and prepare minutes. It is assumed that these meetings will be held jointly with the Public Works Department and any stakeholders as necessary. Assume four (4) meetings.

2. Gather data from the City including, but not limited to any proposed vertical and horizontal alignments of the trail that may have been developed, control points, benchmarks, utilities, property lines and any existing topographical data in digital form. Obtain from the City the hydraulic computer models for Shoal Creek from the FEMA Flood Insurance Study (FIS) and any other hydrologic/hydraulic studies. Collect adjacent ownership boundaries and plats from the City.

3. Perform topographical and hydraulic surveys. Implement existing control points and benchmarks supplied by the City.

4. Perform hydrologic analysis and hydraulic analysis on the existing channel. Verify the data on the existing FEMA FIS for the bridge.

5. Research structure types and locations for the best functional solution. The selection of the structure type will also be based on economy and aesthetics. Location of the structure will take into account any existing utilities noted in the data supplied by the City.

6. Perform hydrologic and hydraulic analysis for the bridge. Size the bridge structure to fulfill the "No-Rise" criteria of FEMA for the Shoal Creek FIS. Check FEMA requirements for the need of a LOMR or CLOMR.

7. Complete a "No-Rise" Certificate and Floodplain Development Permits for the bridge located within the FEMA floodplain. Develop documentation and mapping for a LOMR or CLOMR as required.

8. Have a geotechnical firm perform a geotechnical investigation for the bridge structure. The geotechnical data will be used to determine type and depth of foundations.

9. Develop Type, Size and Location (TSL) drawings for review by the Public Works Department for the bridge structure. Address comments and resubmit.

10. Finalize the geometrics of the bridge and perform the structural design for the bridge structure. The load carrying capacity of the bridge structure will be that required for the accepted pedestrian/bicycle loadings or the weight of an ambulance, whichever is greater. Determine or coordinate the trail profile at the vicinity of the bridges to be incorporated in the City's proposed overall alignment of the trail.

11. Prepare the construction drawings and calculate bid quantities for the bridge structure. These drawings will be included as separate sheets in the Shoal Creek Segment 3 Trail plans to be prepared by the City.

12. Develop the technical specifications for Division 2 and subsequent divisions that pertain to the structure. Assist the City with Division 1 specifications if requested.

13. Prepare an opinion of costs for the structure based on the best available current data.

14. Submit the Plans, Specifications and Estimate (PS&E) for the bridge to the Public Works Department for review. Address all comments and resubmit.

15. Provide supporting data as requested for the City's use in preparing permits, obtaining Right-of-Way, coordinating with utilities and finalizing bid documents. This would include copies of the proposed bridge structure plans, hydraulic calculations and previously obtained survey data.

DELIVERABLES:

1. Paper copy of the studies, analyses, geotechnical investigations and/or calculations noted in the TASKS if requested by the City.

2. Paper copy (11" x 17") of the TS&L plans (maximum five (5) copies) and/or Adobe PDF digital copy.

3. Paper copy of the "No-Rise" and Floodplain Development Permits.

4. Paper copy and/or Word DOC digital copy of meeting minutes.

5. Paper copy (11" x 17") of the Final Plans (maximum five (5) copies) and/or Adobe PDF or TIF digital copies.

6. Paper copy and/or Word DOC digital copy of the applicable specifications.

7. Paper and Microstation/Geopak copies of the topographical survey.

THIS SCOPE OF THE ENGINEER'S SERVICES DOES NOT INCLUDE:

1. Legal surveys and other surveys not associated with the structure unless specifically noted in TASKS.

2. All design, plan and specification preparation for the remainder of the Shoal Creek Segment 3 Trail including horizontal and vertical alignment adjustments required for the relocation of the structure from the initial alignment location, and other drainage and creek crossings not included in this scope.

3. All permits for governing agencies such as the NRCS, Army Corps of Engineers, DNR, Department of Conservation, etc. Veenstra & Kimm, Inc. will prepare the "No-Rise" Certificate and Floodplain Development Permits as noted for the bridge in the TASKS.

4. All work associated with Right-of-Way Acquisition, utility coordination, traffic control and erosion control except as noted in the TASKS.

5. All services associated with the Bidding Phase of the project including attendance and minutes of pre-bid conferences and bid openings, addendum preparation and award analyses.

6. Attendance to preconstruction conferences; site visits for construction observation or "Special Inspections" including specific observations and measurements for compliance with the plans and final inspections; shop drawing review; and material submittal reviews.

7. All material, soils and rock field and laboratory testing during construction (unless specifically noted).

8. Construction surveys.

9. Construction documentation including but not limited to Notice to Proceed, Project Design, Subcontractor and Supplier Approvals, Pay Applications, Change Orders, Payrolls and other Labor Documentation.

10. Preparation, warranty or certification of any As-Constructed Drawings.

ATTACHMENT A2

Task 89020295
Scope of the Engineer's Services
Floodplain Map Revision
Big Shoal Creek Trail
Project No. CS140003 - 2015 Federal TA Projects
(February 11, 2020)

Services will include tasks for performing a LOMR for Mill Creek and Rock Creek due to errors and outdated information on the Effective Flood Insurance Study for these creeks within the limits between NE Chouteau Trafficway and N Brighton Avenue. This will be part of the services for Amendment No. 2 for the 2015 Federal TA Projects.

Veenstra & Kimm, Inc. will perform work for this task. The firm's Scope of Services is noted below.

VEENSTRA & KIMM, INC.

TASKS:

1. Gather and review data from the City and FEMA.

2. Conduct field reconnaissance to determine modified or replaced structures.

3. Perform topographical and hydraulic surveys. Implement existing control points and benchmarks supplied by the City.

4. Determine the hydrologic analysis method implemented in the effective study.

5. Calibrate the effective HEC-RAS models of the creeks. Compare the HEC-RAS input to the actual field conditions.

6. Make corrections to the input for the changed and/or erroneous conditions of the model. Rerun the model with the new input.

7. Compare profiles and BFE's for Mill Creek and Rock Creek at the confluence of Rock Creek to Mill Creek. Explain any discrepancies with the models.

8. Review the HEC-RAS models with KCMO staff and make adjustments as needed.

9. Prepare a base map from the revised HEC-RAS model. Develop flood profiles and floodway limits from the revised HEC-RAS model.

10. Prepare a draft report and complete the required FEMA LOMR forms and review with KCMO staff.

11. Revise the LOMR forms, map, and exhibits based on input from the KCMO staff. Submit the information to the KCMO staff for final processing.

12. Revise the LOMR forms, map, and exhibits based on comments from FEMA or FEMA's contractor. Resubmit to the KCMO staff.

DELIVERABLES:

1. Paper copy of the studies, analyses, and/or calculations noted in the TASKS if requested by the City.

2. Paper and digital copies of HEC-RAS models, maps, and profile exhibits per FEMA and KCMO requirements.

THIS SCOPE OF THE ENGINEER'S SERVICES DOES NOT INCLUDE:

1. Legal surveys and other surveys not associated with the study.

2. Any design, plan and specification preparation for facilities within the limits of the study.

3. All permits for governing agencies such as the NRCS, Army Corps of Engineers, DNR, Department of Conservation, etc.

4. Preparation, warranty or certification of any As-Constructed Drawings used in the preparation of this study.

ATTACHMENT A2

Task 64019002
Scope of Services
Missouri River Bridges Trail Connections
Project No. CS140003 - 2015 Federal TA Projects
(February 11, 2020)

1. Project Coordination and Base Mapping

a. Vireo will work with the City to develop a schedule and regular review meetings for this project. In addition, Vireo will use the latest version of the City's GIS data to assemble a base map for the development of this feasibility study.

2. Development of Feasibility Concepts

a. Vireo will work with the City to develop a feasibility study for the Riverfront trail and greenway development.

b. The scope of the feasibility will include:
   i. Feasibility for a trail and greenway network throughout the riverfront area, specifically from Chouteau Bridge to the new Buck O'Neil Bridge.
   ii. Connections to other communities downstream of the Downtown Airport
   iii. Access locations to the river
   iv. Viewshed areas of the City from the trail and greenway network
   v. Opportunities for habitat restoration and wetland restoration
   vi. Develop ideas for recreational and destination attractions along the Riverfront in areas like Old Harlem and the 210 Bottoms Area.
   vii. Identify connections to these and other recreational or destination opportunities along the riverfront

c. Vireo will develop two feasibility concepts which include the items above to discuss with the City and outside agencies.

3. Review Meetings and Agency Coordination

a. Meet with jurisdictions and departments who own and manage land not currently under City control.
   i. US Army Corps of Engineers (2 meetings)
   ii. Port Authority
   iii. KCMO Aviation Department
   iv. KCMO Parks and Recreation Department
   v. KCMO Levee Committee
   vi. City of North Kansas City
   vii. NKC Levee District

b. Meet key land holders along the route to determine feasibility of the trail and greenway alignment concepts.
   i. Harrah's Casino
   ii. Ameristar Casino
   iii. Suburban Land Reserve

c. Public input is not included under this scope but will be done in following phase.

4. Finalize Riverfront Feasibility Concept

a. After the review meetings and agency coordination Vireo will work with the City to refine the two alternatives into one. The result will be a plan and location of the riverfront trail and possible destinations. Up to two perspective drawings will be completed to illustrate the final concept.

b. Final design, engineering and all environmental permitting will be done at a later date under a separate contract.

5. Final Riverfront feasibility Plan and Executive Summary

a. Vireo will finalize the concept into an illustrative plan and two illustrative perspectives

b. Vireo will summarize the process and discussions with outside agencies and City departments into an executive summary.

c. Vireo will develop a planning level cost estimate and possible funding mechanisms through partnerships and other grants available.

ATTACHMENT A2

Task 89020253
Scope of the Engineer's Services
Second Creek Trail – Segment 1 Geotechnical Exploration
Project No. CS140003 - 2015 Federal TA Projects
(February 11, 2020)

Services will include tasks for the geotechnical exploration for a pedestrian bridge for the Second Creek Trail Segment 1. This will be part of the services for Amendment No. 2 for the 2015 Federal TA Projects.

TSi Engineering will perform work for this task. The firm's Scope of Services is noted below.

TSi ENGINEERING, INC.

The field exploration will consist of two (2) borings, one near each substructure unit. The borings will be continued to auger refusal on bedrock or to 80 feet, whichever is encountered first.. Standard Penetration Test (ASTM D 1586) samples will be obtained and Shelby Tube (ASTM D 1587) samples will be obtained at 5-foot intervals in each boring. When bedrock is encountered, 10 feet of the rock will be sampled using "N" series coring tools to determine the rock mass rating.

A laboratory test program will be performed on samples recovered from the borings to determine their engineering characteristics. Laboratory tests will include, but are not limited to, visual classification, natural moisture content, dry unit weight, Atterberg limit, and unconfined compression tests.

VEENSTRA & KIMM, INC.
CONSULTING ENGINEERS

VEENSTRA & KIMM, INC. COST PROPOSAL

PEDESTRIAN BRIDGE - RTE 169 & TRAIL APPROACHES - RTE 152 TRAIL SEGMENT 10 - 89020267

KANSAS CITY, MISSOURI - PUBLIC WORKS DEPARTMENT

	PROJECT HOURS ESTIMATE	Manhours							
	Item Description	Engineer III-B	Engineer V	Engineer VI	Engineer VII	Engineer IX	Tech II	Clerical III	Total
	DESIGN PHASE								
1	**ROUTE 152 TRAIL - SEGMENT 10**								0
2									0
3	Coordination and Progress Meetings	2	2	2		4		1	11
4									0
5	Data Collection	1	1	2	4	6			14
6									0
7	Topographic and Drainage Surveys	1	2	2	4	10	8		27
8									0
9	Preliminary Design of Walls	2	1	4	8	8	2		25
10									0
11	Preliminary Design of Trails	1	1	2	4	8	6		22
12									0
13	Cross Sections	1	1	4	4	12	12		34
14									0
15	Drainage Design	1	2	1	4	12	4		24
16									0
17	Erosion Control & SWPPP	1	2		2	2		2	9
18									0
19	Geotechnical Investigations	4	4	2	6	10	2		28
20									0
21	Preliminary Plans	3	4	6	12	30	42		97
22									0
23	Geometric Design of Bridge, Walls and Trails	1	2	2	6	8	12		31
24									0
	PAGE 1 TOTAL ESTIMATE	18	22	27	54	110	88	3	322

VEENSTRA & KIMM, INC.
CONSULTING ENGINEERS

VEENSTRA & KIMM, INC. COST PROPOSAL

PEDESTRIAN BRIDGE - RTE 169 & TRAIL APPROACHES - RTE 152 TRAIL SEGMENT 10 - 89020267

KANSAS CITY, MISSOURI - PUBLIC WORKS DEPARTMENT

	PROJECT HOURS ESTIMATE	Manhours							
	Item Description	Engineer III-B	Engineer V	Engineer VI	Engineer VII	Engineer IX	Tech II	Clerical III	Total
25	Structural Design - Abutments and Walls	2	4	8	16	36	8		74
26									0
27	Prepare TSL Drawings	2	2	8	10	20	24		66
28									0
29	Submit TS&L to City & MoDOT for Review	1		1	2	2		1	7
30									0
31	Address Review Comments and Resubmit	1	1	2	2	6	8		20
32									0
33	Vertical and Horizontal Alignments of Bridge	1	2	1	6	10	8		28
34									0
35	Concrete Approach Slab	1	2		4	6	6		19
36									0
37	Complete Final Plans and Drawings	2	4	10	22	36	76		150
38									0
39	Check Final Design	2	1	6	16	14			39
40									0
41	Check Final Plans	1	2	6	10	26	14		59
42									0
43	Prepare Specifications	1	2	2	6	6		4	21
44									0
45	Prepare Opinion of Construction Cost	2		2	2	4			10
46									0
47	Submit PS&E to City for Review	1	1		1	2		1	6
	PAGE 2 TOTAL ESTIMATE	17	21	46	97	168	144	6	499

VEENSTRA & KIMM, INC. COST PROPOSAL

PEDESTRIAN BRIDGE - RTE 169 & TRAIL APPROACHES - RTE 152 TRAIL SEGMENT 10 - 89020267

KANSAS CITY, MISSOURI - PUBLIC WORKS DEPARTMENT

	PROJECT HOURS ESTIMATE	Manhours							
	Item Description	Engineer III-B	Engineer V	Engineer VI	Engineer VII	Engineer IX	Tech II	Clerical III	Total
48	PS&E Revisions	2	2	2	8	12	12	2	40
49									0
50	Submit Final Plans, Specifications & Cost Estimate	1			1	2	1	2	7
51									0
52	Provide Support to City when Requested	1	2		6	6	2		17
53									0
54	Unknowns and Miscellaneous	3	5	5	8	12	11	1	45
55									0
56									0
57									0
58									0
59									0
60									0
61									0
62									0
63									0
64									0
65									0
66									0
67									0
68									0
69									0
70									0
	PAGE 3 TOTAL ESTIMATE	7	9	7	23	32	26	5	109
	TOTAL ESTIMATE	42	52	80	174	310	258	14	930

VEENSTRA & KIMM, INC. COST PROPOSAL
PEDESTRIAN BRIDGE - RTE 169 & TRAIL APPROACHES - RTE 152 TRAIL SEGMENT 10 - 89020267
KANSAS CITY, MISSOURI - PUBLIC WORKS DEPARTMENT
DESIGN COST ESTIMATE

DIRECT LABOR

Discipline	Total Hours	Rate	Total
Engineer III-B	42	$52.80	2218
Engineer V	52	$45.50	2366
Engineer VI	80	$43.00	3440
Engineer VII	174	$40.40	7030
Engineer IX	310	$34.80	10788
Technician II	258	$32.60	8411
Clerical III	14	$21.00	294
TOTAL DIRECT LABOR	930		$34,547

TOTAL ESTIMATED DIRECT LABOR COST		$34,547
DIRECT NON-SALARY AND INDIRECT OVERHEAD COSTS @	115%	$39,774
TOTAL ESTIMATED LABOR COSTS		$74,321

DIRECT EXPENSES

Sub-Consultant Services:		
Tsi Engineering, Inc. (Subsurface Investigations)	$20,798	
Olsson (Easements)	$12,040	
Total Estimated Cost for Subconsultants		$32,838
Mileage		$120
Printing & Reproduction		$70
Lodging		$0
Meals		$40
Engineering Supplies		$33

TOTAL ESTIMATED DIRECT EXPENSES		$33,101
TOTAL ESTIMATED COSTS		$107,422
FIXED FEE	15.00%	$11,148
MAXIMUM AMOUNT PAYABLE		$118,570

VEENSTRA & KIMM, INC.
CONSULTING ENGINEERS

VEENSTRA & KIMM, INC. COST PROPOSAL

PEDESTRIAN BRIDGE - SHOAL CREEK TRAIL - SEGMENT 3 - 89020370

KANSAS CITY, MISSOURI - PUBLIC WORKS DEPARTMENT

PROJECT HOURS ESTIMATE		Manhours							
	Item Description	Engineer III-B	Engineer V	Engineer VI	Engineer VII	Engineer IX	Tech II	Clerical III	Total
	DESIGN PHASE								
1	**SHOAL CREEK - SEGMENT 3**								0
2									0
3	Coordination and Progress Meetings	2	2	2		2		1	9
4									0
5	Data Collection	1	1	2	4	5			13
6	Topographic, Hydraulic and Drainage Surveys		2	1	2	12	12		29
7	Existing Hydrologic & Hydraulic Analysis	1	2	2	6	8			19
8	Proposed Hydrologic & Hydraulic Analysis		2	2	8	12	2		26
9	"No-Rise" and Ploodplain Documentation	1	2	2		2			7
10									0
11	Collect & review information for LOMR	2	4	2	9	11	6	1	35
12	Check & calibrate HEC-RAS model for LOMR	1	2	2	4	8			17
13	Run HEC-RAS to develop LOMR profiles & floodway	2	2	4	10	12			30
14	Prepare LOMR Report and review with City Staff	3	2	3	4	11	5	3	31
15	Cross Sections	1		2	4	8	8		23
16									0
17	Drainage Design	1	2		1	4	2		10
18									0
19	Erosion Control & SWPPP	1	2		1	2		2	8
20									0
21	Geotechnical Investigations	2	2	2	4	2			12
22									0
23	Preliminary Plans	2	2	4	6	20	32		66
24									0
	PAGE 1 TOTAL ESTIMATE	20	29	30	63	119	67	7	335

VEENSTRA & KIMM, INC.
CONSULTING ENGINEERS

VEENSTRA & KIMM, INC. COST PROPOSAL

PEDESTRIAN BRIDGE - SHOAL CREEK TRAIL - SEGMENT 3 - 89020370

KANSAS CITY, MISSOURI - PUBLIC WORKS DEPARTMENT

	PROJECT HOURS ESTIMATE	Manhours							
	Item Description	Engineer III-B	Engineer V	Engineer VI	Engineer VII	Engineer IX	Tech II	Clerical III	Total
25	Geometric Design	1	1	1	2	4	4		13
26									0
27	Structural Design - Abutments	2	4	4	8	16	4		38
28									0
29	Structural Design - Intermediate Bent	2	4	4	20	28	8		66
30									0
31	Vertical and Horizontal Alignments - Approx. 700'	1	2		2	6	2		13
32									0
33	Concrete Approach Slab	1	2		4	6	2		15
34									0
35	Final Plans and Drawings	2	2	6	16	30	64		120
36									0
37	Check Final Design	1	1	2	6	6			16
38									0
39	Check Final Plans	1	1	4	8	18	6		38
40									0
41	Prepare Specifications	1	1		6	4		4	16
42									0
43	Prepare Opinion of Construction Cost	2		2		2			6
44									0
45	Submit PS&E to City for Review	1	1		1	2		1	6
46									0
47	PS&E Revisions	2	2	1	6	12	4	2	29
	PAGE 2 TOTAL ESTIMATE	17	21	24	79	134	94	7	376

VEENSTRA & KIMM, INC.
CONSULTING ENGINEERS

VEENSTRA & KIMM, INC. COST PROPOSAL

PEDESTRIAN BRIDGE - SHOAL CREEK TRAIL - SEGMENT 3 - 89020370

KANSAS CITY, MISSOURI - PUBLIC WORKS DEPARTMENT

PROJECT HOURS ESTIMATE		Manhours							
	Item Description	Engineer III-B	Engineer V	Engineer VI	Engineer VII	Engineer IX	Tech II	Clerical III	Total
48	Submit Final Plans, Specifications & Cost Estimate	1			1	1	1	1	5
49									0
50	Provide Support to City when Requested	1	2		4	6			13
51									0
52	Unknowns and Miscellaneous	3	4	6	7	16	14	1	51
53									0
54									0
55									0
56									0
57									0
58									0
59									0
60									0
61									0
62									0
63									0
64									0
65									0
66									0
67									0
68									0
69									0
70									0
PAGE 3 TOTAL ESTIMATE		5	6	6	12	23	15	2	69
TOTAL ESTIMATE		42	56	60	154	276	176	16	780

VEENSTRA & KIMM, INC. COST PROPOSAL
PEDESTRIAN BRIDGE - SHOAL CREEK TRAIL - SEGMENT 3 - 89020370
KANSAS CITY, MISSOURI - PUBLIC WORKS DEPARTMENT
DESIGN COST ESTIMATE

DIRECT LABOR

Discipline	Total Hours	Rate	Total
Engineer III-B	42	$52.80	2218
Engineer V	56	$45.50	2548
Engineer VI	60	$43.00	2580
Engineer VII	154	$40.40	6222
Engineer IX	276	$34.80	9605
Technician II	176	$32.60	5738
Clerical III	16	$21.00	336
TOTAL DIRECT LABOR	780		$29,247

TOTAL ESTIMATED DIRECT LABOR COST		$29,247
DIRECT NON-SALARY AND INDIRECT OVERHEAD COSTS @	115%	$33,672
TOTAL ESTIMATED LABOR COSTS		$62,919

DIRECT EXPENSES

Sub-Consultant Services:		
Tsi Engineering, Inc. (Subsurface Investigations)	$11,650	
Total Estimated Cost for Tsi		$11,650
Mileage		$120
Printing & Reproduction		$70
Lodging		$0
Meals		$40
Engineering Supplies		$33
TOTAL ESTIMATED DIRECT EXPENSES		$11,913
TOTAL ESTIMATED COSTS		$74,832
FIXED FEE	15.00%	$9,438
MAXIMUM AMOUNT PAYABLE		$84,270

VEENSTRA & KIMM, INC.
CONSULTING ENGINEERS

VEENSTRA & KIMM, INC. COST PROPOSAL

LETTER OF MAP REVISION - MILL CREEK AND ROCK CREEK - 89020295

KANSAS CITY, MISSOURI - PUBLIC WORKS DEPARTMENT

	PROJECT HOURS ESTIMATE	Manhours							
	Item Description	Engineer III-B	Engineer V	Engineer VI	Engineer VII	Engineer IX	Tech II	Clerical III	Total
	DESIGN PHASE								
1	**ROCK CREEK**								0
2									0
3	Collect and review existing information	1	1	2		2		1	7
4									0
5	Conduct field reconnaissance	1		1	4	5			11
6									0
7	Perform field surveys			1		7	6		14
8									0
9	Calibrate existing effective HEC-RAS model	1	1	1	4	6			13
10									0
11	Compare HEC-RAS input to actual field conditions		2	1	2	2			7
12									0
13	Make any corrections to input needed		1	2		2			5
14									0
15	Rerun HEC-RAS with corrections	1		2	4	8			15
16									0
17	Compare to Mill Creek at confluence	1	2		1	2	2		8
18									0
19	Explain discrepancies	1				2		1	4
20									0
21	Review with City Staff	2		2		2			6
22									0
23									0
24	Unknowns and Miscellaneous	2	1	2	4	8	2		19
	PAGE 1 TOTAL ESTIMATE	10	8	14	19	46	10	2	109

VEENSTRA & KIMM, INC.
CONSULTING ENGINEERS

VEENSTRA & KIMM, INC. COST PROPOSAL

LETTER OF MAP REVISION - MILL CREEK AND ROCK CREEK - 89020295

KANSAS CITY, MISSOURI - PUBLIC WORKS DEPARTMENT

	PROJECT HOURS ESTIMATE	Manhours							
	Item Description	Engineer III-B	Engineer V	Engineer VI	Engineer VII	Engineer IX	Tech II	Clerical III	Total
	MILL CREEK								
25	Collect and review existing information	1		1	3	4	2		11
26									0
27	Conduct field reconnaissance		2		5	6			13
28									0
29	Perform field surveys			2		8	8		18
30									0
31	Calibrate existing effective HEC-RAS model	1	1		4	8	2		16
32									0
33	Compare HEC-RAS input to actual field conditions	1	2		2	6			11
34									0
35	Make any corrections to input needed		1	1	2	2			6
36									0
37	Rerun HEC-RAS with corrections	1	1	1	4	6			13
38									0
39	Compare and verify BFE's with Rock Creek		1		2	3	1		7
40									0
41	Prepare report and No-Rise Certificate	2	1	1	2	4	2	2	14
42									0
43	Review with City Staff	2		2		2			6
44									0
45	Make adjustments to HEC-RAS model	1	1	1	2	3		1	9
46									0
47	Unknowns and Miscellaneous	2	2	1	6	18	3	1	33
	PAGE 2 TOTAL ESTIMATE	11	12	10	32	70	18	4	157

VEENSTRA & KIMM, INC.
CONSULTING ENGINEERS

VEENSTRA & KIMM, INC. COST PROPOSAL

LETTER OF MAP REVISION - MILL CREEK AND ROCK CREEK - 89020295

KANSAS CITY, MISSOURI - PUBLIC WORKS DEPARTMENT

	PROJECT HOURS ESTIMATE	Manhours							
	Item Description	Engineer III-B	Engineer V	Engineer VI	Engineer VII	Engineer IX	Tech II	Clerical III	Total
	MILL CREEK & ROCK CREEK								
48	**PREPARATION OF LOMR INFORMATION**								0
49									0
50	Collect and review existing information	1	2	2	4	6	2	2	19
51									0
52	Verify, prepare and obtain approval of base map	1	2	4	4	10	12		33
53									0
54	Determine hydrologic analysis method used		1		2	1			4
55									0
56	Conduct field reconnaissance		2		4	6			12
57									0
58	Check and verify calibration of HEC-RAS model	1	1	2		5			9
59									0
60	Run HEC-RAS to determine flood profiles	1	2	2	6	10			21
61									0
62	Run HEC-RAS to determine floodway limits	2	4	2	8	14			30
63									0
64	Prepare draft report	2	1	4	4	10	6	4	31
65									0
66	Review with City Staff	2		2		2			6
67									0
68	Revise and Submit LOMR information to City	1	1		2	4	1	1	10
69									0
70	Unknowns and Miscellaneous	2	2	2	5	6	1	1	19
	PAGE 3 TOTAL ESTIMATE	13	18	20	39	74	22	8	194
	TOTAL ESTIMATE	34	38	44	90	190	50	14	460

VEENSTRA & KIMM, INC. COST PROPOSAL
LETTER OF MAP REVISION - MILL CREEK AND ROCK CREEK - 89020295
KANSAS CITY, MISSOURI - PUBLIC WORKS DEPARTMENT
DESIGN COST ESTIMATE

DIRECT LABOR

Discipline	Total Hours	Rate	Total
Engineer III-B	34	$52.80	1795
Engineer V	38	$45.50	1729
Engineer VI	44	$43.00	1892
Engineer VII	90	$40.40	3636
Engineer IX	190	$34.80	6612
Technician II	50	$32.60	1630
Clerical III	14	$21.00	294
TOTAL DIRECT LABOR	460		

		$17,588
TOTAL ESTIMATED DIRECT LABOR COST		$17,588
DIRECT NON-SALARY AND INDIRECT OVERHEAD COSTS @	115%	$20,249
TOTAL ESTIMATED LABOR COSTS		$37,837

DIRECT EXPENSES

FEMA Data and Information:

FEMA Library Data (Requests for Existing Data)	$1,000	
Total Estimated Cost for Data Request		$1,000
Mileage		$200
Printing & Reproduction		$120
Lodging		$0
Meals		$60
Engineering Supplies		$57
TOTAL ESTIMATED DIRECT EXPENSES		$1,437
TOTAL ESTIMATED COSTS		$39,274
FIXED FEE	15.00%	$5,676
MAXIMUM AMOUNT PAYABLE		$44,950

VEENSTRA & KIMM, INC. COST PROPOSAL
MISSOURI RIVER BRIDGES TRAIL CONNECTIONS - 64019002
KANSAS CITY, MISSOURI - PUBLIC WORKS DEPARTMENT
DESIGN COST ESTIMATE

DIRECT LABOR

Discipline	Total Hours	Rate	Total
Engineer III-B	0	$52.80	0
Engineer V	0	$45.50	0
Engineer VI	0	$43.00	0
Engineer VII	0	$40.40	0
Engineer IX	0	$34.80	0
Technician II	0	$32.60	0
Clerical III	0	$21.00	0
TOTAL DIRECT LABOR	0			$0

TOTAL ESTIMATED DIRECT LABOR COST		$0
DIRECT NON-SALARY AND INDIRECT OVERHEAD COSTS @	115%	$0
TOTAL ESTIMATED LABOR COSTS		$0

DIRECT EXPENSES

Sub-Consultant Services:		
Vireo (Trail studies & investigations)	$49,985	
Total Estimated Cost for Vireo		$49,985
Mileage		$0
Printing & Reproduction		$0
Lodging		$0
Meals		$0
Engineering Supplies		$0

TOTAL ESTIMATED DIRECT EXPENSES		$49,985
TOTAL ESTIMATED COSTS		$49,985
FIXED FEE	15.00%	$0
MAXIMUM AMOUNT PAYABLE		$49,985

VEENSTRA & KIMM, INC. COST PROPOSAL
SECOND CREEK TRAIL - SEGMENT 1 - 89020253
KANSAS CITY, MISSOURI - PUBLIC WORKS DEPARTMENT
DESIGN COST ESTIMATE

DIRECT LABOR

Discipline	Total Hours	Rate	Total
Engineer III-B	0	$52.80	0
Engineer V	0	$45.50	0
Engineer VI	0	$43.00	0
Engineer VII	0	$40.40	0
Engineer IX	0	$34.80	0
Technician II	0	$32.60	0
Clerical III	0	$21.00	0
TOTAL DIRECT LABOR	0		$0

TOTAL ESTIMATED DIRECT LABOR COST		$0
DIRECT NON-SALARY AND INDIRECT OVERHEAD COSTS @	115%	$0
TOTAL ESTIMATED LABOR COSTS		$0

DIRECT EXPENSES

Sub-Consultant Services:		
Tsi Engineering, Inc. (Subsurface Investigations)	$11,650	
Total Estimated Cost for Tsi		$11,650
Mileage		$0
Printing & Reproduction		$0
Lodging		$0
Meals		$0
Engineering Supplies		$0
TOTAL ESTIMATED DIRECT EXPENSES		$11,650
TOTAL ESTIMATED COSTS		$11,650
FIXED FEE	15.00%	$0
MAXIMUM AMOUNT PAYABLE		$11,650

VEENSTRA & KIMM, INC. COST PROPOSAL

2015 FEDERAL TA PROJECTS - AMENDMENT NO. 2 - PROJECT TOTAL

KANSAS CITY, MISSOURI

FEBRUARY 7, 2020

INDIVIDUAL PROJECTS	FEES
PED. BRIDGE RTE 169 - SEGMENT 10 - 89020267	$118,570
PED. BRIDGE - SHOAL CK - SEGMENT 3 - 89020370	$84,270
BIG SHOAL CREEK TRAIL LOMR - 89020295	$44,950
MISSOURI RIVER BRIDGES CONNECTIONS - 64019002	$49,985
SECOND CREEK TRAIL SEGMENT 1 - 89020253	$11,650
TOTAL ALL PROJECTS	$309,425